

## MILITARY VALUE DATA CALL

### TECHNICAL CENTERS

<b>Category</b>	<b>Technical Centers/Labs</b>
<b>Technical Center Site</b>	<b>Coastal Systems Station Dahlgren Division Naval Surface Warfare Center</b>
<b>Location/Address</b>	<b>6703 West Highway 98 Panama City FL 32407</b>

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**TAB A** Technical Operations: Functional Support Area - Life Cycle Work Area Form

**TAB B** Facilities and Equipment: Facilities/Equipment Capability Form

**TAB C** Range Resources: Range Capability Form

**Appendix A** Functional Support Areas - Life Cycle Work Areas List

**Appendix B** Definitions for Functional Support Areas - Life Cycle Work Areas

## MILITARY VALUE MEASURES

### MISSION

1. **Mission Statement.** State the officially assigned mission of this activity and cite the reference document(s) that assigns the mission.

In accordance with NAVSURFWARCEN DL DIV NOTE 5450 of 6 Jan 92, ORGANIZATION AND ADMINISTRATION OF THE NAVAL SURFACE WARFARE CENTER, DAHLGREN DIVISION, further referencing UNDERSECNAV memo of 20 Dec 91 and NAVSURFWARCEN ltr 5400 Ser NSWC/29 of 2 Jan 92, the mission of the Coastal Systems Station is:

Support the mission of the Dahlgren Division of the Naval Surface Warfare Center by providing research, development, test and evaluation for mine and undersea countermeasures, special warfare, amphibious warfare, diving and other Naval missions that take place primarily in the Coastal Region. Execute other responsibilities as assigned by the Commander, Dahlgren Division, Naval Surface Warfare Center.

The Coastal Systems Station is one of three large specialized sites (Dahlgren, White Oak, and Panama City) in the Dahlgren Division. This Division is the consolidated Navy capability for warfare concepts, technology, lifetime systems engineering and development, systems acquisition support, and warfare analysis, simulation and modeling--

- \* For the multi-warfare combat systems and individual weapon systems of the Surface Fleet, increasingly focused on joint strike warfare, individual ship defense, and theater defense needs, associated with regional conflict;
- \* For the challenge of effective weapons control systems and weapon "kill" mechanisms (warheads, explosives...) in the regional conflict environment of mixed "hostiles" and "non-hostiles";
- \* For the re-emphasized lessons of mine warfare from recent conflict in the Persian Gulf; and
- \* For the changing role of Navy strategic offense and defense.

The Coastal Systems Station (CSS) is the U.S. Navy's Lead Research, Development, Test and Evaluation (RDT&E) Activity for:

Mine Countermeasures  
Special Warfare  
Amphibious Warfare  
Diving Systems

CSS's mission is distinct, unique, and absolutely critical to the Navy and National Security. The mission of CSS supports the U.S. Navy in an era of Contingency Operations and Low Intensity Conflict scenarios. The most likely areas for future U.S. naval operations will be in the littoral areas of coastal nations. Therefore, the role of CSS in developing new technology to meet future Fleet operational needs becomes even more vital.

**2. Joint Service Missions.** State any officially assigned joint/lead service assignments missions and cite the document(s) that assigned them.

The Joint Mine Detection Technology Program is a 6.2 Joint USMC, U.S. Army, and ARPA program funded by the USMC. In the spirit of Project Reliance, there is an informal working agreement between the Marine Corps, Amphibious Warfare Technology Directorate and the U.S. Army Belvoir RDE Center, that through the USMC 6.2 Mine Detection Technology Project, Project Number CF31M77 MQ1A AMWMD, Task 2, Joint Mine Detection Technology, CSS has the technical lead in developing innovative airborne sensors for mine detection.

### TECHNICAL FUNCTIONS

**3. Technical Functions Resource Allocations.** Appendix A provides a list of numbered functional support areas that cover the spectrum of naval warfare and support operations. Additionally, Appendix A provides a list of numbered life-cycle work areas that cover the "cradle to grave" spectrum of Navy systems acquisition. Utilizing the two lists at Appendix A, each activity will break out its entire FY1993 technical program within any applicable intersections of these two defining schemes (for example, functional support area #5.2 - life cycle work area #3 will identify the activity's level of resources allocated to sensors and surveillance systems, radar systems in advanced development). Definitions for each functional support and life cycle work area are provided in Appendix B for reference.

a. Use the form at Tab A of this data call to provide data on work years and expenditures for FY1993 to support each applicable intersection of functional support areas and life cycle work areas. When necessary, estimate data to the best of your ability

b. Similarly, use the Tab A forms to report separately on your detachments or sites that have not received this data call directly. This data may be consolidated when the detachments or sites perform work in the same area. When necessary, estimate data to the best of your ability.

### MANPOWER

**4. Work Breakdown Structure.**

a. Use Table 4.1 (below) to provide data on the general support functions at your activity. Report data as of 31 March 1994. If you are collocated with one of your subordinate base keeper commands (i.e., a NAWS or NAS collocated with a NAWC Division), describe the differences in the functions of each and provide a separate Table 4.1 for the subordinate command. Include this command in the Table 4.1 submission for your Activity.

b. Similarly, use Table 4.2 (below) to provide general support function data for all your detachments or sites that did not receive this data call directly. Consolidate data from all of these detachments into one table (4.2). Provide a list of the detachments whose data is included in Table 4.2. For each identified detachment in this list, include its name, location, UIC, and number of civilian and military personnel onboard.

**In addition, if any of your detachments or separate sites not receiving an individual data call have over 50 civilian personnel or own technical facilities, provide separately a description of the site, the functions performed there, photographs showing the facilities and state the reason for that site's existence and the necessity for it to be at that location.**

The White Oak mine development function and the Naval Mine Warfare Engineering Activity, Yorktown are both over 50 civilian personnel, but both activities are geographically relocating to CSS Panama City, as a result of BRAC-93.

c. Use Table 4.3 (below) to provide estimated data, for your activity only, to reflect the anticipated impact of previous BRAC decisions that have not yet been implemented. This data should provide the deltas from Table 4.1.

**NOTES:**

[1] Use the following definitions when providing data for the tables below:

Workyears: Consistent with those used in the preparation of inputs to the President's budget.

Contract Workyears: Actual or estimated workyears performed by support contractors with workyears defined consistent with the definition used in the President's budget.

Civilian Personnel Onboard: Full Time Permanent (FTP) employees.

[2] Any categories of personnel that are employed to support other Activities should be noted with the name of the additional Activity supported.

**Table 4.1, General Support Resources for  
(Activity: CSS ) (UIC: 61331 )**

Function	Space allocated (Gross SQFT)	Work Years	Civilian Personnel onboard	Contract Work Years	Military Personnel Onboard	
					Off	Enl
<b>ADMINISTRATION</b>						
Command (CO/XO/TD/etc.)	2,620	3	3		2	2
Comptroller	10,800	36	33			
Admin *	10,395	48	43	3		
Human Resources *	10,952	27	25	1		
<b>OPERATIONS SUPPORT</b>						
Supply Management *	40,391	77	72			
Consolidated Computational Computer Support	5,900	0	0			
Information Systems and Communications *	7,300	54	49	25		
Safety/OSH/Environmental *	2,700	6	5	1		2
<b>INFRASTRUCTURE</b>						
Physical Security *	4,100	32	29	8		3
Public Works/Staff	11,125	86	80	50	1	1
Fire Protection *	6,555	16	15	2		
Medical/Dental	4,461	0	0			
Military Support	3,800	4	4		1	17
Air/Waterfront Operations	18,750	0	0			
<b>TECHNICAL STAFF</b>						
Technical Operations			832	952	9	71
<b>Totals</b>	<b>139,849</b>	<b>389</b>	<b>1,190</b>	<b>1,042</b>	<b>13</b>	<b>96</b>

\*Provides common service support to major tenants NDSTC, NEDU. Minor levels of support are provided to 9 smaller (1-15 personnel) tenants.

**Table 4.2, General Support Resources for all Detachments  
(Activity: CSS ) (UIC: 60921, 62701, 63394 )**

Function	Space allocated (Gross SQFT)	Work Years	Civilian Personnel onboard	Contract Work Years	Military Personnel Onboard	
					Off	Ent
<b>ADMINISTRATION</b>						
Command (CO/ XO/ TD/etc.)	168	1			1	
Comptroller						
Admin	971	2	2			
Human Resources						
<b>OPERATIONS SUPPORT</b>						
Supply Management	1800	1	1			
Consolidated Computational Computer Support						
Information Systems and Communications						
Safety/OSH/Environmental						
<b>INFRASTRUCTURE</b>						
Physical Security	470	7	7			
Public Works/Staff Civil Engr						
Fire Protection						
Medical/Dental						
Military Support						
Air/Waterfront Operations						
<b>TECHNICAL STAFF</b>						
Technical Operations			256	61.6	3	11
<b>Totals</b>	3,994	299	266	61.6	4	11

Detachments in Table 4.2

	<u>Name</u>	<u>Location</u>	<u>UIC</u>	<u>Civ On-board</u>	<u>Mil on-board</u>
1.	NMWEA <sup>1</sup>	Yorktown	63394	180	10
2.	Ft. Lauderdale <sup>2</sup>	Ft. Lauderdale, FL	62701	25	5
3.	Ft. Monroe <sup>3</sup>	Ft. Monroe, MD	60921	6	0
4.	White Oak <sup>4</sup> (Mine Warfare Function)	Silver Springs, MD	60921	55	0

<sup>1</sup> NMWEA, as a result of BRAC 93, is being geographically located to CSS in FY 94/95.

<sup>2</sup> Ft. Lauderdale is being reassigned to NSWC, Carderock Division in FY 94.

<sup>3</sup> Ft. Monroe, as a result of BRAC 93, has been reassigned from a Detachment of White Oak to a Detachment of Coastal Systems Station, and will remain at Ft. Monroe.

<sup>4</sup> White Oak (Mine Development function), as a result of BRAC 93, is being geographically located to CSS in FY 94/95

Table 4.3, Previous BRAC Impact to General Support Resources for BRAC 93  
 (Activity: CSS ) (UIC: 61331 )

Function	Space allocated (Gross SQFT)	Work Years	Civilian Personnel onboard	Contract Work Years	Military Personnel Onboard	
					Off	Enl
<b>ADMINISTRATION</b>						
Command (CO/XO/ TD/etc.)						
Comptroller						
Admin						
Human Resources						
<b>OPERATIONS SUPPORT</b>						
Supply Management						
Consolidated Computational Computer Support						
Information Systems and Communications						
Safety/OSH/Environmental						
<b>INFRASTRUCTURE</b>						
Physical Security						
Public Works/Staff Civil Engr						
Fire Protection						
Medical/Dental						
Military Support						
Air/Waterfront Operations						
<b>TECHNICAL STAFF</b>						
Technical Operations			241	58.6	3	7
Totals:		268	241	58.6	3	7

**5 Technical Staff Qualifications.**

a. Use Table 5.1 (below) to provide data on the civilian personnel allocated to Technical Operations having the educational and experience levels indicated in the table for your activity. Report data as of 31 March 1994. Similarly, use Table 5.2 (below) to provide data for all your separate detachments or sites that did not receive this data call directly. Consolidate data from all of these detachments into one table (5.2). Provide a list of the detachments whose data is included in Table 5.2.

**Table 5.1, Technical Staff Education Level for**  
**(Activity: NSWC CSS ) (UIC: 61331 )**

Highest Degree Attained	Years of Government and/or Military Service					Total
	Less than 3 Years	3-10 Years	11-15 Years	16-20 Years	More than 20 Years	
Grade School	0	0	0	0	0	0
High School	0	57	42	46	66	211
B.A./B.S	5	200	94	29	72	400
M.A./M.S	1	68	41	14	48	172
Ph.D./M.D.	0	25	10	8	6	49
<b>Total</b>	<b>6</b>	<b>350</b>	<b>187</b>	<b>97</b>	<b>192</b>	<b>832</b>

**Table 5.2, Technical Staff Education Level for all Detachments**  
**(Parent Activity: NSWC CSS ) (UIC: 60921, 62701, & 63394 )**

Highest Degree Attained	Years of Government and/or Military Service					Total
	Less than 3 Years	3-10 Years	11-15 Years	16-20 Years	More than 20 Years	
Grade School	0	0	0	0	0	0
High School	0	25	31	26	50	132
B.A./B.S	1	39	21	4	32	97
M.A./M.S	0	2	12	3	7	24
Ph.D./M.D.	0	2	0	0	1	3
<b>Total</b>	<b>1</b>	<b>68</b>	<b>64</b>	<b>33</b>	<b>90</b>	<b>256</b>

Detachments/Sites:

Ft. Lauderdale, FL  
 Ft. Monroe, VA  
 White Oak, MD  
 Yorktown, VA

b. Use Table 5.3 (below) to provide data on the number of civilian personnel allocated to Technical Operations with graduate degrees and at least three years of applicable experience that have their highest degree in the fields indicated. Report data as of 31 March 1994. Similarly, use Table 5.4 (below) to provide data for all your separate detachments or sites that did not receive this data call directly. Consolidate data from all of these detachments into one table (5.4). Provide a list of the detachments whose data is included in Table 5.4

**Table 5.3, Technical Staff Academic Fields for**  
 (Activity: NSWC CSS ) (UIC: 61331 )

Academic field	Number
Physics	52
Chemistry	2
Biology	1
Mathematics/Statistics/ Operations Research	16
Engineering	133
Medical	
Dental	
Computer Science	3
Social Science	1
Other Science	10
Non-Science	2
<b>Total</b>	<b>220</b>

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b. Use Table 5.3 (below) to provide data on the number of civilian personnel allocated to Technical Operations with graduate degrees and at least three years of applicable experience that have their highest degree in the fields indicated. Report data as of 31 March 1994. Similarly, use Table 5.4 (below) to provide data for all your separate detachments or sites that did not receive this data call directly. Consolidate data from all of these detachments into one table (5.4). Provide a list of the detachments whose data is included in Table 5.4

**Table 5.3, Technical Staff Academic Fields for**  
**(Activity: NSWC CSS ) (UIC: 61331 )**

Academic field	Number
Physics	72
Chemistry	6
Biology	3
Mathematics/Statistics/ Operations Research	38
Engineering	462
Medical	0
Dental	0
Computer Science	17
Social Science	5
Other Science	25
Non-Science	6
<b>Total</b>	<b>634</b>

**Table 5.4, Technical Staff Academic Fields for all Detachments**  
 (Parent Activity: NSWC CSS ) (UIC: 60921, 62701, & 63394 )

Academic field	Number
Physics	2
Chemistry	
Biology	
Mathematics/Statistics/ Operations Research	5
Engineering	18
Medical	
Dental	
Computer Science	2
Social Science	
Other Science	
Non-Science	
<b>Total</b>	<b>27</b>

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Detachments/Sites:

Ft. Lauderdale, FL  
 Ft. Monroe, VA  
 White Oak, MD  
 Yorktown, VA

**Table 5.4, Technical Staff Academic Fields for all Detachments**  
 (Parent Activity: NSWC CSS ) (UIC: 60921, 62701, & 63394 )

Academic field	Number
Physics	4
Chemistry	1
Biology	1
Mathematics/Statistics/ Operations Research	6
Engineering	118
Medical	0
Dental	0
Computer Science	8
Social Science	0
Other Science	0
Non-Science	0
<b>Total</b>	<b>138</b>

Detachments/Sites:

Ft. Lauderdale, FL  
 Ft. Monroe, VA  
 White Oak, MD  
 Yorktown, VA

c. Are there unique aspects of the activity's location that help or hinder in the hiring of qualified personnel?

The Coastal Systems Station has no qualifiers that detract from its ability to perform its mission and hire qualified personnel. Many factors contribute significantly in recruiting. Several of these factors are as follows:

Mission Workplace - CSS has a diversified and well-established full spectrum mission that provides challenging opportunities for personnel to enhance their careers. Equipment and related laboratory spaces have been modernized and contain the latest state of art technology. Since 1984, modernization projects at the Coastal Systems Station have significantly enhanced mission capability and improved the quality of life.

Personal - The State of Florida does not have a state income tax. Panama City has particularly low costs of living and housing. Other factors include: absence of commuting problems; recreational (beach, fresh and salt water sports, fishing, golf, hunting, etc.); spouse employment opportunities; shopping; close access to major tourist attractions and many others.

Medical, Dental - Medical and dental care is provided by branch clinics of Naval Hospital, Pensacola, and the Naval Regional Dental Center. Arrangements are in place for emergency medical care after duty hours and for ambulance service. The local community provides two major hospitals that have the latest technology to respond to any medical and dental needs.

Education - CSS has been the driving force and sponsor for local graduate engineering program of the Florida A&M/Florida State (FAMU/FSU) College of Engineering. Station personnel have averaged 80 percent of the students enrolled in the electrical and mechanical engineering graduate programs. CSS also supports, and is served by, Gulf Coast Community College which provides many undergraduate and continuing education courses in computer and office skills. The local FSU campus also offers undergraduate and graduate programs in Business Management. Troy State, Embry-Riddle and West Florida universities maintain local campuses at Tyndall AFB and offer undergraduate and graduate programs including aviation, human relations, and systems management. Completing the local courses is the Florida Engineering Education Development Systems (FEEDS) program which provides video-taped, graduate engineering courses from all of Florida's public universities. In addition to providing students for these programs, CSS personnel also serve as adjunct professors at the local campuses. The Station's Learning Resource Center (LRC) is a state-of-the-art training facility featuring live satellite broadcasts of college classes; taped/delayed satellite-fed courses; study carrels for computer-based, self-paced training; and other audio, video, and computer training aids to meet the needs of the Station and its tenants.

On-Base Morale, Welfare, Recreation (MWR) - The Station's MWR facilities include a marina, small campground, lighted softball field, tennis courts, weight room, gymnasium, bowling alley, aquatic center, etc. Recent highly successful MWR programs include an on-site summer camp for the children of Station personnel. CSS has a station-wide Wellness

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site summer camp for the children of Station personnel. CSS has a station-wide Wellness Program that is available to all employees. The Wellness Program has a high degree of participation. Base family support programs include a Summer Discovery Camp for the children of Station personnel as well as an Easter Program, Halloween Program, Christmas Party, over-night lock-ins in the Bowling Alley, swimming lessons, and pool parties.

Community Involvement - Station personnel and their families represent a cross section of Bay County citizens; some were born here, most moved here, and some are newcomers. Our people are involved in a host of educational, social, fraternal, religious, charitable, scientific, and recreational activities that enhance their quality of life.

Other - A recent survey conducted by MONEY magazine, and published in the September 1992 issue, rated Panama City 72 in a list of 300 major metropolitan communities. Some of the criteria determining placement included clean air, clean water, affordable housing, low crime rate, affordable medical care, close to colleges, low tax rate, short commuting time, and sunny weather, all of which are enjoyed by Station personnel.

d. List all articles written by the in-house technical staff that were published or accepted for publication in refereed journals since 1 January 1990.

The following articles, written by the in-house technical staff, were submitted or published in refereed journals since 1 January 1990. Limited information was available for 1990. The following information was taken from public release files and from individual department files.

Hackman, R. and Sammelmann, G., "The Acoustic Scattering by a Submerged, Spherical Shell. II: Pole Trajectories in the Complex-ka Plane," Journal Acoustical Society of America, Feb 1990.

Detsch, R.M. and Harris, I.A., "Small Air Bubbles in Reagent Grade Water and Seawater Part I: Rise Velocities of 20 to 100  $\mu$ m Diameter Bubbles," Journal of Geophysical Research, Mar 1990.

Detsch, R.M. and Harris, I.A., "Small Air Bubbles in Reagent Grade Water and Seawater Part II: Dissolution of 20 to 500  $\mu$ m Diameter Bubbles at Atmospheric Pressure," Journal of Geophysical Research, Mar 1990.

Commander, K.W. and McDonald, R.J., "A Finite Element Solution of the Inverse Problem in Bubble Swarm Acoustics," Journal of Acoustical Society of America, Mar 1990.

Lim, R. and Hackman, R.H., "Multiple Scattering from Many Bounded Obstacles: An Improved Matrix Formulation," Journal of Acoustical Society of America, Sep 90.

Wilbur, J.E., "Time-Variant Channel Effects on Spread Spectrum and Diversity Transmissions: A Time Frequency Based Formalism for Signal Parameterization," Journal of Acoustical Society of America, May 1990.

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Program that is available to all employees. The Wellness Program has a high degree of participation. Base family support programs include a Summer Discovery Camp for the children of Station personnel as well as an Easter Program, Halloween Program, Christmas Party, over-night lock-ins in the Bowling Alley, swimming lessons, and pool parties.

Community Involvement - Station personnel and their families represent a cross section of Bay County citizens; some were born here, most moved here, and some are newcomers. Our people are involved in a host of educational, social, fraternal, religious, charitable, scientific, and recreational activities that enhance their quality of life.

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Sammelmann, G.S. and Hackman, R.H., "The Acoustic Scattering by a Submerged, Spherical Shell. II: The High Frequency Region and the Thickness Quasi-Resonance," 1990.

Hackman, R. and Sammelmann, G., "The Acoustic Scattering by a Submerged, Spherical Shell. II: Pole Trajectories in the Complex-ka Plane," Journal Acoustical Society of America, Feb 1990.

Hyland, J.C. and Fox, S.R., "Mine Avoidance Techniques for Underwater Vehicles," 1990.

Clem, T.R. and Purpura, J., "Thin Film High  $T_c$  Superconductor Research," 1990.

Sammelmann, G.S. and Hackman, R.H., "Acoustic Scattering," 1990.

Stefanov, M. and Strand, M., "Optical Phase Conjugation," 1990.

Wilbur, J.E., "Wigner Distribution for Target Classification," 1990.

Dobeck, G.J., Kennedy, R.A., Rodriguez, R.R., and Wilbur, J.E., "Mine Classification by Artificial Neural Network," 1990.

Suiter, H.R., "Pulse Propagation through Bubbly Water," 1990.

Mohr, D.W. and Mittleman, J., "Correlating Metal Microstructure with Backscattered Ultrasonics," 1990.

McNeil, M., "Mineralogical Fingerprints for Microbiological Corrosion," 1990.

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McNeil, R., "A Geometric Study of Corroded Surfaces of Iron-Nickel Alloy," Solid State Chemistry, May 1990.

Sammelmann, G.S. and Hackman, R.H., "Acoustic Scattering from Large Aspect Ratio Objects in a Range-Independent Shallow Water Waveguide," Journal of Acoustical Society of America, Jul 1990.

Gershenson, Meir, "Design of a Hysteretic Squid as the Readout for a DC Squid," IEEE Magnetics Journal, Oct 1990.

Gershenson, Meir, "Design of a Flux Buffer Based on the Flux Shuttle," IEEE Magnetics Journal, Oct 1990.

Lim, R. and Hackman, R.H., "Comments on the Calculation of Cross Sections for Elastic Wave Scattering Using the T-Matrix," Journal of Acoustical Society of America, Sep 1990.

Muise, R.R., George, J.D., and Abel, J.S., "Time-of-Arrival Estimation for Signals Described by Rational Function Laplace Transforms," IEEE Transactions on Acoustics, Speech, and Signal Processing, Dec 1990.

Wilbur, J. and McDonald, R.J., "Nonlinear Analysis of Cyclically Correlated Spectral Spreading in Modulated Signals," Journal of the Acoustical Society of America, Mar 1991.

Detsch, R.M. and Stone, Teresa, "The Effect of an Insoluble Surfactant on the Bubble Size Distributions Produced by Plunging Liquid Jets at Acute Angles in Water and Seawater," The Chemical Engineering Journal, Jan 1991.

Detsch, R.M., "The Dissolution of Small Air Bubbles in Pressurized Seawater," Journal of Geophysical Research, Jan 1991.

Mohr, D.W. and McNeil, M.B., "Use of Modified Log-Activity Diagrams to Elucidate Type 1 Pitting of Copper within Chloride-Bearing Waters," Corrosion Science, Feb 1991.

Mohr, D., "Estimation of Elemental Microvariation within Minerals Analyzed by the Microprobe: Use of Model Population Estimates," American Mineralogist, May 1991.

Detsch, R.M. and Stone, S., "The Effect of an Insoluble Surfactant on the Bubble Size Distributions Produced by Plunging Liquid Jets at Acute Angles in Water and Seawater," Chemical Engineering Journal, Dec 1990.

Wilbur, JoEllen and McDonald, R.J., "Non-Linear Analysis of Cyclically Correlated Spectral Spreading in Modulated Signals," Journal of the Acoustical Society of America, March 1991.

Suiter, H.R., "Pulse Length Effects on the Transmissivity of Bubble Water," Journal of the Acoustical Society of America, Mar 1991.

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- Naud, S.F., and Henderson, G.L., "High Conductivity Intercalated Graphite," 1990.
- Rish, J. and Boehnlein, A., "Optoacoustics Transduction," 1990.
- Lim, R., "Coatings Investigation," 1990.
- Wynn, M. and Bono, J.T., "Active Electromagnetic Detection in Seawater," 1990.
- Harris, I.A., "Phase Assisted Target strength Integration," 1990.
- Pipkin, J., "Underwater Mine Neutralization," 1990.
- Gansert, R.V., "Diver Tidal Volume Measurement," 1990.
- Schrodt, J.K., "Large Time Bandwidth Product Sonar Signals," 1990.
- Fox, S.R., "Projective Geometry Imaging," 1990.
- Hyland, J.C., "Submarine Mine Avoidance," 1990.
- Schrodt, J.K., "Copolymer Hydrophones and Copolymer Hydrophone Arrays," 1990.
- Detsch, R.M. and Harris, I.A., "Small Air Bubbles in Reagent Grade Water and Seawater Part I: Rise Velocities of 20 to 100  $\mu\text{m}$  Diameter Bubbles," Journal of Geophysical Research, Mar 1990.
- Detsch, R.M. and Harris, I.A., "Small Air Bubbles in Reagent Grade Water and Seawater Part II: Dissolution of 20 to 500  $\mu\text{m}$  Diameter Bubbles at Atmospheric Pressure," Journal of Geophysical Research, Mar 1990.
- Commander, K.W. and McDonald, R.J., "A Finite Element Solution of the Inverse Problem in Bubble Swarm Acoustics," Journal of Acoustical Society of America, Mar 1990.
- Lim, R. and Hackman, R.H., "Multiple Scattering from Many Bounded Obstacles: An Improved Matrix Formulation," Journal of Acoustical Society of America, Sep 90.
- Wilbur, J.E., "Time-Variant Channel Effects on Spread Spectrum and Diversity Transmissions: A Time Frequency Based Formalism for Signal Parameterization," Journal of Acoustical Society of America, May 1990.
- McNeil, R., "A Geometric Study of Corroded Surfaces of Iron-Nickel Alloy," Solid State Chemistry, May 1990.
- Sammelmann, G.S. and Hackman, R.H., "Acoustic Scattering from Large Aspect Ratio Objects in a Range-Independent Shallow Water Waveguide," Journal of Acoustical Society of America, Jul 1990.

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e. List all technical books and/or chapters written by the in-house technical staff that were published or accepted for publication since 1 January 1990.

There were no technical books and/or chapters written by the in-house technical staff that were published or accepted for publication since 1 January 1990.

f. Identify any Nobel laureates employed at this activity.

There are no Nobel laureates currently employed at this activity.

g. List all non-governmental awards for research or technical excellence given to members of your technical staff since 1 January 1990.

The Technical Co-Operation Program Award for Work of the Mulloka Sonar Project (GTP-11)	4
TQL Award from TWR for LCAC Trial Deficiency Management Improvements	1
ADPA	2

h. List all governmental awards for research or technical excellence given to members of your technical staff since 1 January 1990.

Navy Superior Civilian Service award (for significant contribution to advancing the technical and scientific understanding of mine warfare operations and equipment while Science Advisor to Commander, Mine Warfare Command)	1
Navy Meritorious Civilian Service Award (includes those signed by our Commanding Officers as well as off-Station)	6
Special Recognition Award for Arctic Demonstration/Validation Team	4
Navy Commendation Medal for Sustained Superior Performance as Amphibious Warfare Officer	1
USMC Commendation for Meritorious Civilian Service (for Management of the Anti-Personnel Obstacle Breaching System)	1
Letters of Commendation	11
Meritorious Unit Commendation citations for meritorious service in direct support of Operations Desert Shield and Desert Storm from 2 Aug 90 to 11 Apr 91	1329
Department of Defense Medallion for providing direct support to combat forces during Desert Shield/Desert Storm	10
Meritorious Service Medal	1
Legion of Merit	1
IR/IED	13

5,019,822	James L. Kirkland	Marine Object Detector	28 MAY 91
5,034,748	Richard C. Goekeke	An Improved Narrow Band Automatic Phase Control	23 JUL 91

**FY92 = 3**

<u>Pat. No.</u>	<u>Inventor(s)</u>	<u>Title</u>	<u>Date</u>
5,060,314	Michael L. Lewis (NC 72,633)	Multi-Mission Ballistic Resistant Jacket	29 OCT 91
5,070,807	Michael L. Lewis (NC 72,858)	Temporary Canopy For Small Watercraft	10 DEC 91
H1104	Richard A. Cavanagh (NC 72,469)	Air Cushion Vehicle Conductive/Semiconductive Flexible Skirt, and Method	01 SEP 92

**FY93 = 6**

<u>Pat. No.</u>	<u>Inventor(s)</u>	<u>Title</u>	<u>Date</u>
5,160,438	Richard Detsch (NC 73,331)	Method and Means of Sampling Large Regions of Liquid For Pollution or Biological Activity Using Bubbles	03 NOV 92
5,188,171	Michael E. Stephanov Rand R. Biggers Jeff W. Rish, III Girardeau L. Henderson Chuong N. Pham (NC 73,539)	Liquid-Crystal Heat Valve Controlled With Multiple Electrode Pairs	23 FEB 93
5,222,548	Rand R. Biggers Jeff W. Rish, III Girardeau L. Henderson Chuong N. Pham Robert R. Fuller (NC 73,278)	Electrically Controlled Liquid-Crystal Heat Valve	29 JUN 93
5,245,588	James L. Kirkland (NC 52,075)	Regenerative Radio-Frequency Wire Detector	24 SEP 93
5,245,928	Norman H. Jasper (NC 46,994)	Ship Signature Modifier	21 SEP 93
5,249,162	James L. Kirkland (NC 53,451)	Radio Frequency Phase Sensitive Wire Detector	28 SEP 93

**FY94 = 2**

<u>Pat. No.</u>	<u>Inventor(s)</u>	<u>Title</u>	<u>Date</u>
5,253,221	Dixon W. Coulbourn (NC 59,562)	Null Steering Device	12 OCT 93
5,299,171	Philip K. White Clell A. Dildy, Jr.	Torpedo Decoy Signal	29 MAR 94

j. List all patents applied for by the in-house technical staff members of this activity since 1 January 1990.

**FY90 = 7**

	<u>Filed PTO</u>	<u>Serial No.</u>	<u>Title</u>
NC 71308 (Ducote)	16 Jan 90	08/083232	LCAC Deck Clamp
NC 72469 (Cavanagh, Dyke)	02 Mar 90	08/023431	Air Cushion Vehicle Conductive/ Semiconductive Flexible Skirt and Method
NC 72633 (Lewis)	04 Mar 90	08/136856	Multi-Mission Ballistic Resistant Jacket
NC 71656 (Cook)	07 May 90	08/083600	Multi-Sectional Transducer Array With Isolation Baffle
NC 72858 (Lewis)	02 Aug 90	08/083607	Temporary Canopy For Small Watercraft
NC 73089 (Muehl)	13 Aug 90	08/083606	Photovoltaic Solar Powered Cathodic Protection System and Method
NC 72467	05 Sep 90	08/083609	A Broadband Structured Anti-Backscatter Material and Related Method

**FY91 = 2**

	<u>Filed PTO</u>	<u>Serial No.</u>	<u>Title</u>
NC 73331 (Detsch)	28 Dec 90	08/095557	Method and Means of Sampling Large Regions of Liquid on Pollution or Biological Activity Using Bubbles
NC 72803 (Detsch)	01 Feb 91		Particle Mediated Dispersion

**FY92 = 3**

	<u>Filed PTO</u>	<u>Serial No.</u>	<u>Title</u>
NC 74771	06 Mar 92	08/083606	Method and Apparatus for Providing Continuous Cathodic Protection by Solar Power
NC 73278	26 May 92	08/888096	Electrically Controlled Liquid-Crystal Heat Valve
NC 73539	22 Jun 92	08/902201	Liquid- Heat Valve Controlled With Multiple Electrode Pairs

**FY93 = 7**

	<u>Filed PTO</u>	<u>Serial No.</u>	<u>Title</u>
NC 73410 (Wynn, Bono)	26 Feb 93	08/023431	Active Electromagnetic Sea Bottom Anomaly Detector
NC 72526 (Wyman, Davis)	29 Jun 93	08/083232	Submersible Boat
NC 74047 (Zehner)	30 Jun 93	08/083600	Passive Beamformer With Low Side Lobes
NC 74066 (Zehner)	30 Jun 93	08/083607	Wide-Beam Acoustic Projector With Sharp Cutoff and Low Side Lobes
NC 74112 (Zehner)	30 Jun 93	08/083606	Toroidal Volume Search Sonar
NC 74402	30 Jun 93	08/083609	Monostatic Projector Synthetic Aperture Sonar
NC 75098 (Gershenson, McDonald)	26 Jul 93	08/095557	Channel Equalized DC Squid Flux Locked Loop

**FY94 =**

	<u>Filed PTO</u>	<u>Serial No.</u>	<u>Title</u>
NC 75510 (Downs)	18 Oct 93	08/136856	Surface-Laminated Piezo-electric-film Sound Transducer

k. Identify any in-house staff that are members of the National Academy of Engineering.

There are no in-house staff members that are members of the National Academy of Engineering.

l. Identify any in-house staff that are members of the National Academy of Sciences.

There are no in-house staff that are members of the National Academy of Sciences.

m. How many Cooperative Research and Development Agreements (CRDAs) have been signed by the activity since 1 January 1990?

No Cooperative Research and Development Agreements have been signed by this activity since 1 January 1990; however, several are being pursued.

n. What has been the activity's annual royalty income from CRDAs and patent licenses for each year since 1 January 1990?

There has been no royalty income from CRDAs or patent licenses since 1 January 1990.

o. List and describe any major end item prototypes, either product or process technology, developed in-house by the activity that are currently in production and/or are currently in use by the U.S. Armed Forces or by industry. Cite a published reference that documents the work.

1. ITEM: AN/SQQ-30 AHEAD-LOOKING SONAR  
DESCRIPTION: Minehunting Sonar to provide MCM-1 Class ships the capability to detect, classify, and localize bottom and moored mines at safe stand-off distances.  
DOCUMENTATION: DT-III Test Results of AN/SQQ-30 (XN-1) Sonar Pre-production Model, April 1983  
IOC: FY 1986
2. ITEM: AN/SQQ-32 AHEAD-LOOKING SONAR  
DESCRIPTION: Minehunting Sonar to provide MCM-1/MHC-51 Class ships the capability to detect, classify, and localize bottom and moored mines at safe stand-off distances. This sonar is a planned replacement for the AN/SQQ-30.  
DOCUMENTATION: AN/SQQ-32 TECHEVAL Phase II Final Report, January 1990  
IOC: FY 1991
3. ITEM: OK-520/SQQ COMMON WINCH  
DESCRIPTION: A non-magnetic winch designed to support both the AN/SQQ-30 & AN/SQQ-32 Minehunting Sonars. Used to deploy, tow, and retrieve the sonar body.  
DOCUMENTATION: MCM-1 Class Combat System Equipment Description Notebook  
IOC: FY 1986
4. ITEM: AN/SQQ-35 SIDE SCAN SONAR  
DESCRIPTION: Minehunting Sonar to provide Craft of Opportunity boats the capability to detect bottom mines.  
DOCUMENTATION: AS/SQQ-35 Acceptance Test Plan, March 1989  
IOC: FY 1990
5. ITEM: AN/SLQ-48, MINE NEUTRALIZATION SYSTEM

DESCRIPTION: The AN/SLQ-48 provides the Fleet with the capability to identify moored and bottom mines and to neutralize bottom mines. Mission Package 3 will provide the Mine Neutralization Vehicle with a mission package for "hard kill" of moored mines.

DOCUMENTATION: Technical Manual, NAVSEA SW570-AA-OMI-010

IOC: FY 1987

6. ITEM: SUPER SEA ROVER

DESCRIPTION: Persian Gulf initiative. Provided a mine identification capability to MSO's deployed to Persian Gulf.

DOCUMENTATION: NCSC Conf White Paper, "Data Requirements Outline for ROV Signature Measurements," of 3 Dec 1987.

IOC: FY 1987

7. ITEM: MK 9 ENVIRONMENTAL MONITORING SYSTEM

DESCRIPTION: The MK 9 provided the MSO platforms with the capability to measure environmental parameters of the water column (sound velocity & temperature). An expendable probe is used to collect the data which is then processed to determine how best to employ the sonar tow body and to predict how well the sonar would operate.

DOCUMENTATION:

IOC: FY 1986

8. ITEM: SEACAT SOUND VELOCITY PROFILER

DESCRIPTION: Persian Gulf initiative. The SEACAT Profiler provides the MCM platforms with the capability to measure environmental parameters of the water column (sound velocity & temperature). An recoverable probe is used to collect the data which is then processed to determine how best to employ the sonar tow body and to predict how well the sonar would operate.

DOCUMENTATION: CSS Report: "Persian Gulf Environmental Summary Report"

IOC: FY 1991

9. ITEM: AN/SSN-2 PRECISE INTEGRATED NAVIGATION SYSTEM (PINS)

DESCRIPTION: Provide position fixing and navigation support to Fleet MCM-1 Class platforms for precise track following in a minefield; provide integration of shipboard minehunting systems and real-time tactical situation displays of MCM missions. System configuration evolved through 3 phases:

- Phase I: baseline system
- Phase II: AN/UYK-44 computer replaced U-1600A  
RACAL Hyperfix system replaced RAYDIST
- Phase III: NAVSTAR GPS added  
TAC Displays added

Integrated Acoustic Tracker added

DOCUMENTATION:

Phase I: AN/SSN-2 TECHEVAL Final Test Report, May 1985

Phase II: AN/SSN-2 Systems & Developmental Testing (DT-IIB)  
Summary Report, May 1987

Phase III: AN/SSN-2 PINS Phase III TECHEVAL (DT- IID) Test Report,  
November 1992

IOC:

Phase I: FY 1985  
Phase II: FY 1988  
Phase III: FY 1993

10. ITEM: INTEGRATED ACOUSTIC TRACKER (IAT)  
DESCRIPTION: Provide capability to determine position of equipment deployed from MCM-1/MHC-51 Class ships; integrate combat systems equipment to provide more accurate target information and improved ship control by graphics  
DOCUMENTATION: Phase III: AN/SSN-2 PINS Phase III TECHEVAL (DT-IID) Test Report, November 1992  
IOC: FY 1993
11. ITEM: AN/URN-30 (HYPERFIX)  
DESCRIPTION: Provide precise position fixing and navigation support for precise track following in a minefield to Fleet MSO platforms  
DOCUMENTATION: Hyperfix Certification Test Plan, May 1987  
IOC: FY 1986
12. ITEM: AN/SYQ-12 ISS TACTICAL DISPLAY  
DESCRIPTION: Provide a tactical display and contact database management system for MSO & COOP platforms. The system processes data from the AN/URN-30 Hyperfix, AN/WRN-6 GPS, Loran-C, AN/SQQ-14 Ahead-looking Sonar, AN/SQQ-35 Side-Scan Sonar  
DOCUMENTATION: ISS Software Version Documents 1,2,3,4, 5  
IOC: FY 1984
13. ITEM: AN/WQN-1, CHANNEL FINDER (MCM-1)  
DESCRIPTION: Provides navigation support to MCM-1 Class platforms  
DOCUMENTATION: NAVSEA Top-level Assembly drawing 807-5035016  
IOC: FY 1988
14. ITEM: AN/WQN-1, CHANNEL FINDER (LHD)  
DESCRIPTION: Provides navigation support to LHD Class platforms  
DOCUMENTATION: NAVSEA Top-level Assembly drawing 807-5035016  
IOC: FY 1988
15. ITEM: AN/WQN-1, CHANNEL FINDER (LHA)  
DESCRIPTION: Provides navigation support to LHA Class platforms  
DOCUMENTATION: NAVSEA Top-level Assembly drawing 807-5035016  
IOC: FY 1988

## AN/SLQ-37 INFLUENCE MINESWEEPING IMPROVEMENTS

- AN/SLQ-37 Influence Minesweeping System is towed behind an MCM platform to generate acoustic and magnetic signals that simulate those generated by passing ships. The

intent is to cause influence component mines to explode a safe distances from the MCM platform. RM&A upgrades were done on most system components.

16. ITEM: AN/SLQ-37 V(2)

DESCRIPTION: The V(2) modernization effort produced a digital, micro-processor based controller which generated magnetic waveforms, replacing the mechanical magnetic waveform controller.

DOCUMENTATION: Technical manual SW565-AA-MMO-010

IOC: FY 1986

17. ITEM: AN/SLQ-37 V(3)

DESCRIPTION: The V(3) modernization effort upgraded the mechanical acoustic controller to a digital micro-processor and combined both the magnetic and acoustic waveform generation capabilities into one controller unit.

DOCUMENTATION: Technical Manual SW565-AB-MMM-020

IOC: FY 1987

18. ITEM: K-4 ELECTRODE FLOATS

DESCRIPTION: Used with the magnetic sweep to provide buoyancy to the electrodes; canvas covering replaced with more durable sheathing.

DOCUMENTATION: CSS Drawing number 07070-24994

IOC: FY 1988

19. ITEM: TS-4144/P ACOUSTIC TEST SET

DESCRIPTION: Used to verify that the acoustic minesweep devices are operating properly. The TS-4144/P is a solid state replacement for the vacuum tube SOMEST MK-4 test set.

DOCUMENTATION: NAVSEA Drawing number (top-level) 6224282

IOC: FY 1989

20. ITEM: SAM-1

DESCRIPTION: Persian Gulf initiative. Provided a remote controlled influence minesweeping system using a pontoon type craft with a magnetic solenoid coils and an acoustic device.

DOCUMENTATION: Swedish SAM (Self-propelled Acoustic Magnetic Minesweep) Evaluation, June 1991

IOC: FY 1991

## AN/SLQ-38 MECHANICAL MINESWEEPING IMPROVEMENTS

- AN/SLQ-38 Mechanical Minesweeping System is towed behind an MCM platform and is used to cut the moorings of mines in the water column. System is comprised of sweepwire, cutters, wedge stops and tensiometers. RM&A upgrades were done on all system components.

21. ITEM: SWEEPWIRE

DESCRIPTION: Sweepwire is towed behind an MCM platform and is armed with cutters to cut mine moorings. Serrated 51/64" wire was replaced with more readily available 5/8" non-serrated wire. Replacement wire was more durable, provided greater swept path, less hog & sag, and was easier to deploy & recover.

DOCUMENTATION: 5/8" Sweepwire Test Report, September 1989

IOC: FY 1988

22. ITEM: MK 12 CUTTER FINS ( 1-Shot)

DESCRIPTION: Attached to sweepwire to engage and cut mine moorings. Stainless steel cutter fins were replaced with lighter weight fiberglass fins. Replacement fins were more durable and were easier to use.

DOCUMENTATION: MK 12 Test Plan, February 1987

IOC: FY 1990

23. ITEM: MK 14 CUTTER FINS (4-Shot)

DESCRIPTION: Attached to sweepwire to engage and cut mine moorings. Stainless steel cutter fins were replaced with lighter weight fiberglass fins. Replacement fins were more durable and were easier to use.

DOCUMENTATION: MK 14 Test Plan, February 1987

IOC: FY 1990

24. ITEM: WEDGESTOPS

DESCRIPTION: Attached to the sweepwire to keep cutters in place. Replacement wedgestops were smaller, lighter, and easier to use. A single helix insert replaced separate left/right inserts and reduced the on-board requirements by one-half.

DOCUMENTATION: Modified wedgestop test plan, October 1988

IOC: FY 1991

25. ITEM: MK 9 CUTTER SWIVEL

DESCRIPTION: Attached to sweepwire to eliminate twisting & binding of the sweepwire.

DOCUMENTATION: CSS Drawing number 07070-25480

IOC: FY 1990

26. ITEM: IDMS LOCATOR

DESCRIPTION: Used with the 2-ship mechanical sweep to provide information on depth of sweep and continuity of sweepwire.

DOCUMENTATION: CSS Drawing number 07070-20239

IOC: FY 1995

27. ITEM: TENSIOMETERS

DESCRIPTION: Provides the capability to monitor tension in sweepwire during mechanical minesweeping operations. Obsolete analog hydraulic tensiometers were replaced with a more accurate digital strain-gauge system; replacement resulted in better utilization of sweepgear.

DOCUMENTATION: CSS Drawing number 07070-25096

IOC: FY 1990

## MISCELLANEOUS MCM SUPPORT EQUIPMENT

28. ITEM: TYPE 3 DAN BUOYS  
DESCRIPTION: Used by to Fleet to mark channels or areas. Replacement float incorporates more durable, easier to repair material.  
DOCUMENTATION: CSS Drawing number 07070 -18492  
IOC: FY 1986
29. ITEM: MASTER REFERENCE BUOYS  
DESCRIPTION: Used by the Fleet as a back-up navigation aid. Replacement float incorporates more durable, easier to repair material and has an improved flasher for enhanced visibility at night.  
DOCUMENTATION: CSS Drawing number 07070-24251  
IOC: FY 1988
30. ITEM: MARKER LIGHT (XENON FLASHER)  
DESCRIPTION: Used by the Fleet on buoys and floats for enhanced visibility at night.  
DOCUMENTATION: CSS Drawing number 07070-18492  
IOC: FY 1988
31. ITEM: FANTAIL LIGHTS  
DESCRIPTION: Persian Gulf initiative to improve visibility and safety on the fantail of MSOs during night operations.  
DOCUMENTATION:  
IOC: FY 1988
32. ITEM: LEAD CLUMPS  
DESCRIPTION: Heavy, massive weights are used on Surface MCM ships to anchor buoys during MCM operations. Concrete clumps of various sizes and shapes were replaced with a donut-like weight (one size) constructed of lead. The number of lead weights used depends on the intended function. On-board space & weight requirements have been reduced significantly.  
DOCUMENTATION: CSS Drawing number 07070-20164  
IOC: FY 1987
33. ITEM: VERSATILE EXERCISE MINE SYSTEM (VEMS)  
DESCRIPTION: Provides real-time training for the Fleet against existing/projected foreign mine threats  
DOCUMENTATION: NCSC VEM Test Report of Jan 1987  
IOC: FY 1990
34. ITEM: TRAWL NET SWEEP  
DESCRIPTION: A tennis-like net towed along the ocean bottom behind a trawl-like craft of opportunity to physically remove mines from an area or to cause the mine to detonate.  
DOCUMENTATION: NCSC Report on Initial Test, "COOP Trawl Net Test" 28 Aug 85 through 1 Sep 85

## ADDITIONAL INITIATIVES

35. ITEM: REMOTE MINEHUNTING OPERATIONAL PROTOTYPE

DESCRIPTION: Develop a fully autonomous, off-board system to provide the Task Force with an organic mine avoidance and mine reconnaissance capability. This effort will provide a near-term capability using NDI equipments and the in-service AMCM AN/AQS-14 sonar.

36. ITEM: REMOTE MINEHUNTING SYSTEM

DESCRIPTION: Develop a fully autonomous, off-board system to provide the Task Force with an organic mine avoidance and mine reconnaissance capability. This is a far-term effort and will incorporate new minehunting sensor technology, eg. a high area rate sonar.

37. ITEM: AN/SSQ-94 COMBAT SYSTEM INTEGRATED TRAINING EQUIPMENT (CSITE)

DESCRIPTION: Develop organic combat systems trainer for MCM-1 and MHC-51 Class ships to provide operator proficiency training, subteam and team training, and tactics and mission planning training.

38. ITEM: MCM TACTICAL ENVIRONMENTAL DATA SYSTEM

DESCRIPTION: Develop an environmental data collection and processing system to support minehunting and minesweeping operations on MCM-1/MHC-51 Class ships

39. ITEM: SINGLE SHIP DEEP SWEEP (SSDS)

DESCRIPTION: Provide modular mechanical minesweeping capability to MHC-51 Class ships

40. ITEM: AN/SLQ-48, MISSION PACKAGE 3

DESCRIPTION: The AN/SLQ-48 provides the Fleet with the capability to identify moored and bottom mines and to neutralize bottom mines. Mission Package 3 will provide the Mine Neutralization Vehicle with a mission package for "hard kill" of moored mines.

41. ITEM: BNU-2/W Recovery Buoy

DESCRIPTION: An automatic deployable flotation marker to mark the tow ball end of AMCM sweep gear.

DOCUMENTATION: Technical Manual NAVAIR 11-80MS-12, Drawing # 30003  
1111AS-100

IOC: 1976

42. ITEM: Winch Crane Assembly

DESCRIPTION: A small lightweight, hand operated crane to remove/install drums in the multi-winch II system.

DOCUMENTATION: Technical Manual NAVAIR 19-1-139, Drawing # 07070-15816  
IOC: 1974

43. ITEM: Release/Recovery Hook  
DESCRIPTION: A device to hold and release on command the AMCM tow being transferred to a helicopter in a sea-to-air transfer.  
DOCUMENTATION: Technical Manual NAVAIR 19-1-140, Drawing #07070-15828  
IOC: 1974
44. ITEM: Pipe, Minesweeping Gear, AN/SPU-1/W  
DESCRIPTION: A shallow water AMCM magnetic sweep device for Helicopters.  
DOCUMENTATION: Technical Manual AW-565MC-MM0-100, Drawing #07070-14660  
IOC: 1972
45. ITEM: MK 105/LPD Lift Assembly  
DESCRIPTION: A special spreader bar to work with two well deck cranes for lifting the MK-105 onto the cradle.  
DOCUMENTATION: Technical Manual NAVAIR 11-80-MSA-8, Drawing # 07070-16480-1  
IOC: 1979
46. ITEM: MK-16 MCD 0 Recovery System  
DESCRIPTION: A wire rope and recovery hook system to conduct air-to-sea transfers with sweep gear.  
DOCUMENTATION: Technical Manual NAVAIR 19-15-4, Drawing # 07070-14425  
IOC: 1972
47. ITEM: Air-to-Air Transfer System  
DESCRIPTION: A system used in AMCM to transfer MK-10 and A/N37U-1 from one helo to another helo.  
DOCUMENTATION: Technical Manual AW-565MC-MMO-000  
IOC: 1990
48. ITEM: Cutter, Powder Actuated, MK-17  
DESCRIPTION: A water safety cutter use to cut mine moorings when deployed with the MK-103 or A/N37U-1 moored sweep systems.  
DOCUMENTATION: Technical Manual NAVAIR 11-80MS-5, Drawing #2622368  
IOC: 1966
49. ITEM: 200 KW Load Box  
DESCRIPTION: A water cooled resistor bank to enable the testing of the MK-105 electrical output.  
DOCUMENTATION: Technical Manual NAVAIR 19-15-5, Drawing # 07070-21854  
IOC: 1975
50. ITEM: Winch Drum Leading Mechanism  
DESCRIPTION: A electrohydraulic device to pre wind tow wires/ropes onto the AMCM winch drums.

DOCUMENTATION: Technical Manual NAVAIR 19-1-154, Drawing #07070-171831

IOC: 1975

51. ITEM: AMCM Single Winch II

DESCRIPTION: A light weight single drum, hydraulic operated winch to allow the stream and recovery of minesweeping/ hunting systems.

DOCUMENTATION: Technical Manual AW-565MC0MAB-000, Drawing #07070-24397

IOC: 1987

52. ITEM: AN/ALQ-141 Countermeasures System

DESCRIPTION: A special purpose mine countermeasures system.

DOCUMENTATION: Technical Manual AW-565BD-MIB-000/S, Drawing # 31442-610J784G01

IOC: 1977

53. ITEM: AN/AQS-14 Sonar Detecting Set

DESCRIPTION: An airborne minehunting sonar system.

DOCUMENTATION: Technical Manual AW-565BD-MMO-100, Drawing # 1507E86

IOC: 1982

54. ITEM: Precise Navigation System

DESCRIPTION: A precise navigation system for airborne mine countermeasures helicopters.

DOCUMENTATION: Test Report # NCSCLR320/C9-001

IOC: 1989

55. ITEM: Swimmer Area Navigation System (SANS)

DESCRIPTION: A portable, time synchronous system designed to provide the combat swimmer a means to navigate and systematically explore a rectangular underwater area.

DOCUMENTATION: O&M Manual SE350-AD-OMI-010/AN/UQN-5A

IOC: 1985

56. ITEM: SEAL Delivery Vehicle (SDV)

DESCRIPTION: As ISEA & Depot Overhaul Point (DOP) we overhaul SDV's at the rate of 5 per year. Overhauls have been done at CSS for the last 15 years. 21 major Engineering Changes requested by the Fleet have been designed and built by CSS for incorporation into SDV from 87-94.

DOCUMENTATION: MK 8 SDV System DWG. # 6317828

IOC: 1978-1994 (5 per year)

57. ITEM: Dry Deck Shelter Transporter (DDST)

DESCRIPTION: Heavy haul trailer designed to carry DDS over the road in C-5 aircraft, on ship or rail, and also serve as training and storage platform.

DOCUMENTATION: DDST DWG. #6350990

IOC: SN 01S - 1982

SN 02P - 1987

SN 03 - 1988  
SN 04, SN 05, SN 06 - 1991  
SN 07 - 1992

58. ITEM: Training Closure & Hatch Assembly (TC&HA) for DDS  
DESCRIPTION: Provides pressure boundary/closure for DDS when mounted on transporter, allows access, vent and crane for training when DDS is shore based.  
DOCUMENTATION: TC&HA DWG. # 6350995  
IOC: SN 02 - 1987  
SN 03 - 1988  
SN 04 - 1991  
SN 07 - 1992
59. ITEM: Divers Air Storage System (DASS)  
DESCRIPTION: Provides air storage & delivery capability to support DDS shore based training for SDVT-1 DET HI.  
DOCUMENTATION: SUBTRAP DWG. #6655057  
IOC: 1991, 1992
60. ITEM: DDS DC Winch System  
DESCRIPTION: Submersible winch mounts in DDS to pull in SDV using power from a modified ET.  
DOCUMENTATION: DDS Winch DWG. # 6162890  
IOC: 1978
61. ITEM: DDS Training Support Package  
DESCRIPTION: Consists of a compressor/generator/ power conversion trailer & an air storage bank of 25 "K" bottles, to support DDS shore based training.  
DOCUMENTATION: Sketches only by CSS  
IOC: 1st system - 1984  
2nd system - 1985
62. ITEM: Foreign Military Sales (FMS)  
DESCRIPTION: Delivery of 3 SDV's to an overseas customer through the FMS program.  
DOCUMENTATION: DWG. # 6317828  
IOC: SDV 01 - 1985  
SDV 02 - 1991  
SDV 03 - 1992
63. ITEM: Special Mission Lighting System  
DESCRIPTION: A multi-mode, infra-red illuminator, that can act as a illumination device, strobe beacon or morse code signalling unit.  
DOCUMENTATION: Patent Disclosure has been filed.  
IOC: 1993 to Army Special Forces
64. ITEM: Underwater Signalling Device

DESCRIPTION: Provides communication between divers and topside.  
DOCUMENTATION: Code 2330 DWG  
IOC: 1993

65. ITEM: IDMS Locator  
DESCRIPTION: A device which enables the operator of the improved deep moored sweep to avoid dragging this sweep on the ocean bottom.  
DOCUMENTATION: IDMS Locator Tech Manual and Drawing Set  
IOC: 1990
66. ITEM: NSW Chronometer  
DESCRIPTION: Diver Navigation Depth Gauge and Timer.  
DOCUMENTATION: NSW Chronometer Operating Instructions, Code 2330 Drawing  
IOC: 1990
67. ITEM: Acoustic Tracking and Communications System (ATACS)  
DESCRIPTION: Underwater tracking/communication system to support SSN-21 test platform.  
DOCUMENTATION: ATACS Tech Ref Manual for the A7 LLSV Unit, Rev 1, 6/89; ATACS Tech Ref Manual for the A54 Topside Unit, Rev A, 11/88; ATACS Test Report, 8/86; NCSC TN 874-87 "Installation and Survey of the ATCS"; and NCSC LSV-2-87 LSV ATACS Tech Ref Manual, VOL III  
IOC: 1987
68. ITEM: Remote Switch  
DESCRIPTION: A system to remotely (radio or hardwired) close a switch to activate SEAL team training systems.  
DOCUMENTATION: Remote Operated Switch Technical Manual, 6/92  
IOC: 1991
69. ITEM: Rifle Simulator Controller  
DESCRIPTION: System to control the Army's Rifle Fire Simulator  
DOCUMENTATION: Code 2330 DWGS  
IOC: 1993
70. ITEM: Non-Audible Communication System  
DESCRIPTION: Non-audible communication systems for use in the SDV's.  
DOCUMENTATION:  
IOC: 1989
71. ITEM: Conventional Diving System Helmets  
DESCRIPTION: Hardshell helmets for use as part of the conventional diving system.  
DOCUMENTATION: Code 2330 drawings  
IOC: 1991
72. ITEM: Lightweight Assault Ladder  
DESCRIPTION: High strength, lightweight ladder for covert assault situations.

DOCUMENTATION: Working Drawings: TA 00010-REV 1, TA 00014, SK 00012  
IOC: 1991-93

73. ITEM: Lightweight Ladder Deployment Device  
DESCRIPTION: Device to facilitate rapid deployment of lightweight ladder.  
DOCUMENTATION: Working Drawing 00015-REV 1  
IOC: 1992-93
74. ITEM: High Speed Boat Helmet Communication System  
DESCRIPTION: System for reducing the magnetic and acoustic signature of small boats used by EOD.  
DOCUMENTATION:  
IOC: 1993
75. ITEM: EOD Small Boat Signature Reduction System  
DESCRIPTION: System for reducing the magnetic and acoustic signature of small boats used by EOD.  
DOCUMENTATION:  
IOC: 1993
76. ITEM: Temporary Shelter for Small Water Craft  
DESCRIPTION: A lightweight, inexpensive shelter to provide concealment and/or inclement weather protection. Designed to be quickly adapted to almost any small vessel, (But developed specifically for CRRC, Combat Rubber Raiding Craft.)  
DOCUMENTATION: Patent granted in 1992  
IOC: May 1989
77. ITEM: Underwater Defensive Lighting System  
DESCRIPTION: A mobile lighting system designed for single ship operation, specifically to provide lighting to deter underwater swimmers/divers by placing a single strand of six lights, (1000 watts ea) over the side of the vessel in its most vulnerable areas.  
DOCUMENTATION:  
IOC: 1990
78. ITEM: Bullet Resistant Jacket, Level 111A  
DESCRIPTION: A mission tailorable, fire resistant, bullet resistant jacket capable of withstanding 9MM auto fire, able to support a 300 lb. load in the water and able to be heated or cooled depending upon operational dictates.  
DOCUMENTATION: Patent received in 1992  
IOC: USS Eisenhower, 1990  
USS Kitty Hawk, 1990  
USS Carl Vinson, 1993
79. ITEM: Hull Perimeter Lighting System  
DESCRIPTION: This system offers 360 DEG lighting and can be installed on any US Naval vessel. The system consists of 3 different output lights, (550, 1000, & 1500 watts). The power outputs available on Naval vessels varies according to class and ship. This is

countered by supplying transformers that can either operate in the step-up or step-down configuration.

DOCUMENTATION: Total installation costs were less than \$8,000 on each vessel.  
IOC: USS Kitty Hawk (27 lights), USS Carl Vinson (25 lights) - 1993

80. ITEM: Clandestine Underwater Night Vision Device

DESCRIPTION: This system allows multi-lens, infra-red, (non-visible) underwater and on the surface vision. The system consists of an onboard 10 milawatt laser and choice of 26MM or 75MM lensing system.

DOCUMENTATION: Patent Disclosure has been filed.

IOC: Army Special Forces - 1992

81. ITEM: Acoustic Rendezvous Transponder

DESCRIPTION: Transponder which operates in conjunction with the SDV OAS.

DOCUMENTATION: ART Operation and Maintenance Manual

IOC: 1993

82. ITEM: Integrated Helmet Communications System

DESCRIPTION: A waterproof, ruggedized, head contact, high-noise environment microphone and ear phone communication system

DOCUMENTATION: Patent has been filed. (Serial #08/136856). Developed under 1989 IR/IED proram - NCSC Technical Report TR415-89

IOC: Desert Storm 1991

83. ITEM: Motion Compensation (Merchant Ship Naval Augmentation Program (MSNAP))

DESCRIPTION: Motion compensation for auxiliary crane ships (T-ACS 1)

DOCUMENTATION: Motion compensation for offshore container handling

IOC: 1983

84. ITEM: Rider Block Tagline

DESCRIPTION: Increase safety of cargo operations through control of pendulation (MSNAP)

DESCRIPTION: Auxiliary crane ship rider block tagline system

IOC: 1985

85. ITEM: Habitability and Utility Support System (HUSS) (MSNAP)

DESCRIPTION: Modular support facilities of a personnel and utility oriented nature; such as, power generation, heating, ventilation/air conditioning, berthing, head and shower, lavatory, sanitation, medical, messing, and recreation facilities. Berthing and head and shower modules tested on USNS Southern Cross and MEDLOGEX 85

DOCUMENTATION: Huss, module drawing 868C8106

IOC: 1985

86. ITEM: Modular Mobile Repair System (MMRS) (MSNAP)

DESCRIPTION: Family of ISO container-based shop modules readily deployable on breakbulk ships and containerships of the ready reserve force for a variety of maintenance missions

DOCUMENTATION: MMRS Design Report  
IOC: 1986

87. ITEM: Container Strikeup System (CSUS) (MSNAP)

DESCRIPTION: Cargo strike-up system for cargo ships in the ready reserve force

DOCUMENTATION: CSUS Design Report

IOC: 1986

88. ITEM: Vertical Pallet Lifter (VPL) (MSNAP)

DESCRIPTION: Vertical cargo transport device for movement of palletted cargo and forklift trucks from below deck to the main deck or between decks within a ship's hold

DOCUMENTATION: Vertical pallet lifter final design

IOC: 1994

89. ITEM: Crane Enhanced Containership (CEC) (MSNAP)

DESCRIPTION: Provide a non-self-sustaining with the capability to self offload its cargo

DOCUMENTATION: CEC Design Report

IOC: 1994

90. ITEM: Global Positioning System (GPS) (LCAC)

DESCRIPTION: Satellite Positioning System

DOCUMENTATION: Installation control drawings (ICD)

IOC: 1991

91. ITEM: Identification, Friend of Foe (IFF) (LCAC)

DESCRIPTION: Allows control ship to identify/interrogate the LCAC

DOCUMENTATION: ICD

IOC: 1991

92. ITEM: Secure Voice Communications (SECVOX) (LCAC)

DESCRIPTION: Allows encrypted voice communication

DOCUMENTATION: ICD

IOC: 1988

93. ITEM: Advanced Narrowband Digital Voice Terminal (ANDVT) (LCAC)

DESCRIPTION: Replacement for obsolete KY-75A/Parkhill high frequency crypto equipment

DOCUMENTATION: ICD

IOC: 1992

94. ITEM: TEMPEST Certification (LCAC)

DESCRIPTION: Allows use of secure voice

- DOCUMENTATION: Technical manual  
IOC: 1992
95. ITEM: High Frequency Hum Filter (LCAC)  
DESCRIPTION: Eliminated excess noise in the HF receiver  
DOCUMENTATION: ICD  
IOC: 1992
96. ITEM: Man on the Move (MOM) Radio (LCAC)  
DESCRIPTION: Backfit LCAC with external antenna  
DOCUMENTATION: ICD  
IOC: 1993
97. ITEM: LR-80 Attitude Heading Reference Unit (AHRU) (LCAC)  
DESCRIPTION: Backfit craft with new attitude heading reference system  
DOCUMENTATION: ICD  
IOC: 1993
98. ITEM: LN-66 Radar (LCAC)  
DESCRIPTION: Upgraded the radar transceiver  
DOCUMENTATION: ICD, technical manual  
IOC: 1993
99. ITEM: Communications Control Unit (CCU) Test Set (LCAC)  
DESCRIPTION: Allows Fleet to Adjust CCU as required for TEMPEST certification  
and troubleshoot the CCU  
DOCUMENTATION: Technical manual  
IOC: 1993
100. ITEM: Position Location Reporting System (PLRS) (LCAC)  
DESCRIPTION: Allows message and position data transfers between remote and  
master stations  
DOCUMENTATION: ICD  
IOC: 1993-4
101. ITEM: Navigation Data Integrator (NDI) (LCAC)  
DESCRIPTION: Integrates navigation sensors and presents a graphical presentation  
for navigator  
DOCUMENTATION: ICD, technical manual  
IOC: 1994
102. ITEM: Alarm and Monitoring System (AMS) (LCAC)  
DESCRIPTION: Upgrades all AMS configurations to the -08 or -09 configuration  
DOCUMENTATION: ICD, technical manual  
IOC: 1994
103. ITEM: AMS Recorder (LCAC)

- DESCRIPTION: Added a ruggedized hard drive to the AMS Craft Control Unit (CCU) to record LCAC performance parameters  
DOCUMENTATION: ICD  
IOC: 1993
104. ITEM: LCAC Performance Analysis System (LPAS) (LCAC)  
DESCRIPTION: Analysis program for LCAC performance data; utilizes data from AMS recorder.  
DOCUMENTATION: Design document user manual  
IOC: 1994
105. ITEM: Mission Planning and Analysis System (MPAS) (LCAC)  
DESCRIPTION: Program that allows LCAC navigators to plan mission data on a PC and load into navigation data integrator. Also allows for analysis of recorded mission data.  
DOCUMENTATION: Design document user manual  
IOC: 1994
106. ITEM: GPS Data Loader Program (GDLP) (LCAC)  
DESCRIPTION: Allows the LCAC navigator to plan mission waypoints and transfer user selected waypoints and almanac data to the GPS receiver  
DOCUMENTATION: Design document user manual  
IOC: 1994
107. ITEM: Trial Deficiency Management System (Amphibious Ships)  
DESCRIPTION: Trial Deficiency Management System to interact with INSURV computer trial card system  
DOCUMENTATION: User manual  
IOC: 1991
108. ITEM: Pintle Hook  
DESCRIPTION: Enable shipboard rough terrain forklift to handle M198 howitzer  
DOCUMENTATION: Installation Level III Drawing  
IOC: 1988
109. ITEM: INOGON Light  
DESCRIPTION: Optical guidance system for LCAC in well deck of LSD 41, LHD, LSD 36 class  
DOCUMENTATION: Installation Level III Drawing  
IOC: 1988
110. ITEM: LCAC Ground Receptacle  
DESCRIPTION: Provide secure grounding for LCAC in well deck of LSD/LHD class ships  
DOCUMENTATION: Installation Level III Drawing  
IOC: 1987

111. ITEM: USMC Vehicle Characters and Shipboard Lashing Requirements  
DESCRIPTION: Manual for lashing USMC vehicles in cargo areas of amphibious ships.  
DOCUMENTATION: Technical Report 611-56W-TR-0001  
IOC: 1990
112. ITEM: Small Diameter Tensioned Hose Fueling At-Sea System (THFASS)  
DESCRIPTION: The small diameter Tensioned Hose Fueling At-Sea System (THFASS) is an improved method for fueling small ships and craft alongside while significantly reducing mechanical complexity, weight and cost.  
DOCUMENTATION: NAVCOASTSYSCEN Small Diameter THFASS-At-Sea System Final Report, Mar 85  
IOC: April 1990
113. ITEM: Large Diameter Tensioned Hose Fueling At-Sea System (THFASS)  
DESCRIPTION: Large Diameter THFASS is an improved method for aircraft carriers, auxiliary ships, and Strategic Sealift ships to provide fuel to escorts and other ships. Reduced hardware complexity, weight, and cost are the primary advantages.  
DOCUMENTATION: NAVCOASTSYSCEN Large Diameter Tensioned Hose Fueling At-System Report, Aug 90  
IOC: 1990
114. ITEM: Omni-directional Vehicle (ODV)  
DESCRIPTION - The ODV provides a highly maneuverable, user friendly vehicle for the movement of ordnance and other cargo in the confined spaces on Combat Logistics Force Ships (CLF), aircraft carriers, and amphibious warfare ships.  
DOCUMENTATION: NAVCOASTSYSCEN Exploratory Development of the Omni-Directional Vehicle (ODV), Feb 91  
IOC: 1991
115. ITEM: Multi-purpose Autonomous Vehicle (MPAV)  
DESCRIPTION: The MPAV is based on the omni-directional wheel and drive system to produce a semi-automated, highly maneuverable vehicle employed on the aircraft carrier for the movement of cargo and ordnance, aircraft weapons loading, and jet aircraft engine handling.  
DOCUMENTATION: Omni-Directional Multi-Purpose Autonomous Vehicle (MPAV-ODV) Development Report and Design, Apr 93  
IOC: 1993
116. ITEM: Global Positioning System Interface Unit (GPSIU)  
DESCRIPTION: Interfaces GPS receivers with the Marine Corps Position Location Reporting System (PLRS) and TAC-n workstations to allow PLRS to be utilized at sea as part of the AN/KSQ-1 Amphibious Assault Direction System  
DOCUMENTATION: GPSIU System Segment Specification (SSS), Interface Design Document (IDD), Complete Software Documentation Suite (2167A Tailored), and Product Drawings and Technical Manual  
IOC: 1994

117. ITEM: AN/KSQ-1 Amphibious Assault Direction System Software  
DESCRIPTION: TAC-n software developed to provide the Commander of the Amphibious Task Force (CATF), the Primary Control Officer (PCO), and the Secondary Control Officer (SCO) the ability to control amphibious assaults from Over-the-Horizon (OTH) DOCUMENTATION: System Specification, Prime Item Development Specifications (PIDS), Interface Design Document (IDD), Software Suite of Documentation (2167A tailored), technical manuals  
IOC: 1994
118. ITEM: Propeller F.O.D. Screen  
DESCRIPTION: Installed in front of the LCAC propeller shroud, it provides protection to the propeller from ingestion of debris into the propeller system.  
DOCUMENTATION: NAVSEA drawing 612-6274453  
IOC: June 1990
119. ITEM: APU Fuel Simplification  
DESCRIPTION: Eliminated independent fuel system for APU, thus removing redundant filters, coelescercs, plumbing, and an unreliable fuel pump from the LCAC.  
DOCUMENTATION: NAVSEA drawing 261-6642362  
IOC: July 1991 (Prototype demo September 1989)
120. ITEM: Linear Wiper  
DESCRIPTION: Replaces existing unreliable and expensive windshield wiper motor assemblies with a low-cost proven highly reliable wiper motor assembly for the front three windshields of the LCAC.  
DOCUMENTATION: CSS drawing 27639  
IOC: December 1993 (prototype demo August 1990)
121. ITEM: Observer Dome  
DESCRIPTION: Replaced expensive high maintenance bubble dome on LCAC port observer station with a fabricated trapezoidal canopy.  
DOCUMENTATION: CSS drawing 24172  
IOC: December 1988
122. ITEM: Observer Dome Wiper  
DESCRIPTION: This installation has been refined by replacement of manual wipers with motorized wipers including wash and anti-ice capability.  
DOCUMENTATION: CSS drawing 28000  
IOC: June 1993
123. ITEM: Towing Rig  
DESCRIPTION: Enhanced capabilities of existing towing rig by providing pelican hooks for rapid release and a weak link to preclude structural failures during sea surges.  
DOCUMENTATION: CSS drawing 27275  
IOC: April 1993

124. ITEM: Transverse Wash Down System  
DESCRIPTION: Introduced underhull fresh water washdown of critical air passages of the LCAC significantly reducing corrosion of those areas.  
DOCUMENTATION: CSS drawing 26814  
IOC: July 1991
125. ITEM: Blow-in Door  
DESCRIPTION: Redesigned main engine auxiliary air passage actuation system to improve reliability and for better sealing.  
DOCUMENTATION: NAVSEA drawing 251-6274491  
IOC: November 1991
126. ITEM: Wave Fence  
DESCRIPTION: Developed a stern wave fence to protect intrusion of following waves into the propeller thus eliminating a source of propeller catastrophic failures.  
DOCUMENTATION: CSS drawing 1987  
IOC:
127. ITEM: Armament Installation/Stowage  
DESCRIPTION: Increased capability of LCAC to carry grenade launcher and 50 caliber machine gun in addition to the M60 original equipment. Included in the design were; stowage of guns and a universal gun mount and gun barrel holders.  
DOCUMENTATION: CSS drawings 26808, 26810, 26811, 26812, and 27011  
IOC: June 1990
128. ITEM: Scavenge Fan Air Duct  
DESCRIPTION: Redesigned filtration system scavenge air duct routing it overboard thus eliminating a source of contaminated air from entering engine spaces.  
DOCUMENTATION: CSS drawing 26950  
IOC: June 1990
129. ITEM: Extreme Cold Weather Operations Kit  
DESCRIPTION: Developed a kit consisting of auxiliary cabin heaters, fuel tank underhull protection, thermal protection for engine oil sump, APU fuel control, and a thermally controlled servo system for lube oil coolers to allow LCAC operations in Arctic operations.  
DOCUMENTATION: CSS drawing 28299; NAVSEA drawing 262-5750665-017  
IOC: November 1992
130. ITEM: P-250 Pump Installation  
DESCRIPTION: Outfitted all LCACs with diesel driven utility pump for dewatering, fire fighting, etc., including mounting of stowage containers, AFFF cans, bilge eductors, etc.  
DOCUMENTATION: CSS drawings 27485 and 27618  
IOC: October 1991

131. ITEM: Low Light Level Operations  
DESCRIPTION: Enhanced LCAC low light level operations by changing the cockpit to control panel lighting system to anyis-green, selection of AN/PVS-7B night vision goggles, kevlar communications helmets compatible with the NVG and IR light shields for external lighting.  
DOCUMENTATION: LCAC craft specification 2028  
IOC: September 1988
132. ITEM: Flyover Blocks  
DESCRIPTION: Designed an erectable flyover block for use by LCAC in well deck operations for underhull and skirt maintenance.  
DOCUMENTATION: CSS drawing 28284  
IOC: September 1992
133. ITEM: Multi-Mission Craft, Air Cushion  
DESCRIPTION: In the process of developing mod kits to outfit LCAC for multi-mission capability, including towing of Mk103, Mk105, ANSQ-14, and launching M-58 linear demolition charges.  
DOCUMENTATION: NAVSEA drawing 476-6980534; 476-7002374; 476-7002380  
IOC: October 1994 (prototype demval April 1988)
134. ITEM: Personnel Transport Module  
DESCRIPTION: Developing a hand erectable multi-purpose shelter to be installed on the LCAC for transport of up to 180 personnel or 54 litters.  
DOCUMENTATION: NAVSEA drawing 802-6981305  
IOC: October 1994
135. ITEM: Mk 5 Mod 0 Linear Demolition Charge Kit  
DESCRIPTION: Kit which included all necessary equipment to setup and operate the M58 Linear Demolition charge from the ground.  
DOCUMENTATION: Level 3 Drawing Package  
IOC: 1983
136. ITEM: Mk 2 Mod 0 Mine Clearance System, Trailer Mounted  
DESCRIPTION: M58 Linear Demolition Charge mounted on a M353 trailer. Included adapter frame, ruggedized hydraulic launch rail and remote firing kit.  
DOCUMENTATION: Level 3 Drawing Package  
IOC: 1982
137. ITEM: M60 Track Width Mine Plow  
DESCRIPTION: Adapter Kit for installing the M1A1 track width mine plow on Marine Corps' M60 tanks.  
DOCUMENTATION: Level 3 Drawing Package  
IOC: 1989

138. ITEM: Conventional Mine Laying System  
DESCRIPTION: System for surface laying M15 anti-tank mines on the surface.  
Pulled behind 5-ton truck, dump truck or amphibious assault vehicle.  
DOCUMENTATION: Level 3 Drawing Package  
IOC: 1988
139. ITEM: Mk 1 Mod 0 Mine Clearance System  
DESCRIPTION: Land mine countermeasures system with three M58 linear demolition charges mounted on a Marine Corps amphibious assault vehicle.  
DOCUMENTATION: Level 3 Drawing Package  
IOC: 1989
140. ITEM: Military Amphibious Reconnaissance System (MARS)  
DESCRIPTION: 15-foot inflatable boat with submersible 35 horsepower outboard engine capable of being deployed from aircraft or submarine.  
DOCUMENTATION: Level 3 Drawing Package  
IOC: 1981
141. ITEM: Engine Maintenance Kit  
DESCRIPTION: Portable field maintenance kit, complete with all tools and spare parts necessary to maintain 8 MARS outboard engines for a period of one year.  
DOCUMENTATION: Level 2 Drawings  
IOC: 1985
142. ITEM: Fording Adapter For USMC Cleared Lane Marking System  
DESCRIPTION: Kit which allowed the Israel Cleared Lane Marker System to be installed on Marine Corps M60 tanks equipped with fording kits.  
DOCUMENTATION: Level 3 Drawings  
IOC: 1980
143. ITEM: Waterproof Swimmer Bags  
DESCRIPTION: Waterproof bag system for combat swimmers consisting of a M16 rifle bag, a small general purpose bag and a large general purpose bag.  
DOCUMENTATION: Level 2 Drawings  
IOC: 1971
144. ITEM: Multi-Purpose Craft, Air Cushion (MCAC) Mine Countermeasures Kit for the LCAC  
DESCRIPTION: Provides mine countermeasures capability for the Amphibious Ready Group using the LCAC platform.  
DOCUMENTATION: Level 3 drawings, technical manuals  
IOC: 1995
145. ITEM: Amphibious Networking System  
DESCRIPTION: Tracks all trial cards for LHD, LSD, and LCAC platforms.

DOCUMENTATION: System Manual User Guide  
IOC: 1988

146. ITEM: Diver/Tender Cable Communications Set.  
DESCRIPTION: A communications system supporting up to three tethered divers and one tender for surface supplied diving.  
DOCUMENTATION: Part # 21064-1  
IOC: 1975
147. ITEM: PC Heater and CO<sub>2</sub> Scrubber  
DESCRIPTION: An integrated heater and CO<sub>2</sub> scrubber for the Deep diving system MK 2 MOD 1 Personnel Transfer Capsule (PC).  
DOCUMENTATION: Technical report NCSL 130-72  
IOC: August 1973
148. ITEM: Diver Monitoring Panel  
DESCRIPTION: Monitors oxygen and carbon dioxide partial pressure for Personnel Transfer Capsule (PTC), diver oxygen partial pressure, breathing gas temperature, suit temperature, exterior water temperature and PTC interior temperature for the Deep Diving System MK 2 MOD 1 PTC.  
DOCUMENTATION: No separate technical manual  
IOC: May 1977
149. ITEM: Diver Communication Panel  
DESCRIPTION: Provides diver communication from the Personnel Transfer Capsule (PTC) of the Deep Diving System MK 2 MOD 1.  
DOCUMENTATION: No separate technical manual  
IOC: May 1977
150. ITEM: Underwater Breathing Apparatus MK 12 Air and Mixed Gas  
DESCRIPTION: A surface supplied open circuit and semi-closed circuit UBA.  
DOCUMENTATION: NAVSEA 0994-LP-018-5010  
IOC: July 1980 (Currently Army only user)
151. ITEM: Underwater Breathing Apparatus (UBA) EX 14 MOD 1  
DESCRIPTION: A closed circuit push-pull UBA for saturation diving.  
DOCUMENTATION: NAVSEA-TM-UBA-14/1  
IOC: 1985
152. ITEM: Emergency Breathing Apparatus (EBA) MK 18 MOD 0, MOD1  
DESCRIPTION: A semi-closed EBA for use inside deep diving chambers.  
DOCUMENTATION: NAVSEA-TM-EBA-18/1  
IOC: 1985
153. ITEM: MK 4 Life Preserver

153. ITEM: MK 4 Life Preserver  
DESCRIPTION: Non-magnetic L.P. used with re-breathers for anti-mine neutralization and clandestine operations.  
DOCUMENTATION: SS 710-AA-MMO-010/TM-LPSP/MK 4  
IOC: 1979
154. ITEM: Enclosed Space Diving System  
DESCRIPTION: Surface supplied compressed air breathing system designed for life support to 60 feet of sea water. Used extensively for inspection and maintenance of sub. ballast tanks.  
DOCUMENTATION: S6560-AF-OMP-010/ESDS  
IOC: 1989
155. ITEM: MK 20 MOD 0 Diving System  
DESCRIPTION: Surface supplied compressed air breathing system designed for life support to 60 fsw.  
DOCUMENTATION: SS600-AK-MMO-010/MK 20 MOD 0  
IOC: 1992
156. ITEM: MK 21 MOD 1 Air and Mixed Gas Diving System  
DESCRIPTION: Surface supplied compressed air or mixed gas saturation diving system designed for life support to 300 fsw.  
DOCUMENTATION: S6560-AG-OMP-010-UBA-21/0  
IOC: 1990
157. ITEM: MK 21 MOD 0 Umbilical Supplied Compressed Air or Mixed Gas Saturation Diving System  
DESCRIPTION: Designed for life support to 950 fsw.  
DOCUMENTATION: S6560-1/0AE-OMP-010-UBA-2  
IOC: 1991
158. ITEM: MK 22 MOD 0 Saturation Diving System  
DESCRIPTION: Umbilical supplied air or mixed gas saturation diving system designed for life support to 950 fsw.  
DOCUMENTATION: S6560-AE-OMP-010-UBA-22/0  
IOC: 1991
159. ITEM: Oxygen Transfer Pump system  
DESCRIPTION: Dive locker with a life support gas system for supporting, storing, and maintaining MK 25 and High Altitude/Low Opening Systems (HALO).  
DOCUMENTATION: TM 09782A-14&P/1  
IOC: Initial systems were fielded in Nov 1992
160. ITEM: Lightweight Dive System (LWDS) MK 3 MOD 0

DOCUMENTATION: SS500-HK-MMO-010  
IOC: 1988

161. ITEM: Oxygen Transfer Pump Assembly (OTPS for EOD)  
DESCRIPTION: Life support gas transfer system used in the EOD Flyaway Diver Locker.  
DOCUMENTATION:  
IOC: First new units will be introduced into the Fleet to replace the current units in Sep 1995
162. ITEM: EOD MK 1 MOD 1 Dry suit  
DESCRIPTION: Low magnetic, variable, dry suit system that keeps the diver warm by keeping him dry and preserving his body heat with a thermal undergarment.  
DOCUMENTATION: SS520-AM-MMO-010  
IOC: will be issued to Fleet with O&M technical manual by September 1994
163. ITEM: MK 25 MOD 1 (LAR V) (400)  
DESCRIPTION: Low magnetic, 100% oxygen, closed-circuit oxygen UBA, constructed for mine countermeasures (MCM) operations.  
DOCUMENTATION: NAVSEA SS600-AJ-MMO-010  
IOC: Will be issued to Fleet with O&M technical manual by Dec 1994
164. ITEM: Flyaway Dive Locker (FADL)  
DESCRIPTION: EOD Flyaway Dive Locker with a life support gas system for supporting, storing, and maintaining UBA MK 16s.  
DOCUMENTATION: S9592-AY-MMO-010  
IOC: Initial FADLs were issued to Fleet in December 1993. Final FADL will be delivered in August 1994.
165. ITEM: Flyaway Recompression Chamber  
DESCRIPTION: Two-man and tender, doublelock recompression chamber and controls in a mobile shelter.  
DOCUMENTATION: S9592-AY-MMO-020  
IOC: First units will be issued to Fleet with O&M technical manuals by October 1994
166. ITEM: Emergency Breathing System, MK 1 MOD 0 Type II (EBS II)  
DESCRIPTION: An Emergency Breathing system to support the MK 16 diver when committed to in-water decompression due to a UBA EX 5 MOD 0 MK 16 failure.  
DOCUMENTATION: SS600-AL-MMO-010  
IOC: First units will be fielded July 1994
167. ITEM: Underwater Communication System (UCS) EX 5 MOD 0  
DESCRIPTION: A fiber-optic communication system which will be utilized during MK UBA 1 dives.  
DOCUMENTATION:

IOC: First units will be fielded Sep 1995

168. ITEM: Special Diver's Air Support System

DESCRIPTION: A 5000 psi air supply system to support surface supplied diving operations.

DOCUMENTATION: (U.S. Army Dwg. 13229E4550)

IOC: Issued to the U.S. Army in Dec 1993

169. ITEM: Diver's Timer/Depth Gauge

DESCRIPTION: A low magnetic, combination timer and depth gauge selected and tested by CSS for Explosive Ordnance Disposal diving.

DOCUMENTATION: NAVSEA DWG No. 6196237 & 6196238

IOC: 1990

170. ITEM: Full Face Mask, MK 24 MOD 0

DESCRIPTION: A full face mask with integral closed-circuit to open-circuit switchover for use with the MK16 UBA.

DOCUMENTATION: NAVSEA Dwg. No. 6696515

IOC: 1994

171. ITEM: Power Supply, Electrical/Hydraulic, Model 4

DESCRIPTION: An electrically powered hydraulic power supply to support diver hydraulic tools.

DOCUMENTATION: NAVSEA Dwg No. 5366558, NAVSEA S9592-AJ-MMA-010-020,030

IOC:

172. ITEM: Power Supply, Diesel/Hydraulic, Model 2

DESCRIPTION: A diesel powered hydraulic power supply to support diver hydraulic tools.

DOCUMENTATION: NAVSEA Dwg No. 5366557, NAVSEA S9592-AJ-MMA-010-020,030

IOC:

173. ITEM: Power Supply, Light Weight, Model 3

DESCRIPTION: A light weight hydraulic power supply to support diver hydraulic tools.

DOCUMENTATION: NAVSEA S9592-AJ-MMA-010-020,030

IOC:

174. ITEM: Power supply, diesel/Hydraulic, Model 6

DESCRIPTION: a diesel powered hydraulic power supply to support diver hydraulic tools.

DOCUMENTATION: NAVSEA S9592-AJ-MMA-010-020,030

IOC:

175. ITEM: Power supply, Outboard, Model 7  
DESCRIPTION: A outboard motor powered hydraulic power supply to support diver hydraulic tools.  
DOCUMENTATION: NAVSEA S9592-AJ-MMA-010-020,030  
IOC:
176. ITEM: Hydraulic Tools  
DESCRIPTION: a wide range including grinders, impact wrenches, cutoff saws, chain saws, come-alongs, sump pump, jetting tools, chipping hammers, hose reels, flow dividers, pressure intensifiers, etc.  
DOCUMENTATION: NAVSEA Dwg Nos. 5366561/62/69/70/75/77/78/ 79/91)  
NAVSEA S9592-AJ-MMA-010-020,030  
IOC:
177. ITEM: Underwater Ultrasonic Thickness Gauging System  
DESCRIPTION: Primarily used for pre-overhaul planning and damage assessment of ship hulls.  
DOCUMENTATION: NAVSEA Dwg No. 6653028, Underwater Ship Husbandry Manual 0910-LP-310-0900.  
IOC: Issued to the Fleet in the early 1980s, latest 1993.
178. ITEM: Underwater Magnetic Particle Test System  
DESCRIPTION: Allows divers to perform crack detection for damage assessment and quality assurance on underwater welds.  
DOCUMENTATION: NAVSEA Dwg No. 6653063, Manual 0910-LP-310-0900  
IOC: 1980
179. ITEM: CAPTOR Mine MK 60  
DESCRIPTION: A deep-water, moored, anti-submarine mine consisting of a MK 46 Mod4/6 torpedo encapsulated in a housing that includes the mooring, target-sensing/ - validation/-localization subassemblies.  
DOCUMENTATION: OP 4372  
IOC: 1979
180. ITEM: QUICKSTRIKE Mine(s) MK 65 MOD 0, MK 62 MOD 0, MK 63 MOD 0, and MK 64 MOD 0  
DESCRIPTION: Aircraft-laid, shallow-water, bottom mines designed for use against surface ships and submarines. The QUICKSTRIKE MOD 0 mines use the TDD MK 57.  
DOCUMENTATION: SW551-A3-MMI-010 (for MK 65 Mine) and SW551-A2-MMI-010 (for MK 62, 63, 64 Mines)  
IOC: 1985
181. ITEM: Tail Section MK 11 MOD 0  
DESCRIPTION: High-speed, low-altitude delivery paratail used to retard the water entry of the QUICKSTRIKE Mine MK 64 MOD 0 and the Destructor MK 41.

DOCUMENTATION: SW551-A2-MMI-010  
IOC: 1981

182. ITEM: Tail Section MK 12 MOD 0  
DESCRIPTION: High-speed, low-altitude delivery paratail used to retard the water entry of the QUICKSTRIKE Mine MK 63 MOD 0 and the Destructor MK 40.  
DOCUMENTATION: SW550-AE-MMI-080  
IOC: 1982

183. ITEM: Submarine Launched Mobile Mine MK 67 MOD 2  
DESCRIPTION: SLMM is a submarine launched mine based on the MK 37 MOD 2 torpedo which was modified as a shallow-water bottom mine for use against surface ships and submarines.  
DOCUMENTATION: SW550-AE-MMI-080  
IOC: 1987

184. ITEM: QUICKSTRIKE Mine MK 65 MOD 1  
DESCRIPTION: An air-launched, 2,390 pound, bottom mine for use against surface ships and submarines. the MOD 1 mine uses the TDD MK 58.  
DOCUMENTATION: SW551-A3-MMI-010  
IOC: 1989

185. ITEM: Tail Section MK 16 MOD 0  
DESCRIPTION: The tail section MK 16 is a high-speed, low-altitude delivery paratail for retarding the water entry of the QUICKSTRIKE Mine MK 62 or the Destructor MK 36.  
DOCUMENTATION: SW551-B6-MMI-010  
IOC: 1994

186. ITEM: Acoustic Device Countermeasure, ADC MK1 Mod 0  
DESCRIPTION: An expendable, 5-inch diameter sonar countermeasure launched from external launchers on Trident submarines and earlier SSBN submarines.  
DOCUMENTATION: Submarine CM Handbook NCSC-THB-101-81, June 1989,  
Confidential  
IOC: 1976

187. ITEM: Acoustic Device Countermeasure, ADC MK2 Mod 0  
DESCRIPTION: An expendable 3-inch diameter torpedo countermeasure launched from an internal launcher aboard submarines.  
DOCUMENTATION: Submarine CM Handbook NCSC-THB-101-81, June 1989,  
Confidential  
IOC: 1975

188. ITEM: Acoustic Device Countermeasure, ADC MK2 Mod 1  
DESCRIPTION: An advanced 3-inch diameter torpedo countermeasure with improved signal characteristics.

DOCUMENTATION: Submarine CM Handbook NCSC-THB-101-81, June 1989,  
Confidential  
IOC: 1994

189. ITEM: Acoustic Device Countermeasure, ADC MK3  
DESCRIPTION: An expendable 6-inch diameter torpedo countermeasure, launched externally from submarines, providing increased capability  
DOCUMENTATION: Submarine CM Handbook NCSC-THB-101-81, June 1989,  
Confidential  
IOC: 1994

190. ITEM: Countermeasure Set Acoustic, CSA MK1 Mod 0  
DESCRIPTION: An externally mounted countermeasure launcher providing submarines with a capability to rapidly deploy 5-inch diameter countermeasures  
DOCUMENTATION: Submarine CM Handbook NCSC-THB-101-81, June 1989,  
Confidential  
IOC: 1976

191. ITEM: Countermeasure Set Acoustic, CSA MK2 Mod 0 & Mod 1  
DESCRIPTION: An externally mounted countermeasure launcher providing Trident submarines (Mod 0) and SSN 688 Class submarines (Mod 1) with a capability to rapidly fire 6-inch diameter countermeasures  
DOCUMENTATION: Submarine CM Handbook NCSC-THB-101-81, June 1989,  
Confidential  
IOC: 1994

192. ITEM: Torpedo Countermeasure Transmitting Set, AN/SLQ-25A (NIXIE)  
DESCRIPTION: A towed torpedo countermeasure intended to provide surface ships with an effective defensive system against modern torpedoes.  
DOCUMENTATION: Torpedo countermeasure transmitting set AN/SLQ-25A system operation and maintenance technical manual, NAVSEA TM SE 376-HA-MMA-010/C,  
Confidential, of 23 Mar 92  
IOC: 1991

## FACILITIES AND EQUIPMENT

6. **Special Facilities/Equipment Resources.** Include a copy of the form provided at Tab B of this data call for each facility and "major" piece of equipment located at this activity. Include information on separate detachments. The following definitions will apply:

Facilities - Will include such things as rocket firing bays, towing tanks, anechoic chambers, hypervelocity gun ranges, hyperbaric chambers, wind tunnels, simulation/emulation laboratories, etc. Include buildings that are integral to the facility/equipment. Do not include major outdoor ranges or land.

Also, describe modeling and simulation capabilities, hardware in-the-loop facilities and analysis or wargaming capabilities.

Equipment - Resources used to support the operation of the site with a replacement value of \$500,000 or greater. Do not include land or buildings in this category. In reporting equipment, provide information to indicate the degree of portability of the equipment. Class 3 Personal Property items ("plant equipment" or "equipment in place") by definition are highly portable and can be moved easily. Some Class 2 Installed Equipment, such as Main-frame computers, test stands and small hyperbaric chambers, require more extensive utilities support and assembly of components, but can be relocated without damage to the facility or equipment, and therefore are considered "moveable" assets. Other Class 2 items are so large and/or integral to the facility that houses them that major demolition and construction would be required to relocate them, and therefore are considered "fixed" assets. Where appropriate, pieces of equipment can be aggregated for the purposes of completing Tab B.

### 7. General Facilities.

a. Is there any cash revenue generated by this activity? Example: Electricity generated at this activity and sold to the local community. If yes, describe.

No cash revenue.

b. What MILCON projects are currently programmed to be completed by the end of FY1995? For each project provide:

None.

(1) A description of the proposed facility with title and project number. Be sure to include the trailing alpha designator for BRACs-88, 91 and 93 realignment projects, i.e., P-xxxR, P-xxxS, P-xxxT .

N/A

(2) The functional support area(s) that the new facility will support. Refer to Appendix A.

N/A

(3) Identify installed equipment to be provided based on the threshold guidance of paragraph 6, page 12, of this data call.

N/A

(4) The additional square footage that this project will provide to the functional support area(s).

N/A

(5) The current working estimate (CWE) & planned beneficial occupancy date (BOD) of the project.

N/A

c. What MILCON projects are currently programmed to be executed/completed after FY1995? For each project provide:

P-365T

(1) A description of the proposed facility with title and project number.

The facility will be a two-story building consisting of steel frame with concrete block walls and brick veneer. The building will be constructed on grade with a concrete foundation. The facility will house two large highbay areas with a 10-ton and 5-ton bridge crane. The exterior of the building will match the existing building adjacent to the site.

Title: Mine Warfare Research & Development Facility

Project Number: P-365T

(2) The functional support area(s) the new facility will support.

Functional support areas are Mines, Coastal Warfare, Countermeasures, Logistics, etc.

(3) The identified installed equipment to be provided based on the threshold guidance of paragraph 6, page 12, of this data call.

The MILCON project will have one piece of equipment valued at more than 500K, the vibrator/shaker table - 536K. (Note: the equipment is being relocated from Yorktown.

(4) The additional square footage this project will provide to the functional support area(s).

30,000 sq. ft.

(5) CWE & planned BOD.

CWE: 3.1M

BOD: January 1997

d. What is the distance (in miles) to the nearest military airfield and/or pier not located at your site? Describe. Assume all previous BRAC closures have been executed.

Airfield: Tyndall Air Force Base is located approximately 15 miles southeast of CSS. Tyndall Air Force Base is an Air Training Command.

Pier: Naval Air Station Pensacola (NASP) is located approximately 125 miles west of CSS. NASP is a Naval Training Command. Port Panama City, a civilian port, is located approximately one mile across the bay from CSS. Currently, military vessels visiting CSS utilize the full range of Port Panama City pier services.

e. How many certified magazines, used for the storage of explosives, does this activity own or control? What is the total explosive weight storage capacity?

- Three (3) each fuse and detonator magazines, CCN-421-12 capacity - 576 sq. ft. or 192 sq. ft. each or 5,760 cu. ft. of storage, 325 cu. ft. presently stored

- Two (2) each high explosive magazines, CCN-421-22 capacity - 1,188 sq. ft. total, 594 sq. ft. each or 9,900 cu. ft., 1,925 cu. ft. presently stored

- Three (3) each small arms/pyrotechnic magazines, CCN-421-48 capacity = 429 sq. ft. total, 143 sq. ft. each or 4,290 cu. ft., present storage = 625 cu. ft. of material

## LOCATION

### 8. Geographic Location.

a. Is there an imperative in facility, function or synergy that requires the installation/base/facility to be in its present location? If yes, describe.

The Coastal Systems Station's (CSS) coastal test environment is well-known for its geographic location which provides coastal and riverine areas very similar to many foreign countries where SO Low Intensity Conflict (SO/LIC) scenarios are likely (i.e., SE Asia, Central and South America, and Persian Gulf). CSS's immediate access to bay, riverine and open ocean test environments is not available at any other DOD R&D activity. CSS has ideal year-round at-sea testing capabilities, open water temperature and visibility conditions conducive to testing and training. The environment allows year round testing essential to providing rapid crisis response. The proximity of test areas enables maximum test time "on station." In addition, there are no current or projected encroachment issues at CSS.

The clustering of R&D and acquisition support for four primary mission areas involved in Expeditionary Warfare and in direct support of the Navy's strategy of . . . "From the Sea" -- amphibious warfare, mine warfare, special warfare and diving -- at one site, CSS, provides a synergism of facilities, test environment, and technical skills that has been extensively utilized in responding to contingency operations such as Desert Shield/Desert Storm. The available natural environment in and around CSS for performing RDT&E is a mission capability that is unique to Panama City, FL and cannot be duplicated at any other existing activity without unwarranted and excessive cost. A full range of test environments (gulf, bay, and riverine), water depths and bottom conditions required for Coastal Warfare RDT&E are within approximately 1 hour ship or 15 minute helicopter transit time. This subtropical environment has conditions remarkably similar to many Third World areas and enables testing year round, essential to providing rapid crises response. Since no other DOD activity has the CSS's mission assignments, these test ranges and facilities have not been duplicated at any other activity.

The Station's Gulf of Mexico Test Range, which is immediately to the south of the Station's main complex, comprises 350 square nautical miles of ocean and coastal environment that is ideal for RDT&E in all of the Station's mission areas. St. Andrew Bay, directly adjacent to the CSS, provides a 90 square nautical mile test area representative of natural estuaries, enclosed bays, and navigable harbors. The riverine environments of the Station's Apalachicola River site furnish a test site for projects requiring a main river channel, accompanying tributaries, swamps, marshes, and delta.

The range of water depths and bottom conditions at the CSS's test ranges have been used extensively to test the performance of minehunting and minesweeping systems and tactics, and the vulnerability of platforms, against simulated Desert Shield, Persian Gulf, and Vietnam operational minefields, and to provide a coherent base to develop and support requirements, concepts and systems for mine warfare throughout their life cycle. CSS's Gulf, bay and land test areas provide the Navy with the only location having a complete range of environmentally permitted operating areas for LCAC R&D, acquisition support, and training activities. SEAL Delivery Vehicle (SDV) navigation tests, sonar evaluations, surface craft signature tests, and high speed boat shock and vibration data collection are cost effectively conducted year round in the Gulf of Mexico. Because of the low density of maritime traffic throughout the local marine environment, a wide variety of clandestine RDT&E and training activities can be easily accomplished. For example, SDV Team TWO out of Little Creek, Virginia, trains at CSS during the cold winter months when operation is impossible in the Chesapeake Bay.

The complex consisting of the CSS and its major tenants -- the Naval Diving and Salvage Training Center (NDSTC) and the Navy Experimental Diving Unit (NEDU) -- operates the entire Navy Diving and Salvage research, development, and training program in the United States. The co-location of NDSTC, NEDU, EOD Group Two Detachment, and U.S. Marine Corps Combat Swimmer Team at CSS provides a unique combination of technical experts and specialized facilities unmatched elsewhere in the world. Also, the synergism between diving and CSS's other mission areas enables CSS to leverage technology development efforts and maximize the integration of diving within the Navy community, in particular, the development of life support systems for special warfare forces. This large complex of diving facilities provides unique and highly specialized testing capabilities not existing elsewhere in the world. These facilities have been designed and built for the sole purpose of subjecting diving life support equipment (including some highly classified systems) to the worst anticipated simulated environmental conditions prior to placing a man-in-the-loop and prior to introduction of equipment into the Fleet. The man-rated hyperbaric facilities (wet and dry), breathing simulation systems, computers for data acquisition and control of these systems, and medical monitoring equipment provide the required testing capabilities of diver life support equipments.

NDSTC's complex contains several facilities which support CSS's Diving and Special Warfare mission areas, including free ascent towers for SCUBA development, three large hyperbaric training assemblies, and a hyperbaric chamber support for diving emergencies. NDSTC teams with NEDU and the CSS for accelerated development, testing, and Fleet introduction of new diving equipment and systems. Use of NDSTC for accelerated life cycle testing gives immediate feedback on system performance. The continuing interface with Fleet divers and specialists enables the early correction of design deficiencies, system improvements, logistic support, training and the development of tactics. In addition, technical manpower is available for rapid assignment to the field as necessary.

NEDU's Ocean Simulation Facility (OSF) is critical to CSS's mission areas. This national unique hyperbaric research facility is operated by NEDU and is the only hyperbaric research facility in the U. S. which can certify manned systems. Besides certification of manned systems, the OSF is used for development and testing of manned diving life support and work systems. In addition, since the OSF has the capability to conduct endurance depth tests on underwater bodies and systems in a controlled environment to simulated depths of 2250 feet and water temperature down to 34 deg F, it also functions as a low-cost test chamber to test both mines and mine countermeasures systems to maximum operational depths before actually going to sea, thus reducing the risk of a major failure during testing. Furthermore, approximately 30 percent of the tasking for this unique complex is Special Warfare related, including pressure testing of the MK 8 MOD O SDVs upon completion of overhaul, testing of life support equipment designed and built by CSS in support of Maritime SOF missions, and specialized cleaning of high pressure/oxygen systems for underwater breathing apparatus. In addition to the OSF, CSS Diving and Special Warfare mission areas rely on two other NEDU facilities: 1) the Hydrospace Laboratory for the development and testing of equipment and systems before committing to manned testing, and 2) the Experimental Diving Facility for integration testing of life support systems and rapid response to underwater breathing apparatus evaluations.

In every mission area, the Station performs warfare analysis, basic technology development, advanced technology development and demonstrations, advanced and engineering development and technical support to acquisition and fleet support. This full breadth of involvement crosses all organization lines, increases information flow, decreases time from concept to fielding, and facilitates response to new threats and fleet needs. Synergy of mission areas, coupled with a hybrid product and matrix technical organization structure provides the flexibility as well as the specialization needed to meet changing requirements. As resources decline, it is essential that facilities, equipment and personnel are assigned and structured to accommodate the widest possible range of mission area needs. CSS, with its outstanding and diverse facilities and technical personnel, is ideally suited for RDT&E in its four complementary mission areas which comprise Littoral Warfare. Tab B, page 3 shows a matrix that summarizes CSS's Littoral Warfare facilities with respect to its assigned mission areas. Such synergy and beneficial multi-use capability is outstandingly cost effective and impossible to replicate elsewhere.

CSS also benefits by its location relative to clustering with several other headquarters and test activities, the closest of which is Eglin AFB in Ft. Walton Beach, FL. Eglin AFB has two major, unique test facilities which have significant contributions for accomplishing the Station's mission: the Explosive Test Pond and the McKinley Cold Weather Chamber. Eglin AFB's Explosive Test Pond is regularly used to conduct development tests and advanced technology demonstrations of explosive systems for mine and obstacle clearance in very shallow water and the surf zone. Eglin AFB's Cold Weather Chamber enables cold and arctic climate testing of systems and equipment under controlled conditions; such tests have

been conducted by CSS personnel to test mine warfare equipment, the Assault Landing Craft Air Cushion (LCAC) and its prototype.

b. What is the importance of the present location relative to customers supported?

Because of its geographic location with respect to the U.S.'s east and west coasts, CSS is centrally placed to support both SURFLANT and SURFPAC in all Station mission areas. For Fleet mine warfare support, CSS's Gulf of Mexico site complements the COMINWARCOM assets located at Ingleside, TX. CSS is near the two LCAC production sites and the LSD and LHD shipbuilders, making it ideally located to support NAVSEA's Amphibious Ship Acquisition Program. Similarly, CSS is located near major Special Warfare activities such as the Special Operations Command (SOCOM) and the Special Operations Research and Development Acquisition Command (SORDAC) at MacDill AFB in Tampa, FL, and the Air Force's Special Operations School and Wing at Hurlburt Field in Ft. Walton Beach, FL. Also, CSS is located across the bay from a Maritime Prepositioned Ships (MPS) loadout site and maintains direct liaison with all amphibious groups in assisting with operational readiness maintenance. As stated previously, the collocation of the CSS with its tenants, NDSTC and NEDU, enables the entire Navy diving research, development and training to be conducted year round at one site.

In summary, the CSS's mission is distinct, unique, and absolutely critical to the Navy and National Security. The Station's mission capabilities have been developed at the present site because of the area's unique natural environment which is ideal for all aspects of Coastal Warfare RDT&E, Acquisition Support, and In-Service Engineering.

## FEATURES AND CAPABILITIES

### 9. Computational Facilities.

a. Describe the general and special computational capabilities at this site. Include super computing, parallel computing, distributed computing and networking. Include high-speed data transfer, fiber optic links, microwave links, network interconnectivity and video teleconferencing capabilities. Do not discuss desktops and laptops except as they relate to networking.

#### Computational Facilities - Scientific

##### **Countermeasures (CME)**

The CME is a large simulation complex originally designed for the evaluation of torpedo countermeasures systems through real-time simulation studies. The CME was expanded to accommodate simulation of mines, and platform sonars. The CME is also used in detailed real-time simulation of the dynamics of underwater bodies such as swimmer/diver vehicles and submarines. It employs operationally realistic mixes of torpedoes, ships, mines, submarines, acoustic countermeasures devices, and target decoys. In the simulation, each object is modeled to react as it would in an actual encounter at sea. Actual weapon hardware is used in the simulator and is simulated in real-time by a synthesizer controlled by parallel processing computers that provide the acoustic modeling. The CME has been approved by OPTEVFOR for OPEVAL and TECHEVAL of selected systems as a means for reducing time for operational tests, thus saving money.

##### **Advanced Technology Computational Facility (ATCF)**

The Advanced Technology Computational Facility (ATCF) is the primary facility for performing engineering and scientific computing for research and technology development at the COASTSYSTA. As such, the ATCF supports all Station product areas.

The ATCF consists of a cluster composed of Digital Equipment Corporation (DEC) VAX 900-420VP supercomputer, a VAX 8810 augmented with a pair of Gould IP8500 image processors and a CSPI array processor, and a dozen VAXstation and DEC 3000 workstations. These machines provide the user the full range of engineering and scientific computational support. The ATCF provides the user with access to most commercially available scientific and engineering software tools as well as the basic computer languages as FORTRAN, ADA, C, LISP, and BASIC. Emphasis is placed on providing an affordable user-friendly environment. Current disciplines supported include computational fluid dynamics, structural analysis, acoustics, signal and image processing, electro-optics, electromagnetics, superconductivity, neural networks and expert systems, and vehicle hydrodynamics and

control system design and simulation. The ATCF provides processing up through the SECRET level.

While the basic hardware and software are common place the special capabilities incorporated into the ATCF to support signal and image processing and vehicle modeling and simulation provide a unique environment. Signal and image processing is support hardware-wise by Gould image processors and high performance DEC workstations operating in mutually supporting roles with high-capacity optical and tape storage. The ATCF is equipped to perform continuous, real-time video digitizing in support of electro-optics sensors. A dedicated fiber-optic (FDDI) network connects most of the workstations to the data stored on the ATCF. Specialized interfaces to high-capacity tape recording devices are supported to aid in the analysis of test data. Software available includes industry standard packages as well as the latest tools from university and research laboratories.

Vehicle modeling and simulation throughout the entire mission is provided by unique software tools that provide state-of-the-art hydrodynamics prediction into the nonlinear range, mathematical modeling of the guidance and control hardware, and the environment. Actual vehicle hardware and computers may be incorporated into the simulation. A 3D-graphical presentation of the mission is to provide utilizing top-of-the-line Silicon Graphics (SGI) Reality Engine workstations.

#### Computational Facilities - General

a. Computers. The General Purpose Computational Facility is comprised of hardware suites utilized by all codes for entering/obtaining management information. Principal users are as follows:

- A Digital VAX Cluster (two VAX 11/780s, one VAX 11/785) is used to capture and process labor data for introduction to the financial system. Additionally, a scheduling system is extensively used by the Shops to schedule and monitor work submitted by the technical codes.

- The financial system (Accounting and Financial Management Information System (AFMIS)) is housed on a CDC Cyber 11/780. Information from the labor system and the supply system is uploaded to the Cyber. Additional data is introduced by Budget, Accounting, and Disbursing. All data is processed and reports disseminated to various codes.

- Supply (contracts, purchase orders, inventory, receiving, etc.) is processed on a Prime 9955II. This system provides a highly efficient means of performing all actions required to insure processes needed by Supply.

- The Technical Library houses a DEC Microvax utilized to provide information requested by the technical codes. A software package (DATALIB) is installed to provide this support.

b. Local Area Network (LAN). The Coastal Systems Station (CSS) LAN system is based on a CATV backbone in which data and video are transmitted throughout the Station. Station buildings have Ethernet segments (10 MBPS) interconnected to the backbone via RF bridges. There are approximately 50 buildings connected directly to the backbone and another five buildings remotely connected using internal T1 circuits and remote Ethernet bridges. During FY94 LAN expansion, another 12 buildings will be connected to the backbone bringing the total to 62. In addition to the backbone expansion, fiber optic cable will be installed this year linking Buildings 3, 110, 400, and 470. This will initially cover a requirement to link Buildings 110 and 470 with high-speed FDDI link (100 Mbps). Future plans call for connecting the buildings with a high-speed fiber optic backbone utilizing 100BASET, FDDI, and/or ATM.

The CSS networking environment consists of DoD standard TCP/IP terminal/workstation to host connectivity and client/server technology. The client/server network operating system consists of Novell Netware V3.11 and 3Com 3+Open LAN Manager. The 3Com system will be phased out by the end of FY95. The Novell Netware system provides the platform for the Lotus CC:Mail PC-based electronic mail system. This includes an SMTP gateway to interface to the outside world (Internet) via the Navy Network (NAVNET) and DREN connections. There are approximately 20 Novell servers located at CSS. With the T1 interface to NSWC Dahlgren Division (Dahlgren, VA), users have access to approximately 80 Novell servers across both sites as well as servers located at NAVSEA Headquarters. In addition to the client/server type systems, there are approximately five network based UNIX host/servers which provide services such as electronic mail, domain name services, SMTP gateway services, data storage, etc.

The CSS LAN System also provides valuable video services across its backbone to conference rooms located throughout the Station. The five video channels broadcasted throughout the Station are: National Weather Service local radar, LRC's Training Channel, CSS Information Channel (BBS), Cable News Network (CNN)/Weather Channel, and the CSS video TeleConferencing Broadcast Channel. The VTC broadcast channel allows the CO/ED to broadcast live "all hands" meetings to CSS personnel located through the Station without having to gather personnel at a single location. This can also be used to broadcast DCTN video teleconferences to personnel.

c. Video Teleconferencing Center (VTC). The VTC is a state-of-the-art, full-duplex, compressed near full motion, interactive, color video teleconferencing system. The integrated VTC system consists of geographically dispersed video studio facilities that connect to nodal video Teleconferencing Services (VTS) facilities of the Defense Commercial

Telecommunications Network (DCTN) over leased T1 transmission facilities via the Public Telephone Network (PTN).

The interconnected video studios have the capability to conduct teleconferencing sessions in either the secure or non-secure operating modes. In the non-secure mode, the VTC system provides for both point-to-point and seen to be heard multipoint teleconferencing will be available.

Initialization of the network configuration is made using the Video Conference Controller (VCC) and its associated touch-screen-sensitive Session Control Panel (SCP). The capabilities provided by the SCP/VCC and the associated interface with the DNCC allow the facilitator to exercise real-time control of the video teleconferencing session while it is in progress.

The VTC studio provides furnishings and video/audio interfaces for accommodating six primary participants located at a conference table, and an additional 22 participants located in the gallery area.

The facilitator's work station consists of the SCP info-touch display unit and the Room Control Panel (RCP), a touch-screen sensitive slate control and display indicator unit. The front wall of the studio houses video monitors, color video cameras, a hard-copy unit, studio loudspeaker, a 3.5" RGB color monitor, VCR, video copy processor, video show professional, and a High Resolution Graphics Subsystem (HRGS) which consists of the system control unit, removable hard disk storage, laser printer, image scanner, graphics tablet, and a color monitor.

#### **10. Mobilization Responsibility and Capability.**

a. Describe any mobilization responsibility officially assigned to this site. Cite the document assigning the responsibility.

Mine Warfare Automated Data Processing (ADP) Disaster Recovery Site - The Coastal Systems Station has been designated by Commander Mine Warfare Command Instruction 5239.2A, dated 6 October 1988, as a backup site for Mine Warfare Data Processing.

(1) What functional support area(s) does this responsibility support? Refer to Appendix A for the list of functional support areas?

This responsibility supports the following functional support areas:

- 2.5 Mines
- 8.3 Countermeasures

(2) What portion of the work years and dollars, as reported in each applicable functional support area reported in Tab A, are spent solely on maintaining your activity's readiness to execute the mobilization responsibilities?

No work years and dollars are spent solely on maintaining the activity's readiness to execute the mobilization responsibilities.

(3) How many additional personnel (military & civilian) would be assigned to your activity as part of the mobilization responsibility? Include separately any contractor assets that would be added.

No additional personnel would be assigned or contractor assets added.

b. Does your activity have adequate facilities to support your mobilization responsibilities? (yes/no)

Yes.

(1) If yes, is any space assigned for the sole purpose of maintaining mobilization readiness? (yes/no) If yes, list the square footage assigned.

No.

(2) If no, what repairs, renovations and/or additions are required to provide adequate facilities? What is the estimated cost of this work?

None.

(3) Are there any restrictions that would prevent work (noted in paragraph 10.b.(2) above) from taking place (i.e., AICUZ, environmental constraints, HERO, etc.)? If yes, describe.

No.

c. Describe any production facilities that would be activated in case of a future contingency.

None.

d. Is your activity used as a Reserve Unit mobilization and/or training site?

Training site - various Army, Marine Corps, Navy Reserves and National Guard units utilize intermittently CSS land, location, and facilities for short-term (2 weeks or less) to conduct training and exercises. Reserve Officer Training Corps (ROTC) and Junior ROTC regularly visit CSS for training and indoctrination.

11. **Range Resources.** Include a copy of the form provided at Tab C of this data call for each range located at this activity or operated by this activity. Also, report ranges at detachments and sites not receiving a separate data call. The following definition of a range will apply:

Range - An instrumented or non-instrumented area that utilizes air, land, and/or water space to support test and evaluation, measurements, training and data collection functions, but is not enclosed within a building.

Gulf Test, Ft. Monroe, and Ft. Lauderdale ranges are reflected in Tab C.

## QUALITY OF LIFE

### 12. Military Housing

(a) Family Housing:

- (1) Do you have mandatory assignment to on-base housing? (circle) yes no  
 (2) For military family housing in your locale provide the following

information:

Type of Quarters	Number of Bedrooms	Total number of units	Number Adequate	Number Substandard	Number Inadequate
Officer	4+	5	All		
Officer	3	10	All		
Officer	1 or 2	0			
Enlisted	4+	4	All		
Enlisted	3	42	All		
Enlisted	1 or 2	4	All		
Mobile Homes		0			
Mobile Home lots		0			

(3) In accordance with NAVFACINST 11010.44E, an inadequate facility cannot be made adequate for its present use through "economically justifiable means". For all the categories above where inadequate facilities are identified provide the following information:

Facility type/code:

What makes it inadequate?

What use is being made of the facility?

What is the cost to upgrade the facility to substandard?

What other use could be made of the facility and at what cost?

Current improvement plans and programmed funding:

Has this facility condition resulted in C3 or C4 designation on your

BASEREP?

Not applicable.

(4) Complete the following table for the military housing waiting list.

Pay Grade	Number of Bedrooms	Number on List <sup>1</sup>	Average Wait
O-6/7/8/9	1	N/A	N/A
	2	N/A	N/A
	3	N/A	N/A
	4+	0	Captain's Quarters
O-4/5	1	N/A	N/A
	2	N/A	N/A
	3	2	6-12 months
	4+	1	6-12 months
O-1/2/3/CWO	1	N/A	N/A
	2	N/A	N/A
	3	5	6-9 months
	4+	2	9-12 months
E7-E9	1	N/A	N/A
	2	N/A	N/A
	3	13	12-18 months
	4+	5	12-24 months
E1-E6	1	N/A	N/A
	2	7	12-18 months
	3	15	12-18 months
	4+	5	12-24 months

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<sup>1</sup>As of 31 March 1994.

(5) What do you consider to be the top five factors driving the demand for base housing? Does it vary by grade category? If so provide details.

Top Five Factors Driving the Demand for Base Housing	
1	Savings on utilities/rent
2	Attractive, well-maintained homes
3	Convenience
4	Security
5	Comradeship

(6) What percent of your family housing units have all the amenities required by "The Facility Planning & Design Guide" (Military Handbook 1190 & Military Handbook 1035-Family Housing)? 100%

(7) Provide the utilization rate for family housing for FY 1993.

Type of Quarters	Utilization Rate
Adequate	98%
Substandard	
Inadequate	

(8) As of 31 March 1994, have you experienced much of a change since FY 1993? If so, why? If occupancy is under 98% ( or vacancy over 2%), is there a reason?

N/A.

(b) BEQ:

(1) Provide the utilization rate for BEQs for FY 1993.

Type of Quarters	Utilization Rate
Adequate	86
Substandard	--
Inadequate	--

(2) As of 31 March 1994, have you experienced much of a change since FY 1993? If so, why? If occupancy is under 95% (or vacancy over 5%), is there a reason?

Yes, due to increased student activity, currently at 93%. Renovation of units has resulted in a slight decline in occupancy.

(3) Calculate the Average on Board (AOB) for geographic bachelors as follows:

$$\text{AOB} = \frac{(\# \text{ Geographic Bachelors} \times \text{average number of days in barracks})}{365}$$

$$\text{AOB} = \frac{13 (365)}{365} = 13$$

(4) Indicate in the following chart the percentage of geographic bachelors (GB) by category of reasons for family separation. Provide comments as necessary.

Reason for Separation from Family	Number of GB	Percent of GB	Comments
Family Commitments (children in school, financial, etc.)			
Spouse Employment (non-military)			
Other	13	100	15 GBs rooms are designated at BEQ
<b>TOTAL</b>	13	100	

(5) How many geographic bachelors do not live on base? **None.**

(c) BOQ:

(1) Provide the utilization rate for BOQs for FY 1993.

Type of Quarters	Utilization Rate
Adequate	91
Substandard	--
Inadequate	--

(2) As of 31 March 1994, have you experienced much of a change since FY 1993? If so, why? If occupancy is under 95% (or vacancy over 5%), is there a reason?

Yes, renovation upgrade, currently at 98% (year to date = 85%).

(3) Calculate the Average on Board (AOB) for geographic bachelors as follows:

$$\text{AOB} = \frac{(\# \text{ Geographic Bachelors } \times \text{ average number of days in barracks})}{365}$$

None on board.

(4) Indicate in the following chart the percentage of geographic bachelors (GB) by category of reasons for family separation. Provide comments as necessary. **Not applicable.**

Reason for Separation from Family	Number of GB	Percent of GB	Comments
Family Commitments (children in school, financial, etc.)	--	--	
Spouse Employment (non-military)	--	--	
Other			
<b>TOTAL</b>			

(5) How many geographic bachelors do not live on base? **None.**

(d) BOQ/BEQ Housing and Messing.

(1) Provide data on the BOQs and BEQs assigned to your current plant account. The desired unit of measure for this capacity is people housed. Use CCN to differentiate between pay grades, i.e., E1-E4, E5-E6, E7-E9, CWO-O2, O3 and above.

**BOQ - Bldg. 349**

Facility Type, Bldg. # & CCN	Total No. of Beds	Total No. of Rooms	Adequate		Substandard		Inadequate	
			Beds	Sq Ft	Beds	Sq Ft	Beds	Sq Ft
BOQ, Bldg. 349, 724-11	30	30	30	250-399				
BOQ, Bldg. 349, 724-12	17	17	17	450-450				

**BEQ - Bldg. 304 - Transient**

Facility Type, Bldg. # & CCN	Total No. of Beds	Total No. of Rooms	Adequate		Substandard		Inadequate	
			Beds	Sq Ft	Beds	Sq Ft	Beds	Sq Ft
BEQ, Bldg. 304, 721-11	87	29	87	270-359				
BEQ, Bldg. 304, 721-11	66	33	66	250-269				
BEQ, Bldg. 304, 721-12	40	20	40	250-269				
BEQ, Bldg. 304, 721-13	13	13	13	250-269				

**BEQ - Bldg. 304 - Permanent**

Facility Type, Bldg. # & CCN	Total No. of Beds	Total No. of Rooms	Adequate		Substandard		Inadequate	
			Beds	Sq Ft	Beds	Sq Ft	Beds	Sq Ft
BEQ, Bldg. 304, 721- 11,721-12	1	1	1	90-134				
BEQ, Bldg. 304, 721-11	12	6	12	180-269				
BEQ, Bldg. 304, 721-12	14	7	14	180-269				
BEQ, Bldg. 304, 721-13	6	6	6	270-359				

(2) In accordance with NAVFACINST 11010.44E, an inadequate facility cannot be made adequate for its present use through "economically justifiable means". For all the categories above where inadequate facilities are identified provide the following information:

- a. FACILITY TYPE/CODE:
- b. WHAT MAKES IT INADEQUATE?
- c. WHAT USE IS BEING MADE OF THE FACILITY?
- d. WHAT IS THE COST TO UPGRADE THE FACILITY TO SUBSTANDARD?
- e. WHAT OTHER USE COULD BE MADE OF THE FACILITY AND AT WHAT COST?
- f. CURRENT IMPROVEMENT PLANS AND PROGRAMMED FUNDING:
- g. HAS THIS FACILITY CONDITION RESULTED IN C3 OR C4 DESIGNATION ON YOUR BASEREP?

N/A

(3) Provide data on the BOQs and BEQs projected to be assigned to your plant account in FY 1997. The desired unit of measure for this capacity is people housed. Use CCN to differentiate between pay grades, i.e., E1-E4, E5-E6, E7-E9, CWO-O2, O3 and above.

**BOQ - Bldg. 349**

Facility Type, Bldg. # & CCN	Total No. of Beds	Total No. of Rooms	Adequate		Substandard		Inadequate	
			Beds	Sq Ft	Beds	Sq Ft	Beds	Sq Ft
BOQ, Bldg. 349, 724-11	30	30	30	250-399				
BOQ, Bldg. 349, 724-12	17	17	17	400-450				

**BEQ - Bldgs. 304 & 484 - Transient**

Facility Type, Bldg. # & CCN	Total No. of Beds	Total No. of Rooms	Adequate		Substandard		Inadequate	
			Beds	Sq Ft	Beds	Sq Ft	Beds	Sq Ft
BEQ, Bldg. 304 & 484, 721-11	64	32	64	270-359				
BEQ, Bldg. 304 & 484, 721-11	236	118	236	250-269				
BEQ, Bldg. 304 & 484, 721-12	129	129	129	180-269				
BEQ, Bldg. 304 & 484, 721-13	34	34	34	250-269				

**BEQ - Bldgs. 349 & 484 - Permanent**

Facility Type, Bldg. # & CCN	Total No. of Beds	Total No. of Rooms	Adequate		Substandard		Inadequate	
			Beds	Sq Ft	Beds	Sq Ft	Beds	Sq Ft
BEQ, Bldg. 304 & 484, 721-11,721-12	1	1	1	90-134				
BEQ, Bldg. 304 & 484, 721-11	12	6	12	180-269				
BEQ, Bldg. 304 & 484, 721-12	14	14	14	180-269				
BEQ, Bldgs. 304 & 484, 721-13	6	6	6	270-359				

(4) In accordance with NAVFACINST 11010.44E, an inadequate facility cannot be made adequate for its present use through "economically justifiable means". For all the categories above where inadequate facilities are identified provide the following information:

- a. FACILITY TYPE/CODE:
- b. WHAT MAKES IT INADEQUATE?
- c. WHAT USE IS BEING MADE OF THE FACILITY?
- d. WHAT IS THE COST TO UPGRADE THE FACILITY TO SUBSTANDARD?
- e. WHAT OTHER USE COULD BE MADE OF THE FACILITY AND AT WHAT COST?
- f. CURRENT IMPROVEMENT PLANS AND PROGRAMMED FUNDING:
- g. HAS THIS FACILITY CONDITION RESULTED IN C3 OR C4 DESIGNATION ON YOUR BASEREP?

N/A.

(5) Provide data on the messing facilities assigned to your current plant account.

Messing is currently provided through the Long Glass Club, an open dining facility opened to all employees (military and civilian). A new galley operation is anticipated to open in the Fall of 1994.

Facility Type, CCN and Bldg. #	Total Sq. Ft.	Adequate		Substandard		Inadequate		Avg # Noon Meals Served
		Seats	Sq Ft	Seats	Sq Ft	Seats	Sq Ft	

(6) In accordance with NAVFACINST 11010.44E, an inadequate facility cannot be made adequate for its present use through "economically justifiable means". For all the categories above where inadequate facilities are identified provide the following information:

- a. FACILITY TYPE/CODE:
- b. WHAT MAKES IT INADEQUATE?
- c. WHAT USE IS BEING MADE OF THE FACILITY?
- d. WHAT IS THE COST TO UPGRADE THE FACILITY TO SUBSTANDARD?
- e. WHAT OTHER USE COULD BE MADE OF THE FACILITY AND AT WHAT COST?
- f. CURRENT IMPROVEMENT PLANS AND PROGRAMMED FUNDING:
- g. HAS THIS FACILITY CONDITION RESULTED IN C3 OR C4 DESIGNATION ON YOUR BASEREP?

N/A.

(7) Provide data on the messing facilities projected to be assigned to your plant account in FY 1997.

Facility Type, CCN and Bldg. #	Total Sq. Ft.	Adequate		Substandard		Inadequate		Avg # Noon Meals Served
		Seats	Sq Ft	Seats	Sq Ft	Seats	Sq Ft	
Galley, Bldg 485*	8000	132						Projected to be 100

\* Note: This building is under construction and is scheduled to open the 1st quarter FY 95.

(8) In accordance with NAVFACINST 11010.44E, an inadequate facility cannot be made adequate for its present use through "economically justifiable means". For all the categories above where inadequate facilities are identified provide the following information:

- a. FACILITY TYPE/CODE:
- b. WHAT MAKES IT INADEQUATE?
- c. WHAT USE IS BEING MADE OF THE FACILITY?
- d. WHAT IS THE COST TO UPGRADE THE FACILITY TO SUBSTANDARD?
- e. WHAT OTHER USE COULD BE MADE OF THE FACILITY AND AT WHAT COST?
- f. CURRENT IMPROVEMENT PLANS AND PROGRAMMED FUNDING:
- g. HAS THIS FACILITY CONDITION RESULTED IN C3 OR C4 DESIGNATION ON YOUR BASEREP?

13. **MWR Facilities.** For on-base MWR facilities<sup>10</sup> available, complete the following table for each separate location. For off-base government owned or leased recreation facilities indicate distance from base. If there are any facilities not listed, include them at the bottom of the table.

**LOCATION** Panama City, FL **DISTANCE** 0

Facility	Unit of Measure	Total	Profitable (Y,N,N/A)
Auto Hobby	Indoor Bays	3	Y
	Outdoor Bays	1	Y
Arts/Crafts	SF	N/A	-
Wood Hobby	SF	-	-
Bowling	Lanes	10	Y
Club ( <b>All Hands</b> )	SF	8,400	N
Officer's Club	SF	N/A	-
Library	SF	N/A	-
Library	Books	N/A	-
Theater	Seats	N/A	-
ITT	SF	N/A	-
Museum/Memorial	SF	-	-
Pool (indoor)	Lanes	-	-
Pool (outdoor)	Lanes	6	N
Beach	LF	600 ft	N/A
Swimming Ponds	Each	N/A	-
Tennis CT	Each	4	N/A

<sup>10</sup>Spaces designed for a particular use. A single building might contain several facilities, each of which should be listed separately.

Facility	Unit of Measure	Total	Profitable (Y,N,N/A)
Volleyball CT (outdoor)	Each	3	N/A
Basketball CT (outdoor)	Each	1	N/A
Racquetball CT	Each	2	N/A
Golf Course	Holes	N/A	-
Driving Range	Tee Boxes	N/A	-
Gymnasium } One	SF	5922	N/A
Fitness Center } Facility	SF	2376	N/A
Marina	Berths	45	Y
Stables	Stalls	N/A	-
Softball Fld	Each	1	N/A
Football Fld	Each	N/A	-
Soccer Fld	Each	N/A	-
Youth Center	SF	N/A	-
Recycling Center	SF	1000	Y

(a) Is your library part of a regional interlibrary loan program?

N/A

**14. Base Family Support Facilities and Programs.**

a. Complete the following table on the availability of child care in a child care center on your base.

No child care available.

Age Category	Capacity (Children)	SF			Number on Wait List	Average Wait (Days)
		Adequate	Substandard	Inadequate		
0-6 Mos						
6-12 Mos						
12-24 Mos						
24-36 Mos						
3-5 Yrs						

b. In accordance with NAVFACINST 11010.44E, an inadequate facility cannot be made adequate for its present use through "economically justifiable means." For all the categories above where inadequate facilities are identified provide the following information:

Not applicable.

Facility type/code:

What makes it inadequate?

What use is being made of the facility?

What is the cost to upgrade the facility to substandard?

What other use could be made of the facility and at what cost?

Current improvement plans and programmed funding:

Has this facility condition resulted in C3 or C4 designation on your BASEREP?

c. If you have a waiting list, describe what programs or facilities other than those sponsored by your command are available to accommodate those on the list.

d. How many "certified home care providers" are registered at your base?

None.

e. Are there other military child care facilities within 30 minutes of the base? State owner and capacity (i.e., 60 children, 0-5 yrs).

No military child care facilities within 30 minutes.

f. Complete the following table for services available on your base. If you have any services not listed, include them at the bottom.

Service	Unit of Measure	Qty
Exchange	SF	11,928
Gas Station	SF	--
Auto Repair	SF	1,586
Auto Parts Store	SF	--
Commissary	SF	--
Mini-Mart	SF	Inside Exchange
Package Store	SF	Inside Exchange
Fast Food Restaurants	Each	--
Bank/Credit Union	Each	--
Family Service Center	SF	--
Laundromat	SF	--
Dry Cleaners	Each	--
ARC	PN	--
Chapel	PN	--
FSC Classrm/Auditorium	PN	--

15. Proximity of Closest Major Metropolitan Areas (provide at least three):

City	Distance (Miles)
Panama City/Bay County	-0-
Okaloosa County	50
Tallahassee	100

16. Standard Rate VHA Data for Cost of Living:

Paygrade	With Dependents	Without Dependents
E1	21.17	11.85
E2	21.17	13.31
E3	16.74	12.34
E4	36.55	25.21
E5	54.87	38.31
E6	63.15	42.99
E7	58.78	40.83
E8	58.48	44.21
E9	66.87	50.76
W1	82.60	62.73
W2	34.98	27.44
W3	58.63	47.66
W4	64.78	57.44
O1E	21.85	16.21
O2E	38.65	30.81
O3E	77.12	65.12
O1	34.82	25.66
O2	21.36	16.69
O3	65.22	54.91
O4	59.97	52.15
O5	43.45	35.94
O6	96.94	80.24
O7	24.54	19.94

**17. Off-base Housing Rental and Purchase**

(a) Fill in the following table for average rental costs in the area for the period 1 April 1993 through 31 March 1994.

Type Rental	Average Monthly Rent		Average Monthly Utilities Cost
	Annual High	Annual Low	
Efficiency	368	333	50
Apartment (1-2 Bedroom)	516	466	60
Apartment (3+ Bedroom)	651	589	65
Single Family Home (3 Bedroom)	683	618	136
Single Family Home (4+ Bedroom)	866	784	155
Town House (2 Bedroom)	394	356	78
Town House (3+ Bedroom)	446	404	88
Condominium (2 Bedroom)	735	665	55
Condominium (3+ Bedroom)	840	760	65

(b) What was the rental occupancy rate in the community as of 31 March 1994?

Type Rental	Percent Occupancy Rate
Efficiency	98.00
Apartment (1-2 Bedroom)	97.30
Apartment (3+ Bedroom)	99.00 NOTE (a)
Single Family Home (3 Bedroom)	96.00 NOTE (b)
Single Family Home (4+ Bedroom)	98.00
Town House (2 Bedroom)	91.00
Town House (3+ Bedroom)	95.00
Condominium (2 Bedroom)	75.00 NOTE (c)
Condominium (3+ Bedroom)	65.00

NOTE (a): Data provided by Bay County Multifamily Housing Association.

NOTE (b): Data provided by property management divisions of ERA Neubauer Real Estate, Inc., St. Andrew Bay Real Estate, Inc., Katherine Riley Realty, Inc., C-21 Commander Realty Inc., Sunspot Realty, Gulf Properties, C-21 Beach Realty Consultants.

NOTE (c): Information on Condominiums provided by condo rental management associations and rents are affected by seasonal trends.

UTILITIES: According to Gulf Power Company engineering department, average annualized costs for electricity for a 1500 sq. ft. house (all electric), built after 1990 to "Good Cents" energy standards, household of 4, would be approximately \$100.00 per month.

Average costs for water, sewer and refuse services typical of the same household would be approximately \$35-40 per month.

(c) What are the median costs for homes in the area?

Type of Home	Median Cost
Single Family Home (3 Bedroom)	72900 Note (a)
Single Family Home (4+ Bedroom)	111500 Note (b)
Town House (2 Bedroom)	48500 Note (c)
Town House (3+ Bedroom)	74000 Note (d)
Condominium (2 Bedroom)	92000 Note (e)
Condominium (3+ Bedroom)	139000 Note (f)

i. List all patents awarded to the in-house technical staff members of this activity since 1 January 1990.

**FY90 = 12**

<u>Pat. No.</u>	<u>Inventor(s)</u>	<u>Title</u>	<u>Date</u>
4,938,136	Paul F. Gould	Resonant Acousticmagnetic Minesweeper	03 JUL 90
4,939,697	Jesse L. Bealor, Jr. Rufus L. Cook	Variable Focusing Sonar	03 JUL 90
4,939,698	Francis J. Murphree	Sonar System	03 JUL 90
4,939,699	Francis J. Murphree Henry L. Warner Edward G. McLeroy	Sonar System	03 JUL 90
4,939,702	Francis J. Murphree	Barrier Sonar	03 JUL 90
4,949,314	Francis J. Murphree	Method and Means for Increasing Echo-Ranging-Search Rate	14 AUG 90
4,951,571	Curtis G. Bane	Drum Minesweeper	28 AUG 90
4,951,644	David R. Bon	Pneumatic Launcher	28 AUG 90
4,952,938	James L. Kirkland	Wire Detector	28 AUG 90
4,953,143	Francis J. Higgins Chester D. Loggins James T. Christoff	Multiple Frequency Synthetic Aperture Sonar	28 AUG 90
4,954,999	Willis A. Teel James T. Christoff	Double Phase-Lock-Loop	04 SEP 90
4,958,330	Francis J. Higgins	Wide Angular Diversity Synthetic Aperture Sonar	18 SEP 90

**FY91 =39**

<u>Pat. No.</u>	<u>Inventor(s)</u>	<u>Title</u>	<u>Date</u>
4,961,174	Willis A. Teel James T. Christoff	High Data Rate Continuous Wave Towed Sonar	02 OCT 90
4,961,175	Joseph E. Blue Thomas C. Watson	Low Frequency Sound Source for Acoustic Sweeps	02 OCT 90
4,961,181	Myron A. Elliott	Acoustic Transient Generator	02 OCT 90
4,964,091	Rufus L. Cook	Electroacoustic Transducer	16 OCT 90
4,969,131	William G. Harris, Jr.	Automatic Detection and Classification Equipment for High Resolution Sonar	06 NOV 90
4,969,399	Louis A. Kish	Acoustic Mine Countermeasures	13 NOV 90
4,970,701	James L. Kirkland	Wire Detector	13 NOV 90
4,970,702	James L. Kirkland	Electrical Conductor Detecting Device	13 NOV 90
4,970,704	Raymond E. Kelly	Acoustical Generator	13 NOV 90

4,970,956	John E. Bowling	Solid State Programmable Intervalometer	20 NOV 90
4,970,981	William H. Tolbert	Chute River Mine Sweep	20 NOV 90
	Garrett G. Salsman		
4,972,379	William G. Harris, Jr.	Sonic Echo Simulator	20 NOV 90
4,972,385	Willis A. Teel	Target Size Classification System	20 NOV 90
4,972,387	Henry L. Warner	High Information Rate Catacoustic System	20 NOV 90
4,972,388	James L. Kirkland	Electrical Cable Marker	20 NOV 90
4,972,389	Willis A. Teel	Electroacoustic Transducer	20 NOV 90
4,972,776	Richard K. Shumaker	Submarine Minesweeper	27 NOV 90
	Louis F. Jones		
4,974,216	Myron Elliott	Acoustic Energy Source	27 NOV 90
4,975,888	George E. Kern	Mine Neutralization System	04 DEC 90
4,975,912	Ernest A. Hogge	Brackish-Water Wire Detector	04 DEC 90
4,977,545	Willis A. Teel	Target Detector	11 DEC 90
	Louis F. Jones		
4,980,868	Willis A. Teel	Sonar System	25 DEC 90
4,982,384	Edward L. Pipkin	Split Beam Sonar	01 JAN 91
	Garrett G. Salsman		
4,985,874	Eugene Roeschlein	Solid State Sequencing Switch	15 JAN 91
4,989,186	Dennis W. Ficker	Target Tracking Sonar With False Target Detector	29 JAN 91
4,990,852	James L. Kirkland	Automatic Classifier For Electric Wire Detector	05 FEB 91
4,991,144	Keith E. Geren	Dopplerized Echo Repeater	05 FEB 91
	Ray M. Markland		
4,992,786	James L. Kirkland	Electrical Conductor Detector	12 FEB 91
4,993,325	James C. Slone, Jr.	Magnetic Field Generator	19 FEB 91
	John A. Hudson		
	Bernard Deleman		
4,993,344	Louis F. Jones	Torpedo Defense For Ships	19 FEB 91
4,993,345	David W. Feldman	Floating Degaussing Cable System	19 FEB 91
4,993,662	Daniel C. Barnes	Apparatus For Guiding A	19 FEB 91
	Wendell J. Bridges		
	Jon R. Carr		
5,000,634	John E. Ducote	Low Profile Equipment/Cargo Clamp	19 MAR 91
	Louis F. Jones	Magnetic Field Generator	19 MAR 91
5,001,485	Louis F. Jones	Proximity Fuze System	26 MAR 91
5,001,984	Willis A. Teel		
5,007,346	James L. Kirkland	Device For Detecting And/Or Sweeping Electrically Controlled Mines	16 APR 91
5,012,742	Louis F. Jones	Proximity Fuze	7 MAY 91

18. For the top five sea intensive ratings in the principle warfare community your base supports, provide the following:

Rating	Number Sea Billets in the Local Area	Number of Shore billets in the Local Area
AD	0	5
AT	0	1
A2	0	2
AE	0	5
PR	0	1

19. Complete the following table for the average one-way commute for the five largest concentrations of military and civilian personnel living off-base.

Location	% Employees	Distance (mi)	Time(min)
Panama City, FL	43.9	4	15
Panama City Beach, FL	35.7	3	5
Lynn Haven, FL	16.7	7	20
Youngstown, FL	1.5	20	40
Chipley, FL	0.5	49	60

20. Complete the tables below to indicate the civilian educational opportunities available to service members stationed at the installation (to include any outlying sites) and their dependents:

(a) List the local educational institutions which offer programs available to dependent children. Indicate the school type (e.g. DODDS, private, public, parochial, etc.), grade level (e.g. pre-school, primary, secondary, etc.), what students with special needs the institution is equipped to handle, cost of enrollment, and for high schools only, the average SAT score of the class that graduated in 1993, and the number of students in that class who enrolled in college in the fall of 1994.

Institution	Type	Grade Level(s)	Special Education	Annual Enrollment Cost per Student	1993 Avg SAT/ACT Score	% HS Grad to Higher Educ	Source of Info
1st Presbyterian Christian School	Private	K3-5	No	K-2, \$1400 3-4, 1035	N/A	N/A	School
Good Shepherd Lutheran	Private	K5-8th	No	\$1815	N/A	N/A	School
Holy Nativity Episcopal Grade	Private	K3-5th	No	\$1950	N/A	N/A	School
Islamic Community School	Private	K-10th	No	\$3000	N/A	N/A	School
Panama City Christian	Private	K5-12th	No	K-\$1600 1-6 2000 7-12 \$2200	N/A	N/A	School
St. John the Evangelist Catholic School	Private	K4-8	No	Catholic \$1500 Non-Catholic \$1750	N/A	N/A	School
Fellowship Christian Academy School	Private	K2-12	No	\$1300	N/A	N/A	School
Primary Prep School	Private	K3-K4	No	\$3120	N/A	N/A	School
7th Day Adventist Elem. School	Private	1-8th	No	\$1650	N/A	N/A	School
19 Elementary Schools	Public	K-6	Yes	\$4,100	N/A	N/A	*
6 Middle Schools	Public	7-8	Yes	\$4,100	N/A	N/A	*
3 High Schools	Public	9-12	Yes	\$4,100	920/22	65%	*
A.D. Harris Special Education	Public	Var.	Yes	\$4,100	N/A	N/A	*
Shaw Adult Center	Public	Var.	Yes	\$4,100	N/A	N/A	*
Margaret K. Lewis Exceptional Student Center	Public	Var.	Yes	\$4,100	N/A	N/A	*

\*Bay County Board of Education. \$4,100 average enrollment cost per student. Specific details by school not available.

(b) List the educational institutions within 30 miles which offer programs off-base available to service members and their adult dependents. Indicate the extent of their programs by placing a "Yes" or "No" in all boxes as applies.

Institution	Type Classes		Program Type(s)				
			Adult High School	Vocational/ Technical	Undergraduate		Graduate
					Courses only	Degree Program	
FSU Panama City Campus	Day	Yes	No	No	-	Yes	Yes
	Night	Yes	No	No	-	Yes	Yes
Gulf Coast Community College	Day	Yes	No	No	-	Yes	No
	Night	Yes	No	No	-	Yes	No
Embry Riddle Aeronautical Univ.	Day	No	No	No	-	No	No
	Night	Yes	No	No	-	Yes	Yes
FAMU/FSU	Day	Yes	No	No	-	Yes	Yes
	Night	Yes	No	No	-	Yes	Yes
Troy State	Day	No	No	No	-	No	No
	Night	Yes	No	No	-	Yes	Yes
Haney Vo-Tech	Day	Yes	No	Yes		No	No
	Night	Yes	No				
Univ. of West Florida	Day	No	No	No	-	No	Yes
	Night	Yes	No	No	-	Yes	

(c) List the educational institutions which offer programs on-base available to service members and their adult dependents. Indicate the extent of their programs by placing a "Yes" or "No" in all boxes as applies.

Institution	Type Classes	Program Type(s)				
		Adult High School	Vocational/ Technical	Undergraduate		Graduate
				Courses only	Degree Program	
Gulf Coast Community College	Day No	No	No	-	-	-
	Night Yes	No	No	-	Yes	No
	Corres- pondence No	No	No	-		
National Technological University	Day No	No	No	-		
	Night Yes	No	No	-	Yes	Yes
	Corres- pondence No	No	No	-	-	-
Penn State	Day No	No	No			
	Night Yes	No	No		No	yes
	Corres- pondence No	-				
	Day					
	Night					
	Corres- pondence					

## 21. Spousal Employment Opportunities.

Provide the following data on spousal employment opportunities.

Skill Level	Number of Military Spouses Serviced by Transition Site Spouse Employment Assistance			Local Community Unemployment Rate**
	1991	1992*	1993	
Professional	*	3	4	8.67
Manufacturing	*			
Clerical	*	1	11	8.67
Service	*	4	5	8.67
Other	*	2	3	8.67

\* Not available.

\*\*Bay County, Florida percentage not available to skill levels.

The Coastal Systems Station, Panama City, Florida, Transition Site Office was established and became fully staffed (with three personnel) on 1 Sep 92.

## 22. Medical/Dental.

a. Do your active duty personnel have any difficulty with access to medical or dental care, in either the military or civilian health care system? Develop the why of your response.

### Medical

(1) Active duty military do not have difficulty with access to medical care in the military or civilian health care system.

Medical care is provided on board the Station by the Naval Hospital - Pensacola - Branch Medical Clinic during week days from 0730 - 1600. Occupational health monitoring is handled through Naval Hospital Pensacola, Occupational Health Clinic. After hours and some specialized care can be obtained through Tyndall AFB Hospital's Acute Care Clinic Monday - Friday from 0730 - 2000 and Saturday and Sunday from 0730 - 1500; Tyndall AFB Hospital is located approximately 15 miles east of the Station. If needed, a full range of specialty care can be obtained through the Naval Hospital Pensacola, located approximately 100 miles west of the Station. After hours emergency medical care can be obtained either through the community's Bay Medical Center or HCA Gulf Coast Hospital

emergency rooms located within 10 miles of the Station. Additional support is provided on board the Station by the Industrial Safety Office.

(2) Military dependent medical care.

Military dependent medical care on board the Station is limited to primary care services on a first-call, first-served, 24-hour in advance, appointment-only basis. The Tyndall AFB Hospital's Family Practice, Pediatric, and Acute Care Clinics are opened to dependents. There is also a full array of Medical choices available utilizing CHAMPUS in the local community.

**Dental**

(1) Active duty personnel do not have any difficulty with access to dental care in either the military or civilian health care system.

Dental care is provided to active duty personnel on board the Coastal Systems Station by the Naval Dental Center - Branch Dental Clinic during normal duty hours. Oral surgery is available at Eglin AFB approximately 50 miles west of the Station. Periodontal and endodontic care is available at both Eglin AFB and the Naval Dental Center, Pensacola, approximately 100 miles west of the Station.

(2) Military dependent dental care.

Normal military dependent dental care is provided in the community under the Delta Dental Plan. The naval Dental Center-Branch Dental Clinic is available for emergency services on a 24-hour basis to active duty military, retired military, and dependents. Additionally, emergency care is available at Tyndall AFB, approximately 15 miles east of the station when no doctor is available at the Station.

FOR OFFICIAL USE ONLY - BRAC '95 WORKING PAPERS

REQUESTS FOR CLARIFICATION  
From the Base Structure Analysis Team (BSAT)

Control #: 001  
To: Jim Logan  
Fax: (703)602-0541

Activity: NAVSEA  
Voice: (703)602-3926

Date sent: 8 SEP 94

CLARIFICATION/CORRECTION REQUESTED for Data Call #5 Question #23

To clarify ambiguities in responses to the above question, please provide the CRIME RATES for your surrounding community or county/township/parrish/city in these three categories: Violent Crime Rate  
Property Crime Rate  
Drug Crime Rate

Disregard previous format in question #13.  
Specify the rate per 100,000 population.  
Crime rates are expected to be obtainable from appropriate law enforcement offices.  
Data is needed for the activities listed on page 2.

*Christina May*  
LT Christina May  
(703) 601-9691

NOTE: This information is needed urgently. Request you respond with clarification comments (below) or corrected page(s) within 24 hours after receipt of the activity. FAX a preliminary response directly to the BSAT at (703) 756-2174. Then, send your official response, properly certified, through your chain of command for certification and further forwarding to the BSAT. Official documentation must be retained to support your response and be available for validation by the Naval Audit Service.

Reply: For CY 1993, the violent crime rate is 678.2 per 100,000 (comprised of totals from categories 14, 15, 16, 20, 22, 23, 24 & 25 Data Call 5, Question 23. The property crime rate is 6,438.7 per 100,000 (comprised of totals from categories 1 through 13, and 21). The drug crime rate is not available (category 18).

CAPT D. C. STEERE  
Name

Code 00  
Code

904/234-4201  
Commercial Phone #

9/09/94  
Date

Submission for Coastal Systems Station UIC N61331

FOR OFFICIAL USE ONLY - BRAC '95 WORKING PAPERS

14:12 No.004 P.02

SEP 09 '94

ID:9042344522

CODE D11

23 **Crime Rate.** Complete the table below to indicate the crime rate for your air station for the last three fiscal years. The source for case category definitions to be used in responding to this question are found in NCIS - Manual dated 23 February 1989, at Appendix A, entitled "Case Category Definitions." Note: the crimes reported in this table should include 1) all reported criminal activity which occurred on base regardless of whether the subject or the victim of that activity was assigned to or worked at the base; and 2) all reported criminal activity off base.

Crime Definitions	FY 1991	FY 1992	FY 1993
1. Arson (6A)			
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel-military}	0	0	0
Off Base Personnel-civilian}	26.7	20.0	N/A
2. Blackmarket (6C)			
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	0	0	0
3. Counterfeiting (6G)			
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	0	0	0
4. Postal (6L)			
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	0	0	0

N/A = not available

Crime Definitions	FY 1991	FY 1992	FY 1993
5. Customs (6M)			
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	0	0	0
6. Burglary (6N)			
Base Personnel - military	.7	.7	.7
Base Personnel - civilian	2.9	2.0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	1422.9	1444.1	1450.0
7. Larceny - Ordnance (6R)			
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	0	0	0
8. Larceny - Government (6S)			
Base Personnel - military	.7	1.5	5.2
Base Personnel - civilian	5.9	11.9	4.4
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	0	0	0

Crime Definitions	FY 1991	FY 1992	FY 1993
9. Larceny - Personal (6T)			
Base Personnel - military	10.4	4.4	8.9
Base Personnel - civilian	2.9	2.2	8.1
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	4241.5	4605.2	4614.8
10. Wrongful Destruction (6U)			
Base Personnel - military	2.9	2.9	6.7
Base Personnel - civilian	3.7	5.9	7.4
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	0	0	0
11. Larceny - Vehicle (6V)			
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	277.0	349.6	324.4
12. Bomb Threat (7B)			
Base Personnel - military	0	0	.7
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	0	0	0

Crime Definitions	FY 1991	FY 1992	FY 1993
13. Extortion (7E)			
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	0	0	0
14. Assault (7G)			
Base Personnel - military	2.2	1.5	1.5
Base Personnel - civilian	.7	.7	2.2
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	497.0	484.4	456.3
15. Death (7H)			
Base Personnel - military	0	0	.3
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	6.7
Off Base Personnel - civilian	N/A	5.9	9
16. Kidnapping (7K)			
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	11.9	17.0	N/A

N/A = not available

Crime Definitions	FY 1991	FY 1992	FY 1993
18. Narcotics (7N)			
Base Personnel - military	0	.7	0
Base Personnel - civilian	0	.7	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	439.3	408.1	N/A
19. Perjury (7P)			
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	0	0	0
20. Robbery (7R)			
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	71.1	97.8	88.9
21. Traffic Accident (7T)			
Base Personnel - military	0	3.7	1.5
Base Personnel - civilian	5.2	5.2	5.9
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	.7	0	0

N/A = not available

Crime Definitions	FY 1991	FY 1992	FY 1993
22. Sex Abuse - Child (8B)			
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	0	0	0
23. Indecent Assault (8D)			
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	0	0	0
24. Rape (8F)			
Base Personnel - military	0	0	.7
Base Personnel - civilian	0	0	0
Off Base Personnel - military	.7	0	0
Off Base Personnel - civilian	96.3	141.5	112.6
25. Sodomy (8G)			
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	0	0	0

**Crime Rate Notes:**

- Crime rate calculated as number of crimes reported in Bay County, FL per 100,000 permanent and average daily transient population.
- Items with a "0" are either "0" or information was not available.

**TAB A**

**TECHNICAL OPERATIONS**

**FUNCTIONAL SUPPORT AREA - LIFE CYCLE WORK AREA FORM**

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	1. Exploratory Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 9.2 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1313.2

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 247.8

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 3992.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	2. Advance Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 80.8 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 11342.1

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 8263.7

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 4888.5

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	3. Advance Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 186.9 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 27308.7

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 27993.8

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 3411.8

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	4. Engineering and Manufacturing Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 15.1 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 3166

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 3295

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 346.3

Note: In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	5. RDT&E Management Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 2.8 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 513.6

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 1359.9

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	6. Operational Systems Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 9.4 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1512.2

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 565.4

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 2.1

Note: In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	7. Production

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 11.8 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1643.5

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 886.1

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) -15.5

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	8. Acceptance Testing

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 3.4 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 480.8

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 388.7

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	9. Modernization

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 6.6 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1099.5

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 730.4

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 5 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	10. Program Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 6.9 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1487.0

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 894.6

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 275.2

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	11. Maintenance

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 7 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 852.4

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 542.8

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	12. Repair

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 11 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1337

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 851.4

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	13. Testing

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 7.7 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 959.7

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 798.6

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	14. In-Service Engineering

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 4.6 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 635

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 355

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 1616.6

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	15. Program Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 2.5 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 293.6

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 203

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 84 0.3

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	17. Training/Operational Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 22.5 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 3068.2

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 1002.4

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	18. Simulation, Modeling & Analysis

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 16.1 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 2252.2

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 447.9

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 178.0

Note: In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	3. Combat Systems Integration 3.2 Air
Life Cycle Work Area	10. Program Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 15.1 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 2000.5

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 749.9

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	3. Combat Systems Integration 3.2 Air
Life Cycle Work Area	14. In-service Engineering

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 3.2 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 450.6

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 60.4

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	3. Combat Systems Integration 3.3 Surface
Life Cycle Work Area	3. Advanced Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 31.5 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 4281.9

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 2445.6

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	3. Combat Systems Integration 3.3 Surface
Life Cycle Work Area	14. In-Service Engineering

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. .8 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 109

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 49.5

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4. Special Operation Support 4.1 Landing Force Equipment and System
Life Cycle Work Area	3. Advanced Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 2.3 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 301.4

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 556.5

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) -0.2

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4. Special Operation Support 4.1 Landing Force Equipment and System
Life Cycle Work Area	5. RDT&E Management Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 2.3 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 282.6

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 22.4

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4. Special Operation Support 4.1 Landing Force Equipment and System
Life Cycle Work Area	6. Operational Systems Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. .5 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 60.8

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 9.3

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 189.4

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4. Special Operation Support 4.1 Landing Force Equipment and System
Life Cycle Work Area	7. Production

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 2.4 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 315.9

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 468.4

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4. Special Operation Support 4.1 Landing Force Equipment and System
Life Cycle Work Area	8. Acceptance Testing

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 9.0 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1199

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 715.1

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) -1.2

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4. Special Operation Support 4.1 Landing Force Equipment and System
Life Cycle Work Area	9. Modernization

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 16.3 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 2334.9

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 2323.9

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4. Special Operation Support 4.1 Landing Force Equipment and System
Life Cycle Work Area	10. Program Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 4.8 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 683.8

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 483.7

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) -22.1

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4. Special Operation Support 4.1 Landing Force Equipment and System
Life Cycle Work Area	13. Testing

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 5.4 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1011.9

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 896.9

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4. Special Operation Support 4.1 Landing Force Equipment and System
Life Cycle Work Area	14. In-Service Engineering

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 7.3 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 940.3

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 1086.4

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4. Special Operation Support 4.1 Landing Force Equipment and System
Life Cycle Work Area	17. Training/Operational Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 4.6 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 664.7

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 1209.3

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4.0 Special Operation Support 4.2 Coastal/Special Warfare Support
Life Cycle Work Area	2. Exploratory Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 7.7 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1076.6

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 626.9

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4.0 Special Operation Support 4.2 Coastal/Special Warfare Support
Life Cycle Work Area	3. Advanced Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 18.8 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 2575.7

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 923

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 9.9

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4.0 Special Operation Support 4.2 Coastal/Special Warfare Support
Life Cycle Work Area	4. Engineering and Manufacturing Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 25.5 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 3270.4

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 1141.1

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 30.0

Note: In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4.0 Special Operation Support 4.2 Coastal/Special Warfare Support
Life Cycle Work Area	5. RDT&E Management Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 10.6 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1348.8

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 920.1

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 1 05.6

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4.0 Special Operation Support 4.2 Coastal/Special Warfare Support
Life Cycle Work Area	6. Operational Systems Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 18.3 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 2430.6

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 2635.8

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4.0 Special Operation Support 4.2 Coastal/Special Warfare Support
Life Cycle Work Area	8. Acceptance Testing

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. .6 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 83.6

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 15.6

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4.0 Special Operation Support 4.2 Coastal/Special Warfare Support
Life Cycle Work Area	9. Modernization

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. .7 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 81.0

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 6213.9

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) -1089.8

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4.0 Special Operation Support 4.2 Coastal/Special Warfare Support
Life Cycle Work Area	14. In-Service Engineering

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 36.1 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 4508.0

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 133.1

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) -82.4

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4.0 Special Operation Support 4.2 Coastal/Special Warfare Support
Life Cycle Work Area	17. Training/Operational Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 1.4 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 188.5

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 49.8

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	4.0 Special Operation Support 4.2 Coastal/Special Warfare Support
Life Cycle Work Area	18. Simulation, Modeling, and Analysis

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 2.5 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 349.7

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 103.7

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	10.0 General Mission Support 10.4 Diving, Salvage, and Ocean Engineering
Life Cycle Work Area	3. Advanced Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 18.1 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 2276.1

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 450.9

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 1729.5

Note: In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	10.0 General Mission Support 10.4 Diving, Salvage and Ocean Engineering
Life Cycle Work Area	4. Engineering and Manufacturing Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 4.5 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 759.5

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 388.6

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 423.9

Note: In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	10.0 General Mission Support 10.4 Diving, Salvage, and Ocean Engineering
Life Cycle Work Area	6. Operational Systems Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 8.5 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1049.9

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 507.8

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 74.5

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	10.0 General Mission Support 10.4 Diving, Salvage, and Ocean Engineering
Life Cycle Work Area	7. Production

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 5.9 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 830.3

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 719.9

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	10.0 General Mission Support 10.4 Diving, Salvage, and Ocean Engineering
Life Cycle Work Area	8. Acceptance Testing

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 4.3 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 512

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 40.2

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	10.0 General Mission Support 10.4 Diving, Salvage, and Ocean Engineering
Life Cycle Work Area	9. Modernization

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 13.5 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1818.3

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 1636.3

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 264.2

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	10.0 General Mission Support 10.4 Diving, Salvage, and Ocean Engineering
Life Cycle Work Area	10. Program Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 3.1 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 369.1

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0.0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 32.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	10.0 General Mission Support 10.4 Diving, Salvage, and Ocean Engineering
Life Cycle Work Area	11. Maintenance

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 3.6 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 492.9

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 74.9

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	10.0 General Mission Support 10.4 Diving, Salvage, and Ocean Engineering
Life Cycle Work Area	12. Repair

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 5.1 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 750.2

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 212.7

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	10.0 General Mission Support 10.4 Diving, Salvage, and Ocean Engineering
Life Cycle Work Area	13. Testing

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 1.5 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 177.7

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0.0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	10.0 General Mission Support 10.4 Diving, Salvage, and Ocean Engineering
Life Cycle Work Area	14. In-Service Engineering

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 5.9 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 710.6

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 204.5

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	10.0 General Mission Support 10.4 Diving, Salvage, and Ocean Engineering
Life Cycle Work Area	17. Training/Operational Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 4.5 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 543.2

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) -4

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 212.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	10.0 General Mission Support 10.4 Diving, Salvage, and Ocean Engineering
Life Cycle Work Area	18. Simulation, Modeling and Analysis

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 2.0 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 236.3

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0.0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station
Functional Support Area	10.0 General Mission Support 10.9 Activity Mission and Function Support
Life Cycle Work Area	15. Program Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 31.3 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 2033.4

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 2493.9

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station, White Oak Activity *
Functional Support Area	2.0 Weapons Systems 2.5 Mines
Life Cycle Work Area	2. Exploratory Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 17.7 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 281.3

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 458.1

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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\* The mine development work shown on this sheet was performed in FY93 at NSWC, Dahlgren Division, White Oak. As a result of BRAC 93, this function has been realigned with the Coastal Systems Station starting FY 94. The work is shown here to accurately depict the total technical functions currently assigned to CSS. The personnel will be relocated to CSS by the end of FY95

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station, White Oak Activity *
Functional Support Area	2.0 Weapons Systems 2.5 Mines
Life Cycle Work Area	3. Advanced Development

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 13.6 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 2466.3

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 3122.3

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 8.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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(d) For calendar year 1993, from the local MLS listings provide the number of 2, 3, and 4 bedroom homes available for purchase. Use only homes for which monthly payments would be within 90 to 110 percent of the E5 BAQ and VHA for your area.

Month	Number of Bedrooms		
	2	3	4+
January	82	126	14
February	77	125	2
March	82	211	19
April	81	126	18
May	63	139	14
June	87	133	21
July	91	301	23
August	101	231	66
September	113	251	27
October	79	123	20
November	79	119	54
December	78	123	20

NOTE (a): 985 units/item list #493 = median (low = 16,000 high = 428,000)

NOTE (b): 224 units/item list #113 (low 37,000 high 375,000)

NOTE (c): 99 units/item #50 (low 26,500 high = 155,000)

NOTE (d): 49 units, item #25 (low 36,500 high 225,000)

NOTE (e): 150 units, item #76 (low 36,500 high 225,000)

NOTE (f): 29 units, item #76 (low 49,000 high 225,000)

The median price data is derived from a substantial sample of the market (Multiple Listing Service) but does not take into account a significant new home market which has been shown to be about 25% of the total market.

(e) Describe the principle housing cost drivers in your local area.

During 1993, certain segments of the Bay County housing market (particularly rental properties) were very close reaching market equilibrium. The typical gap between supply and demand widened later in the year as builders and developers began to respond to market conditions. This is not typical, as the market generally experiences a substantial oversupply. The most significant market driver in the Bay County housing market is growth and stability in basic employment, and the resulting affect on non-basic industry and support services (not necessarily population growth). The most relevant factor in the 1993 market was pent-up demand unleashed by lower interest rates, business stability and expansion, and modest growth in the tourism industry.

Population income is always the key factor in creating housing demand. Household income has typically remained fairly constant as the major (basic) industries have been stable. The West part of the county has also been affected by a reasonably strong rebound in the second home market supported by tourism. This market has historically been somewhat erratic and in the judgement of many area real estate professionals demand may have already reached another peak as there is now evidence of oversupply.

**NOTES:**

It should be noted that new home sales which are not substantially reflected in the statistical data provided account for approximately one-fourth of all transactions. According to a Metro market Trends, Inc., a total of 876 homes were sold in Bay County during the first quarter of 1994. Research indicates that 25% of the transactions were new homes.

The study regarding availability of units is compiled from Multiple Listing Service statistical data. According to Metro Market Trends data (taken from actual recording of sale transactions in public records), only about 38% of all transactions which occurred in the first quarter were recorded in the multiple listing service. This indicates that both inventory levels and transactional statistics provided in the study are significantly lower than the market actually offers. A factor of 1.6X might be a safe multiplier to apply to the inventory figures provided. Median price information should, however, be fairly reliable, as the MLS can be considered a reliable market data sample with the exception of any influence caused by new construction.

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station, White Oak Activity *
Functional Support Area	2.0 Weapons Systems 2.5 Mines
Life Cycle Work Area	4. Engineering and Manufacturing Development

Note: An example of a functional support area - life cycle work area is "I. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 29.7 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 5163.8

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 221.3

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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\* The mine development work shown on this sheet was performed in FY93 at NSWC, Dahlgren Division, White Oak. As a result of BRAC 93, this function has been realigned with the Coastal Systems Station starting FY 94. The work is shown here to accurately depict the total technical functions currently assigned to CSS. The personnel will be relocated to CSS by the end of FY95

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station, White Oak Activity *
Functional Support Area	2.0 Weapons Systems 2.5 Mines
Life Cycle Work Area	7. Production

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 1.2 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 918.3

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0.0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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\* The mine development work shown on this sheet was performed in FY93 at NSWC, Dahlgren Division, White Oak. As a result of BRAC 93, this function has been realigned with the Coastal Systems Station starting FY 94. The work is shown here to accurately depict the total technical functions currently assigned to CSS. The personnel will be relocated to CSS by the end of FY95

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station, White Oak Activity *
Functional Support Area	2.0 Weapons Systems 2.5 Mines
Life Cycle Work Area	8. Acceptance Testing

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 1.8 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 284.3

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0.0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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\* The mine development work shown on this sheet was performed in FY93 at NSWC, Dahlgren Division, White Oak. As a result of BRAC 93, this function has been realigned with the Coastal Systems Station starting FY 94. The work is shown here to accurately depict the total technical functions currently assigned to CSS. The personnel will be relocated to CSS by the end of FY95

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station, White Oak Activity *
Functional Support Area	2.0 Weapons Systems 2.5 Mines
Life Cycle Work Area	9. Modernization

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. .9 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 133.9

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0.0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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\* The mine development work shown on this sheet was performed in FY93 at NSWC, Dahlgren Division, White Oak. As a result of BRAC 93, this function has been realigned with the Coastal Systems Station starting FY 94. The work is shown here to accurately depict the total technical functions currently assigned to CSS. The personnel will be relocated to CSS by the end of FY95

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station, White Oak Activity *
Functional Support Area	2.0 Weapons Systems 2.5 Mines
Life Cycle Work Area	14. In-Service Engineering

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 13.7 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 2661.8

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 115.2

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note:

In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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\* The mine development work shown on this sheet was performed in FY93 at NSWC, Dahlgren Division, White Oak. As a result of BRAC 93, this function has been realigned with the Coastal Systems Station starting FY 94. The work is shown here to accurately depict the total technical functions currently assigned to CSS. The personnel will be relocated to CSS by the end of FY95

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station, Naval Mine Warfare Engineering Activity *
Functional Support Area	2.0 Weapons Systems 2.5 Mines
Life Cycle Work Area	10. Program Management

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 11.0 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1210.6

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 197.9

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note: In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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\* The work shown on this sheet was performed in FY93 at the Naval Mine Warfare Engineering Activity, Yorktown, and accounted for in NSWC, Port Hueneme Division for FY93. As a result of BRAC 93, this activity has been realigned with Coastal Systems Station starting in FY94. The work is shown here to adequately depict the technical functions currently assigned to CSS. The personnel will be relocated by the end of FY95.

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station, Naval Mine Warfare Engineering Activity *
Functional Support Area	2.0 Weapons Systems 2.5 Mines
Life Cycle Work Area	14. In-Service Engineering

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 52.0 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 5977.1

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not include direct cite funding.** \$(K) 977.2

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note: In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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\* The work shown on this sheet was performed in FY93 at the Naval Mine Warfare Engineering Activity, Yorktown, and accounted for in NSWC, Port Hueneme Division for FY93. As a result of BRAC 93, this activity has been realigned with Coastal Systems Station starting in FY94. The work is shown here to adequately depict the technical functions currently assigned to CSS. The personnel will be relocated by the end of FY95.

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station, Naval Mine Warfare Engineering Activity *
Functional Support Area	2.0 Weapons Systems 2.5 Mines
Life Cycle Work Area	15. Program Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 3.0 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 378.3

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 61.9

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note: In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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\* The work shown on this sheet was performed in FY93 at the Naval Mine Warfare Engineering Activity, Yorktown, and accounted for in NSWC, Port Hueneme Division for FY93. As a result of BRAC 93, this activity has been realigned with Coastal Systems Station starting in FY94. The work is shown here to adequately depict the technical functions currently assigned to CSS. The personnel will be relocated by the end of FY95.

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station, Naval Mine Warfare Engineering Activity *
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	10. Program Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 12.0 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1356.0

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 156.0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note: In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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\* The work shown on this sheet was performed in FY93 at the Naval Mine Warfare Engineering Activity, Yorktown, and accounted for in NSWC, Port Hueneme Division for FY93. As a result of BRAC 93, this activity has been realigned with Coastal Systems Station starting in FY94. The work is shown here to adequately depict the technical functions currently assigned to CSS. The personnel will be relocated by the end of FY95.

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station, Naval Mine Warfare Engineering Activity *
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	14. In-Service Engineering

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 61 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 6614.0

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 759.0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note: In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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\* The work shown on this sheet was performed in FY93 at the Naval Mine Warfare Engineering Activity, Yorktown, and accounted for in NSWC, Port Hueneme Division for FY93. As a result of BRAC 93, this activity has been realigned with Coastal Systems Station starting in FY94. The work is shown here to adequately depict the technical functions currently assigned to CSS. The personnel will be relocated by the end of FY95.

**TECHNICAL FUNCTIONS  
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM**

Technical Center Site	NSWC Dahlgren Division, Coastal Systems Station, Naval Mine Warfare Engineering Activity *
Functional Support Area	8.0 Defense Systems 8.2 Countermeasures (CM)
Life Cycle Work Area	15. Program Support

Note: An example of a functional support area - life cycle work area is "1. Platform, 1.1 Undersea, - 10. Program Support".

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 5.0 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 8149.0

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 59.0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0.0

Note: In-House Expenditures - Is comprised of the total obligation authority for direct labor, direct material, direct travel, direct equipment, direct computer support, other direct support services and all overhead.

Out-of-House Expenditures - Is comprised of total obligational authority for direct work (customer funded, mission oriented) performed or to be performed by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

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\* The work shown on this sheet was performed in FY93 at the Naval Mine Warfare Engineering Activity, Yorktown, and accounted for in NSWC, Port Hueneme Division for FY93. As a result of BRAC 93, this activity has been realigned with Coastal Systems Station starting in FY94. The work is shown here to adequately depict the technical functions currently assigned to CSS. The personnel will be relocated by the end of FY95.

**TAB B**  
**SPECIAL FACILITIES AND EQUIPMENT**  
**FACILITIES/EQUIPMENT CAPABILITY FORM**

**TAB B  
INTRODUCTION  
COASTAL SYSTEMS STATION**

**Special Facilities and Equipment described here in TAB B, each play an integral role in providing essential Technical Capabilities which the Navy requires to perform its mission. Many facilities have multiple uses in the development, acquisitions support, and in-service upgrade of Fleet Systems. Individual facilities are usually not stand-alone in the context of system concept development, system engineering, and system integration, but are interconnected with other facilities to provide total system capability.**

**In addition, facilities and equipment are interconnected with human expertise and experience to provide Technical Capability. TAB B provides a description of the Technical Capabilities performed at this site and describe the interconnecting of individual facilities and equipment, and the interconnectivity of facilities and equipments with technical expertise and experience.**

**The three matrices which follow graphically depict the applications of the site specific facilities and equipment to the Technical Capabilities of the Dahlgren Division.**

**TAB B INTRODUCTION  
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TAB B INTRODUCTION

Special Facilities \ Technical Capabilities	Surface and Strategic Warfare and Cost Analysis	Combat Systems Engineering	Joint Mission Planning Systems	RF and EO Sensors	Combat & Weapon Control Systems	Weapon Systems	Surface Ship Defense Systems	Cooperative Engagement Capability Systems	Theater Ballistic Missile Defense Systems	Gun Weapon Systems	Marine Corps Weaponry	Strategic and Space Systems	Electronic Warfare Systems	Mine Warfare Systems	Amphibious Warfare Systems	Special Warfare Systems	Diving and Life Support Systems	Electromagnetic Environmental Effects (E3)	Weapon Systems Safety	Chemical/Biological Warfare Defense Systems	Warheads	Weapons Materials	Defense against Nuclear Weapons Radiation Effects	Electrochemical Power Sources (Batteries)	Magnetic Silencing
	DAHLGREN																								
1. SLBM Weapons Control Facility			X																						
2. SLBM Strategic Systems Operational Support Facility			X									X													
3. Scientific and Engineering Computer Complex	X		X		X					X		X	X												
4. Program Assurance Facility (PAF)	X			X	X	X				X	X	X	X						X						
5. Cruise Missile/UAV Systems Development and Integration Facility													X						X						
6. AEGIS Computer Center (ACC)	X	X	X	X			X	X											X						
7. Computer Aided Engineering & Performance Assessment Facility	X						X	X											X						
8. Prototype Fabrication Facility					X	X				X	X								X			X			
9. Warhead Development Facility					X				X	X	X	X							X			X			
10. Search and Track Sensor Test Site (STSTS)			X			X	X			X	X	X									X				
11. Phalanx Instrumented Test Facility			X		X	X	X			X		X													
12. AN/SLQ-32(v)1 Program Generation Center, RF						X																			
13. Anechoic Test Facility			X			X					X														
14. Weapons Systems Safety Analysis & Evaluation Facility (WSSAEF)						X	X	X		X	X	X													
15. EM Vulnerability Assessment Facility (EMVAF)			X		X	X	X			X								X	X						
16. Chem-Bio Engineering Complex						X	X				X									X					
17. Pulsed Power Technology Complex			X			X	X					X													
18. Chem-Bio Sciences Complex													X												
19. Smart Munitions Development Lab.					X					X	X								X						
20. Systems Technology Facility Complex		X		X		X	X																		
21. Visualization/Computation Statistics Lab.																									
22. Potomac River Test Range (PRTR)					X		X			X	X										X				

**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

The Coastal Systems Station (CSS) is composed of an integrated set of special and unique complexes and facilities designed to perform the Station's mission of conducting Research and Development (R&D), Test and Evaluation (T&E), Acquisition Support, Software Support, and In-Service Engineering (ISE) in Mine Warfare (MIW), Amphibious Warfare (AMW), Naval Special Warfare (NSW), and Diving and Life Support systems. Page 3 is an aerial photograph of the Coastal Systems Station looking South toward the Gulf of Mexico and CSS's Gulf Test Range. The following CSS special facilities are discussed in Tab B:

<u>Facility Name</u>	<u>Tab B Page</u>
<b>Mine Warfare Complex</b>	<b>4</b>
Airborne Mine Countermeasure (AMCM) Complex	10
Countermeasures Evaluator (CME)	15
Computation and Analysis Facility	19
Computer Software Engineering Laboratory (CSEL)	22
Mine Exploitation Complex	26
MIW Fleet Tactics Support Module	31
Sensor Development Complex	35
Mine and MCM Systems and Environmental Test Lab	41
<b>Amphibious Warfare Engineering and Test Complex</b>	<b>47</b>
<b>Diving/Special Warfare Life Support Complex</b>	<b>56</b>
Hydrospace Lab	60
Underwater Equipment Lab	65
Deep Submergence Test Facility	69
Experimental Diving Facility (EDF)	73
Ocean Simulation Facility (OSF)	78
Naval Diving and Salvage Training Center (NDSTC)	83
<b>Special Warfare Research and Engineering Complex</b>	<b>87</b>
<b>R&amp;D Underwater Countermeasures Fabrication Facility</b>	<b>91</b>
<b>Mechanical Test Lab</b>	<b>97</b>
<b>General Purpose Berthing Wharf</b>	<b>101</b>

The OSF, EDF and NDSTC are CSS facilities but are operated by tenant commands; therefore, they have been included in this submission.



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**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Mine Warfare (MIW) Research and Engineering Complex</b>

1. State the primary purpose(s) of the facility/equipment.

**CSS's Mine Warfare (MIW) Research and Engineering Complex is a special facility that includes the Airborne Mine Countermeasures Facility, the Mine Exploitation Facility, the Countermeasures Evaluator, the Computation and Analysis Facility, the MIW Fleet Support Module, the Computer Software Engineering Lab (CSEL), the Sensor Development Complex, and the facilities moved from White Oak and Yorktown as a result of BRAC 91 and BRAC 93 consolidations of Mine Warfare at CSS. The complex is used to perform almost all U.S. Navy research and development (R&D), test and evaluation (T&E), acquisition support and in-service engineering (ISE) of mine warfare systems, including mines and mine countermeasures (MCM). In addition to mines and mine countermeasures, this complex supports MCM efforts conducted to support Amphibious Warfare and Special Warfare operational requirements. The data for the individual facilities is reported in subsequent pages. In addition to these on-site facilities, CSS uses, and MIW development is dependent on, the ranges at Ft. Monroe and Ft. Lauderdale described in TAB C and the following facilities described in the Dahlgren Division, White Oak Military Value TAB B response: the Electrochemistry RDT&E Facility, the Magnetic Silencing Complex, the Advanced Weapons Materials Complex, the Radiation Technology Complex, and the Hydroballistics Facility.**

**CSS is the recognized expert and conducts full spectrum RDT&E and life cycle support for the Fleet in Mine Warfare (MIW). MIW includes the development of Mine MCM systems for surface and helicopter use and sea Mine Systems (Mining). The MCM mission includes development and implementation of new technologies to detect mines using magnetics, sound, and laser light. In addition, technology development to counter the mines via remote vehicles and/or minesweeping resides at CSS. Moreover, CSS has the facilities and expertise to exploit the new technologies found in new mine threats, and to develop new systems and tactics to counter these mines. This support, as well as engineering support for all MCM platforms is provided directly to the fleet in real time. The Mining mission includes applied research in mine sensor and algorithms technology, assessments of current and future US mine capabilities, upgrades and improvements to current stockpile mines, development of new mine and mine delivery systems and Fleet minefield planning and operational support.**

CSS has an unduplicated mix of unique state-of-the-art facilities, specialized expertise, highly classified threat and intelligence laboratories, and secure working environments. CSS provides a total system capability with unequalled technical depth (nearly 50 years involvement in MCM; almost 76 in Mining), operational understanding, and vision. CSS maintains a unique co-location with three other mission areas (Amphibious Warfare (AMW), Special Warfare (NSW), and Diving) that directly support/compliment MCM. This unique synergism of capabilities and facilities provides a coherent base to develop requirements, systems, and tactics for Expeditionary Warfare. CSS's expertise and support is key to the Navy being a "smart buyer" of today's weapon systems and is an essential element in addressing the affordability issue with today's systems.

In September 1992, the Secretary of the Navy provided a new vision for the Navy and Marine Corps in a white paper entitled From the Sea. This vision represents a shift in focus from a Global threat to regional challenges and from "blue water" operations to "littoral or coastal" operations. This vision cites the following capabilities required of the future Navy:

- \* "It requires open sea lanes of communication so that passage of shipping is not impeded by an adversary."
- \* "Maneuver from the sea, the tactical equivalent of maneuver warfare on land ... is literally the key to success."

Unfortunately, any third world nation can significantly impede the sea lanes of communication or access to an area by the effective use of cheap, available sea mines. The MCM mission is the development and maintenance of the means to prevent effective mining operations against the Navy. The mission includes research, technology, and engineering of MCM systems as well as threat mine exploitation, tactics development and direct Fleet support. In the future, in an era of fewer platforms, each platform will have greater relative military value; therefore, it is absolutely necessary to increase the survivability of all platforms through effective MCM including the use of offensive mining to neutralize enemy mining capability. Mining is an ideal capability to support and sustain battlespace dominance in the littoral zone by providing the option to dominate a larger battle space with smaller forces through the use of minefields. A unique role of mining in power projection is the capability to deny or disrupt the movement of enemy traffic on land by mixing magnetic influence mines with conventional bombs on roads, airfields, assembly areas, etc.

CSS's facilities and expertise enables it to identify current and future material and system concepts that are meaningful and worthy for development; and subsequently to transfer maximum information to industry to lower development, design, and performance risk. CSS's facilities provides the Navy's exclusive capability to exploit and analyze foreign sea mines. Results of this exploitation and analysis are used to develop Fleet countermeasures procedures for MCM ships and helicopters, modify or improve

the capability of existing equipment to counter the threat, or provide the technical basis to develop new countermeasures equipment. Last, and certainly not least, CSS's MIW facilities support the Fleet in times of crises/war; since the early 1970's, CSS has provided large scale support to the Fleet during all major Operations involving MCM, e.g., END SWEEP and DESERT SHIELD/DESERT STORM.

The development of mines and MCM for use at sea has little jointness or dual use, however, much of the research and technology does have alternative uses, for example Laser reconnaissance sensor technologies have application to U.S. Army and Marine Corps reconnaissance missions and in the application of environmental pollution detection and control. Super conducting magnetics technology has the potential to significantly reduce the size, weight, and costs of medical diagnostic systems such as MRI machines. This and related conventional magnetic technology also has applications in the detection and clean-up of buried pollutants such as unappended ordnance in Lake Erie (estimated 8000 unexploded artillery shells remaining from military training exercises), humanitarian de-mining in South East Asia, and the detection of underground facilities (tunnels, etc.). Very high resolution sonars currently under development have commercial use in the safety inspection of underwater structures such as bridges and offshore platforms. Similar uses can be found for the underwater lasers being developed.

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

The totality of the MIW facilities/equipment complex would be extremely difficult and expensive to move.

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

The replacement value of the Mine Warfare Research and Engineering complex is over \$67M. This capability is supported by a unique complex of facilities which are vital to MIW Systems R&D, T&E, Acquisition Support, Software Support, and ISE. In addition to supporting MIW, these facilities support the other CSS mission areas (AMW, NSW, and Diving.) CSS facilities include areas to perform work on HIGHLY CLASSIFIED Projects. The facilities included in the MIW complex are list below:

- Airborne Mine Countermeasure (AMCM) Complex
- Countermeasures Evaluator (CME)
- Computation and Analysis Facility
- Computer Software Engineering Laboratory (CSEL)
- Mine Exploitation Facility
- MIW Fleet Support Module
- Sensor Development Facility
- Acoustic Test Pool

- **Physical Acoustics Lab**
  - **Magnetic Sensor Lab**
  - **Electro-optics Lab**
  - **Transducer Lab**
- Mine and MCM Systems and Environmental Test Lab**

**Additional Station facilities required to support CSS's MIW mission include the: Diving/Special Warfare Life Support Complex (Ocean Simulation Facility, Experimental Diving Facility, Hydrospace Lab, Underwater Equipment Lab, Deep Submergence Test Facility, and the Naval Diving and Salvage Training Center), the Amphibious Warfare Engineering and Test Complex, the R&D Underwater Countermeasures Fabrication Facility, the Mechanical Test Lab, and the General Purpose Berthing Wharf.**

4. Provide the gross weight and cube of the facility/equipment. **See individual facility write-ups**
5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power. **See individual facility write-ups**
6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.). **See individual facility write-ups**
7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing). **See individual facility write-ups**
8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**Relocation or replication of this complex would be nearly impossible and certainly very expensive. The location of CSS on the Gulf of Mexico provides a unique test site, environmentally analogous to the Persian Gulf and easily accessible by the MCM forces posted at Ingleside, TX. Having the MIW program at CSS maintains a unique physical co-location and technical interrelationship with its three other mission areas: AMW, NSW, and Diving. This unique synergism of capabilities and facilities provides a coherent base to develop and support requirements, concepts and systems for mine warfare throughout their life cycle. The environment allows testing year round essential to providing rapid crisis response. The proximity of test areas allows maximum time on station.**

**Loss of this special complex would eliminate most current and planned research and development, test and evaluation, acquisition support and in-service engineering for mines and mine countermeasures, thereby reducing the readiness of Naval AMCM and**

SMCM forces and offensive mining, and impeding future Naval force development. The elimination or relocation of this facility would severely compromise the Navy's Littoral Warfare capability to project power, to protect high value Naval combatants, to avoid the economic impact of mine blockades, and to perform offensive mining. The mining of the Persian Gulf during Desert Storm clearly demonstrated the need for continued development of our Mining and MCM capability. The loss of technical facilities for MIW RDT&E, in-service engineering, and support over the life of the systems and weapons would cripple the Navy's ability to provide rapid response during national crises, a cornerstone of "From the Sea." The experience, stability and continuity provided by CSS to MCM and Mining through the knowledge gained over the years is irreplaceable, in particular the stability and continuity for the MIW Program Managers, COMINEWARCOM and more importantly the Fleet. Relocation of the function would cause significant, and possibly fatal, delays to critical programs and projects.

As demonstrated during Desert Storm and previous operations, CSS's world-class capabilities, further enhanced by the addition of MWEA and White Oak personnel, provide quick reaction, on-the-spot technical response to urgent Fleet problems that cannot wait for contract cycles or that are in war zones. CSS provides rapid response direct to the Fleet in-theater for the installation of hardware, crew training, and in-country T&E to assess system effectiveness in times of urgent need or national crisis. This facility also supports the Fleet in crises by quickly installing one-of-a-kind technological breadboards and accelerating development of emerging systems and equipment to meet new, previously unknown threats. This facility will now include all in-service mines in the stockpile. CSS is the only activity within DOD conducting R&D on naval mines.

9. Indicate how and when the facility/equipment was transported and or constructed at the site. **The complex was constructed on-site. (See individual sheets for dates.)**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

## **2.5 Mines**

### **4.1 Landing Force Equipment and Systems**

### **4.2 Coastal/Special Warfare Support**

### **8.2 Countermeasures (CM)**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**Approximately 550 direct in-house workyears have been invested per year by the Navy in the RDT&E, technical acquisition support, and in-service functions described in the section. This investment level has slightly increased from 1989-1993. These workyears directly utilize or depend on the facilities described in this section.**

**TAB B**

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12. Provide the projected utilization data out to FY1997.

**Utilization rate for the MIW facilities will be stable or slightly increase over the planning period because of the priority and importance of MIW in the Navy's "From the Sea" strategy.**

13. What is the approximate number of personnel used to operate the facility/equipment?

**CSS's Scientists and Engineers (S&Es) operating this complex of special facilities have highly specialized expertise and knowledge in the following disciplines: systems engineering, electrical and electronics engineering, mechanical engineering, computer science, electro-optics, operations research. The S&E's have a high concentration of Bachelor's degrees, with a medium concentration of Master's degrees and a smaller percentage of Doctorates. The majority of engineers in each of the above disciplines has between 5 to 25 years experience. Highly specialized, unique expertise is provided by CSS personnel in fields such as superconducting magnetic sensors, shallow water acoustics, high resolution sonar, underwater electro-optic imagery, tow cable dynamics and control, unmanned underwater vehicle (UUV) control, combat system engineering, mine warfare simulation and modeling, threat weapon exploitation, and tactics development. While the scientific and engineering basis for much of the work has been obtained through formal education and trade schools, the application of these scientific and engineering disciplines to the development of MIW systems was learned through 10 to 15 years on-the-job training and experience. Maintenance of the experience and corporate knowledge resident at CSS personnel in both mines and MCM is essential to developing the capabilities delineated in "From the Sea." Their corporate knowledge and experience are not duplicated in the government or private industry.**

14. What is the approximate number of personnel needed to maintain the equipment?

**See individual facility write-ups**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**Photos of the facilities that make up this complex are included with each individual write-up.**

**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Airborne Mine Countermeasures (AMCM) Complex</b>

1. State the primary purpose(s) of the facility/equipment.

**CSS's Airborne Mine Countermeasures (AMCM) Complex is a special facility that is required to conduct research and development, test and evaluation, and in-service engineering (ISE) activities for AMCM systems. This complex supports the aircraft and AMCM systems required to conduct full scale testing of AMCM systems for quick response to operational airborne MCM squadrons. Additionally, this complex provides the facilities to develop new AMCM operational capabilities, support ISE activities for AMCM operational equipments, and perform O-, I-, and D-level maintenance for AMCM equipment.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**Fixed. This facility is a fixed complex that includes a test craft support building (Bldg 323), hangar (147), helicopter landing pad (449), operations tower (466), fuel farm (406), and a ramp with dock leading directly into the water to accommodate equipment and system launch and recovery. This facility is designated fixed because the on-water siting and the proximity to the Gulf Test Range of this facility is mission critical to meet the requirements to develop and test AMCM systems. This facility occupies approximately 360,000 sq. ft of waterfront property, with a frontage of over 600 feet.**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

<b>Bldg 147</b>	<b>\$1,187,000</b>
<b>Bldg 323</b>	<b>1,139,000</b>
<b>Bldg 449</b>	<b>625,000</b>
<b>Bldg 406</b>	<b>234,000</b>
<b>Bldg 367</b>	<b>147,000</b>
<b>Bldg 466</b>	<b>101,000</b>
<b>Dock</b>	<b>550,000</b>
<b>Spec. Utilities</b>	<b><u>150,000</u></b>
	<b>\$4,133,000</b>

4. Provide the gross weight and cube of the facility/equipment.

The following are the square footages of the buildings in the AMCM facility:

<u>Item</u>	<u>Sq. Ft</u>	<u>Wt (lbs)</u>	<u>Cu. Ft</u>
Bldg 323	7041	1,363,000	323,886
Bldg 147	19366	6,000,000	631,264
Bldg 466	707	30,000	6,825
Bldg 301		35,000	12,000
Fuel Farm (Note 1)	525	100,000	63,795
Helopad (Note 2)	7777	33,750,000	60,003,000

**NOTES:**

1. Includes mandatory safety buffer zone
2. Includes specified airspace above helipad for safety of flight considerations, as defined by FAA and Navy regulations.

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

Utility support required above "normal" 120 V 1 $\phi$  electric power includes:

<u>Item</u>	<u>Extra Utility Support</u>
Bldg 323	240V 1 $\phi$ ; 240V 3 $\phi$ ; 440V 3 $\phi$ ; 28 VDC; Water for equipment washdown, safety showers, etc.
Bldg 147	Same as Bldg 323 plus multiple grounding points
Bldg 466	Radio transmission tower
Fuel Farm	Safety items
Helopad	Multiple grounding points

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

The primary special budget requirement is the waterfront property. In addition, the heliport, hangar, and Bldg 323 require extra-thick floors in order to support the weight of helicopters and other airborne equipment. High-bay areas of the hangar and Bldg 323 require deluge sprinklers for fire control. Building 301 is a storage facility approved through the SECRET level, requiring special alarm security systems.

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

Temperature and humidity control in Bldgs 323, 147, 301, and 466.

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or

relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**Impossible to Relocate.** This complex is impossible to relocate because of the reliance of the total AMCM effort on CSS's Gulf of Mexico Test Range. Replication of this facility would require: 600 feet of waterfront property; suitable docking/launching capability for specialized AMCM equipment and support boats; hangar space for aircraft maintenance; a helicopter pad, including all required provisions for grounding connections, refueling facilities, aircraft operations control tower, AMCM equipment workup and maintenance building; and suitable test ranges including all range support (such as positioning systems, targets, target emplacement craft, specialized support personnel such as divers). That is, not only must the facilities be constructed on a suitable waterfront site, but there must be a test range capable of deploying instrumentation capable of evaluating minesweeping systems. Additionally, it is desirable (if not absolutely essential) that the adjacent waters suitably emulate typical Navy operating areas.

Administratively, in addition to the necessary environmental impact statement for the facility as a whole, separate impact studies and statements or other administrative actions would be required for the fuel farm, the pier (both state and Army Corps of Engineers permitting required), and the helipad (several agencies). Taken together, the replication of this facility is possible, but certainly not easy. No potential alternate site has been identified for replicating the AMCM complex that would not require major construction and environmental permitting. Not only is the combination of this facility and CSS's Gulf Test Range unduplicated elsewhere, but also it is likely that it would be impossible to find another area where such facilities could be constructed.

Loss of this facility would jeopardize the readiness of Fleet AMCM forces for response to Low Intensity Conflicts and crucial peace keeping operations that, in the past, CSS has been repeatedly called upon to provide in contingency operations such as Vietnam, the Red Sea, the Persian Gulf, and Desert Storm/Desert Shield. This facility is the only facility in the U. S. Navy (or in NATO) for supporting AMCM equipment. Without this facility, as squadron-deployed equipment becomes unserviceable, the capability of performing AMCM missions would be lost. This would mean the loss of all of the Navy's current rapid deployment mine countermeasures capability, with the consequence of placing deployed elements of the fleet at substantially enhanced risk to mines. In addition, loss of this complex would impede the development of systems for the future Naval force -- with respect to research and development, R&D projects using AMCM equipment, both AMCM and MCAC, would become unsupportable.

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

<u>Building</u>	<u>Date</u>
323	1976
147	1957
367	1984
406	1987
449	1957

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

### **8.2 Countermeasures (CM)**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**Based on work days, the facility was in operation 100% of the time during the listed period.**

12. Provide the projected utilization data out to FY1997.

<u>Year</u>	<u>Ave Use</u>
1994	100%
1995	100%
1996	100%
1997	100%

13. What is the approximate number of personnel used to operate the facility/equipment?

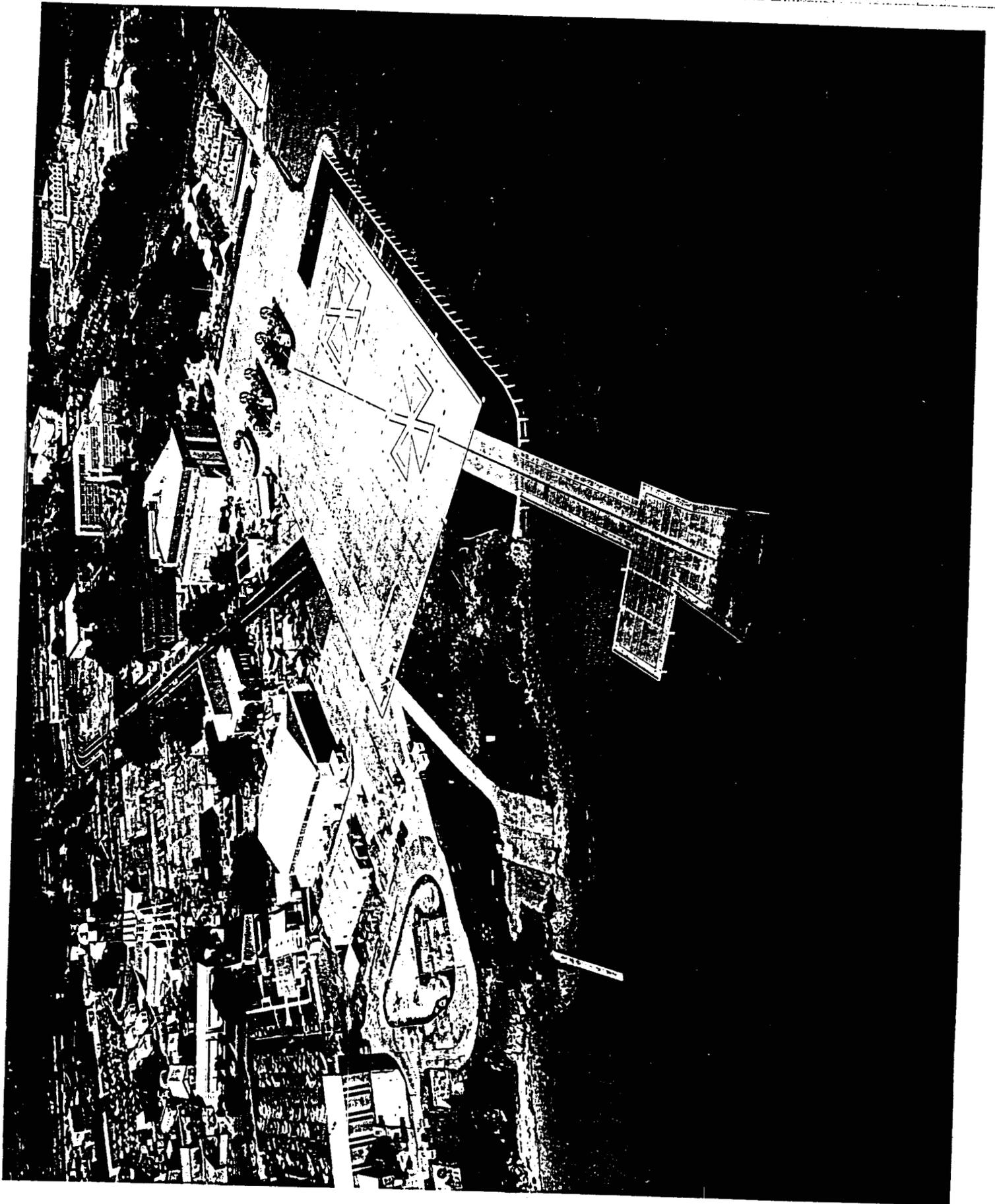
**59**

14. What is the approximate number of personnel needed to maintain the equipment?

**Standard maintenance activities to keep the facility functional would require 3 individuals to maintain the level of operational capability.**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**An aerial view of the AMCM complex is shown on the next page.**



**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division, Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Countermeasures Evaluator (CME)</b>

1. State the primary purpose(s) of the facility/equipment.

**The Countermeasures Evaluator (CME) is a unique and special facility that is a hardware-in-the-loop simulator designed for the research, development, test, and evaluation of mine, sonar, and torpedo countermeasure systems through real-time simulation studies. The CME has been expanded over the years to accommodate simulations of U.S. mines, threat mines, mine countermeasures, counterweapons, and sonars. It can also simulate any moving vehicle or platform such as ships, helicopters, submarines, swimmer delivery vehicles, etc. It is the only simulator able to handle the high data rate, fully realistic, real-time encounter of weapons, countermeasures, ships, and submarines. In addition to supporting countermeasure design studies, the CME has also been used to support weapon design analysis. Major expansions of the CME, completed in 1989 and 1992 have incorporated state-of-the-art super computer technology, reduced operating maintenance costs, and incorporated state-of-the-art simulation tools and technology to support such capabilities as is required for large scale distributed simulation scenarios. The CME, and all its functionality, is not duplicated anywhere within the DOD.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**The CME consists of about 65 individual computers/processors configured in a parallel processing arrangement. It also consists of specialized acoustic signal synthesis equipment. This required level of capability does not lend itself to portability. Movement of such a facility would be extremely costly, time consuming, and risky. This equipment is considered Class 2 equipment but would require about 6 months to disassemble and reassemble. One cabinet that would have to be disassembled in order to remove it from the building has 12,000 wires connected to it.**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

<b>Building</b>	<b>\$ 1,400,000</b>
<b>Equipment</b>	<b><u>26,000,000</u></b>
	<b>\$27,400,000</b>

4. Provide the gross weight and cube of the facility/equipment.

**Approximately 3600 cu. ft of equipment, at about 35,000 lbs, and many miles of wire and cabling. The CME building contains 9960 sq. ft.**

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**There is no special utility support required other than that required to support secure processing.**

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**The only special facility requirement is that required to support round-the-clock secure processing.**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**A facility such as the CME requires a reliable climate controlled environment. It must be maintained at 68 degrees F and 50-60% humidity.**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**Because of the extremely large number of components and connections (discussed in question 2 above), the CME is considered at least extremely difficult, if not impossible, to either replicate or relocate at another site. If disassembled or moved, there is a serious risk of losing the CME capability for an extended period. Due to its large, complex physical layout, relocation of the CME would incur a large cost and time burden.**

**Loss of this facility would deprive the Navy of a critical tool required for the development of countermeasures to new threats and therefore impede the development of future Naval forces. The Navy's only other facility similar to the CME is the WAF located at NUWC. The WAF was developed specifically for torpedo development and does not have the CME's full spectrum capability. Since the CME operates 24 hours a day, one facility cannot handle the combined hardware-in-the-loop development work load of both CSS's CME and NUWC's WAF. In addition, the cost of implementing the same capability on the WAF would be enormous and counterproductive to the support required to meet the Fleet's current and future operational requirements for the Mine Warfare and Amphibious Warfare.**

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

**The CME began development in 1968 and has remained in the same location since then. It has been expanded and upgraded over the years. Its current configuration still utilizes some of the original equipment but has kept pace with technology to be able to provide the level of support required for development of advanced technology Fleet systems.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

**2.5 Mines**

**4.2 Coastal/Special Warfare Support**

**8.2 Countermeasures (CM)**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**The CME has operated 24 hours a day, 5 to 7 days a week through this period (1989-1993).**

12. Provide the projected utilization data out to FY1997.

**24 hours a day, 5-7 days a week through FY1997.**

13. What is the approximate number of personnel used to operate the facility/equipment?

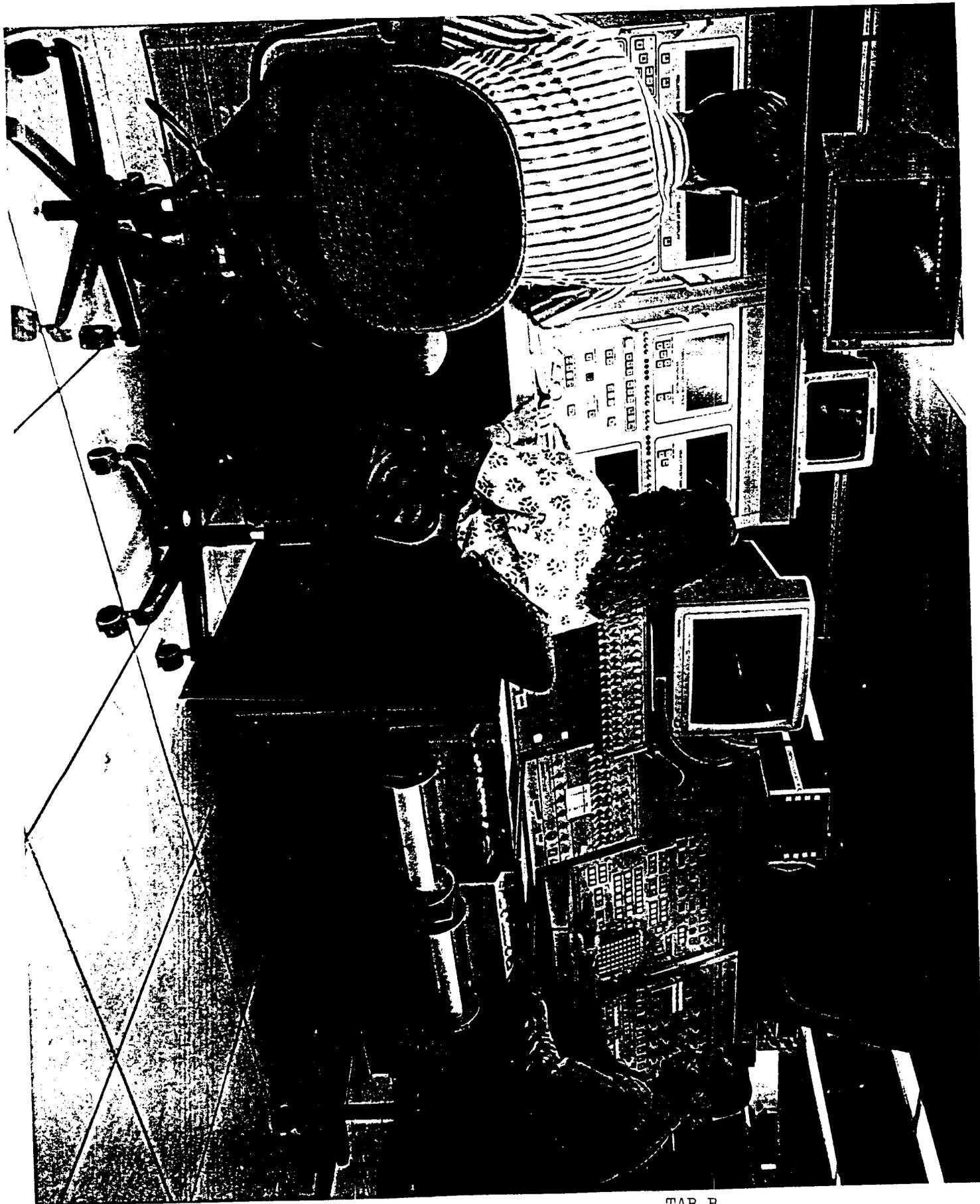
**25 people to operate and support the CME**

14. What is the approximate number of personnel needed to maintain the equipment?

**5 plus several equipment specialized maintenance contracts**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The CME equipment is shown in the photo on the following page.**



**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Computation &amp; Analysis Facility</b>

1. State the primary purpose(s) of the facility/equipment.

**The Computation & Analysis Facility is a two story, secure building used to house computation and analysis equipment and labs.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**The equipment is moveable; but, the facility must have a special access area.**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

**As of 31 Mar 94, all equipment intended for relocation to this building has not been moved. The value below reflects only the equipment that has been moved.**

<b>Building</b>	<b>\$ 2,595,000</b>
<b>Current Equipment</b>	<b><u>5,000,000</u></b>
	<b>\$ 7,595,000</b>

4. Provide the gross weight and cube of the facility/equipment.

**33,000 sq. ft**

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**A totally secure vault, a 60% raised floor for computer electronic equipment, and a 10,000-lb capacity overhead crane in the two story high bay.**

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**Special access (Secret) lab and storage space**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**Temperature and humidity control - All computer rooms contain individual under floor type air conditioning equipment to maintain proper humidity and temperature for electronic equipment.**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**Although this building is replicable, the primary difficulty in relocating this equipment to another site would be obtaining the necessary special access ratings.**

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

**Construction of this facility was completed in FY 1994.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

**2.5 Mines**

**4.2 Coastal/Special Warfare Support**

**8.2 Countermeasures (CM)**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**No data; this is a new facility that became operational in FY 1994.**

12. Provide the projected utilization data out to FY1997. **100% direct funding.**

13. What is the approximate number of personnel used to operate the facility/equipment?

**This facility houses 38 people, all of whom operate and utilize the facility for scientific and RDT&E activities.**

14. What is the approximate number of personnel needed to maintain the equipment?

**Routine equipment maintenance will take approximately 3 employees.**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The photo on the following page shows the exterior of the facility.**



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**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Computer Software Engineering Lab (CSEL)</b>

1. State the primary purpose(s) of the facility/equipment.

**The Computer Software Engineering Laboratory (CSEL) houses the Combat Information Center (CIC) mockup for Mine Countermeasures (MCM) ships. It contains actual combat system equipment arranged exactly as it is on-board the ship so that it can be used to demonstrate simulated MCM operations. The CSEL also contains the computer systems used for software development, configuration control, integration, and verification/validation of combat system software. Software to support combat system training prior to transitioning life cycle management responsibilities to the In-Service Engineering Agent (ISEA) is also included.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**The equipment consists of Class 2 Installed Equipment that can be relocated without damage to the facility or equipment, but requires special utilities support.**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

**The following are the estimated replacement costs; however, none of the combat system equipment will be available without awarding a contract for a one time build which would increase significantly the estimated costs shown.**

<b>Equipment</b>	<b>\$9,600,000</b>
<b>Building</b>	<b><u>3,500,000</u></b>
	<b>\$13,100,000</b>

4. Provide the gross weight and cube of the facility/equipment.

<b>Estimated gross weight</b>	<b>12,000 lbs</b>
<b>Estimated cube</b>	<b>65,000 cu. ft</b>

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**115 VAC 3 phase delta 400 Hz, 1.5 KVA  
208 VAC  
440 VAC 3 phase 60 Hz, 15 KVA  
Emergency power (UPS for computers, lighting)**

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**Security "For Official Use Only"  
LAN connections to computer systems outside the building**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**Humidity and temperature control  
Fire control system**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**This facility could be replicated or relocated at another site. If the facility was lost, the ability to develop software in an integrated environment and to perform independent verification and validation (IV&V) on contractor developed software would not exist. If the necessary computer equipment was not available, then development, integration, testing, evaluation, and IV&V of software would have to be accomplished on board MCM or MHC class ships as ship schedules permit, thus increasing project development schedule and costs.**

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

**The CSEL was constructed within an existing building in 1983. The equipment was transported by truck from contractor facilities and Naval activities. Expansion of function and capabilities have continued into 1994.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

### **8.2 Countermeasures (CM)**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**12 work years**

12. Provide the projected utilization data out to FY1997.

**15 work years per year**

13. What is the approximate number of personnel used to operate the facility/equipment?

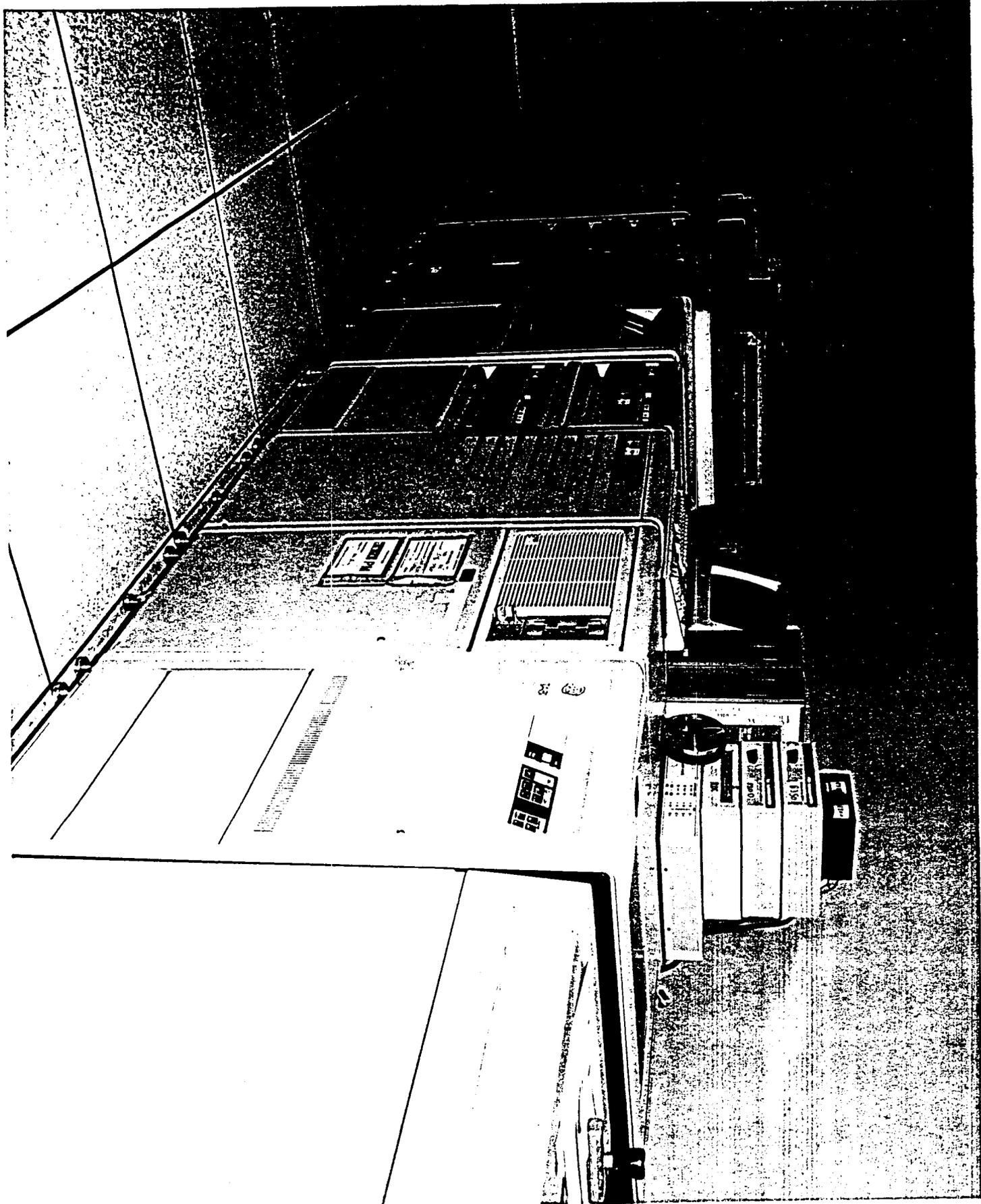
**One person is required half-time to operate the facility. This does not include the personnel required to develop, integrate, and test software on various projects. Including these people increases the staffing level to approximately 15.**

14. What is the approximate number of personnel needed to maintain the equipment?

**One person is required half-time to maintain the facility.**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The photo on the following page shows some of the CSEL equipment.**



**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Mine Exploitation Complex</b>

1. State the primary purpose(s) of the facility/equipment.

**The Mine Exploitation Complex is used to perform research and development, test and evaluation, acquisition support, and in-service engineering of Mine Warfare Systems. This complex is an integrated combination of special facilities designed for testing and analyzing the vulnerability of Air and Surface Mine Warfare platforms and systems, Amphibious Warfare systems, and Special Warfare systems to foreign and U.S. mines. In addition, the facility provides a calibrated test bed to determine characteristics essential to the development of mine countermeasures devices and tactics to counter mine threats. The facility is capable of physically simulating magnetic, pressure, and acoustic environments where moored and bottom mines would exist and be encountered by various types of mechanical and influence sweeps and U.S. combatants. This facility also includes capabilities for the development and testing of highly sensitive magnetometers, for mapping the magnetic fields around objects, for the analysis of motional noise in superconducting magnetic gradiometers, and for evaluating magnetic sensing systems based on the principles of superconductivity.**

**The facility provides the unique capability to simulate/stimulate the three influence fields individually or in combination via a computer control. The influence fields generated are used to stimulate actual mine sensors. This physical simulation ability provides the capability to:**

- a. Experimentally determine the effectiveness and critical parameters of a wide range of sweeping techniques and devices.**
- b. Characterize U.S. and foreign mine systems empirically in terms of sensor input/output transfer functions for single and multiple influences.**
- c. Obtain detailed data on mine system response to individual and combined influences in steady state and transient input situations.**
- d. Measure the magnetic field of large vehicles (Fanslau coil) and measure and calibrate the acoustic properties of mine warfare systems.**

e. Provide experimental validation and testing of Navy mine systems and mine technology.

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**Fixed.** This is a fixed facility that includes three non-magnetic buildings and an elliptical non-magnetic test pool (Bldg 383):

a. Magnetic Signature Generator facility with a 30 ft long, 6 ft diameter solenoid coil (Bldg 380)

b. Magnetic Environmental Facility with a 4-story, 40 ft diameter Fanslau coil (Bldg 381)

c. Systems Test and Control Laboratory (Bldg 379) with space for a magnetics lab, a pressure lab, a acoustic lab, a multi-influence lab, a computer lab, and a demonstration and staging area.

In addition, the facility includes the Foreign Material Exploitation Lab (Bldg 316) for storage and lab space for work on highly classified projects.

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

Bldg 379	\$1,142,000
Bldg 380	103,000
Bldg 381	856,000
Bldg 382	9,000
Bldg 383	2,963,000
Bldg 384	3,000
Bldg 316	<u>2,178,000</u>
	\$7,254,000

4. Provide the gross weight and cube of the facility/equipment.

**Elliptical test pool: 300 ft long, 200 ft wide, and 40 ft deep**

Systems Test and Control Laboratory	7,915 sq. ft
Magnetic Signature Generator Facility	714 sq. ft
Magnetic Environmental Facility	5,964 sq. ft
Foreign Material Exploitation Lab	<u>16,871 sq. ft</u>
Total (not including test pool)	31,464 sq. ft

5. Indicate any "special" utility support required by this facility/equipment other than normal

electrical power.

**None**

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**Non-ferrous materials, shielding, vaulted building, cryogenic material storage, and handling devices and additional security for work on and storage of HIGHLY CLASSIFIED projects.**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**Magnetically clean test area  
Temperature and humidity control**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**Impossible to replicate or relocate. This complex is not replicable or relocatable. The special facilities (Fanslau coil, pool, solenoid, non-magnetic buildings) could be replicated elsewhere, at significant expense; however, the facilities must be constructed in a magnetically clean environment. CSS is uniquely located in a low magnetic environment, and all the fixed facilities have been built to nonmagnetic specifications. The geologic make-up, low ferrous content of the area, and CSS's rural location combine to yield low magnetic gradients. Although the equipment and nonmagnetic buildings could be replicated elsewhere, the capability may not be replicated depending on the magnetic characteristics of the location. In particular, this is the only facility anywhere capable of testing the responses to multiple influence mines and other types of smart mines.**

**The loss of this facility would reduce the readiness of Surface MCM forces and impede the development of future Naval surface forces by preventing the development of effective countermeasures against any new advanced mine threats and vulnerability to U.S. combatants. Without effective countermeasures, such weapons may be used effectively to close virtually any restricted body of water and to seriously hamper the use of Naval force in any selected geographic area.**

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

**Construction of the complex was completed in 1986. An addition to the Foreign**

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**Material Lab was completed in 1990.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

- 2.5 Mines**
- 4.1 Landing Force Equipment and Systems**
- 4.2 Coastal/Special Warfare Support**
- 8.2 Countermeasures (CM)**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**Approximately 8 workyears/yr based on direct funding for a 40-hr week**

12. Provide the projected utilization data out to FY1997.

<u>Year</u>	<u>Ave. Use</u>
<b>1994</b>	<b>100%</b>
<b>1995</b>	<b>100%</b>
<b>1996</b>	<b>100%</b>
<b>1997</b>	<b>100%</b>

13. What is the approximate number of personnel used to operate the facility/equipment?

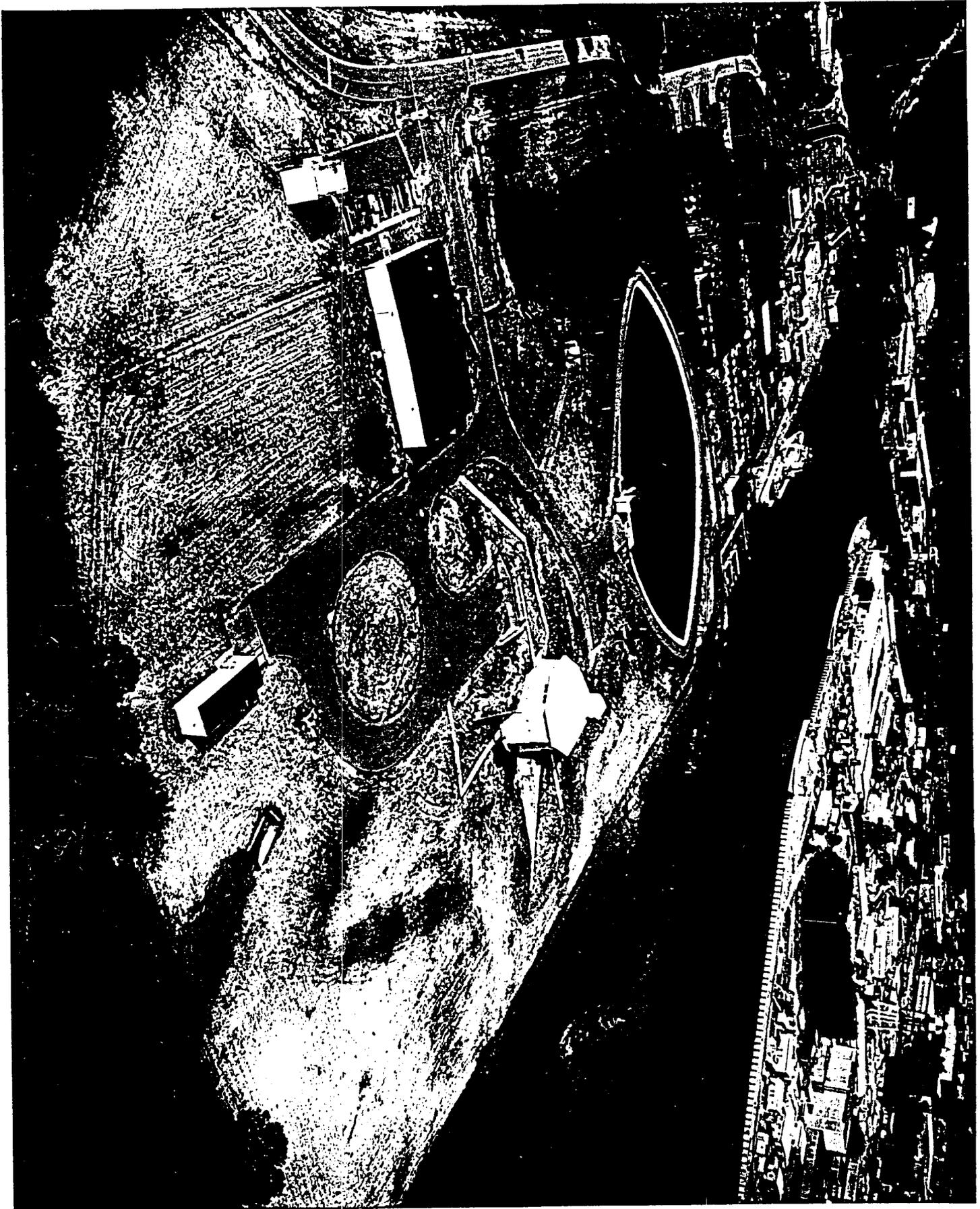
**Eight (8)**

14. What is the approximate number of personnel needed to maintain the equipment?

**One work year - eight people, 10% of time**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The photo on the following page shows an aerial view of the complex.**



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**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Mine Warfare (MIW) Fleet Tactics Support Module</b>

1. State the primary purpose(s) of the facility/equipment.

**The Mine Warfare (MIW) Fleet Tactics Support Module is a special facility constructed to provide:**

**(1) Surface and Airborne MIW effectiveness and countermeasures procedure evaluation against foreign sea mines and vulnerability/susceptibility assessments of Fleet combatants against foreign sea mines.**

**(2) Quick assessments of tactical procedures and necessary data to plan and evaluate missions in littoral scenarios. Preliminary tactics, i.e., message TACMEMOS, are normally prepared.**

**(3) Laboratory assessments of MIW tactical procedures by conducting field trials against instrumented mines, comparing those results to projected effectiveness and vulnerability assessments, and adjusting recommended countermeasures procedures as needed.**

**(4) On-site tactical procedures guidance to Fleet personnel.**

**(5) To develop computerized tactical aids (TACAIDS) to support MIW Planning and Evaluation.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**Fixed**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

<b>Building</b>	<b>\$ 232,070</b>
<b>Equipment</b>	<b><u>1,000,000</u></b>
	<b>\$1,232,070</b>

4. Provide the gross weight and cube of the facility/equipment.

<b>Building</b>		<b>1,000,000 cu. ft</b>
<b>Equipment</b>	<b>10,000 lbs</b>	<b>2,250 cu. ft</b>

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**Special Electrical Power to run ADP Equipment: 200 amp service  
Above normal heating and cooling**

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**Security space to SECRET level.**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**Humidity and temperature control for ADP equipment.**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**Extremely Difficult to relocate equipment. Equipment and building could be re-located to another site - but with the normal expenses of moving sensitive computer equipment and building a new "secure Secret" building.**

**Loss of this facility would reduce the readiness of MCM forces by delaying the development of tactical procedures and planning aids. Loss of this facility would also impede the development of future Naval forces by eliminating the capability to develop new tactics and procedures.**

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

**The MIW Fleet Support Module is an "in-site" construction facility and was not transported to present location.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

**2.5 Mines**

- 4.1 Landing Force Equipment and Support**
- 4.2 Coastal/Special Warfare Support**
- 8.2 Countermeasures (CM)**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**Average Per Year:**

**Tactics Procedures Development 15,000 Labor Hours**  
**ADP Run Time Hours 5,000 Util Hours**

12. Provide the projected utilization data out to FY1997.

	<b>FY94</b>	<b>FY95</b>	<b>FY96</b>	<b>FY97</b>
<b>Tactics (Work years)</b>	<b>8.5</b>	<b>9.0</b>	<b>9.0</b>	<b>9.0</b>
<b>ADP (Run Time Hours)</b>	<b>5,000</b>	<b>7,000</b>	<b>7,000</b>	<b>8,000</b>

13. What is the approximate number of personnel used to operate the facility/equipment?

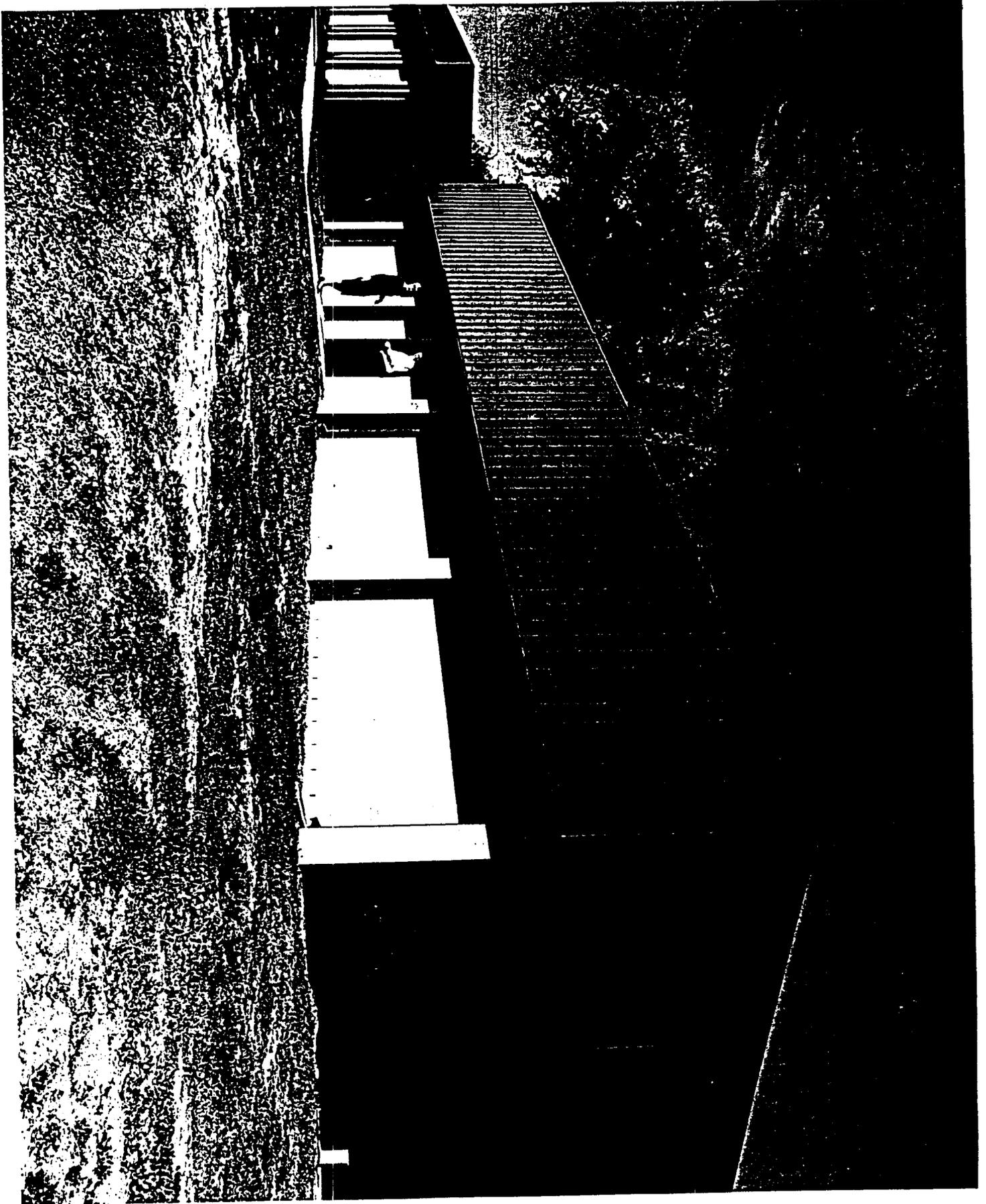
**9**

14. What is the approximate number of personnel needed to maintain the equipment?

**Maintenance of specialized equipment done under contract**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The photo on the following page shows the exterior of the facility.**



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**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Sensor Development Complex</b>

1. State the primary purpose(s) of the facility/equipment.

**The Sensor Development Complex is a special and unique facility composed of five laboratories - the Physical Acoustics Lab, the Acoustic Test Pool and Calibration Facility, the Electro-optics Lab, the Transducer Lab, and the Magnetics Lab. These facilities are used for research, development, test and evaluation of sonars and other sensors uniquely designed for use in mine warfare systems, special warfare missions, and diver navigation and tracking equipment.**

**The Physical Acoustics Lab is used in the development of mine detection sonars is capable of executing acoustic experiments under extremely precise conditions and has a computer-controlled data collection system. The Acoustic Test Pool facility is used to test and measure projector and hydrophone beam patterns, projector source levels, hydrophone sensitivities, transducer impedances, and sonar system levels. The Transducer Development laboratory provides the means to design and fabricate special purpose, one-of-a-kind, underwater electroacoustic transducers for use in systems for detecting mines.**

**The Electro-optics Laboratory is used to develop systems to detect mines in very shallow water, the surf zone, and on the beach. This facility is laser safe and has the capability to study air-water interface effects and underwater imaging necessary for developing an optical mine detection system. It was designed to investigate the fundamental interactions involved in the propagation of monochromatic light in water, and provides an opportunity to conduct basic research in the areas of laser physics, optics, photonics, imaging, and spectral analysis.**

**The Magnetics Lab is used to develop and test highly sensitive magnetometers, for mapping the magnetic fields around objects, for the analysis of motional noise in superconducting magnetic gradiometers, and to evaluate state-of-the-art magnetic sensors based on the principles of superconductivity. This facility is being supplemented by the relocation of equipment from White Oak (as a result of BRAC 93) that is used to perform magnetic profile testing and evaluation of materials used in weapons systems. Individual components such as structural members, and fasteners are also evaluated for compliance of magnetic profile requirements. Devices under test can be magnetically biased or normalized to meet special criteria. The laboratory building itself cannot**

cause any deviation of the background magnetic field but must provide seismic isolation for accurate testing of samples.

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

The Acoustic Test Pool and Calibration Facility consists of three fixed facilities: a freshwater pond, a pontoon barge, a measurement pier extending over the pond, and a calibration lab.

The Transducer Development Lab houses special equipment which is moveable and includes a milling machine, a pressure/vacuum insertion system, a temperature-controlled oven, a hydraulic press, an acoustic materials testing laboratory, an electronics instrumentation test system, and an instrument to measure sound velocity of material versus temperature. The Physical Acoustics Lab (Bldg 296) houses a fixed, 10 ft by 10 ft by 10 ft acoustic test tank with a precision data collection system.

The Magnetics Lab is located in a nonmagnetic area (40 acres of magnetically clean land, i.e., sifted and cleaned to a depth of 10 ft, within a 220 acre buffer zone.) The facility is equipped with cryogenic material storage and handling devices, high precision shop, and a computer system for on-line data collection and processing. The equipment is moveable; however, it must be located in a magnetically clean environment which limits where it could be relocated.

The equipment in Electro-optics Lab is moveable. This lab contains several lasers, optical tables, storage facilities, laser and camera calibration equipment, and hazardous vapor testing capability.

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

Bldg 102	\$175,000
Bldg 106	175,000
Bldg 296	163,000
Bldg 313	59,000
Bldg 366	<u>91,000</u>
	\$663,000

4. Provide the gross weight and cube of the facility/equipment.

Bldg 102	2,766 sq. ft
Bldg 106	1,050 sq. ft
Bldg 296	1,760 sq. ft
Bldg 366	<u>1,500 sq. ft</u>
	7,076 sq. ft

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

None

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**The Magnetics Lab requires shock isolation and non-ferrous equipment (non-magnetic buildings, etc.), shielding, and a location away from Earth field disturbing influences such as railways and overhead power lines. The location must be in a place where the Earth's ambient magnetic field is within specific levels.**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**The Magnetics Laboratory requires a magnetically clean test area. The facility at CSS consists of 40 acres of magnetically clean land built within a 220 acre buffer zone. The Transducer Development laboratory requires a specially constructed building with an air conditioning and ventilation system designed to quickly remove pollutants.**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**The Acoustic Test Pool facility consists of a freshwater pond, a pontoon barge, a measurement pier extended over the pond, and measurement equipment; the barge and the pier cannot be moved but could be replicated, and the measurement equipment can be relocated. The Physical Acoustics Lab equipment (precision data collection system computers, etc.) can be moved; the 10 ft by 10 ft by 10 ft test tank cannot be relocated but it can be replicated. The Electro-optics Lab can be relocated; however, the receiving site must be certified laser safe to maintain the present capability. The Transducer Lab can be relocated. The Magnetics Lab could be physically replicated; however, the Panama City area where CSS is located provides a low magnetic environment which is essential for magnetic sensor research and development. The land has been further cleaned of all extraneous magnetic materials and all the fixed facilities have been built to nonmagnetic specifications. The geologic make-up, low ferrous content of the area and CSS's rural location combine to yield low magnetic gradients. That is, the complex's equipment and nonmagnetic buildings could be replicated elsewhere; however, the capability may not be replicated depending on the magnetic characteristics of the location.**

**The loss of this facility would reduce the readiness of the current Naval force and**

**impede the development of future Naval force. Losing MCM capability in any area would significantly weaken our total MCM capability and compromise the National ability to project power, protect high value Naval vessels, and avoid the economic impact of mine blockades. The stability and continuity provided by CSS through the knowledge gained over the years is irreplaceable. Loss in technical knowledge gained over the Navy's ability to meet Fleet needs and will affect the ability to provide rapid response during National crises.**

**Without suitable site for testing the properties of the material used in mines and minesweeping, the sensitivity and functioning of mine components cannot be determined, and the vulnerability of minesweeping gear and the minesweepers themselves cannot be assessed, which could lead to ship damage and crew casualties. The mining of the Persian Gulf during Desert Shield/Desert Storm clearly demonstrated the effectiveness of mine warfare when two high-value combatants struck mines and were out of service for extended periods. Mines are inexpensive and are readily available. More than 1000 sea mines and 1 million land mines were recovered by the Allied Forces after Desert Storm. Mine Warfare represents the biggest challenge to littoral warfare; successful mine countermeasures is critical to amphibious warfare. Mine fields must be detected and mines must be neutralized or avoided for a successful amphibious assault. Sea and amphibious warfare are mission unique to the Navy and a critical component of MARCOR Maneuver Warfare Capabilities. Mine hunting is presently accomplished with acoustic, magnetic, and electro-optic (EO) systems working in concert. The mine threat is continually advancing. Modern mines are small, stealthy and can be found anywhere in the water - including under the sand. Continued research and development is critical to meeting the current and anticipated threat. Acoustic, magnetic and EO facilities must be maintained to develop a total system MCM capability.**

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

**The Magnetics Lab was originally constructed in 1985. The facility is located on 40 acres of magnetically sterile land (sifted and cleaned to a depth of 10 ft) within a 220 acre buffer zone. The facility is equipped with cryogenic material storage and handling devices, high precision shop, and a computer system for on-line data collection and processing.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

**2.5 Mines**

**4.2 Coastal/Special Warfare Support**

**8.2 Countermeasures (CM)**

**10.4 Diving, Salvage and Ocean Engineering**

11. Provide the historical utilization average for the past five fiscal years (1989-1993).

Define the unit of measure used.

**Ave. utilization rate: 100% (based on a 40-hr workweek)**

12. Provide the projected utilization data out to FY1997.

<u>Year</u>	<u>Ave Use</u>
1994	100%
1995	100%
1996	100%
1997	100%

13. What is the approximate number of personnel used to operate the facility/equipment?

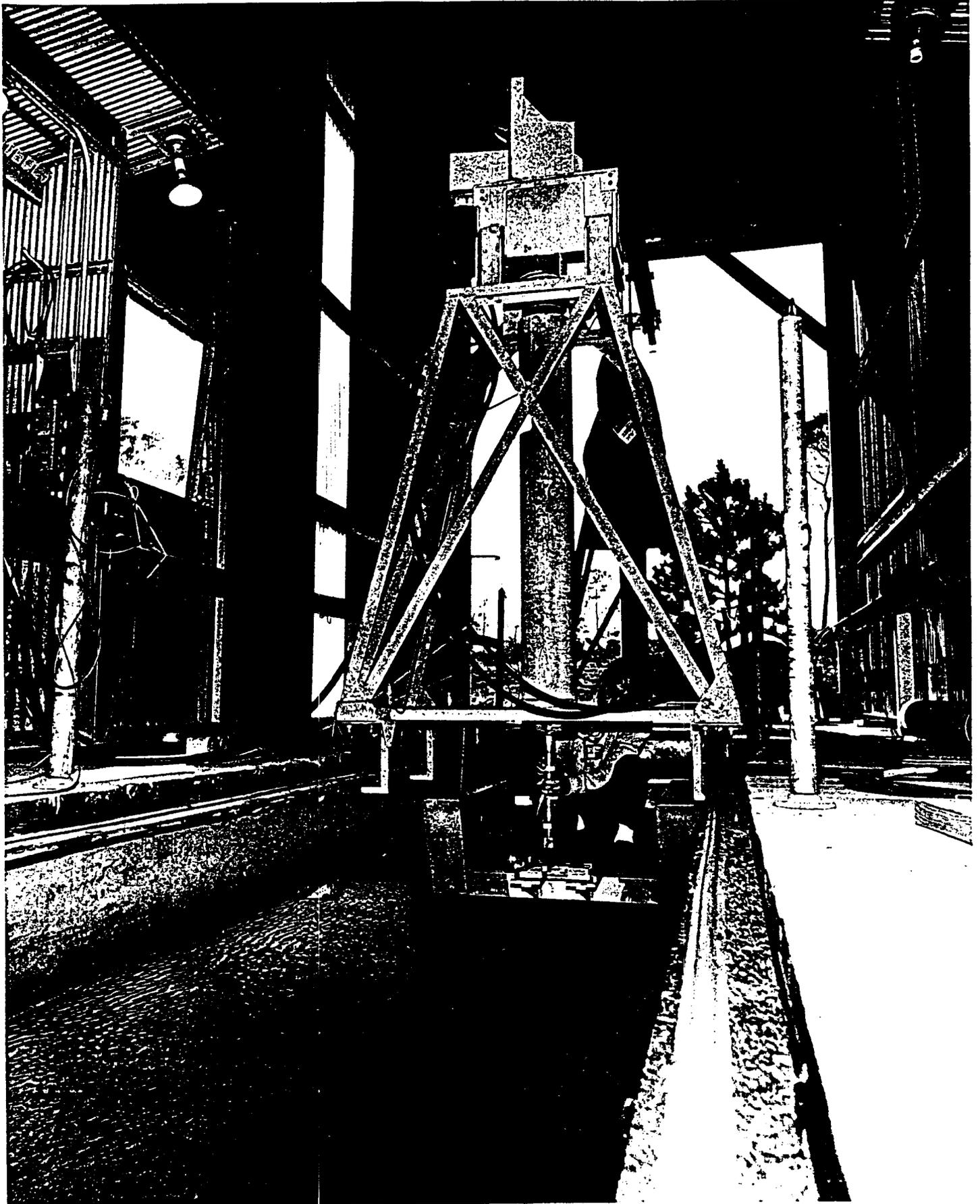
**10 (Magnetic - 3, Acoustic Test Pool - 2, Electro-optic - 3, Physical Acoustics -2)**

14. What is the approximate number of personnel needed to maintain the equipment?

**10 people (see #13) at 10% = 1 work year**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The photo on the following page shows the interior of the Acoustic Test Pool.  
Photos of the other facilities and equipment in this complex are available upon request.**



TAB B  
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UIC N61331

**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Mine and MCM Systems and Environmental Test Lab</b>

1. State the primary purpose(s) of the facility/equipment.

The Mine and MCM Systems and Environmental Test Lab was created as a result of BRAC 91 and BRAC 93 directing the relocation of facilities and equipment from Yorktown (ISE) and White Oak (Mine Development) to CSS. This special facility is designed to develop, maintain and operate precision measurement, electronic stimulation, and environmental simulation laboratory for first article and periodic production lot testing in support of procurement of assigned systems and equipment. The facility will be used to conduct special studies to provide data for decisions on requests for waivers, deviations and engineering changes. In addition, the facility will be used to test prototype equipment, mine and mine countermeasures (MCM) product improvements or resolution of manufacture/contract discrepancies. These functions contain a unique combination of specialized vibration, impact shock, tensile testing, and thermal stressing equipment along with hydrostatic pressure tanks. This capability is required for systems testing and mission profile operational testing of hardware throughout its development and in-service life.

This facility will be composed of a high capacity vibration system from Yorktown, a 21-inch air gun from White Oak, three mine target detection device (TDD) testers from both White Oak and Yorktown, and the MCM Systems Fault Isolation and Repair Labs. The high capacity (40,000-lb) vibration system is used to simulate the vibration effects of delivery aircraft, ground transportation, and low level shock effects on underwater mines and MCM systems. Tests are conducted on both large objects (complete mines) and individual components.

The 21-inch Air Gun is used to simulate the inertia effects of water entry, bottom impact, rocket launch, parachute opening, target impact, catapult launch, arrested landing, and torpedo tube launch. Two phase water entry shock at the energy level of this facility is a capability that is not available at any government or contractor lab; the only alternative would be field testing. In addition to extensive use for mine development, the air gun is currently used to simulate inertia launch for decoy development programs.

The TDD 57, 58 and 71 Class A Testers compose the Mine Target Detecting

**Device (TDD) Evaluation and Analysis Facility.** This is a special facility used to conduct hardware-in-the-loop simulation testing of mine target detecting devices (TDD) and to conduct weapon specification and acceptance testing of TDDs. This facility consists of two magnetic and pressure playback systems and four Class A test stations.

The MCM Systems Fault Isolation and Repair Labs are unique and special facilities that support three of the most important mine countermeasures hunting, sweeping and training systems in today's MCM Fleet:

- a. AN/SLQ-48 Mine Neutralization Vehicle (MNV)
- b. AN/SLQ-37 Acoustic Minesweeping Device
- c. Versatile Exercise Mine System (VEMS) minesweeping training device

This lab provides the unique capabilities of mechanical and electrical fault isolation and repair of key in-service systems and components. Responsibilities encompass in-service support of a wide variety of systems including: remote controlled underwater MCM vehicles, VEMS, and mine test sets and hardware. Instrumentation for this process includes shipboard consoles, diagnostic and programming systems, Class A instrumentation and electrical test equipment. This capability lends itself to the direct in-theater support of MCM operations in the Persian Gulf and worldwide support of in-service systems.

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**Moveable, but with a high installation cost. The estimated cost for moving the high capacity vibration system is \$450,000. The estimated cost of moving the air gun is \$340,000.**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

<u>Equipment</u>	<u>Estimated Value</u>
High Capacity vibration system	\$ 950,000
Environmental test chambers	2,100,000
Air gun, handling equipment and pistons	1,280,000
Three TDDs	<u>2,125,000</u>
	<b>\$6,455,000</b>

4. Provide the gross weight and cube of the facility/equipment.

<u>Equipment</u>	<u>Gross Weight</u>	<u>Approx. Cube</u>
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<b>Air gun</b>	<b>33,750 lbs</b>	<b>1250 cu. ft</b>
<b>TDDs</b>	<b>8,000 lbs</b>	<b>768 cu. ft</b>
<b>5 environmental test chambers</b>	<b>15,550 lbs</b>	<b>3524 cu. ft</b>
<b>Shock drop testers</b>	<b>4,475 lbs</b>	<b>327 cu. ft</b>
<b>Low cap. vibration system</b>	<b>4,615 lbs</b>	<b>244 cu. ft</b>
<b>High cap. vibration system</b>	<b><u>66,000 lbs</u></b>	<b><u>1371 cu. ft</u></b>
	<b>127,915 lbs</b>	<b>7,484 cu. ft</b>

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**Thermal shock chamber: 100 psig air and bottled nitrogen**  
**Air gun: 2000 psig compressor system**  
**TDDs: 50 psig air supply**  
**High capacity vibration system: 60 psig compressed air, and a closed loop, chilled water cooling system**  
**Low capacity vibration system: 60 psig compressed air**  
**Shock drop testers: 60 and 100 psig compressed air, 1200 and 2200 psig nitrogen (dry)**  
**Environmental test chambers: closed loop, chilled water cooling system**

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**High and low capacity vibration systems and transportation vibration table**  
**- Steel reinforced concrete foundation and vibration isolation pad mountings**  
**Air Gun - 80 ft ASME certified storage capacity**  
**Environmental Test Chambers - Floor-mounted drain holes**  
**Shock drop testers - Steel reinforced concrete foundation with a 13 ft deep hole in the center of the foundation, vibration isolation pads, and hydraulic pumps bolted to the floor**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**In addition to standard temperature (72 deg F) and humidity (42% maximum) control,**

**High capacity vibration system: 2760 cfm ventilation control**  
**Low capacity vibration system: 1460 cfm ventilation control**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**These facilities can be relocated, but the move and the reinstallation costs are very high (several million dollars). Mine and MCM Systems Labs capabilities do not exist at any other government or commercial source.**

**Environmental Test Lab - Similar capabilities exist at other government and commercial sites. Many other government activities have located their equipment within explosive areas and other specialized test areas. This makes their operating costs are much higher when conducting relatively safer tests done at P-365. Currently all non-core testing is contracted to commercial sources. Experience with contracting testing has led to a process where some materials are tested for quality inparallel performance parameters at this lab.**

**High capacity vibration system - Eleven other similar vibration systems are known to be owned by other government activities (five Navy, three NASA) and one (possibly two) commercial activities on the West Coast. Many of the other government activities have located their equipment within explosive or other specialized test areas, thus their operating costs are much higher compared to conducting the relatively safer tests to be done in P-365. Experience with other government activities performing vibration tests has led to a process where some materials are tested for quality inparallel performance parameters at this lab.**

**Air Gun - The 21 inch air gun was designed, developed and fabricated completely in-house without any contractor support.**

**TDD Class A Testers - the pressure magnetic playback systems and the Class A test stations are one of a kind devices; there is no duplication of these items in either the government or private industry. In addition, the facility housing the TDDs must be located in a magnetic and seismic quiet area.**

**Loss of these facilities would degrade Fleet readiness by preventing the Navy engineering support community from performing MIW training and Fleet support throughout the life cycles of the many mine and MCM weapon systems. Loss of this facility would severely reduce the operational readiness of the Fleet MCM forces. This facility provides the basis for the troubleshooting and development of repair standards for those systems when repairs are difficult for Fleet personnel, plus the engineering expertise and practical knowledge required to develop and prototype engineering and logistical improvements. Loss of this facility would result in the Navy engineering support community being unable to perform its life cycle maintenance role for the AN/SLQ-48, AN/SLQ-37 and VEMS.**

**9. Indicate how and when the facility/equipment was transported and or constructed at the site.**

**As a result of BRAC 91 and BRAC 93 consolidating Mine Warfare at CSS, the TDD 57, 58 and 71 Class A testers will be disassembled and shipped to CSS prior to FY**

**1997. New building (P-365) to be constructed at CSS.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

**2.5 Mines**

**8.2 Countermeasures (CM)**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**22 workyears per year based on 100% utilization with direct funding for a 40-hr work week.**

12. Provide the projected utilization data out to FY1997.

**22 workyears per year (see above)**

13. What is the approximate number of personnel used to operate the facility/equipment?

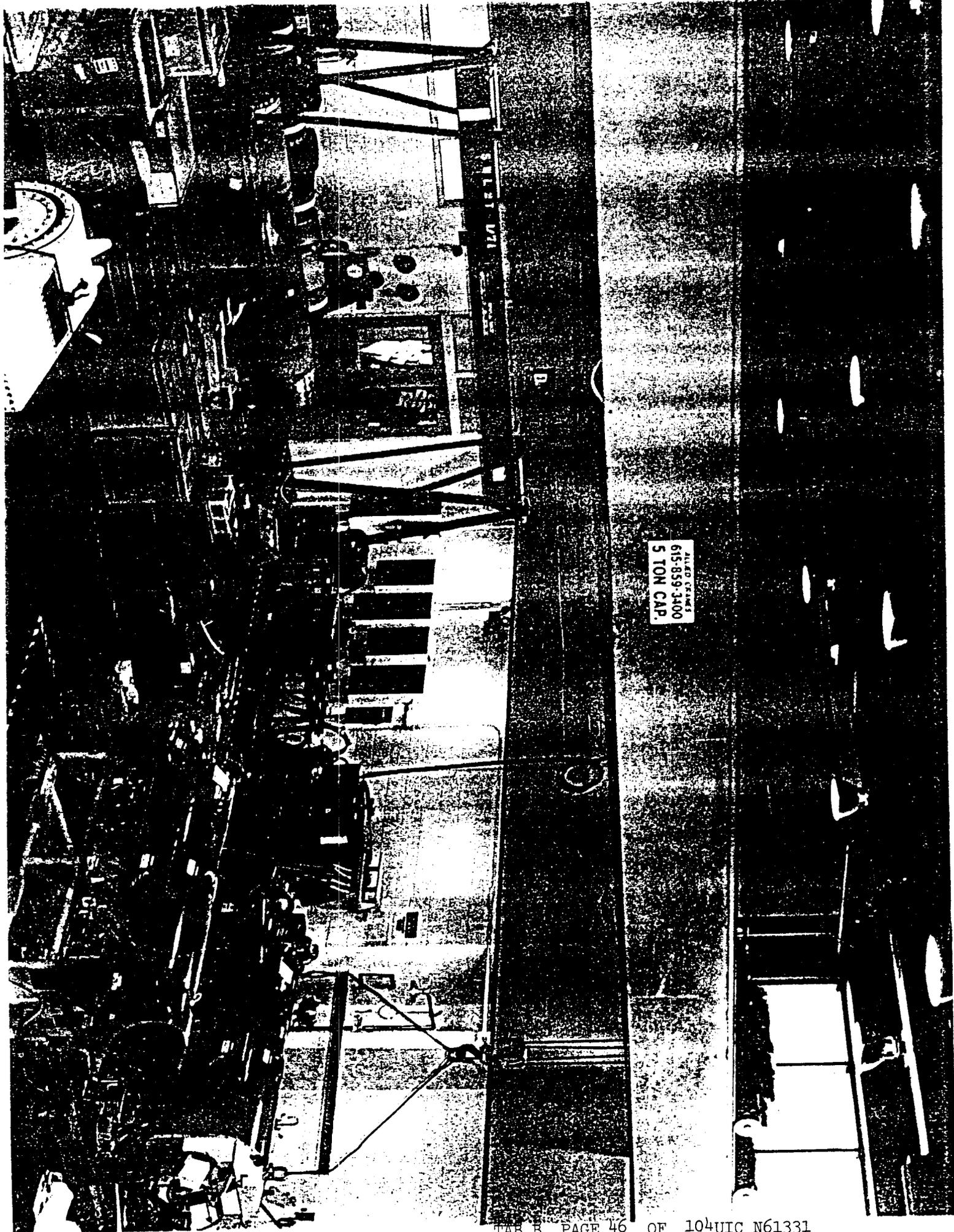
**6 engineers and 16 technicians total**

14. What is the approximate number of personnel needed to maintain the equipment?

**5 technicians to perform routine maintenance; other maintenance to be contracted**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The photo on the following page shows some of the equipment that will be included in this facility.**



ALLIED CRANES  
615-859-3400  
5 TON CAP.

**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Amphibious Warfare Engineering and Test Complex</b>

1. State the primary purposes of the facility/equipment.

**The Amphibious Warfare (AMW) Engineering and Test Complex is a special facility that consists of five permanent buildings and thirteen temporary structures. The complex is used to conduct the majority of research and development, test and evaluation, acquisition support and in-service engineering for Amphibious Warfare systems. The major buildings are the LCAC Hangar/Ramp Facility, the Amphibious Warfare Building, and three engineering support buildings. The LCAC Hangar/Ramp Facility is a special facility that was designed and constructed to support RDT&E of full-scale landing craft. This facility is located to provide immediate access to St. Andrews Bay and the Gulf of Mexico. The facility is equipped with ramps, craft landing spaces, a high-bay hangar and support spaces, and can support up to eight Landing Craft, Air Cushion (LCACs) on the ramp at any time. Operational systems include a 20-ton bridge crane, a small test tank, and a craft fueling system. The current use of the facility has been expanded to provide RDT&E support for other systems including amphibious vehicles, mine warfare, navigation, environmental monitoring, and special warfare systems.**

**This complex enables full-scale testing, product improvement, mission enhancement, crew training and fleet support activities for LCAC and LCAC related expeditionary warfare systems. It provides a preventative maintenance and staging area for new production LCAC awaiting lift ship transportation to Assault Craft Unit FOUR (Little Creek, VA) or Assault Craft Unit FIVE (Camp Pendleton, CA). Additionally, space, facilities and support services are immediately available for a full range of engineering support for acquisition, system integration, and in-service engineering. Through tests conducted at this facility, the safety standards for the operation of the LCAC in all well deck capable ships have been established, and the operational envelope for safe operation of the LCAC in various conditions of sea state, load, wind, surf, etc. has been developed.**

**This complex is used to conduct training for Phase I (initial ACV training) under the auspices of CSS for the LCAC craft. Specialized training for CSS developed**

capabilities (NDI, AN/KSQ-1, LPAS, MPAS) is conducted at CSS and later exported to the Fleet. CSS also has the capability to perform Phase II and III training with LCAC. This was done at CSS during the initial staging of Assault Craft Unit (ACU)-5 and -4 prior to location at their current facilities. During Desert Shield/Storm, CSS performed the Phase II and III training since the operational forces were committed to the forward deployments. This surge capability greatly relieved the operating forces and filled a critical need.

The LCAC craft builder is located only 220 miles west of Panama City. The 220 mile trip acts as a final operational demonstration for all LCACs prior to delivery and acceptance by the U.S. Navy at CSS. Current production rate is one LCAC per month delivered to CSS. At CSS, LCACs are maintained while awaiting amphibious lift ship to transport to east and west coast Assault Craft Units. The only shipyards currently building amphibious ships (LSD cargo variant, LHD 1, LHD 5 classes) are located on the Gulf Coast within 300 miles of Panama City, FL. Using CSS as a staging area allows coordinating of ship delivery schedules with LCAC deliveries to the Assault Craft Units and precluding the need for cost by barging or heavy lift ship delivery alternatives.

LCAC Hangar/Ramp. The LCAC Hangar/Ramp provides office and laboratory space for Fleet support of expeditionary warfare, including USMC vehicles, mine countermeasures, LCAC, and LCAC mechanical and kit integration laboratories; an electro-optics laboratory is also located in the building. This facility was designed and constructed to support development, testing, and evaluation of full-scale air cushion landing craft. Special design features of the building include motor driven hanger-type doors, an electrical ground "well" system of extremely low resistance, fire fighting/hardening modifications, an LCAC operations/communications position with unobstructed ramp visibility, spare parts storeroom, tool room, and machine shop, a 20-ton bridge crane, small water test tank, battery handling/charging room and "yellow gear" support area. A 400Hz generator services four 200 ampere 400Hz outlets in the high bay area for LCAC system power. The building is separated from St. Andrews Bay by the hardened concrete ACV parking and upper ramp area. As Lead Center for the US Navy's Amphibious Warfare and Strategic Sealift programs, CSS is intimately involved with LSD 41 Dock Landing Ships, LHD 1 Amphibious Assault Ships, and Landing Craft, Air Cushion (LCAC). Consequently, the unique CSS installed specially designed LCAC ramp/hangar facilities are needed to support continuing development, acceptance, testing, ISE functions, and training of LCAC crews. The current use of the facility has been augmented by double-wide trailers for LCAC training, crew operations, "yellow gear" support, LCAC logistics and maintenance. CSS has been assigned an LCAC production craft for test and evaluation. This craft operates from the Building 319 ramp area.

LCAC Operational Areas. Overland as well as over water operational areas have

been obtained for LCAC test, evaluation, and training. These operational areas are accessible from the water and are located at Tyndall AFB and on commercial forestry land. These lands are environmentally approved through Federal and State agencies. Additionally, a CSS controlled explosive magazine with water access is less than 1 mile from the building 319 ramp area. LCAC have entry/exit routes to the runway complexes at Tyndall and Eglin Air Force bases. Having LCAC operational areas on-site at CSS also facilitates efficiencies on related programs. For example, AN/KSQ-1 and MCAC (Multi Mission Craft, Air Cushion) are able to design, test, and integrate LCAC-related portions of the system via hands-on efforts at CSS. The close proximity of LCAC assets promotes a better product with reduced travel, transportation and lost time costs to the Navy.

**Amphibious Warfare Building.** The Amphibious Warfare Building (Bldg 371) provides a high bay for LCAC trainers and storage equipment, test and trials instrumentation laboratory, a computer networking facility engineering, LCAC crew training classrooms, and engineering and office spaces. This network facility is supported by FTS-2000, 56K WAN, and T-1 data transmission lines and is the location of the PMS377 Trial Deficiency Management System core computer data base.

In addition to the above three facilities, the Amphibious Warfare Engineering and test Complex includes engineering support facilities that provide engineering and office spaces for the LCAC, Strategic Sealift, Amphibious Ship, Amphibious Assault Direction System (AN/KSQ-1), and Very Shallow Water Mine Countermeasure programs. Building 411 also houses the AN/KSQ-1 electronics laboratory and a point to point (MCTSSA Camp Pendleton, CA to CSS) 56K WAN link for AN/KSQ-1 testing purposes. Two ISO MIL-Vans adjacent to Building 411 provide additional AN/KSQ-1 testing and development laboratory space.

Although there is no formal mobilization responsibility designated for this facility, the ramp area is capable of accommodating up to eight (8) LCACs if needed for mobilization. In the event of mobilization, the air cushion vehicle, amphibious ship, and sealift expertise would be absolutely necessary to revitalize or expand the industrial base. CSS engineers would work with industry to ensure the Navy requirements were being met. In addition, this facility is approximately one mile by water from a Maritime Prepositioning Ship (MPS) loadout site.

In summary, Expeditionary Warfare requirements are increasing and will increase in the future, particularly if budget cut-backs result in the return of overseas US forces to CONUS, increasing the need to rapidly redeploy fighting forces. In addition, Third World contingency operations far from US shores remain a major US military requirement. Therefore the requirement for this complex for R&D, T&E, Acquisition Support, and In-Service Engineering of Amphibious Warfare unique systems and equipment, will remain important for the next two decades.

2. Indicate whether facility/equipment is portable, movable, or fixed as defined by paragraph 6, page 12 of this data call.

All facilities of this complex are fixed since the siting of these facilities is critical to the conduct of Amphibious Warfare R&D, T&E. Acquisition Support, and In-service Engineering. The Air Cushion Vehicle (ACV) ramp and operational area are fixed and tailored uniquely to ACV operations. All laboratories, MIL-Vans, and double-wide trailers in the amphibious complex, are movable. The LCAC test craft is movable.

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

**Facility Costs**

<b>Building 319</b>	<b>\$4,126,000</b>
<b>Bldg 319 ramp area</b>	<b>1,014,000</b>
<b>Building 371</b>	<b>1,178,000</b>
<b>Building 401</b>	<b>200,000</b>
<b>Building 405</b>	<b>200,000</b>
<b>Building 411</b>	<b><u>184,000</u></b>
<b>Total Building Value</b>	<b>\$6,902,000</b>

**Laboratory/Equipment Costs**

<b>LCAC tool room and machine shop</b>	<b>\$300,000</b>
<b>LCAC support and test equipment</b>	<b>600,000</b>
<b>Overhead crane</b>	<b>100,000</b>
<b>LCAC laboratory</b>	<b>1,000,000</b>
<b>LCAC mechanical laboratory</b>	<b>150,000</b>
<b>LCAC test and trials instruction lab</b>	<b>200,000</b>
<b>AN/KSQ-1 laboratory</b>	<b>500,000</b>
<b>LCAC test craft</b>	<b>16,000,000</b>
<b>ISO MIL-Vans/equipment</b>	<b><u>300,000</u></b>
<b>Total Equipment Value</b>	<b>\$19,150,000</b>

**Total Buildings plus Equipment \$26,052,000**

4. Provide gross weight and cube of the facility/equipment.

<b>Building 319</b>	<b>38,400 sq ft</b>
<b>Building 319 ramps</b>	<b>190,000 sq ft</b>
<b>Building 371</b>	<b>14,400 sq ft</b>
<b>Building 401</b>	<b>3,600 sq ft</b>
<b>Building 405</b>	<b>3,500 sq ft</b>
<b>Building 411</b>	<b>3,520 sq ft</b>

Trailers (13 @ 1,500 sq ft)	19,500 sq ft
ISO MIL-Vans (2 @ 320 sq ft)	<u>640 sq ft</u>
	243,560 sq ft

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**Building 319 has a 400Hz generator and air compressors for low pressure air outlets. A low resistance electrical ground system is provided. Building 371 has dedicated FTS-2000, 56K WAN, and T-1 data transmission lines. Building 411 has a 56K AT&T WAN link.**

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, shielding, hardening, etc.).

**Ramps and parking areas are constructed with heavily reinforced concrete to accommodate high foot print loads of ACVs and tracked USMC vehicles. One of the two ramp areas is bermed for noise and airblast attenuation, and has a fuel spill containment catchment and recovery system. One ramp has embedded strong points for the attachment of the hover test rig. Both ramps have two 200 ampere 400Hz electric service outlets for craft shore power, fire hydrants for fresh water wash down and firefighting, and range/alignment light system to assist optimum ramp approach. Approved hazardous material storage and hazardous waste storage/handling facilities are located between the two ramp areas. Ramps have erosion resistant interfaces at the water's edge, a design made possible by the relatively small tidal range of the Bay (spring tide ranges rarely exceed three feet). The LCAC laboratory has a cryptographic vault.**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing, etc.).

**LCAC ramps have craft waste-water catch gutters. In addition, environmentally approved overland LCAC operating areas have been authorized by Federal and state regulatory agencies. Environmental impact studies and environmental assessments have been completed and updated as required to maintain LCAC overland operational areas.**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**Relocation of this complex to another site would be impossible. This complex is required to support development and acceptance testing, ISE functions, and crew**

training for LCAC, and is uniquely suited to support the Navy and Marine Corps team in its new direction, i.e., " providing Naval expeditionary forces, shaped for joint operations, operating forward from the sea, in the littoral areas of the world." CSS's facilities have been established at Panama City, FL, because of the area's unique natural environment, which is ideal for RDT&E to support the new focus on littoral warfare. Currently there is no feasible site for relocating LCAC RDT&E that would not require major construction and environmental permitting. There are no areas in the U.S. that can provide the existing open ocean, coastal water, and environmentally approved, realistic terrain to conduct LCAC testing combined with the proximity to the two LCAC manufacturers. Not only is the combination of this complex and CSS's Gulf Test Range unduplicated, but it is unlikely similar facilities could be constructed and environmentally permitted.

It would be extremely difficult to replicate the LCAC operational ramps at Building 319 and nearly impossible to duplicate the environmentally approved operating areas. The LCAC operational area at Building 319 has been tailored to meet ACV requirements with concrete ramps, and high bay for indoor maintenance periods. Short transit distances to St. Andrews Bay and the Gulf of Mexico test ranges reduces general wear on craft systems and reduces fuel costs of testing. RDT&E activities are greatly facilitated by immediate proximity and availability of design and fabrication facilities, helicopter, diver, and small craft support services, ocean port with railroad access, LCAC fuel storage and handling systems.

Loss of this facility would jeopardize the readiness of Amphibious Warfare forces to response to Low Intensity Conflicts and crucial peace keeping operations, and would impede the development and deployment of future systems for amphibious forces, in particular the installation of mine countermeasures (MCM) systems on LCACs. The need for the installation of MCM systems is critical to counter the proliferation and deployment of anti-invasion mines in areas where Third World contingency operations might occur. Also, there would be a loss of engineering support and crew training for Fleet units, technical and operational problems would not be addressed, logistics support would be fragmented, and next generation amphibious craft and ships would not be realized.

9. Indicate how and when the facility/equipment was transported and/or constructed at the site.

**Building 319 - 1976 w/ LCAC related modifications in 1983, 1984, 1985**  
**Building 371 - 1985**  
**Building 401 - 1987**  
**Building 405 - 1985**  
**Building 411 - 1988**

The structures are primarily steel frame with concrete block walls and brick veneer exterior. The ACV ramps face St. Andrew Bay with a concrete ramp into the water and is one mile from Port Panama City where amphibious lift ships are able to dock and five miles from the Gulf Test ranges.

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

**4.1 Landing Force Equipment and Systems**

**4.2 Coastal/Special Warfare Support**

**8.2 Countermeasures (CM)**

**11.1 Training**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit measure used.

**All facilities and equipment have been utilized normally five days per week, eight hours per day. The work supported by these facilities has been stable at approximately 90 direct in-house workyears.**

12. Provide the projected utilization data out to FY1997.

**All buildings will be utilized at the current rate through 1997. Average utilization rate is projected to be approximately 95 work years for the complex.**

13. What is the approximate number of personnel used to operate the facility/equipment.

**Approximately 85 persons occupy the Amphibious Warfare complex. This includes engineering support personnel as well as LCAC operational and maintenance personnel.**

14. What is appropriate number of personnel needed to maintain equipment.

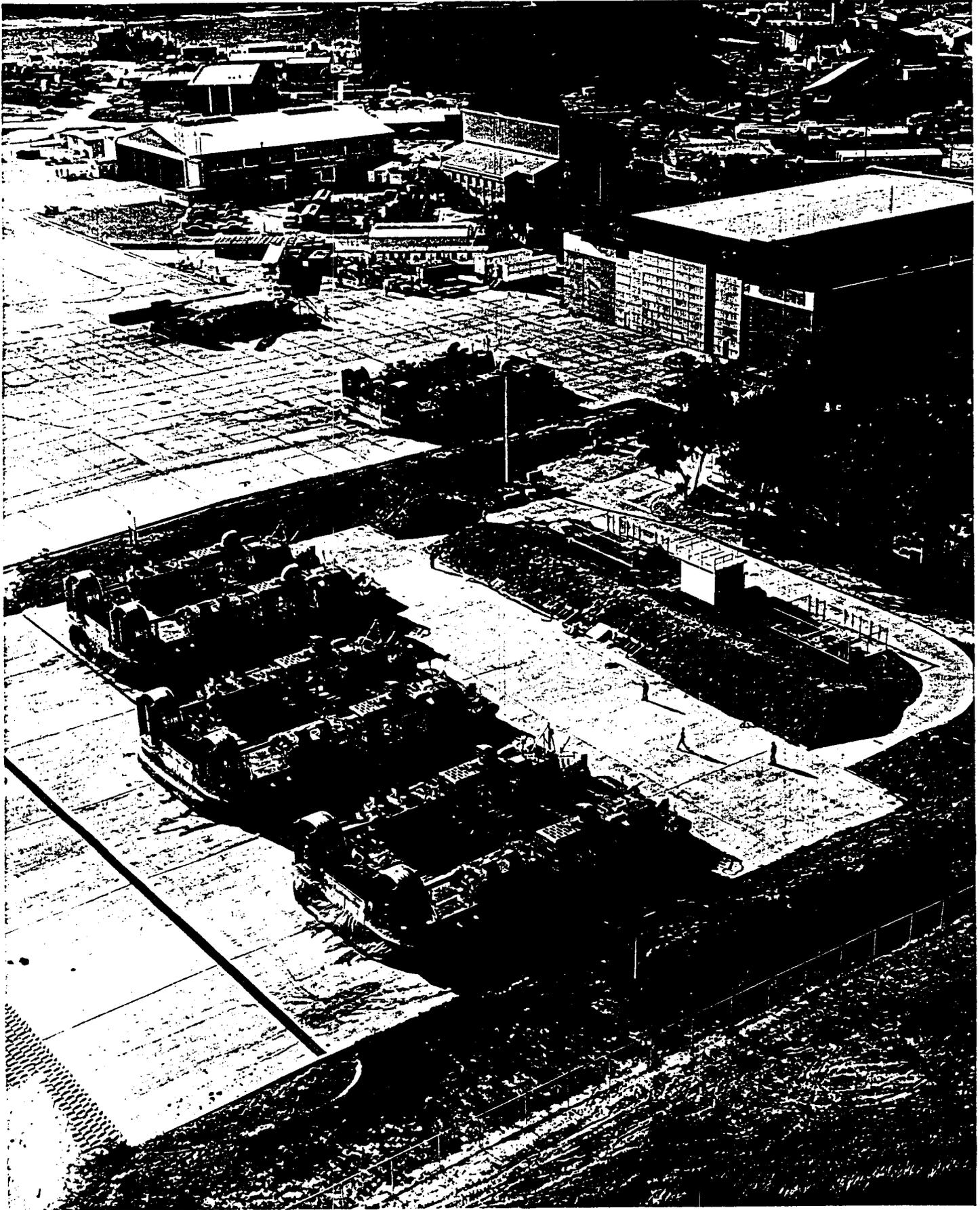
<b>LCAC Laboratory</b>	<b>12 engineers/technicians</b>
<b>LCAC Mechanical</b>	<b>14 engineers/technicians</b>
<b>LCAC Operations</b>	<b>12 engineers/technicians</b>
<b>LCAC Maintenance</b>	<b>20 engineers/technicians</b>
<b>AN/KSQ-1</b>	<b>6 engineers/technicians</b>
<b>LCAC Test and Trials</b>	<b>4 engineers/technicians</b>
<b>TDMS Computer Data Base System</b>	<b>8 computer scientists/programmers/data entry</b>

**Additionally, there exists at CSS and the immediate adjacent vicinity a unique**

**contractor support base of individuals representing the geographic center of US hovercraft technology and US Navy hovercraft experience. This support base ranges from designers to operators. Many of these individuals have been associated with the US Navy hovercraft program since its earliest beginnings, while others are recent retirees from operational LCAC units, some with combat experience. These persons are an extremely valuable asset to the overall LCAC program.**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The photo on the following page shows the LCAC hangar and ramp, four LCACs, and one AP1-88 ACV training craft.**



**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Diving/Special Warfare Life Support Complex</b>

1. State the primary purpose(s) of the facility/equipment.

**The Diving/Special Warfare Life Support Complex is a special facility that includes the Hydrospace Laboratory, Chemical Analysis Laboratory, Deep Submergence Life Support Facility, Experimental Dive Facility, Ocean Simulation Facility, and the Naval Diving and Salvage Training Center facilities. These special facilities have been designed and built for subjecting diving equipment (including some highly classified systems) to the worst anticipated simulated environmental conditions prior to placing a man-in-the-loop and prior to introduction of the equipment into the Fleet. The man-rated hyperbaric facilities (wet and dry), breathing simulation systems, computers for data acquisition and control of these systems, and medical monitoring equipment provide the required testing capabilities of diver life support equipments. Specific life support products and technologies include underwater and contaminated atmospheres breathing equipment, diving physiology, Navy diving procedures and operations, thermal protection, hyperbaric systems, manned and unmanned hyperbaric testing, decompression techniques and applications, gas dynamics and chemistry, chemical O<sub>2</sub> generation and CO<sub>2</sub> absorption. In addition to life support, the complex is used to develop diver navigation (tracking) equipment, diver tools, underwater non-destruction testing (NDT) equipment; and mission support equipment for EOD, Special Warfare and Marine Corps combat swimmers and divers. In addition to diver life support, this complex frequently supports CSS's other warfare areas, particularly Special Warfare which provides up to 30% of the support for some of the individual facilities. The data for the individual facilities is reported in subsequent pages.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**Fixed. The co-location of the Coastal Systems Station (CSS), the Navy Experimental Diving Unit (NEDU), the Naval Diving and Salvage Training Center (NDSTC), EOD Group Two Detachment, and U.S. Marine Corps Combat Swimmer Team at Panama City, Florida provides a unique combination of technical experts and specialized facilities unmatched elsewhere in the world.**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

**See subsequent write-ups for individual facility values.**

4. Provide the gross weight and cube of the facility/equipment.

**See subsequent write-ups for individual facility data.**

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**Reported in subsequent write-ups on the individual facilities.**

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**Reported in subsequent write-ups on the individual facilities.**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**Reported in subsequent write-ups on the individual facilities.**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**There is no other activity where there exists such comprehensive diver life support facilities. Therefore, maintaining the Navy's Diving/Special Warfare Life Support R&D, T&E, Acquisition Support and ISE, would require an extremely difficult relocation effort coupled with a major construction of facilities. Relocation of all or part of these facilities would endanger the safety of divers' lives for several years until these facilities could be built up elsewhere. The co-location of the Coastal Systems Station (CSS), Navy Experimental Diving Unit (NEDU), the Naval Diving and Salvage Training Center (NDSTC), EOD Group Two Detachment, and U.S. Marine Corps Combat Swimmer Team at Panama City, FL, provides a unique combination of technical experts and specialized facilities unmatched elsewhere in the world.**

**The loss of this facility would lower the response time for developing new diving and combat swimmer life support systems, thereby reducing the readiness of Naval diving and combat swimmer forces and impeding future Naval force development. The**

**elimination or relocation of all or part of these facilities would severely affect the ability of Naval Special Warfare (NSW), Explosive Ordnance Disposal (EOD), Marine Corps, and Army Special Forces combat divers to conduct required covert missions and to perform other operational requirements such as controlling shipboard damage, in-theater ship repair (particularly in areas remote from dry dock and pier facilities), and ordnance recovery.**

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

**This complex of special facilities was constructed on site. Construction of the first major facility, the OSF, was completed in 1975. The most recent construction of a major facility in this complex, additions to NDSTC, were completed in 1992.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

- 2.5 Mines**
- 4.2 Coastal/Special Warfare Support**
- 8.2 Countermeasures (CM)**
- 10.4 Diving, Salvage and Ocean Engineering**
- 11.1 Training (NDSTC)**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**100 % based on the direct funding received and a 40-hr work week. These facilities support a stable in-house rate of 80 workyears.**

12. Provide the projected utilization data out to FY1997.

**No change in utilization rate is expected.**

13. What is the approximate number of personnel used to operate the facility/equipment?

**65 not including NDSTC**

14. What is the approximate number of personnel needed to maintain the equipment?

**Reported in subsequent write-ups on the individual facilities.**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**Photos provided with the individual write-ups for each facility in this complex.**

**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Hydrospace Laboratory</b>

1. State the primary purpose(s) of the facility/equipment.

**The Hydrospace Laboratory is a special facility that is used for research and development, test and evaluation, acquisition support and in-service engineering in support of the Navy's Diving and Special Warfare life support tasks. The Hydrospace Laboratory is a 1989 upgrade hyperbaric testing facility that enables Coastal Systems Station personnel to perform research and engineering evaluations of materials, swimmer/diver equipment, deep sea and saturation diving subsystems and related precision life support equipment under controlled conditions. The laboratory covers 6,000 square feet and houses five hyperbaric test chambers, a test tank, and data acquisition and processing systems that allow unmanned simulation and testing to a simulated ocean depth of 5,625 feet of sea water at temperatures as low as 28° F. This unique facility has the hardware, software, and staff required for performing hyperbaric equipment tests, certification/quality assurance tests, gas and liquid flow studies, heat transfer studies, simulated manned testing, hyper/hypobaric environmental simulation with real time data acquisition and reduction.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**Fixed. The Hydrospace Laboratory buildings (Bldgs 413 and 108) house five hyperbaric test chambers, a test tank, and data acquisition and processing systems. The equipment located in the Hydrospace Laboratory is designated Class 2, movable. The largest hyperbaric chamber would require disassembly into components for removal from the building and transportation.**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

<b>Building 413</b>	<b>1,248,000</b>
<b>Building 108</b>	<b>333,000</b>
<b>Equipment</b>	<b><u>1,620,000</u></b>
	<b>3,201,000</b>

4. Provide the gross weight and cube of the facility/equipment.

<b>Building 413</b>	<b>5,986 sq. ft.</b>
<b>Building 108</b>	<b><u>3,360 sq. ft.</u></b>
	<b>9,346 sq. ft.</b>

**The gross weight of the equipment is approximately 470,000 pounds.**

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**None**

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**Special budget requirements for plant equipment include heavy foundations for the hyperbaric chambers and the inert gas bottle farm, an electrical shielding and grounding grid around the entire facility, 2-ton overhead traveling crane (45 feet span, 80 feet travel), certified high pressure piping, road rated piping and drain trenches, uninterruptable power supply for the computer/data acquisition/chamber control, hyperbaric chamber high bay with 34 foot vertical clearance to accommodate the overhead crane, and HSL-7 hyperbaric chamber, glycol supply and return lines with drops at each chamber location and at various sites in high bay for cold water testing, oxygen level monitoring and alarm system tied to building ventilation system, high speed data link from each chamber to control room, local area network throughout building, elevated lighting levels in high bay and control room, forced ventilation in compressor rooms, and an access roadway and crane set up area suitable for handling for routine maintenance of the 28,000 pounds inert gas modules.**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**Environmental control of temperature and humidity is required in the Hydrospace Laboratory to maintain instrumentation calibration traceable to the National Institute for Standards and Technology (NIST) and stable test conditions. Simple electrostatic air filtration is required to reduce air borne dust.**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

Relocation of this facility, and the equipment housed within this facility, would be impractical without also relocating the Ocean Simulation Facility, the Experimental Diving Facility and the Naval Diving and Salvage Training Center complex. The Hydrospace Laboratory is an essential element in the Research and Development mission of the Coastal Systems Station. It provides the scientists and engineers of the Coastal Systems Station a place where they can obtain hands-on experience with state-of-the-art diving and life support equipment. It provides a forum where theories in fluid dynamics, heat transfer, or mechanics can be evaluated in the harsh reality of the real world. This environment would be difficult or impossible to replicate at another site mainly due to the experience of the personnel, and the synergism between the Hydrospace Laboratory, the scientists and engineers of the Coastal Systems Station, the Navy Experimental Diving Unit, and the Naval Diving and Salvage Training Center. If the Hydrospace Laboratory were moved to a new location without the benefit of the experience of the current personnel and synergism between it and the other organizations, it would take 10 to 15 years to obtain the current level of expertise. Even if that expertise were relocated, high priority projects would not be able to meet operational requirements. The Hydrospace Laboratory provides quality assurance testing of life support equipment before it is issued for use. Without the unique capability of the Hydrospace Laboratory, immediately the EX 14 program would not meet its operational requirement. Other programs which would be delayed and would not meet operational requirements include EBA MK 18, SAR, and CWPDS.

Loss of this facility would impact the readiness of Naval diving and special warfare forces and impede the future Naval force development by preventing the conduct of all Navy diving and special warfare life support RDT&E conducted prior to at-sea testing.

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

The Hydrospace Laboratory was established in the 1960s. The present facility is the result of MILCON P-273. The building was designed from the ground up to support the mission of the Hydrospace Laboratory, and was completed in 1989. The certified high pressure piping was then fabricated and installed on-site. Three hyperbaric chambers were commercially procured to our design specification, trucked to site, installed, and certified in 1990. The final chamber was also commercially procured to our design specification, individual components were trucked to site, and the chamber (HSL-7) was erected inside the building using land based cranes. The final chamber was installed and certified in 1991. The gas storage modules weighing 28,000 pounds each were all trucked over the road. Final fit up and piping was completed on site. The Hydrospace Laboratory has been selected as the site to relocate a hydrostatic pressure vessel from Yorktown under BRAC '91. The A&E contract has been awarded and we are awaiting the 15% design package. Installation is expected to be complete by FY 95.

**Buildings 413 and 108 were constructed in 1988 and 1955 respectively.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

**4.2 Coastal/Special Warfare Support  
10.4 Diving, Salvage and Ocean Engineering**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**The historical utilization average for the past five fiscal years (1989-1993) is 5.4 work years. Average utilization rate over the last 5 years: 100% based on 40-hour week).**

12. Provide the projected utilization data out to FY 97.

**The projected utilization rate in FY 97 is 6.5 work years.**

<u>Year</u>	<u>Ave Use</u>
1994	100%
1995	100%
1996	100%
1997	100%

13. What is the approximate number of personnel used to operate the facility/equipment?

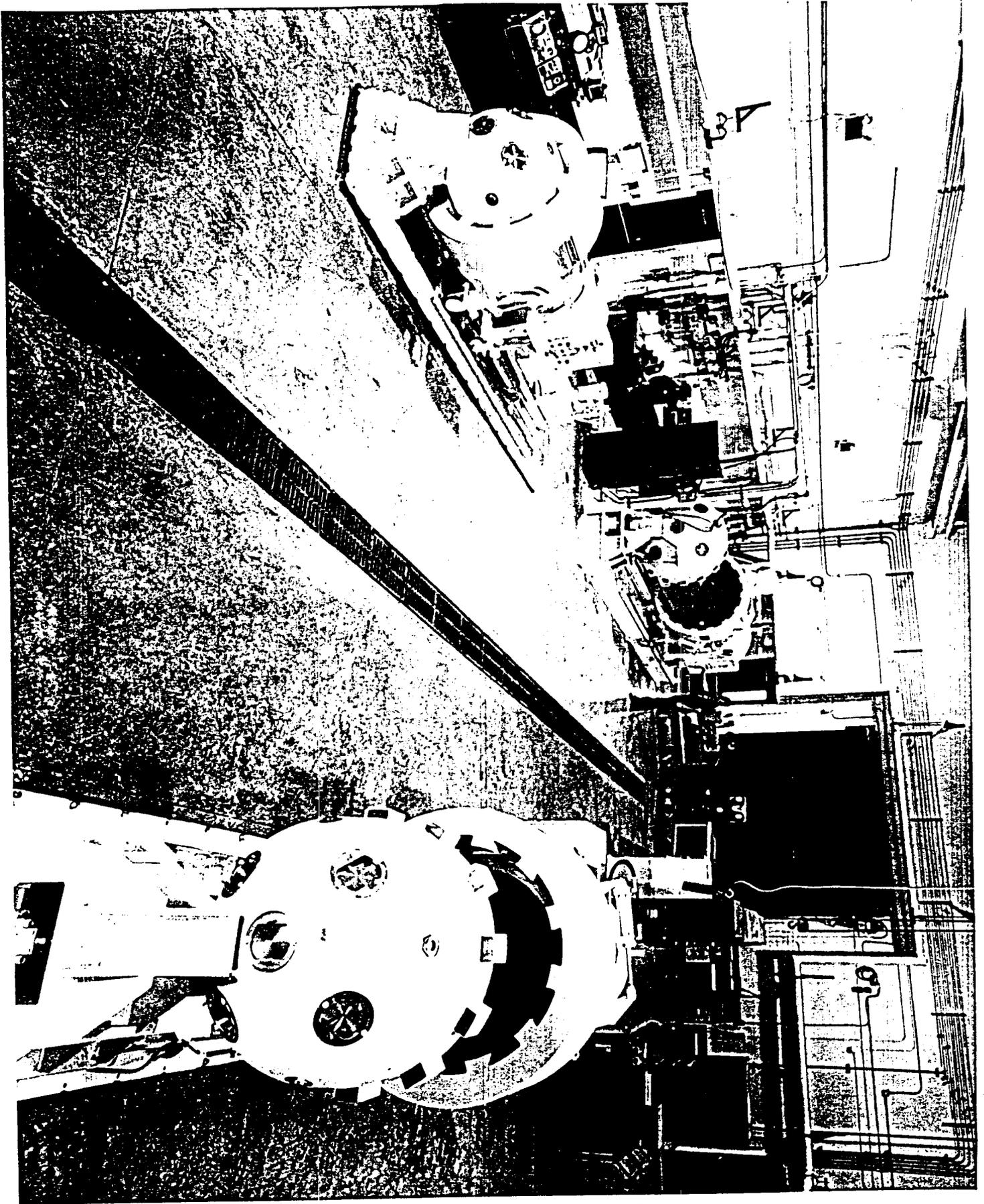
**On a daily basis, six people operate the Hydrospace Laboratory.**

14. What is the approximate number of personnel needed to maintain the equipment?

**Each of the six people who operate the Hydrospace Laboratory on a daily basis performs some level of equipment maintenance. If the maintenance function was relegated to dedicated personnel, it would require one to two people full time due to the varied nature of the required maintenance.**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The photo on the following page shows three of the Hydrospace Lab's five hyperbaric chambers.**



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**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Underwater Equipment Laboratory</b>

1. State the primary purpose(s) of the facility/equipment.

**CSS's Underwater Equipment Laboratory is a state-of-the-art chemistry laboratory necessary in the certification of diving air and gas supplies and the analysis of oils, plastics, and hydrocarbons. This lab is required to support CSS's mission in research and development, test and evaluation, acquisition support, and in-service engineering of Diving and Special Warfare Life Support Systems. Specific capabilities and functions include scuba gas analysis/hyperbaric chamber analysis, precision gas mixing, outgassing studies, ambient air analysis, leak detection, gas standards, compressor air analysis, water analysis, calibration of analytical equipment, training on gas analysis equipment, trace gas analysis down to the parts per billion (ppb) - parts per million (ppm) range. This facility supports NEDU, NDSTC, DoD, Government and civilian activities as well as CSS.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**This laboratory contains Class 2 installed equipment which is very sensitive and will be difficult to move.**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

<b>Building</b>	<b>\$773,000</b>
<b>Equipment</b>	<b><u>750,000</u></b>
<b>Total</b>	<b>\$1,523,000</b>

4. Provide the gross weight and cube of the facility/equipment.

**The building housing the Underwater Equipment Laboratory contains 5,191 square feet. The gross weight of the equipment is approximately 10,500 pounds.**

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**This facility requires emergency power because of the type of equipment located within the laboratory. Several instruments require continuous power and would be damaged if all power was lost.**

6. Indicate any special budget requirements for the facility/ equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**None**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**This laboratory requires special temperature controls for the mass spectrometer laboratories, special hoods for the gas chromatographs, hoods for the wet chemistry laboratory, and a humidity and temperature controlled for the infrared laboratory.**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**Loss of this facility or relocation would endanger the safety of divers at the NDSTC and NEDU by removal of an on-site gas certification laboratory, and therefore reduce the readiness of the existing Naval Diving and Special Warfare forces. There is no other existing DoD or commercial laboratory which can provide these services.**

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

**Construction of Building 414 was completed in 1988.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

- 2.5 Mines**
- 4.2 Coastal/Special Warfare Support**
- 8.2 Countermeasures (CM)**
- 10.4 Diving, Salvage and Ocean Engineering**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**Approximately 6 workyears per year based on 100% direct funding and a 40-hour workweek. Based on a unit of measure of "laboratory analysis" the laboratory averages 653 analyses per year.**

12. Provide the projected utilization data out to FY1997.

<u>Year</u>	<u>Ave Use</u>	<u>Analyses</u>
1994	100%	685
1995	100%	720
1996	100%	755
1997	100%	795

13. What is the approximate number of personnel used to operate the facility/equipment?

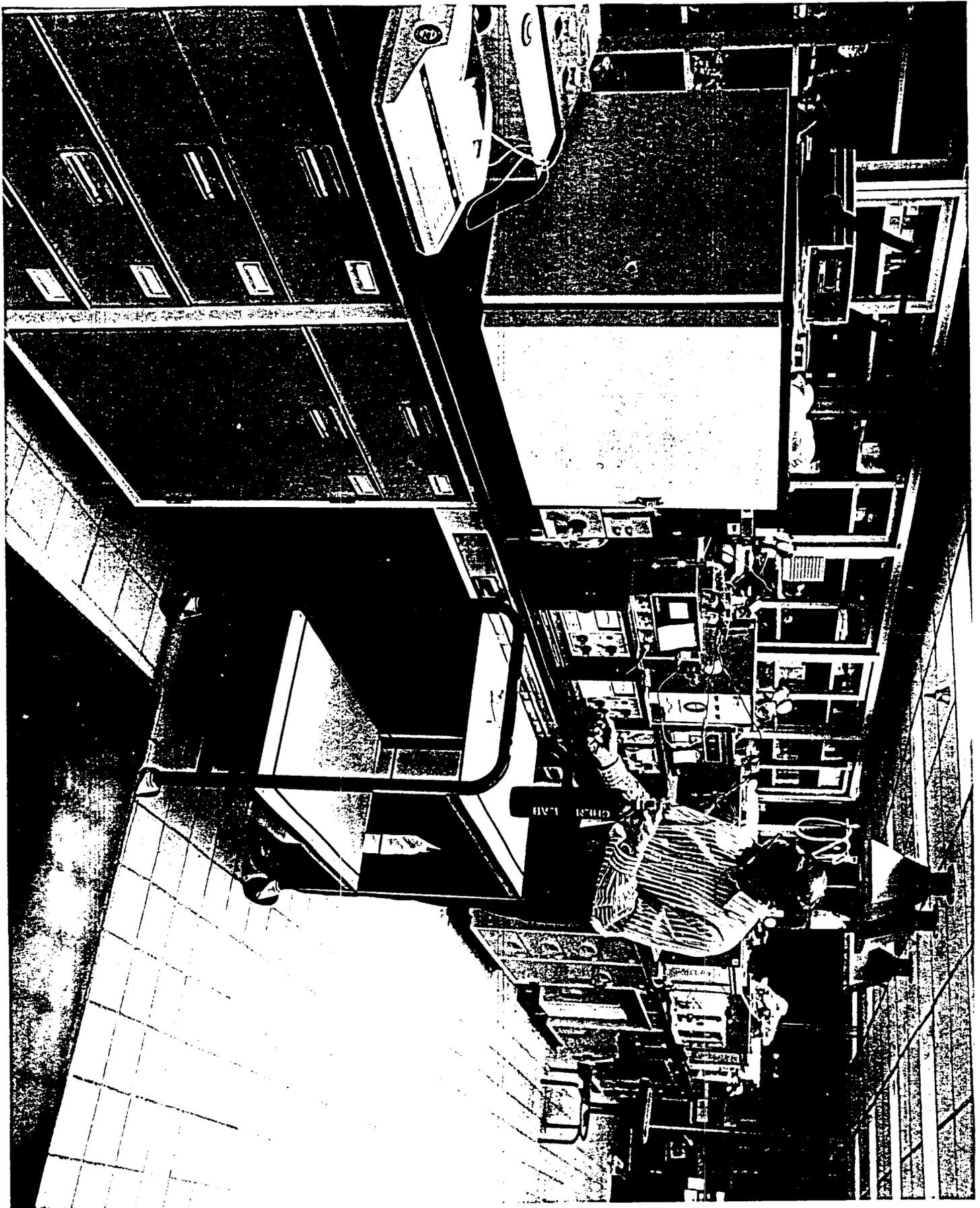
**3 chemists and 1-3 technicians**

14. What is the approximate number of personnel needed to maintain the equipment?

**3 chemists and 1-3 technicians**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The photo on the following page shows a portion of the chemical analysis equipment inside this complex.**



**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Deep Submergence Test Laboratory</b>

1. State the primary purpose(s) of the facility/equipment.

**The Deep Submergence Test Laboratory provides special facilities such as clean areas, secure environmental controlled storage, grade B water, vacuum and high pressure air and mixed gas supply lines, used in the assembly and test of life support diving equipments.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**Facility is not portable. Special facilities are integral part of structure.**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

**\$1,100,000**

4. Provide the gross weight and cube of the facility/equipment.

**Not applicable - integral to building.**

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**None**

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**Overhead rail crane  
In-floor concrete test tank  
Stainless steel grade B water system  
Stainless steel high pressure gas systems**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**Clean work areas with filtered room air; positive pressure clean zones with sealed floors and walls; environmentally controlled, secure, storage areas, etc.**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**This facility could be replicated, but it is an integral part of the total Diving/Special Warfare Life Support complex. Replication cost is estimated at \$1.1 million. Similar commercial facilities are not presently in existence.**

**The loss of this facility would lower the response time for developing new diving and combat swimmer life support systems, thereby reducing the readiness of Naval diving and combat swimmer forces and impeding future Naval force development.**

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

**Facility construction completed in 1992.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

**10.4 Diving, Salvage, and Ocean Engineering**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**Average utilization for the past 2 years 100% (based on a 40-hour week).**

12. Provide the projected utilization data out to FY 97.

<u>Year</u>	<u>Ave Use</u>
1994	100%
1995	100%
1996	100%
1997	100%

13. What is the approximate number of personnel used to operate the facility/equipment?

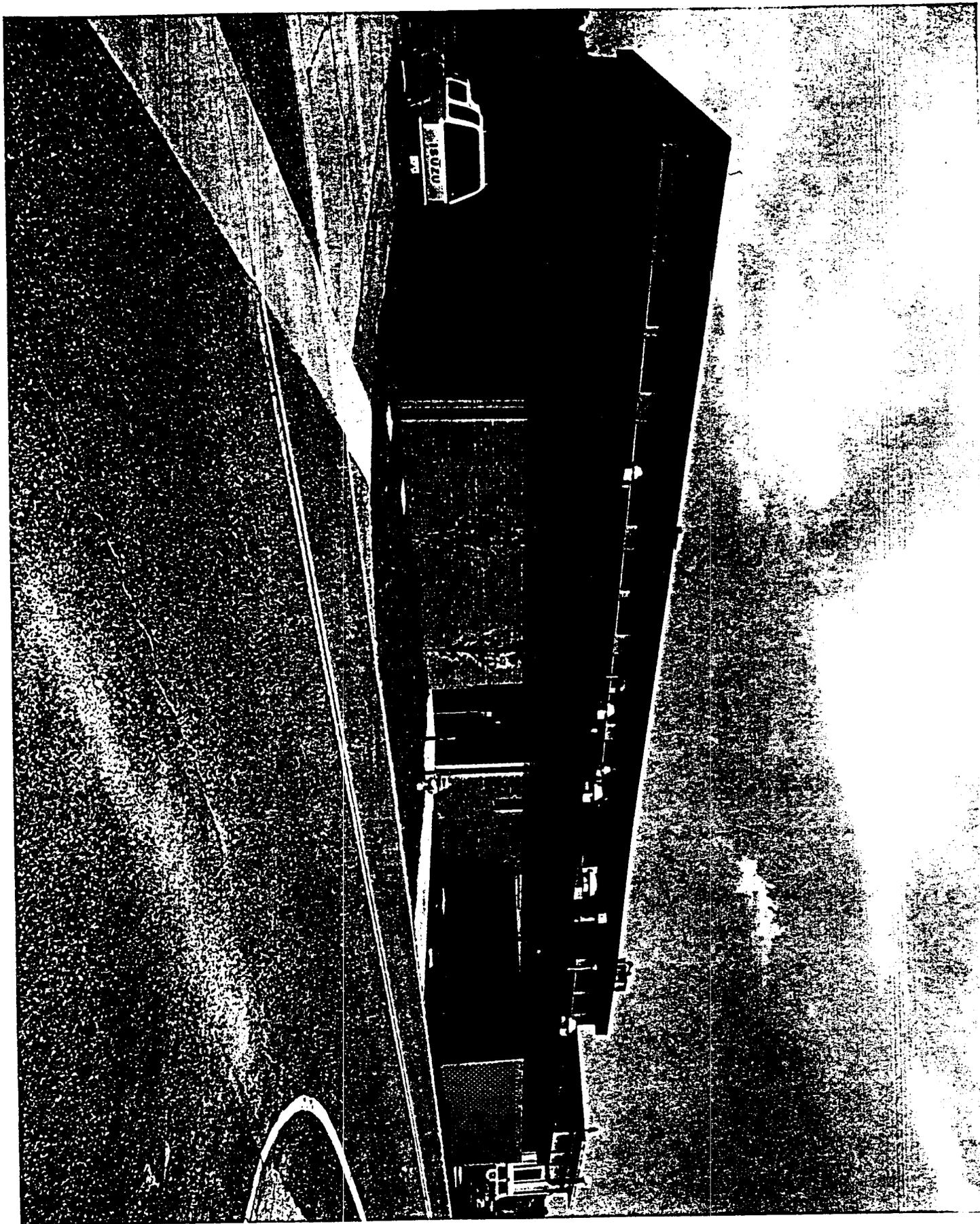
**4 full time**

14. What is the approximate number of personnel needed to maintain the equipment?

**1 part time**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The photo on the following page shows the exterior of the Deep Submergence Test Facility.**



**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Experimental Diving Facility (EDF)</b>

1. State the primary purpose(s) of the facility/equipment.

**The Experimental Diving Facility (EDF) is a CSS facility operated by the Navy Experimental Diving Unit (NEDU). The facility is used to perform manned test and evaluation of diving and hyperbaric chamber systems and components, and of all diving practices and procedures to determine safety, operational suitability, operational limits, and conformance to established standards. The facility also is used for Life Support Systems integration testing and complements the Ocean Simulation Facility.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**Fixed. The Experimental Diving Facility (Bldg 321) is a 15,807 square foot, fixed facility constructed in 1975 to support the Ocean Simulation Facility. The two story building includes a hyperbaric chamber complex composed of three chambers.**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

<b>Building</b>	<b>\$4,207,000</b>
<b>Equipment</b>	<b><u>750,000</u></b>
	<b>\$4,957,000</b>

4. Provide the gross weight and cube of the facility/equipment.

**Building 321    15,807 sq. ft**

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**None**

6. Indicate any special budget requirements for the facility/equipment (i.e., special

foundations, non-ferrous materials, shielding, hardening, etc.).

**None**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**None**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**Relocation of this facility would only make sense if the Ocean Simulation Facility is also moved. NEDU is the Navy's technical agent, In-Service Engineering Agent, and test and evaluation agent in all matters related to diving and hyperbaric operations. As such, NEDU performs three major tasks:**

**(1) Operations and maintenance of the Ocean Simulation Facility (OSF), the world's largest hyperbaric complex. This complex, which is certified to 2250 Feet of Sea Water, is utilized to perform manned testing/evaluation of all diving and hyperbaric systems and components during development and prior to authorization for fleet use. Also, diving and hyperbaric procedures are evaluated before approval for operational use or inclusion in the U.S. Navy Diving Manual.**

**(2) Operation and maintenance of the Experimental Diving Facility (EDF). The EDF consists of three hyperbaric chambers, computer-controlled and monitored for the unmanned testing of diving equipment. It is completely independent in both function, hardware and personnel from the OSF.**

**(3) In June 1986, the Chief of Naval Operations mandated NEDU to serve as the In-Service Engineering (ISE) Agent of Commander, Naval Sea Systems Command in all matters involving diving and hyperbaric operations. This function provides on-site assistance to fleet diving commands worldwide. On-scene inspections of shipboard diving systems during pre-overhaul test and inspections (POT/T), diving, hyperbaric systems design safety reviews, overhaul of diving systems (shipboard and shore-based), construction of hyperbaric recompression chambers, and medical evaluation of the adequacy of diver's life support systems are all examples of the technical support supplied by NEDU in this mission area.**

**During this decade, the EDF unmanned testing complex has emerged as the cornerstone of the U.S. Navy's Test and Evaluation Program for diver and combat**

swimmer life support equipment. The significance of the EDF has been made more apparent in recent years with increased focus on the Special Warfare community. To support the growing requirements, the EDF has evolved from a single, manually monitored chamber to a sophisticated three chamber complex support by remote electronic atmospheric monitoring equipment and a computerized data acquisition and analysis system. Increased manning has been assigned to maintain proficiency in test procedures, to perform required maintenance and to allow for the orderly training of EDF military personnel.

A major portion of NEDU's material and manpower assets are utilized in support of a CNO-directed Brickbat Priority project. Immediate response is expected and necessary to support emergent program requirements. A discussion of this program would be inappropriate in this document; however, the total efforts expended by NEDU to support this ongoing project have grown to over 30% of the total manpower resources. Without this project, NEDU's ability to continue with the research, testing and development of diving and hyperbaric systems as well as meet specific life critical fleet testing requirements will be severely impaired.

Therefore, the loss of this facility would lower the response time for developing new diving and combat swimmer life support systems, thereby reducing the readiness of Naval diving and combat swimmer forces and impeding future Naval force development.

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

**The Experimental Diving Facility was constructed in 1975.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

**4.2 Coastal/Special Warfare Support**

**10.4 Diving, Salvage and Ocean Engineering**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**6 workyears/year based on 100% direct funding for a 40-hr week**

12. Provide the projected utilization data out to FY1997.

<u>Year</u>	<u>Ave Use</u>
1994	100%
1995	100%

<b>1996</b>	<b>100%</b>
<b>1997</b>	<b>100%</b>

13. What is the approximate number of personnel used to operate the facility/equipment?

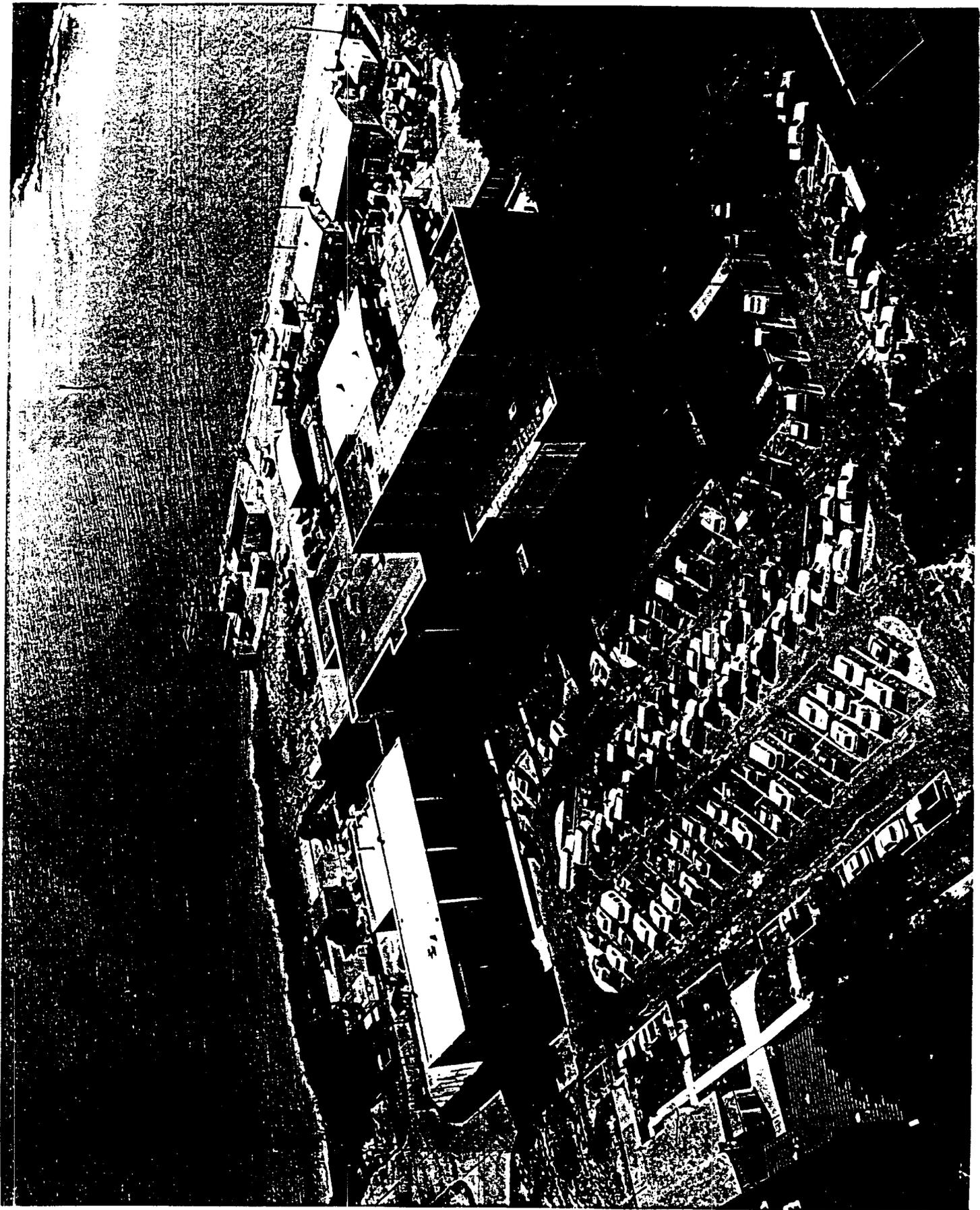
**5 people**

14. What is the approximate number of personnel needed to maintain the equipment?

**6 people**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The photo on the following page shows an aerial view of the EDF (the building on the left) and the OSF (the building on the right).**



**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Ocean Simulation Facility (OSF)</b>

1. State the primary purpose(s) of the facility/equipment.

**The Ocean Simulation Facility (OSF) is a CSS facility that is maintained and operated under the command of the Navy Experimental Diving Unit (NEDU), a tenant at the CSS site. The OSF is a unique hyperbaric research facility that provides the capability for research and development, test and evaluation, and certification of manned diver life support and working systems, hyperbaric chamber systems and components, and all diving practices and procedures to determine safety, operational stability, operational limits, and conformance to established standards. The OSF is man-rated for safe operation to 1000 psig or an ocean depth of 2250 feet, and includes capabilities for testing in varied temperatures, light levels, turbidity, and pressure.**

**In addition, the OSF functions as a test chamber to test swimmer propulsion devices, small submersibles, and diving innovations in near-actual conditions in the safety of a controlled laboratory environment where medical and engineering monitoring of men and equipment is possible. The OSF also provides the capability to conduct endurance depth tests on underwater bodies and systems in a controlled environment. The OSF also functions as a low-cost test chamber to test MCM systems at depth before actually going to sea; this reduces risk of a major failure during ship testing. Approximately 30 percent of the tasking for this unique complex in Special Warfare related; this includes pressure testing of the MK 8 MOD 0 SDVs upon completion of overhaul, testing of life support equipment designed and built by CSS in support of Maritime SOF missions, and specialized cleaning of high pressure/oxygen systems for underwater breathing apparatus.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**Fixed. The OSF is a fixed facility enclosing of a complex of five fixed dry chambers and one fixed wet chamber plus project work spaces and offices.**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

**\$28,098,000 plus a \$2,900,000, two-story addition connecting the OSF with the EDF to provide additional work space to support diving research work. (The \$28.1M value includes the chambers that are integral to the building, but does not include the instrumentation.)**

4. Provide the gross weight and cube of the facility/equipment.

**Gross weight of chambers and supports is approximately 825,530 pounds.**

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**The facility requires high pressure (2,200 psig) gas storage for pure helium, contaminated helium, oxygen, nitrogen, air, and mixed gases. Compressors for each of these gases, a gas analysis system, built-in-breathing system, wet chamber water conditioning system, hot water suit system, sanitary and potable water system, chamber fire protection system and certified high pressure piping, tubing and valves.**

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**Special budget requirements are chamber foundations separate from the building foundation. A monolithic (one pour) of 472 cubic yards of concrete reinforced with 30 tons of steel measuring 100 feet in length, 26 feet in width and 5 feet thick. A high pressure (1000 psig) atmosphere conditioning system consisting of 6 separate atmospheric loops. Each loop is parallel with a cooler and heater in one leg and a CO<sub>2</sub> scrubber, contaminant filter, and particulate filter in the other leg.**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**Building requires control of temperature and humidity to maintain instrumentation calibration and maintain stable test conditions. Chamber environmental control required to maintain the partial pressure of CO<sub>2</sub> to below a maximum of 4.0 mm of Hg., remove particles 0.3 microns and larger at an efficiency of 99.97%, remove body and equipment orders, maintain temperatures between 50°F and 110°F ± 5° selectable, humidity control from 50 to 95% relative, pressure control range from 0 to 1000 psig.**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**Because of the integral test chambers, this facility would be impossible to relocate. No similar facility exists either government or civilian. Therefore, the loss of this facility would eliminate the capability for developing new diving and combat swimmer life support systems, thereby reducing the readiness of Naval diving and combat swimmer forces and impeding future Naval force development.**

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

**The OSF is a three-story structure with a steel frame, concrete block exterior walls and brick veneer constructed in 1971. The high pressure chambers were manufactured in Houston, Texas and transported to Panama City by barge. A special "bridging ramp" was utilized to offload the chambers to the land site with out touching the local dock area. Once in place the building was constructed around the chambers then additional piping and plumbing was installed.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

- 2.5 Mines**
- 4.2 Coastal/Special Warfare Support**
- 8.2 Countermeasures (CM)**
- 10.4 Diving, Salvage and Ocean Engineering**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**100 % based on direct funding received and a 40-hr work week.**

12. Provide the projected utilization data out to FY 97.

**The projected utilization rate in FY 97 is 6.5 work years.**

<u>Year</u>	<u>Ave. Use</u>
<b>1994</b>	<b>100%</b>
<b>1995</b>	<b>100%</b>
<b>1996</b>	<b>100%</b>
<b>1997</b>	<b>100%</b>

13. What is the approximate number of personnel used to operate the facility/equipment?

**45 people - Note for a manned saturation dive it requires three shifts to cover 24-**

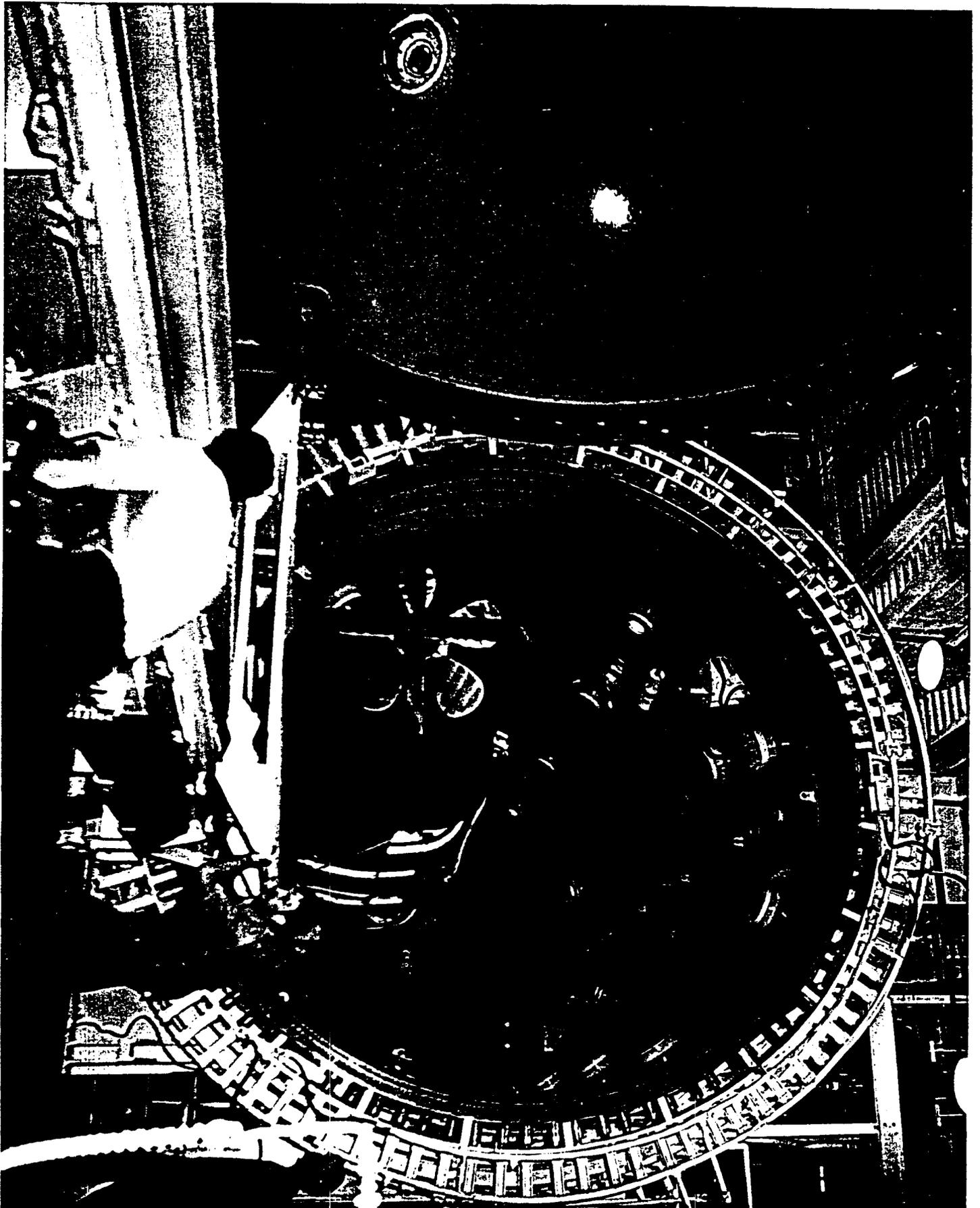
**hour/day operations.**

14. What is the approximate number of personnel needed to maintain the equipment?

**45 people**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The photo on the following page shows a Swimmer Delivery Vehicle (SDV) being placed in one of the OSF's hyperbaric chambers for testing. The exterior of the OSF is shown on page 77.**



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**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Navy Diving &amp; Salvage Training Center (NDSTC) Complex</b>

1. State the primary purpose(s) of the facility/equipment.

**The Naval Diving and Salvage Training Center (NDSTC) Complex is a unique national asset used to train diving and salvage personnel of all services. The complex is a tenant-operated activity at the CSS site. Its operation is funded from Navy Training resources but provides facilities to conduct research and development, test and evaluation, acquisition support, and in-service engineering of Navy Diving and Special Warfare Life Support Systems. The complex provides diving and salvage classrooms and hands-on training areas for officer and enlisted personnel.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**Fixed**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

<b>Building 350</b>	<b>\$5,612,000</b>
<b>Building 437</b>	<b>2,751,000</b>
<b>Building 438</b>	<b><u>2,450,000</u></b>
<b>Total</b>	<b>\$10,813,000</b>

4. Provide the gross weight and cube of the facility/equipment.

<b>Building 350</b>	<b>52,598 sq. ft</b>
<b>Building 437</b>	<b>24,323 sq. ft</b>
<b>Building 438</b>	<b><u>33,430 sq. ft</u></b>
<b>Total</b>	<b>100,351 sq. ft</b>

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

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None

6. Indicate any special budget requirements for the facility/ equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

None

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

None

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/ equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**Because of the size and the number of facilities integral to the buildings, this complex would be impossible to relocate. Loss of this facility would prevent the training of diving and salvage personnel thereby seriously reducing the readiness of U.S. Naval forces. Also, loss of this facility would eliminate a critical cog in Life Support R&D, T&E, and ISE which would eventually impede the development of the future Naval forces.**

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

**The NDSTC's first building at CSS, Building 350, was constructed in 1980, the building is a poured in place concrete structure with pre-cast concrete exterior panels. The facility includes a 90 ft by 50 ft heated training pool, a complete medical facility with laboratory and emergency treatment room, auditorium, and support spaces. The facilities also house the administrative functions of the Diving and Salvage Training Center. NDSTC trains nearly 1000 divers annually and is capable of training over 300 students at one time. Besides Navy officers and enlisted students, the school also trains divers from the other services and selected DoD civilians. NDSTC also serves as the focal point of U.S. Navy diving medicine.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

**4.2 Coastal/Special Warfare Support**

**10.4 Diving, Salvage and Ocean Engineering**

**11.1 Training**

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11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**Average utilization for the past 5 years: 100% (based on a 40-hour week).**

12. Provide the projected utilization data out to FY 1997.

<u>Year</u>	<u>Ave Use</u>
1994	100%
1995	100%
1996	100%
1997	100%

13. What is the approximate number of personnel used to operate the facility/equipment?

**Tenant operated training facility - data not available**

14. What is the approximate number of personnel needed to maintain the equipment?

**Tenant operated - data not available**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The photo on the following page shows an aerial view of NDSTC.**

**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Special Warfare Research and Engineering Complex</b>

1. State the primary purpose(s) of the facility/equipment.

**The Special Warfare Research and Engineering Complex is a special facility developed for R&D, T&E, Acquisition Support and ISE of the Special Warfare mobility and mission support systems, including all types of SEAL Delivery Vehicles (SDVs). The main building of the complex houses a welding and machine shop, an electronics and electrical shop, a high bay area, and a receiving and storage area. Other facilities housed in other buildings include the Service Life Extension Program (SLEP) Fabrication Shop, a Paint and Fiberglass Shop, and a Maritime Equipment Support Facility.**

**The high bay area (105 ft by 50 ft) is used for the general disassembly, overhaul, mechanical system testing, and assembly of SDVs. It is equipped with a 5-ton overhead crane and rail system which is capable of handling a fully assembled SDV through the entire length of the high bay. This space is capable of housing five SDVs.**

**The welding and machine shop (105 ft by 40 ft) is used for the refurbishment and fabrication of the various canisters, bracketry, mechanical components and frame repairs. The welding area is equipped with at least two TIG welding machines and tables. The machine shop is equipped with lathes, milling machines, drill presses, and band saws. Two overhead cranes on a rail system provide 4000 lbs handling capacity through the entire shop.**

**The electronics and electrical shop (52 ft by 40 ft) is used for the disassembly, repair, testing, and assembly of the various electrical systems before installation into the SDV. It is equipped with various meggers, meters, oscilloscopes, and voltmeters.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**Fixed**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment

cost separate from any building and utilities that may be integral to the facility/equipment.

Item	Building	Equipment
Bldg 89	\$1,680,000	\$ 830,000
Bldg 292	142,000	476,000
Bldg 364	72,000	330,000
Bldg 293	<u>122,000</u>	<u>          </u>
	\$2,016,000	\$1,636,000

4. Provide the gross weight and cube of the facility/equipment.

Bldg 89	17,000 sq. ft
Bldg 292	5,460 sq. ft
Bldg 364	1,400 sq. ft
Bldg 293	<u>4,615 sq. ft</u>
	28,475 sq. ft

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**All shops have heating, air conditioning and ventilation systems, and compressed air service.**

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**Secure project work and storage areas**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**Heating, air conditioning and ventilation for the various shops.**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**Although this complex could be physically replicated at great expense somewhere else, it would be useless without access two critical test CSS facilities: (1) the Gulf Test Range for at-sea testing, and (2) the Ocean Simulation Facility for pressure testing of the hull. (Write-ups for both facilities are included elsewhere in this data call submission.)**

Loss of this facility would reduce the readiness of Naval Special Forces by severely delaying, or possibly preventing, overhaul work on MK 8 SDVs. Also, since the development of the next generation Special Warfare systems relies on the availability of this facility to meet program milestones, the loss of this facility would impede the development of future Naval Special Warfare forces.

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

The facilities in this complex were all constructed on site. These facilities have been expanded and upgraded since their original construction. The most recent major upgrade was completed in 1989.

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

#### 4.2 Coastal/Special Warfare Support

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

100% based on direct funding and a 40 hr work week.

12. Provide the projected utilization data out to FY1997.

<u>Year</u>	<u>Ave Use</u>
1994	100%
1995	100%
1996	100%
1997	100%

13. What is the approximate number of personnel used to operate the facility/equipment?

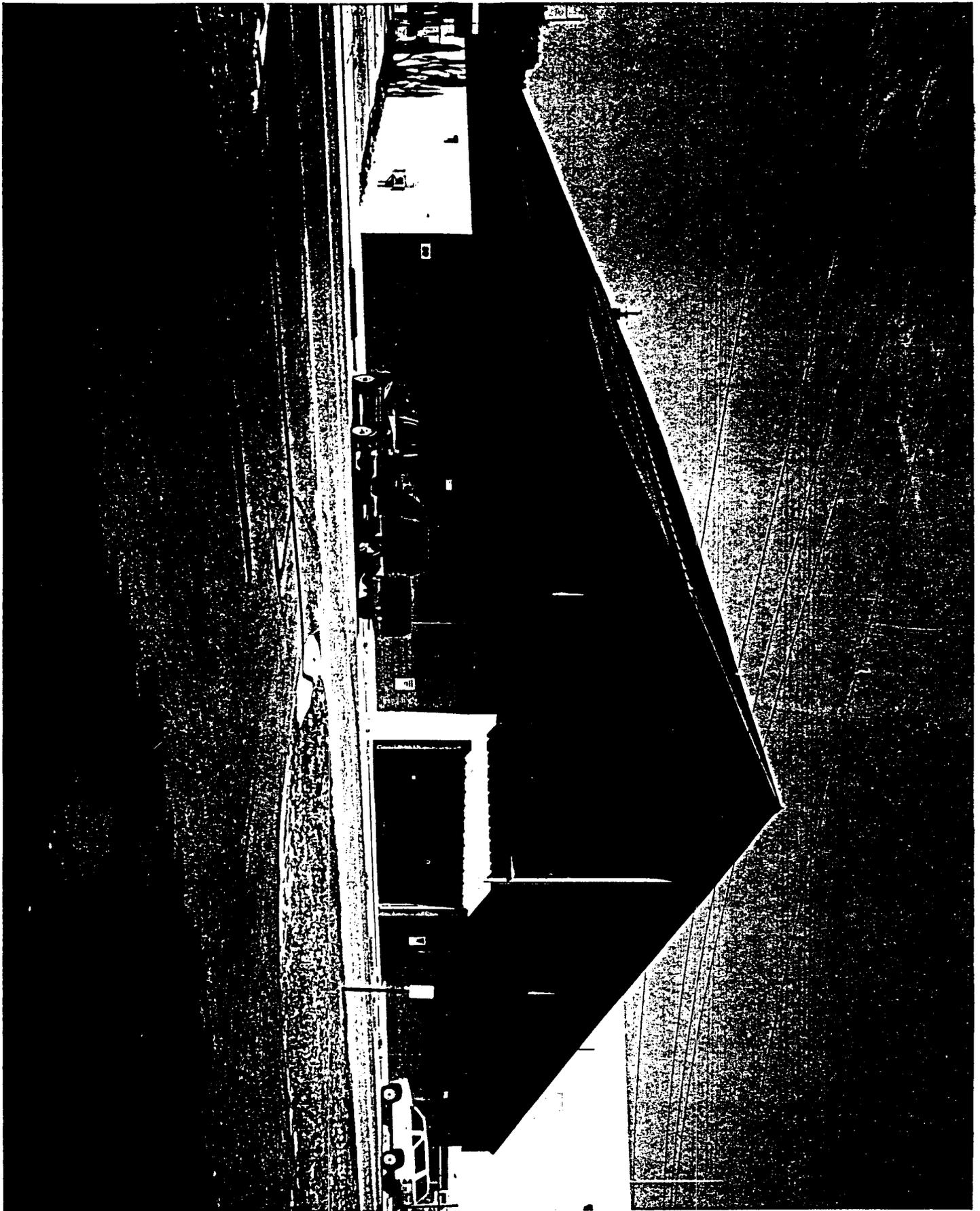
14

14. What is the approximate number of personnel needed to maintain the equipment?

The 14 people cited in question 13 perform light, routine maintenance of the equipment. For extensive maintenance or repair, outside personnel are called upon.

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

The photo on the following page shows the exterior of the facility.



**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>R&amp;D Underwater Countermeasure Fabrication Facility</b>

1. State the primary purpose(s) of the facility/equipment.

**The R&D Underwater Countermeasure Fabrication Facility is a special facility that is used for small scale production of one-of-a-kind (including highly classified systems and equipment for the Fleet). As such, it provides CSS with the capability to produce experimental, demonstration and developmental vehicles, devices, and equipments in support of the Station's mine warfare, amphibious warfare, special warfare, and diving and life support R&D, T&E, acquisition support, in-service engineering, and Fleet support. This facility consolidates shop functions into one modern efficient building, provides climate control for high-tech/high-precision equipment and processes, eliminates time and cost lost in transportation between scattered facilities, reduces energy consumption, and provides direct access from the prototype fabrication shops to waterfront project assembly areas before being loaded onto research vessels or towed to sea for testing. In addition, the facility provides direct access to waterfront project assembly areas, a critical feature for the frequent loading/offloading of prototype equipment onto various research vessels.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**This is a fixed facility (Bldg 431).**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

<b>Building</b>	<b>\$5,227,000</b>
<b>Equipment</b>	<b>2,439,000</b>
<b>Tool Room</b>	<b><u>650,000</u></b>
	<b>\$8,316,000</b>

4. Provide the gross weight and cube of the facility/equipment.

**56,500 sq. ft.**

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**None**

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**Operating systems in the building include two 5-ton bridge cranes, and state-of-the-art computer-controlled machine shop equipment. Large shop spaces have roll up doors to the exterior with hoist over the doors for loading and unloading.**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**Isolated filtered HVAC system - Plastic shop  
Localized air exhaust systems - Welding, rigging and electronics shops**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**This facility would be difficult to replicate or relocate at another site. Considerations of impact to the Navy are as follows:**

**(1) Cost of replacement of established facility.**

**(2) Unique capabilities available at one location:**

**(a) Welding**

- **Certified welders in variety of materials to Mil-Std 248D and 1595**
- **Brazing capability to NAVSEA Standard 0900-LP-001-7000.**

**(b) Rigging**

- **Zinc potting capability**
- **Capability to load test and certify lifting slings**

**(c) Electrical/Electronics**

- **Dedicated facility and qualified personnel for rubber molding of electrodes/repair of large diameter MCM cables.**
- **High reliability soldering capability to Mil-Std 2000**
- **Maintains classroom with equipment and certified instructors to certified**

instructors to certify others to Mil-Std 2000.

**(d) Plastics**

- Capabilities for high pressure potting for deep submergence systems.
- Capability to hand form models from wood forms or fiberglass

**(e) Machining**

- Capability to machine to 0.0001 inch tolerances using CNC machines.
- Numerical control programming and manufacturing capabilities for high technology manufacturing.

- CNC engraving capability
- Heat treating capabilities
- Automated Central Tool Room serving CSS and tenant activities
- Provides education to new engineers in manufacturing processes.

**(f) Marine Machining**

- Hydraulic machinery and component repair capability

**(3) Facility/craftsman proximity to design engineers enables interaction frequently necessary for prototype development.**

**(4) Unique area for testing prototype systems both in shallow water and riverine environments.**

**(5) Existing shop facility is well staffed and equipped to meet needs that are vital in times of National emergencies, urgent Fleet needs, or other high priority tasks requiring quick turn-around and tight controls and schedules.**

**(6) Commercial facilities offering comparable range of capabilities are not available in this area.**

**(7) Documentation, specifications, and drawing level requirements for contracting to commercial facilities results in longer turn-around time and increased cost due to contract processing requirements.**

**(8) The facility must be in close proximity to design engineering personnel to allow for interaction necessary for prototype development.**

**In summary, the loss of this facility would severely delay work on highly classified programs until an equivalent level of security was established at the relocated facility. As a result, the readiness of existing Naval forces (primarily AMCM, SMCM, Diving and Special Operations) would be reduced and the development of future Naval force would be impeded.**

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

**This special facility was constructed in 1988. The facility, located on CSS's south dock, is a steel frame structure with concrete block walls and a combination of brick veneer and metal panels on the exterior. The facility includes a state-of-the-art machine shop, welding shop, electronic shop, rigging shop, carpentry shop, and support spaces.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

- 2.5 Mines**
- 4.1 Landing Force Equipment and Systems**
- 4.2 Coastal/Special Warfare Support**
- 8.2 Countermeasures (CM)**
- 10.4 Diving, Salvage and Ocean Engineering**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**Average Utilization (based on 40-hour work week): 100%**

12. Provide the projected utilization data out to FY1997.

<u>Year</u>	<u>Ave Use</u>
1994	100%
1995	100%
1996	100%
1997	100%

13. What is the approximate number of personnel used to operate the facility/equipment?

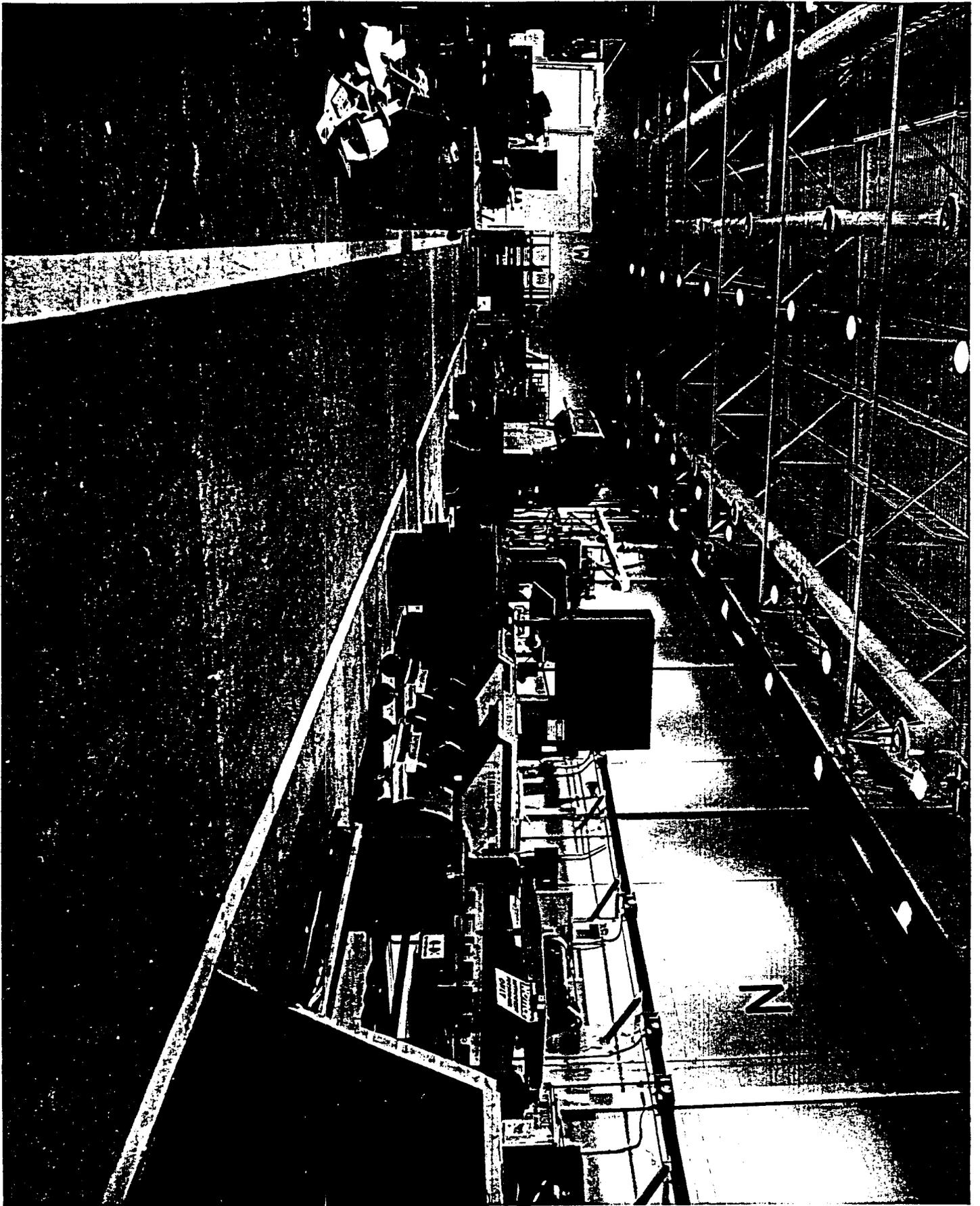
**75 full-time permanent employees**

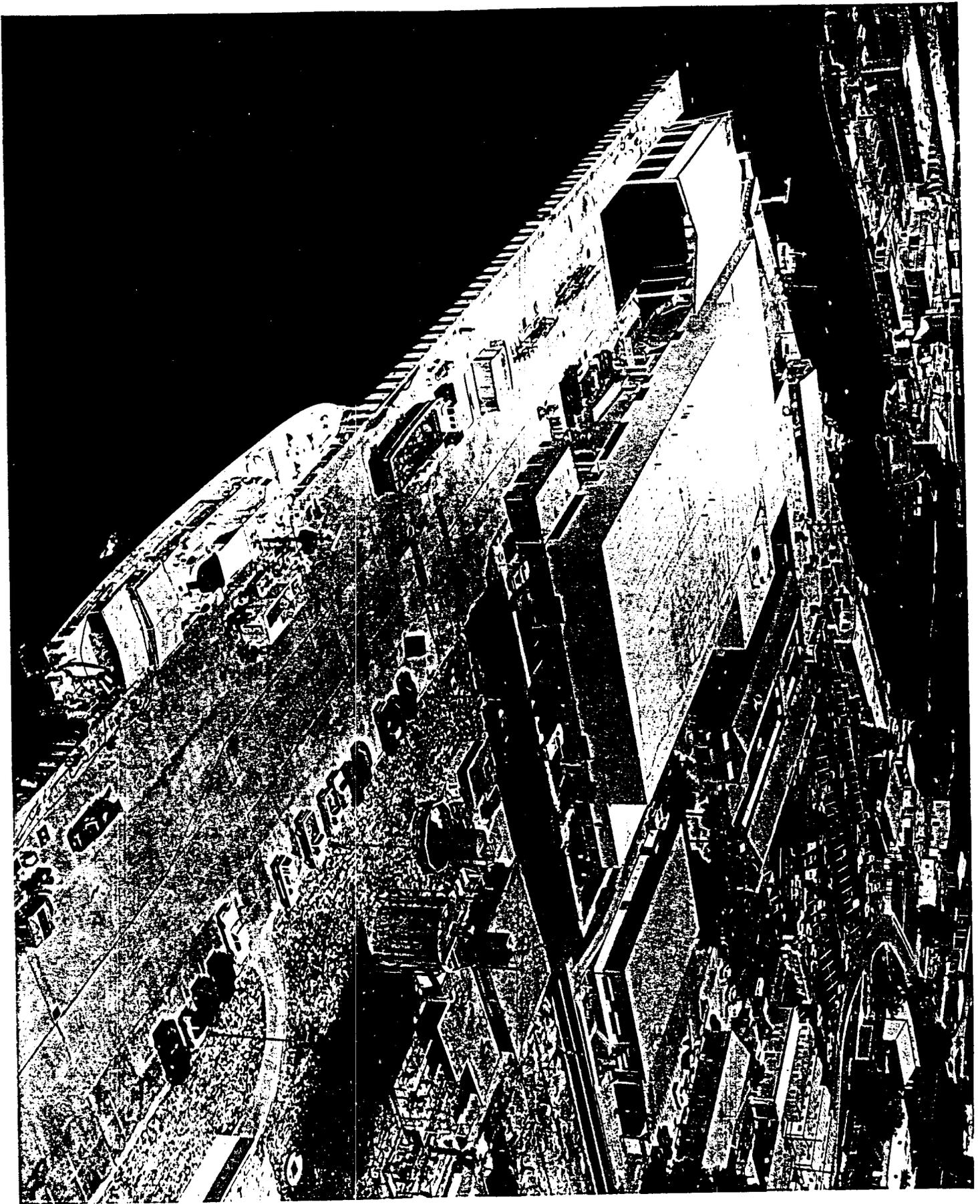
14. What is the approximate number of personnel needed to maintain the equipment?

**Maintenance of the equipment is spread among the 75 employees that operate the facility. It is estimated that the equivalent of one (1) work-year of labor performed for routine facility maintenance.**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The following two pages show the exterior and interior of the facility.**





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**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>Mechanical Test Laboratory</b>

1. State the primary purpose(s) of the facility/equipment.

**The Mechanical Test Laboratory is used to perform vibration tests, shock tests, and dynamic tensile and compression tests to support the development of prototype equipment. The capabilities of this facility will be expanded by the addition of equipment from White Oak's Failure Analysis Lab which is being moved to CSS as a result of consolidation ordered by BRAC 93. The additional equipment will enable the lab to conduct in-depth metallurgical, microelectronics, physical and chemical analysis of materials, components and systems. Failure analysis of mine cases, hydrogen embrittled flight gear, and lubrication and wear problems on mine countermeasures cable winches are a few examples. It also supports system developments using high temperature superconductors, graphite intercalation compounds, liquid crystals, etc., required for CSS's four unique product lines. The microelectronics failure analysis capability will provide in-depth analysis to support both R&D and in-service investigations of electronic systems and components.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**This facility is a permanent, fixed laboratory. All of the equipment associated with the facility is portable or moveable.**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

<b>Building</b>	<b>\$200,000</b>
<b>Equipment</b>	<b><u>200,000</u></b>
	<b>\$400,000</b>

4. Provide the gross weight and cube of the facility/equipment.

<b>Gross weight</b>	<b>30,400 lbs</b>
<b>Equipment cube</b>	<b>4,000 cu. ft</b>
<b>Building floor space</b>	<b>4,000 sq. ft</b>

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**None**

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**The foundation for the shock machine must be isolated from the foundation for the rest of the building.**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**Temperature and humidity control; environmental control requirements are dictated by the equipment being tested.**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**This facility could be relocated or replicated at another site. Loss of this facility would have minimal impact to the Navy since commercial capabilities are available.**

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

**The mechanical test lab was constructed as a MILCON project in 1983. The associated equipment was acquired in 1986-1987 except for the shock machine which was constructed in 1986. Relocation of equipment from White Oak began in FY 1994.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

**2.5 Mines**

**4.1 Landing Force Equipment and Systems**

**4.2 Coastal/Special Warfare Support**

**8.2 Countermeasures (CM)**

**10.4 Diving, Salvage and Ocean Engineering**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**Historical utilization of the facility for the period FY89 through FY93 has averaged 50 days per year; where a "use day" is defined as the utilization of the lab for any or all of its capabilities for any portion of a day.**

12. Provide the projected utilization data out to FY1997.

**Utilization of the facility is projected to be about 50 days/yr out to FY 97.**

13. What is the approximate number of personnel used to operate the facility/equipment?

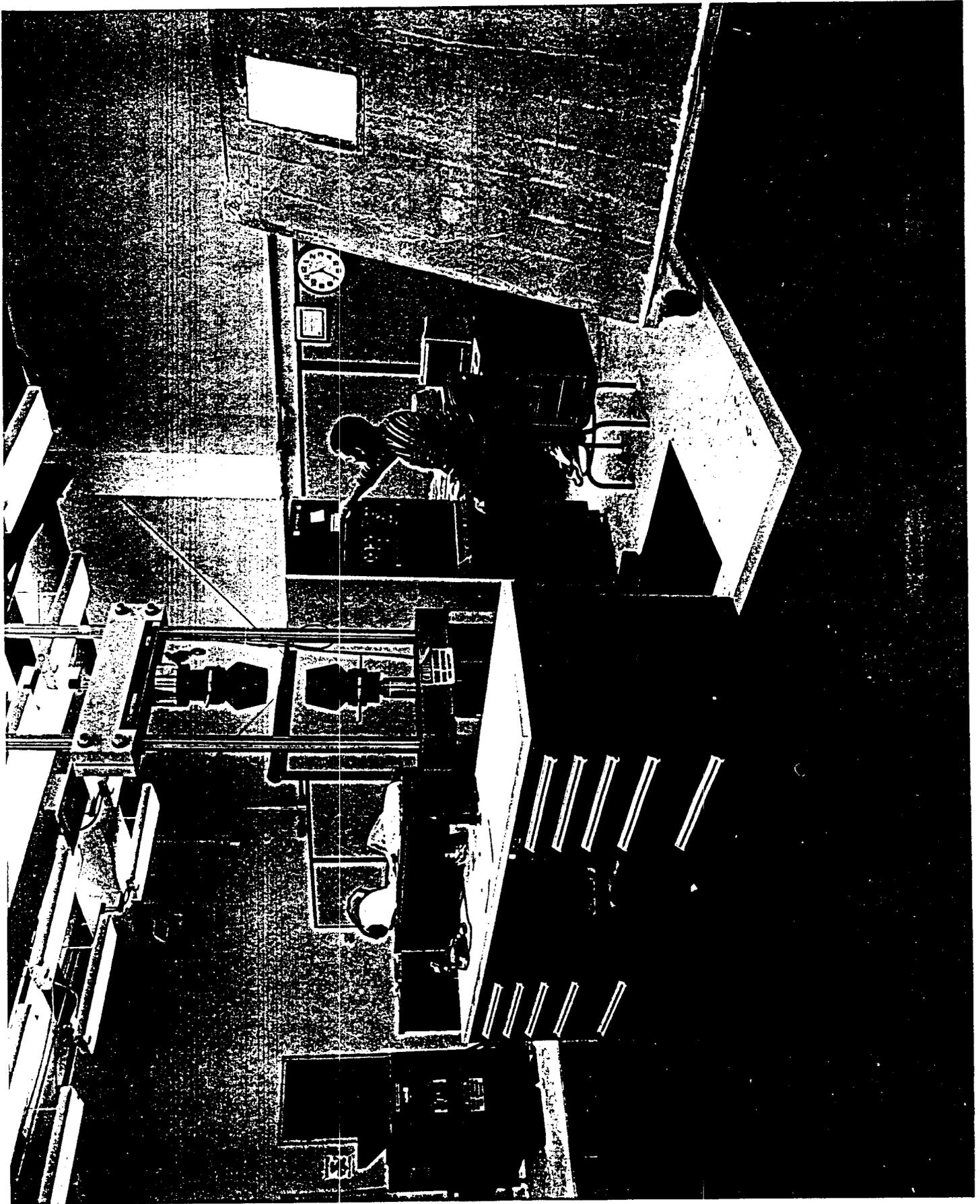
**Two (2)**

14. What is the approximate number of personnel needed to maintain the equipment?

**The equipment is maintained by the two operators except for that maintenance which must be performed by the manufacturer.**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

**The photo on the following page shows some of the equipment in the Mechanical Test Lab.**



**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	<b>NSWC Dahlgren Division Coastal Systems Station</b>
Facility/Equipment Nomenclature or Title	<b>General Purpose Berthing Wharf</b>

1. State the primary purpose(s) of the facility/equipment.

**CSS's General Purpose Berthing Wharf is a special facility that provides berthing for up to 30 CSS and tenant research ships and small craft. CSS has a total of 2,823 linear ft of docking space along Alligator Bayou. Services available on the dock include ship waste water collection, fresh water, air (125 psi) electrical services, and marine diesel fuel. The docking facility at CSS could currently accommodate additional low draft vessels without further construction. The U.S. Coast Guard has a base located on the southern boundary of Alligator Bayou and must have access to Alligator Bayou at all times. Due to the presence of the USCG Station, brest berthing is not available at CSS.**

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

**Fixed**

3. Provide the replacement value of the facility/equipment. Report the facility/equipment cost separate from any building and utilities that may be integral to the facility/equipment.

<b>Berthing</b>	<b>\$5,057,000</b>
<b>Boat shed</b>	<b><u>99,000</u></b>
	<b>\$5,156,000</b>

4. Provide the gross weight and cube of the facility/equipment.

**The wharf/dockside area covers 2823 linear feet of waterfront. Building 302, the boat shed, covers 5600 sq. ft.**

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

**Ship wastewater collection**

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

**A 22 ft depth is maintained in the entrance channel and turning basin. The water depth along the west dock and adjacent to the Naval Diving and Salvage Training Center is approximately 12 ft. Periodic dredging is required to preserve these depths.**

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

**Ship wastewater collection**

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

**Relocation of this facility would be impossible. Most R&D projects assigned to CSS require the use of the Berthing Wharf in support of at-sea test operations. Discontinuing the use of the CSS Berthing Wharf would delay all test projects in all warfare areas at CSS that require the use of the Gulf Test Range.**

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

**Facility was originally constructed in 1953 and took five years to acquire.**

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

**2.5 Mines**

**4.1 Landing Force Equipment and Systems**

**4.2 Coastal/Special Warfare Support**

**8.2 Countermeasures (CM)**

**10.4 Diving, Salvage and Ocean Engineering**

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

**Ave. utilization over last five yrs: 100% (based on 40-hr work week)**

12. Provide the projected utilization data out to FY1997.

<u>Year</u>	<u>Ave Use</u>
1994	100%
1995	100%
1996	100%
1997	100%

13. What is the approximate number of personnel used to operate the facility/equipment?

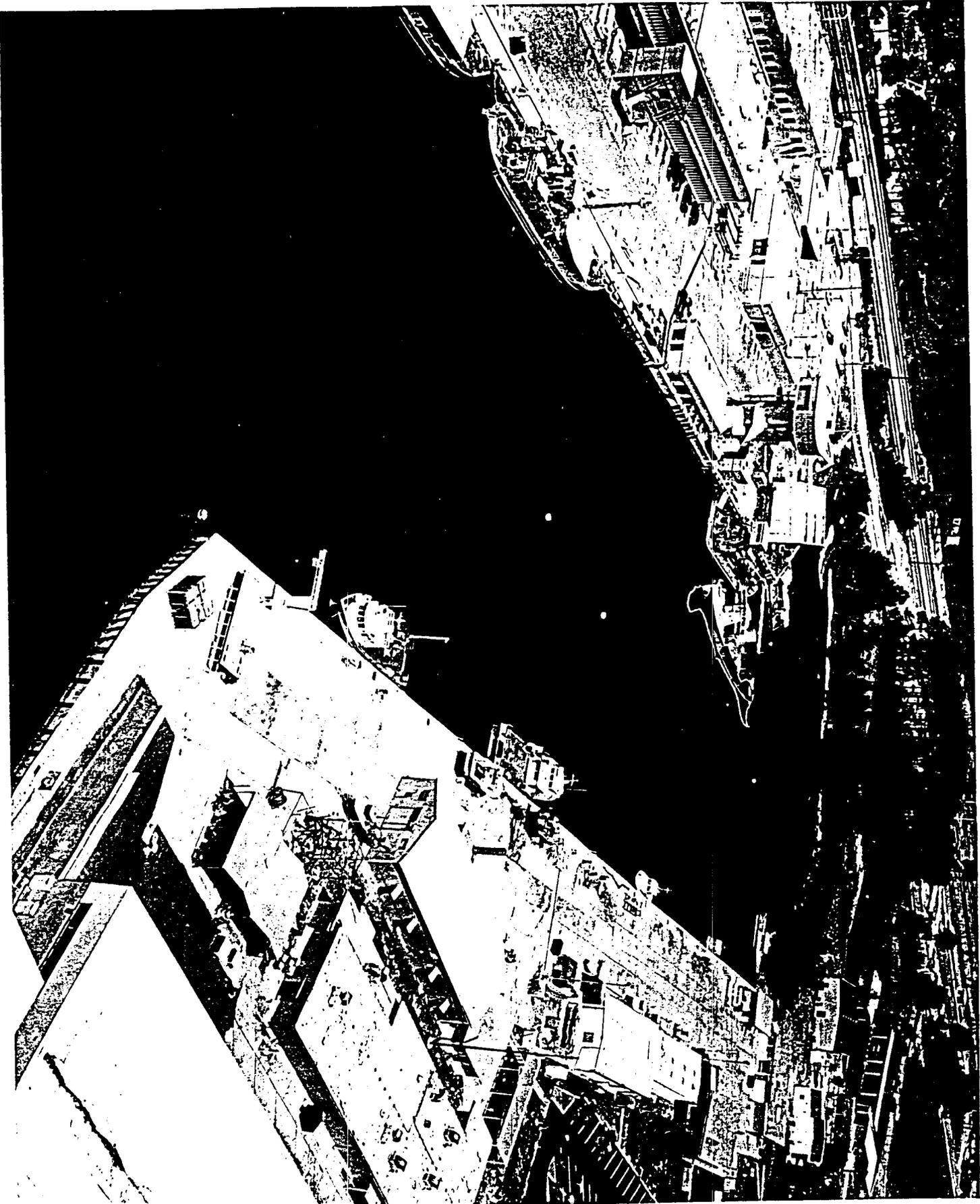
**TBD**

14. What is the approximate number of personnel needed to maintain the equipment?

**TBD**

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.

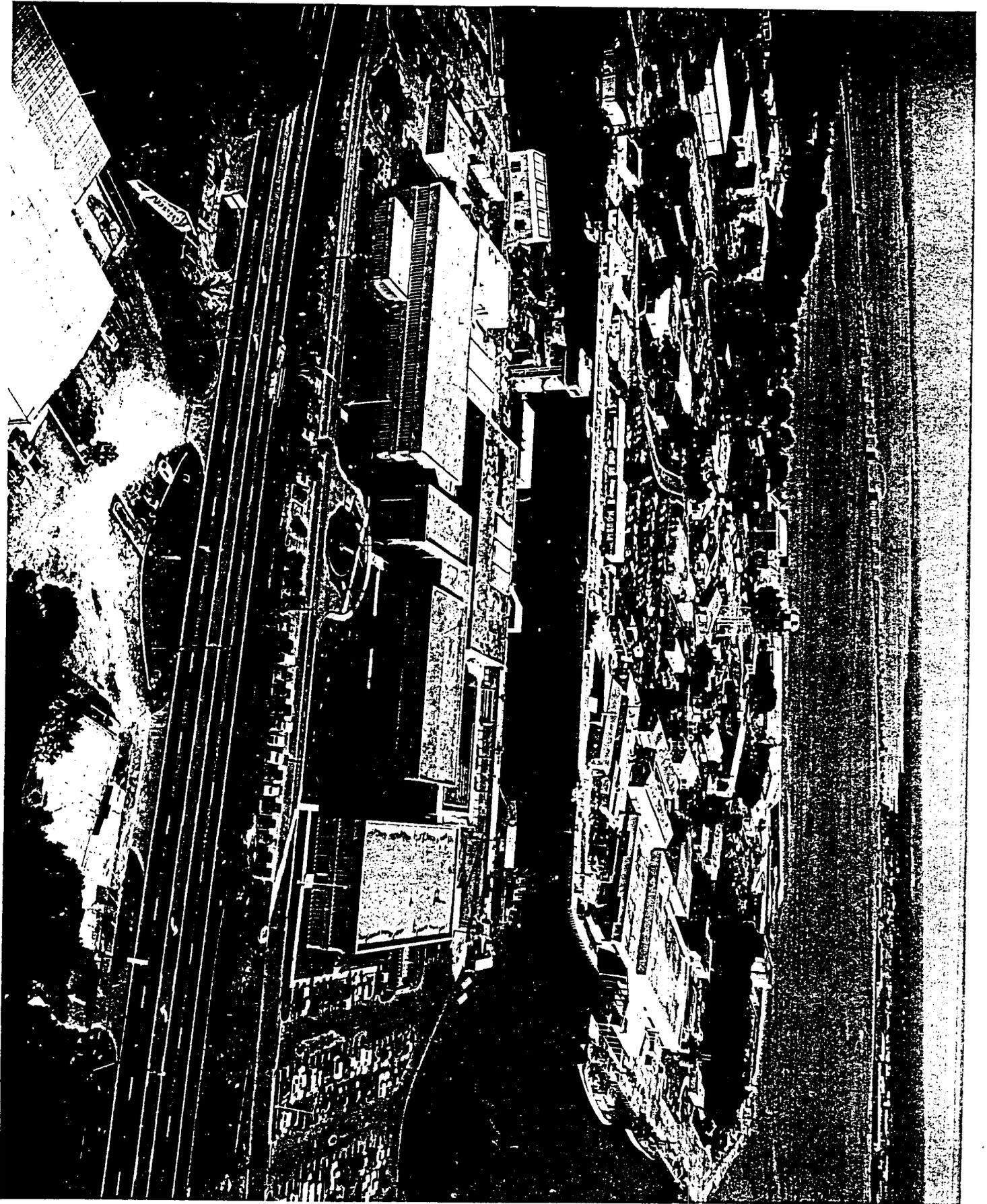
**The photo on the following page is an aerial view of the CSS docks.**



**TAB C**

**RANGE RESOURCES**

**RANGE CAPABILITY FORM**



**RANGE RESOURCES  
RANGE CAPABILITY FORM**

Technical Center Site	<b>Coastal Systems Station Dahlgren Division</b>
Range Nomenclature or Title	<b>Mine Warfare Test and Training Range</b>

1. List all the ranges that your activity maintains and operates. Provide the following information on each range:

a. A brief statement of what the range is used for.

**The Mine Warfare Test and Training Range supports the training, test and evaluation (T&E) of those systems and technologies utilized primarily in mine countermeasures (MCM), amphibious, and special warfare operations. Essentially this support consists of tracking/positioning and signature measurements including acoustic, magnetic, and pressure.**

b. Geographic location of the range.

**The range is located along the coast of the Gulf of Mexico at Panama City in northwest Florida.**

c. Distance from the range to the activity's headquarters facility (main site).

**Approximately 5 miles.**

d. Range size in square miles.

**There are two aspects of the size of the range. One consists of those near shore areas for which permits have been obtained that allow for the installation of mine fields, underwater cables and sensors, and a variety of other equipment of a temporary or permanent nature. The second aspect of the range is that area within which tracking/positioning support can be provided for coastal warfare training and T&E operations. The permitted areas consist of approximately 2.5 sq. mi. within the Gulf of**

**Mexico and approximately 1.7 sq. mi. within St. Andrew Bay at the CSS; the area over which tracking/positioning support can be provided extends throughout the Gulf of Mexico.**

e. Scheduling authority.

**Resides with CSS, Code 3310.**

f. Air space available/restrictions.

**Local airspace in the Panama City area is controlled by Panama City Regional Airport. Special use areas, such as that over the Gulf of Mexico, are controlled by Eglin AFB; permission must be obtained from Eglin prior to performing air operations over the Gulf.**

g. Maximum water depth available/restrictions.

**Approximately 10,000 ft. The only restriction to operations are those routinely applied by the Coast Guard.**

h. Instrumentation capability.

**Consists of Motorola Mini Range tracking/position; differential global positioning systems; data acquisition equipment and sensors for collecting magnetic, acoustic, and pressure signature data; and various data processing equipment.**

i. Accuracy of tracking.

**Approximately 3-5 meters.**

j. Data collection/replay capability.

**Replay capability exists for all real time data collection capability. The positioning/tracking and signature data collection capability is augmented by the capability to collect, analyze, and archive oceanographic parameters to aid in the evaluation of the systems and technologies being tested.**

k. What are the maximum hours per year that this range is available to support activities? Provide the actual hours that the range was up and capable of providing services. Do not count "down time" due to maintenance, reconfiguration, or administrative activities (i.e., Holiday shutdowns).

**The range is available to support various activities year round. Due to the redundant systems available, the range has experienced no periods of time when test and training support could not be provided.**

l. What were the actual hours this range was utilized per year for the last five years (FYs 1989-1993)?

**An average of 154 days per year.**

m. What were the actual hours that this range was utilized in FY1993?

**107 days for providing various range support functions.**

n. Who are the customers of the range?

**The primary range users consist of those activities engaged in MCM; Amphibious, Special Warfare; Sonar and Torpedo Defense; and Research and Technology programs.**

o. Of the actual hours utilized what percentage of utilization time was provided to which customers?

**MCM: 41%**

**Sonar & Torpedo Defense: 33%**

**Amphibious: 10%**

**Research and Technology: 9%**

**Special Warfare: 7%**

p. Provide a sketch, drawing or map of the range.

**Map of the range is at enclosure (1).**

2. Are any of your ranges part of the DoD Major Range and Test Facility Base (MRTFB)? (yes/no) If yes, which ones?

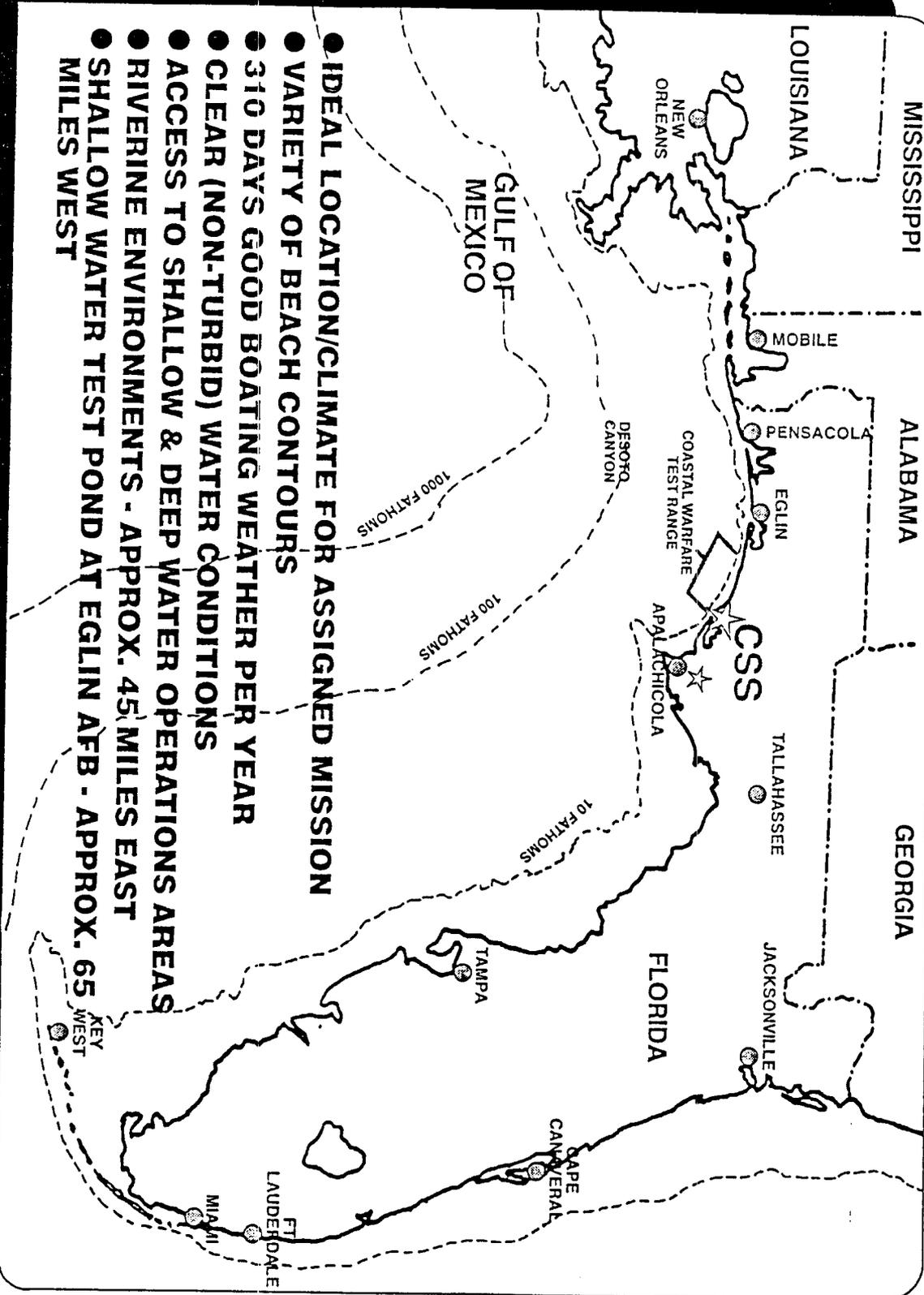
**No.**

3. Are there any limiting (current or future) environmental and/or encroachment characteristics that are associated with this range.

**There are no current or known future limiting environmental and/or encroachment characteristics associated with this range.**

**TAB C  
Page 3 of 14  
UIC: 61331**

# CSS GULF TEST RANGE



- IDEAL LOCATION/CLIMATE FOR ASSIGNED MISSION
- VARIETY OF BEACH CONTOURS
- 310 DAYS GOOD BOATING WEATHER PER YEAR
- CLEAR (NON-TURBID) WATER CONDITIONS
- ACCESS TO SHALLOW & DEEP WATER OPERATIONS AREAS
- RIVERINE ENVIRONMENTS - APPROX. 45 MILES EAST
- SHALLOW WATER TEST POND AT EGLIN AFB - APPROX. 65 MILES WEST

CONSTAL SYSTEMS STATION - PANAMA CITY, FLORIDA

**RANGE RESOURCES  
RANGE CAPABILITY FORM**

Technical Center Site	<b>Coastal Systems Station Dahlgren Division</b>
Range Nomenclature or Title	<b>Fort Monroe Detachment</b>

1. List all the ranges that your activity maintains and operates. Provide the following information on each range:

a. A brief statement of what the range is used for.

**Supports and conducts field RDT&E tests of bottom mines, mine target detecting devices, SEAL weapons, and other systems and subsystems. Operates and maintains underwater ranges, optical and laser tracking systems, work boats, technical shops, assembly areas, and other equipment required to prepare for and conduct assigned test programs.**

b. Geographic location of the range.

**Fort Monroe, Virginia; ranges in the Hampton Roads area and entrance to the Chesapeake Bay.**

c. Distance from the range to the activity's headquarters facility (main site).

**145 miles**

d. Range size in square miles.

**Fort Monroe Range (2.2)**

**Fort Story Range (2.4)**

e. Scheduling authority.

**Facility Manager (804) 727-4207**

**TAB C  
Page 5 of 14  
UIC: 60921**

f. Air space available/restrictions.

**No air operations allowed at the Fort Monroe range; however, capable to conduct north-south runs at the Fort Story range.**

g. Maximum water depth available/restrictions.

**105 feet**

h. Instrumentation capability.

**Unlimited instrumentation available upon request.**

i. Accuracy of tracking.

**2-3 feet**

j. Data collection/replay capability.

**Unlimited real time collection of underwater sensor data.**

k. What are the maximum hours per year that this range is available to support activities? Provide the actual hours that the range was up and capable of providing services. Do not count "down time" due to maintenance, reconfiguration, or administrative activities (i.e., Holiday shutdowns).

**1800**

l. What were the actual hours this range was utilized per year for the last five years (FYs 1989-1993)?

<b>FY 89:</b>	<b>825 hrs</b>
<b>FY 90:</b>	<b>1150 hrs</b>
<b>FY 91:</b>	<b>1630 hrs</b>
<b>FY 92:</b>	<b>1325 hrs</b>
<b>FY 93:</b>	<b>1265 hrs</b>

m. What were the actual hours that this range was utilized in FY1993?

**1265 hrs**

**TAB C**  
**Page 6 of 14**  
**UIC: 60921**

n. Who are the customers of the range?

**Naval Surface Warfare Center Dahlgren Division (NSWCDD)  
Commander, Operational Test and Evaluation Force (COMOPTEVFOR)  
Naval Sea Systems Command (NAVSEA)  
Naval Mine Warfare Engineering Activity (NMWEA)  
Coastal Systems Station (CSS)**

o. Of the actual hours utilized what percentage of utilization time was provided to which customers?

**NSWCDD: 75%  
COMOPTEVFOR: 3%  
NAVSEA: 2%  
NMWEA: 15%  
CSS: 5%**

p. Provide a sketch, drawing or map of the range.

**Attached.**

2. Are any of your ranges part of the DoD Major Range and Test Facility Base (MRTFB)? (yes/no) If yes, which ones?

**No.**

3. Are there any limiting (current or future) environmental and/or encroachment characteristics that are associated with this range.

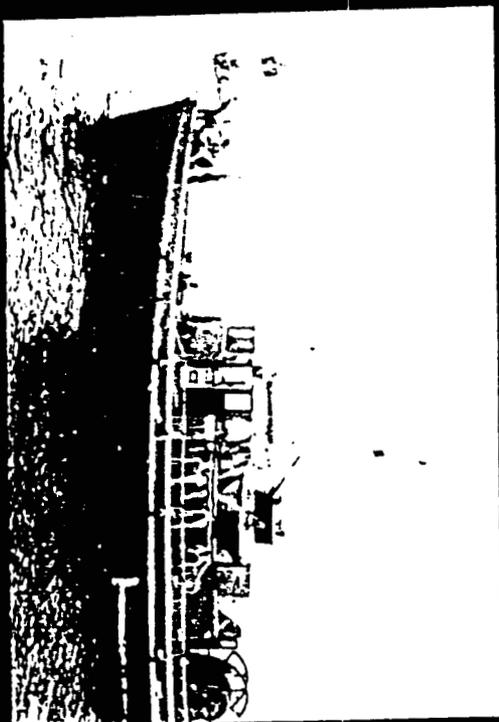
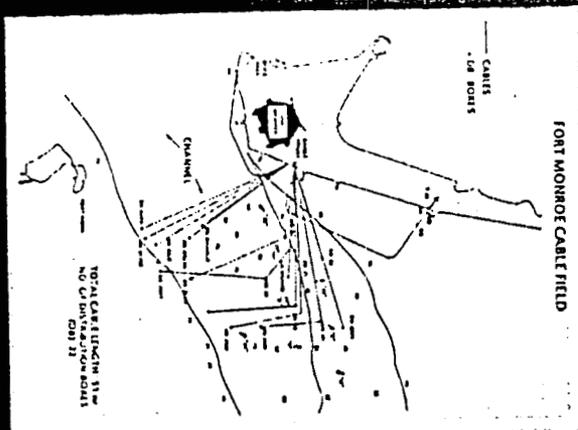
**Limiting environmental and/or encroachment characteristics. No explosive operations allowed; air drops operations only at the Fort Story Range.**

**TAB C  
Page 7 of 14  
UIC: 60921**

# FORT MONROE



- REAL HARBOR CONDITIONS
- NARROW SHIPPING CHANNEL
- HEAVY COMMERCIAL AND MILITARY TRAFFIC
- EXTENSIVE UNDERWATER RANGE
- CAPABILITY TO PLANT/RECOVER LARGE OBJECTS IN CHANNEL



COASTAL SYSTEMS STATION - PANAMA CITY FLORIDA

**RANGE RESOURCES  
RANGE CAPABILITY FORM**

Technical Center Site	Coastal Systems Station Dahlgren Division
Range Nomenclature or Title	Fort Lauderdale Detachment

1. List all the ranges that your activity maintains and operates. Provide the following information on each range:

a. A brief statement of what the range is used for.

**The Fort Lauderdale facility has traditionally existed to support the development of mines and mine countermeasures. More recently the mission has expanded to include the shallow water measurement of acoustic and non-acoustic signatures of surface ships, submarines and other water dependent craft.**

b. Geographic location of the range.

**Fort Lauderdale, Florida (at the intercoastal across from Port Everglades and extends east).**

c. Distance from the range to the activity's headquarters facility (main site).

**The range is contiguous with the land whereby the facility is located.**

d. Range size in square miles.

**Approximately 380.8.**

e. Scheduling authority.

**Scheduling authority resides locally, but is undertaken in consort with Submarine Forces Atlantic (SUBLANT) and Commander, Submarine Forces Atlantic (COMSUBLANT).**

**TAB C  
Page 9 of 14  
UIC: 62701**

f. Air space available/restrictions.

**The Naval Surface Warfare Center operates the Controlled Firing Area (CFA) "Waterbug" Fort Lauderdale Florida under an agreement with the Federal Aviation Administration as follows:**

**Boundaries:** Offshore, Fort Lauderdale, FL  
That area encompassed by a line joining the following coordinates:  
Lat. 26 deg 05' 35"N, Long. 80 deg 03' 25"W to  
Lat. 26 deg 00' 00"N, Long. 80 deg 03' 25"W to  
Lat. 26 deg 00' 00"N, Long. 80 deg 06' 00"W to  
Lat. 26 deg 05' 35"N, Long. 80 deg 03' 25"W,  
thence to the point of beginning.

**Altitudes:** Surface to 2000 ft MSL.

**Time of Use:** By NOTAM between 0700 and 1100 local time, Monday through Friday.

**Weather:** The ceiling shall be at least 1000 feet above the maximum trajectory. Visibility shall be sufficient to maintain visual surveillance of the entire area and for at least five (5) miles beyond in all directions. Radar surveillance should be used over the entire area and may be substituted for visual surveillance where visual surveillance cannot be maintained. Under no circumstances shall a projectile enter any cloud formation.

g. Maximum water depth available/restrictions.

**The in-water range extends from the beach to depth of 1850 feet. The in-water range falls within the PEV OPAREA and as such operations are restricted in accordance with CINCLANTFLTINST 3120.6.**

h. Instrumentation capability.

**TAB C**  
**Page 10 of 14**  
**UIC: 62701**

**Underwater tracking instrumentation includes two and three dimensional synchronous underwater tracking arrays. Surface tracking instrumentation includes microwave, laser and optical tracking. Limited tracking of aircraft is also available.**

**The range maintains and operates modern atmospheric and oceanographic environmental instrumentation including but not limited to:**

**One bottom mounted 300 Kh Acoustic Doppler Current Profiler (ADCP)  
One Ship mounted 150 Kh ADCP  
Three Fast and accurate CTD's  
Two Shore Based and one Shipboard anemometer and rain rate sensors  
Bottom mounted arrays of electric field and magnetic field sensors  
Bottom mounted arrays of pressure sensors  
Recording, mass storage, and data processing capabilities**

**Support instrumentation includes Optical Time Domain Reflectometers (OTDR's, precision voltage and signal measurement and recording devices, and instrumentation for the measurement of corrosion effects such as an electron microscope and stress strain measurement devices.**

i. Accuracy of tracking.

**Underwater tracking accuracies are nominally one meter. The range utilizes the most modern three dimensional underwater tracking available today. Developed specifically for NSWC Fort Lauderdale by ARL Texas under contract to NAVSEA the high accuracy short baseline, multiple frequency tracking arrays achieve submeter tracking accuracy's relative to an array when near real time sound velocity profiles are used to calculate the ray traces. Surface tracking accuracy is one half meter.**

j. Data collection/replay capability.

**Data collection of bottom mounted instruments and arrays is via optical or electrical coax cable. Three optical cables form trunk lines to relay data at the highest data rates possible. Data collection instrumentation varies for Pentium based Pc's standard rack mounted mine track tape recorders. Data recorded and displayed in real time is integrated with range tracking and environmental measurements for range users. High-level computer languages and interactive computing environments provide range users with a new level of ease of data analysis and graphic data exploration.**

**TAB C  
Page 11 of 14  
UIC: 62701**

k. What are the maximum hours per year that this range is available to support activities? Provide the actual hours that the range was up and capable of providing services. Do not count "down time" due to maintenance, reconfiguration, or administrative activities (i.e., Holiday shutdowns).

**The facility is typically open and operating 200 workdays per year; however, the range is available 24 hours a day (even during holidays), based on project need.**

l. What were the actual hours this range was utilized per year for the last five years (FYs 1989-1993)?

<b>FY 89:</b>	<b>930 hrs.</b>
<b>FY 90:</b>	<b>890 hrs.</b>
<b>FY 91:</b>	<b>850 hrs</b>
<b>FY 92:</b>	<b>900 hrs</b>
<b>FY 93:</b>	<b>820 hrs</b>

m. What were the actual hours that this range was utilized in FY1993?

**820 hours**

**NOTE: Our Range Vessel SEACON was dry docked for a major overhaul from August 1993 through October 1993, therefore limiting the range utilization hours significantly.**

n. Who are the customers of the range?

**APPLIED MEASUREMENTS LABORATORY  
NAVAL SURFACE WARFARE CENTER  
COMSUBLANT  
COMSURFLANT  
COMNAVSEAYSCOM  
COMNAVAIRSYSCOM  
COMHELTACWING-ONE  
NAVAL FACILITIES ENGINEERING COMMAND  
NAVAL OCEANOGRAPHIC OFFICE  
RAYTHEON SUBMARINE SIGNALS DIVISION**

**TAB C  
Page 12 of 14  
UIC: 62701**

o. Of the actual hours utilized what percentage of utilization time was provided to which customers?

<u>CUSTOMER</u>	<u>PERCENTAGE</u>
COMHELTA/CWINGONE (AN/ALQ141)	10%
NAVAL SURFACE WARFARE CENTER (WHITE OAK & CARDEROCK DET)	48%
PM0407 (QS & CAPTOR)	20%
RAYTHEON CORPORATION	22%

p. Provide a sketch, drawing or map of the range.

**See enclosure (1).**

2. Are any of your ranges part of the DoD Major Range and Test Facility Base (MRTFB)?  
(yes/no) If yes, which ones?

**No.**

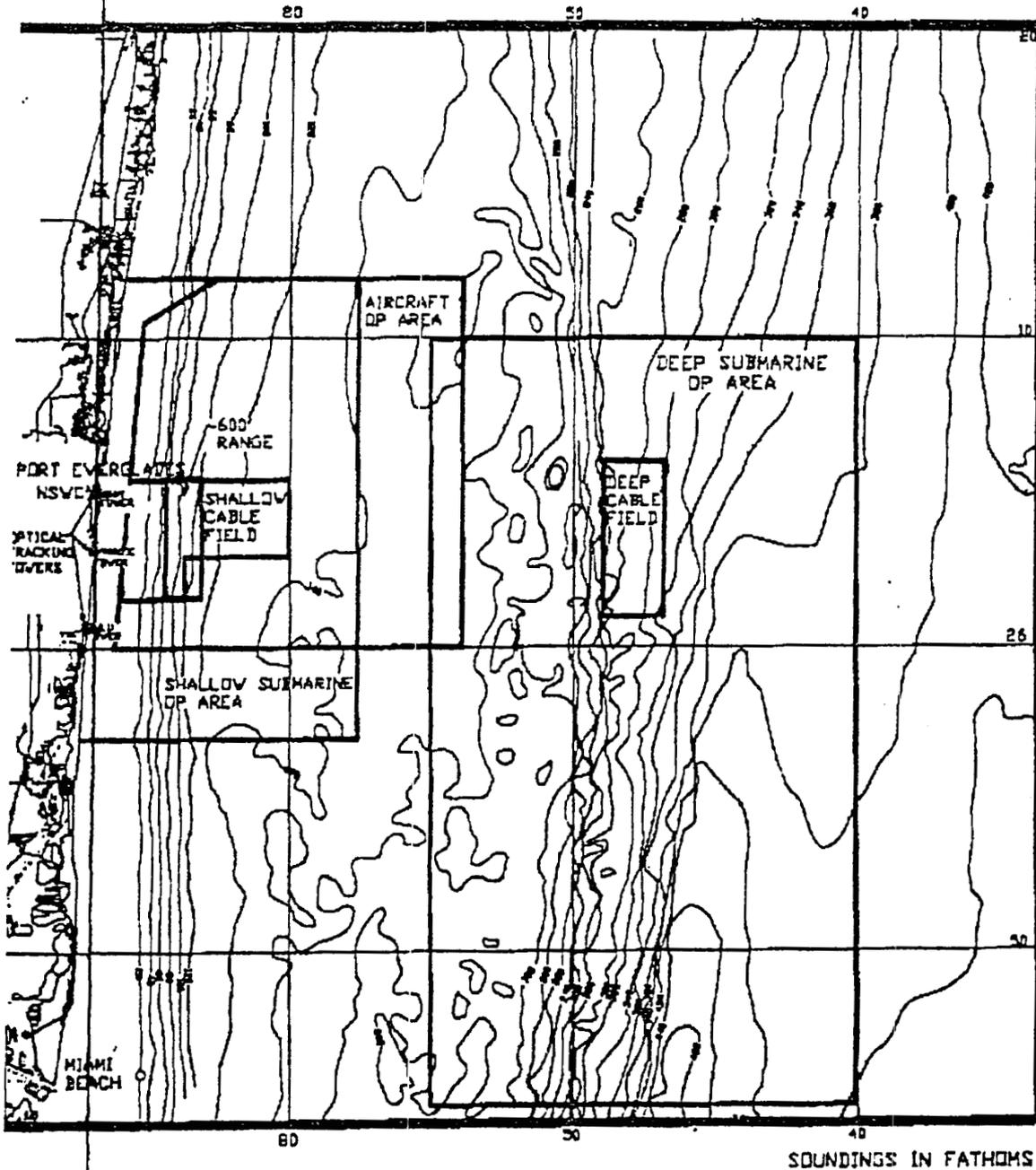
3. Are there any limiting (current or future) environmental and/or encroachment characteristics that are associated with this range.

**Yes, all the limiting factors associated with working in the living marine environment. The use of live explosives is prohibited.**

**TAB C**  
**Page 13 of 14**  
**UIC: 62701**

# NSWC FORT LAUDERDALE TEST RANGES

SCALE: 1" = 5 NM



Jetty site located at south entrance to Port Everglades  
Site consists of 8 1/2 acres with boat dock facilities.  
12 acres are also available at Ft. Lauderdale Airport site.

**APPENDIX A**

## **I. FUNCTIONAL SUPPORT AREAS**

### **1. PLATFORMS**

- 1.1 Undersea
- 1.2 Aircraft
- 1.3 Surface Ship
- 1.4 Space Satellites
- 1.5 Ground Vehicles

### **2. WEAPONS SYSTEMS**

- 2.1 Gun Systems
- 2.2 Guided Missiles
- 2.3 Free Fall Weapons and Rockets
- 2.4 Torpedoes
- 2.5 Mines
- 2.6 Directed Energy Systems
- 2.7 Explosives
- 2.8 Launchers
- 2.9 Fire Control
- 2.10 Weapons Data Links
- 2.11 Weapons Fuzing
- 2.12 Weapons Propulsion
- 2.13 Other Ordnance
- 2.14 Explosive Ordnance Disposal

### **3. COMBAT SYSTEM INTEGRATION**

- 3.1 Subsurface
- 3.2 Air
- 3.3 Surface
- 3.4 Multiplatform

### **4. SPECIAL OPERATIONS SUPPORT**

- 4.1 Landing Force Equipment and Systems
- 4.2 Coastal/Special Warfare Support

### **5. SENSORS & SURVEILLANCE SYSTEMS**

- 5.1 Sonar Systems
- 5.2 Radar Systems
- 5.3 Special Sensors
- 5.4 Space Sensor/Surveillance Systems
- 5.5 Ocean Surveillance

### **6. NAVIGATION**

- 6.1 Submarine Navigation Systems
- 6.2 Aircraft Navigation Systems
- 6.3 Surface Ship Navigation Systems
- 6.4 Weapons Navigation Systems
- 6.5 Satellite Navigation Systems

- 7. COMMAND, CONTROL, COMMUNICATIONS AND INTELLIGENCE (C<sup>3</sup>I)
  - 7.1 Submarine
  - 7.2 Airborne
  - 7.3 Shipboard
  - 7.4 Land-Based
  - 7.5 Space Communications Systems
  - 7.6 Non-Tactical Data Systems
  - 7.7 Air Traffic Control Systems
  - 7.8 Intelligence Information Systems
  
- 8. DEFENSE SYSTEMS
  - 8.1 Ballistic Missile Defense
  - 8.2 Countermeasures (CM)
  - 8.3 Electronic Warfare (EW) Systems
  
- 9. STRATEGIC PROGRAMS
  - 9.1 Navy Strategic Systems
  - 9.2 Nuclear Weapons and Effects
  
- 10. GENERAL MISSION SUPPORT
  - 10.1 Personnel and Training
    - 10.1.1 Submarine-Related Training Systems
    - 10.1.2 Aircraft-Related Training Systems
    - 10.1.3 Surface Ship-Related Training Systems
    - 10.1.4 Weapons-Related Training Systems
    - 10.1.5 Human Resources Research and Development
  - 10.2 Logistics Planning and Implementation
  - 10.3 Facilities Engineering
  - 10.4 Diving, Salvage and Ocean Engineering
  - 10.5 Environmental Description, Prediction, and Effects
  - 10.6 Crew Equipment and Life Support
    - 10.6.1 Submarine
    - 10.6.2 Aircraft
    - 10.6.3 Surface Ship
    - 10.6.4 Medical Research and Combat Casualty Care
    - 10.6.5 Clothing and Textiles
  - 10.7 Major Range Development and Operation
  - 10.8 Other Subsidiary Systems or Components
  - 10.9 Activity Mission and Function Support
  
- 11. GENERIC TECHNOLOGY BASE. [Includes basic research and exploratory development (Budget Categories 6.1 & 6.2) projects that do not fit under the more warfare-focused functional support areas.]
  - 11.1 Computers.
  - 11.2 Software.
  - 11.3 Communications Networking.
  - 11.4 Electronic Devices.
  - 11.5 Materials and Processes.
  - 11.6 Energy Storage.
  - 11.7 Propulsion and Energy Conversion.

- 11.8 Design Automation.
- 11.9 Human-System Interfaces.
- 11.10 Other Technology Base Programs.

## **II. LIFE-CYCLE WORK AREAS**

### **RDT&E**

- 1. BASIC RESEARCH
- 2. EXPLORATORY DEVELOPMENT
- 3. ADVANCED DEVELOPMENT
- 4. ENGINEERING AND MANUFACTURING DEVELOPMENT
- 5. RDT&E MANAGEMENT SUPPORT
- 6. OPERATIONAL SYSTEMS DEVELOPMENT

### **ACQUISITION**

- 7. PRODUCTION
- 8. ACCEPTANCE TESTING
- 9. MODERNIZATION
- 10. PROGRAM SUPPORT

### **LIFE -TIME SUPPORT**

- 11. MAINTENANCE
- 12. REPAIR
- 13. TESTING
- 14. IN-SERVICE ENGINEERING
- 15. PROGRAM SUPPORT
- 16. RETIREMENT

### **GENERAL**

- 17. TRAINING/OPERATIONAL SUPPORT
- 18. SIMULATION, MODELING AND ANALYSIS

**APPENDIX B**

## I. FUNCTIONAL SUPPORT AREA DEFINITIONS

**1. PLATFORMS.** Those self-propelled, boosted or towed conveyances used for the strategic and tactical deployment of forces, weapons, materials and supplies in support of naval warfare. Projects within this area are limited to those in which the principal objective is to provide technological wherewithal to develop Navy aerospace craft, ships, submarines, boats, and amphibians.

1.1 *Undersea.* Self-propelled, boosted, or towed conveyances for transporting a burden under the sea. The vehicle package includes the design, structures, materials, non-nuclear propulsion, power and auxiliary equipment, transmissions and propulsors, fuels and lubricants, energy conservation and pollution abatement equipment, control systems, and silencing inherent in its construction and operation, but excluding mission oriented systems. Included are submarines and other submersibles including their application as unmanned autonomous vehicles (UAV) and targets.

1.2 *Aircraft.* Self-propelled, boosted, or towed conveyances for transporting a burden through the air. The vehicle package includes the design, structures, materials, non-nuclear propulsion, power and auxiliary equipment, transmissions and propulsors, fuels and control systems and silencing inherent in its construction and operation, but excluding mission oriented systems. Included are all air vehicles including their application as UAVs and targets.

1.3 *Surface Ship.* Self-propelled, boosted, or towed conveyances for transporting a burden on land or sea. The vehicle package includes the design, structures, materials, non-nuclear propulsion, power and auxiliary equipment, transmissions and propulsors, fuels and lubricants, energy conservation and pollution abatement equipment, control systems, and silencing inherent in its construction and operation, but excluding mission oriented systems. Included are ships and craft including their application as UAVs and targets.

1.4 *Space Satellites.* A device or spacecraft in orbit. The vehicle package includes the design, structures, materials, non-nuclear propulsion, power and auxiliary equipment, and control systems, inherent in its construction and operation.

1.5 *Ground Vehicles.* Self-propelled, boosted, or towed conveyances for transporting a burden on land. The vehicle package includes the design, structures, materials, non-nuclear propulsion, power and auxiliary equipment, transmissions and propulsors, fuels and lubricants, energy conservation and pollution abatement equipment, control systems, and silencing inherent in its construction and operation, but excluding mission oriented systems.

**2. WEAPONS SYSTEMS.** A system that provides the capability to defeat naval and military targets by destructive means. Included are counter-countermeasures and other design features to reduce the susceptibility of the weapon to counter actions, but excluded are those projects in which the principal objective is to counter a weapons system or those efforts to make a system (other than weapons) less vulnerable to enemy weapons.

2.1 *Gun Systems.* Ordnance which fires projectiles; includes related ammunition (guided projectiles are included in "guided missiles". Included are gun systems aboard aircraft and ships, and gun systems used by personnel.

2.2 *Guided Missiles.* Weapons, either self-propelled, (i.e., reaction launched) or impulse driven (i.e., gun/tube impulse launched) capable of homing on, or following a beam or command signals through the air to a target (includes guided projectiles). Included are missiles that are launched by submarine, aircraft, and ship.

2.3 *Free Fall Weapons and Rockets.* Free fall weapons are those air-delivered weapons, including components and subsystems, which follow a ballistic trajectory after gravity launch without any guidance other than that from the initial orientation and velocity of the launching aircraft. A rocket is a self-propelled airborne vehicle whose trajectory or course, while in flight, cannot be controlled.

2.4 *Torpedoes.* Self-propelled, guided or unguided underwater weapons. Included are torpedoes launched by submarine, aircraft, and ship.

2.5 *Mines.* Self-activating standoff or contact explosive devices that are designed to destroy or damage ground vehicles, boats, ships, or aircraft, or designed to wound, kill, or otherwise incapacitate personnel.

2.6 *Directed Energy Systems.* Devices and techniques for generating and focusing high-intensity beams of electromagnetic energy or charged particles upon targets with lethal effects.

2.7 *Explosives.* Metastable compounds which can rapidly release large quantities of energy mostly in the form of hot, high-pressure gases. Explosives are used in naval munitions such as mines, torpedoes, missiles, etc., and also in other Navy products such as aircraft escape systems, fuse trains, etc.

2.8 *Launchers.* That group of devices, components, or subsystems needed to support, hold, and launch expendable weapons, countermeasure devices, or other stores; the control systems for managing these systems and the stores they carry.

2.9 *Fire Control.* Those platform-based systems which provide data for and/or control the launch platform/weapon/weapon-target interaction in all phases required by a weapons system (e.g., acquisition, track, commit-to-fire-pre-launch, post-launch, mid-course, terminal intercept, and assessment). Included are systems that are based undersea, aboard aircraft, shipboard, and on land.

2.10 *Weapons Data Links.* Efforts include the data links that are part of the weapon's command, control and communications systems.

2.11 *Weapons Fuzing.* Efforts leading to the design of systems to sense a target or the result of other prescribed conditions such as time, barometric pressure, command, etc., and initiate a train of fire. Safing and arming are primary functions performed by a fuse to preclude initiation of the ammunition before the desired position or time.

2.12 *Weapons Propulsion.* Included are propellants, subsystems and systems that comprise the means by which a weapons system moves through the air or sea.

2.13 *Other Ordnance.* Includes efforts that do not fit in the above categories (e.g., pyrotechnics, gas generators, CAD/PAD/AEPS).

2.14 *Explosive Ordnance Disposal.* Efforts relating to the technical support of explosive ordnance disposal technology and training.

**3. COMBAT SYSTEM INTEGRATION.** That effort required to introduce a new system into the operating forces. It involves the integration and evaluation of a new hardware or software subsystem installed in a Navy platform. It includes the mating, installation, and operational support of the resulting higher level system to ensure optimum operating performance.

3.1 *Subsurface*. The integration and evaluation of the various hardware and software subsystems that make up a higher level system, and the mating, installation, and operational support of this higher level system, including its operational software and training systems into undersea platforms.

3.2 *Air*. The integration and evaluation of the various hardware and software subsystems that make up a higher level system, and the mating, installation, and operational support of this higher level system, including its operational software and training systems into air platforms.

3.3 *Surface*. The integration and evaluation of the various hardware and software subsystems that make up a higher level system, and the mating, installation, and operational support of this higher level system, including its operational software and training systems into surface platforms.

3.4 *Multiplatform*. The integration of multiplatform hardware and software subsystems to make up a higher level system, including the mating, installation, and operational support (including training systems) of this higher level system.

**4. SPECIAL OPERATIONS SUPPORT.** Those efforts which are in support of amphibious landing, Marine Corps operations, special warfare and other unique operations. It includes weapons, countermeasures, surveillance and a command support which are developed specifically for the projection of forces ashore and that do not have an application by the Navy general forces in the role of sea control.

4.1 *Landing Force Equipment and Systems*. Involved is that RDT&E effort which is not functionally a part of the amphibious platform. Specifically, this includes reconnaissance of amphibious objective areas, environmental support of amphibious operations, amphibious logistics and the integration of the amphibious and Marine Corps systems required to land amphibious forces on a hostile shore and establish a beachhead. (Contingency facilities in support of forces ashore are included in "facilities".)

4.2 *Coastal/Special Warfare Support*. Techniques and systems required to defend coastal, inshore and harbor facilities as well as those needed to conduct operations such as reconnaissance, deception, coastal or offshore interdiction and assault, counterinsurgency, intelligence gathering, remote sensor operation and waterborne intrusion detection. Special warfare systems include systems, techniques, and concepts utilized by specifically cross-trained personnel in unconventional warfare and coastal/riverine operations.

**5. SENSORS & SURVEILLANCE SYSTEMS.** Those systems used to systematically observe air, space, surface and subsurface areas to detect, classify, localize and identify real or potential military targets. Excluded are those projects in which the principal objective is navigation, weapon fire control or broadbased investigation of the properties of the media or the propagation of energy therein.

5.1 *Sonar Systems*. Those sonar systems and devices used to conduct search, reconnaissance, and surveillance operations to detect, classify, locate, and/or track targets. Included are those systems and devices that are mobile aboard undersea, air, and surface platforms, and those that are fixed.

5.2 *Radar Systems*. Those radar systems and devices used to conduct search, reconnaissance, or surveillance operations to detect, classify, locate, and/or track targets. Included are those systems and devices that are mobile aboard undersea, air, and surface platforms, and those that are fixed.

5.3 *Special Sensors*. Those systems and devices which utilize unique phenomena or methods or combinations of methods to conduct search, reconnaissance, or surveillance operations to detect, classify, locate, and/or track targets. Included are active sensors, passive sensors (e.g., thermal imagers, low light level TV, and infrared search and track systems), and the associated signal and image processing.

## Appendix B

5.4 *Space Sensor/Surveillance Systems.* Those devices and systems in Earth orbit that are used to conduct search, reconnaissance, or surveillance operations to detect, classify, locate and/or track targets.

5.5 *Ocean Surveillance.* Systems and equipment for systematic observation of ocean areas for identification and localization of ships, submarines, and aircraft from fixed and mobile platforms including operational software development, and integration of multi-sensor, coordinated detection data and its display at appropriate sites.

**6. NAVIGATION.** Those systems which utilize electromagnetic, acoustic, or inertial means to guide or navigate surface, subsurface, or aerospace platforms. Included are those systems deployed aboard submarines, aircraft, surface ships and satellites, as well as those used in weapons systems.

6.1 *Submarine Navigation Systems.* Navigation systems deployed aboard submarines, or other undersea vehicles.

6.2 *Aircraft Navigation Systems.* Navigation systems deployed aboard aircraft.

6.3 *Surface Ship Navigation Systems.* Navigation systems deployed aboard surface ships.

6.4 *Weapons Navigation Systems.* Navigation systems installed within weapon systems, such as guided missiles.

6.5 *Satellite Navigation Systems.* Navigation systems deployed aboard satellites.

**7. COMMAND, CONTROL, COMMUNICATIONS AND INTELLIGENCE (C<sup>3</sup>I).** The acquisition, processing and dissemination of information required to plan, direct, and control operations. Included are those projects in command and control, communications and intelligence. Excluded are surveillance systems, and guidance and control of vehicles and weapons. These C<sup>3</sup> systems may be internal or external to submarine, airborne, surface, and land-based platforms.

7.1 *Submarine.* C3 systems deployed aboard submarines, or other undersea vehicles.

7.2 *Airborne.* C3 systems deployed aboard aircraft.

7.3 *Shipboard.* C3 systems deployed aboard surface ships.

7.4 *Land-Based.* C3 systems deployed at shore facilities.

7.5 *Space Communications.* Communications systems in Earth orbit used to convey information.

7.6 *Non-Tactical Data Systems.* Data systems utilized aboard the Navy's operating forces and at shore sites that support ship, submarine and aircraft maintenance, configuration and asset management, supply, inventory, finance, medical, dental, manpower management, administration, food services (ship's mess), and resale operations (ship's stores).

7.7 *Air Traffic Control Systems.* Systems used to promote the safe, orderly, and expeditious movement of air traffic.

7.8 *Intelligence Information Systems.* The systems necessary to conduct the naval warfare task of

intelligence. This task involves the assessment and management of information obtained via surveillance, reconnaissance, and other means to produce timely indications and warning, location, identification, intentions, technical capabilities, and tactics of potential enemies and other countries of interest.

**8. DEFENSE SYSTEMS.** Those systems that are principally designed to defeat a particular weapon system; those systems that are designed to reduce the effectiveness of an enemy's surveillance, communications, navigation and command and control; as well as those efforts directed toward gathering information on the emissions of enemy systems. It does not include those projects in which the principal objective is to incorporate design features in vehicles, surveillance, communication, navigation and other support systems which reduce their vulnerability to enemy action. It also does not include chemical/biological defense for personnel.

8.1 *Ballistic Missile Defense.* Systems designed to protect civilian population centers, military forces, and territory from ballistic missile attack.

8.2 *Countermeasures (CM).* Those systems that are principally designed to defeat a particular weapon system; reduce the effectiveness of an enemy's surveillance, communications, navigation and command and control; as well as gather information on the emissions of enemy systems. Included are those projects to develop systems deployed aboard submarine, aircraft, and surface ship, and those for countering enemy mine warfare through the destruction or neutralization of minefields.

8.3 *Electronic Warfare (EW) Systems.* Those systems, techniques, and devices utilized to determine, exploit, reduce, or prevent hostile use of the electromagnetic spectrum. Included are those projects to develop systems deployed aboard submarine, aircraft, and surface ship, as well as those to develop EW simulators.

**9. STRATEGIC PROGRAMS.** Programs conducted to support the deployment and use of the Navy's strategic deterrence force, as well as those programs conducted on nuclear weapons and effects.

9.1 *Navy Strategic Systems.* Those ships and weapon systems, subsystems, devices, techniques, trainers and facilities required specifically for the deployment and use of the Navy's strategic deterrence force.

9.2 *Nuclear Weapons and Effects.* Nuclear weapons effects and countermeasures, including thermal and nuclear radiation effects and the hardening of components and of weapons systems both nuclear and non-nuclear.

**10. GENERAL MISSION SUPPORT.** Those major areas of support required by Navy general forces that are not included under platforms, weapons systems, combat system integration, special operations support, sensors and surveillance systems, navigation, C<sup>3</sup>I, defense systems, strategic programs, and technology base programs.

10.1 *Personnel and Training.* Human resources research and development for the areas of manpower, personnel, education, and training and its support and service functions for human factors effort in system design, development and acquisition. Included are those systems related to submarine, aircraft, surface ship and weapons training, as well as human resources research.

10.1.1 Submarine-Related Training Systems

10.1.2 Aircraft-Related Training Systems

10.1.3 Surface Ship-Related Training Systems

10.1.4 Weapons-Related Training Systems

10.1.5 Human Resources Research and Development

10.2 *Logistics Planning and Implementation.* Projects for those aspects of military operations which deal with the movement, maintenance, supply, and support of Naval forces afloat and ashore, including underway replenishment, warehousing and mobile logistics maintenance and repair activities; material acquisition, control, handling, distribution and disposal processes; and logistics planning, control, and information processing functions.

10.3 *Facilities Engineering.* Products for (a) ocean facilities including the siting, design, construction/implant, and maintenance of facilities attached to the sea floor such as cable structures, pipelines, communications/power cables and Fleet moorings; (b) contingency facilities and equipment to support Navy and Marine Corps forces ashore in amphibious objective areas and at advanced naval bases; (c) permanent shore facilities such as buildings, piers, drydocks, airfields, POL and weapons storage, and utilities; (d) energy systems ashore including conservation, synthetic fuels, energy self-sufficiency; and (e) environmental protection systems ashore such as industrial wastewater treatment plants, air and noise pollution control devices, and solid waste management systems.

10.4 *Diving, Salvage and Ocean Engineering.* Those support systems and equipment that are required by the Navy in the performance of ocean bottom search, diving, rescue, recovery, salvage operations, and siting, design, construction/implantment, inspection, maintenance and recovery of underwater facilities and associated systems.

10.5 *Environmental Description, Prediction, and Effects.* The study, modeling, and simulation of atmospheric, oceanic, terrestrial, and space environmental effects, both natural and man-made, including the interaction of a weapon system with its operating medium and man-produced phenomena such as obscurants found on the battlefield.

10.6 *Crew Equipment and Life Support.* Techniques, equipment and devices to provide protection for and support of Navy operating personnel, including chemical/biological defense. Included are systems aboard submarines, aircraft, and surface ships, as well as medical research and combat casualty care, and clothing and textiles.

10.6.1 Submarine

10.6.2 Aircraft

10.6.3 Surface Ship

10.6.4 Medical Research and Combat Casualty Care

10.6.5 Clothing and Textiles

10.7 *Major Range Development and Operation.* The design, equipping, and operation of ranges offering diverse and accurate measurement and reconstruction capabilities to establish performance profile data on newly designed, as well as existing, naval vehicles and systems operating in a realistic environment.

10.8 *Other Subsidiary Systems or Components.* Subsidiary systems or components that do not fit within the above product areas (e.g., batteries).

10.9 *Activity Mission and Function Support.* Efforts that clearly support the Activity's responsibilities but which cannot be uniquely assigned to a specific functional area.

**11. GENERIC TECHNOLOGY BASE.** Includes basic research and exploratory development (Budget Categories 6.1 & 6.2) projects that do not fit under the more warfare-focused functional support areas. These areas include computers, software, communications networking, electronic devices, materials and processes, energy storage, propulsion and energy conversion, design automation, human-system interfaces, and other technology base areas.

## Appendix B

11.1 *Computers*. High performance computing systems (and their software operating systems) providing orders-of-magnitude improvements in computational and communications capabilities as a result of improvements in hardware, architectural designs, networking, and computational methods.

11.2 *Software*. The tools and techniques that facilitate the timely generation, maintenance, and enhancement of affordable and reliable applications software, including software for distributed systems, data base software, artificial intelligence, and neural nets.

11.3 *Communications Networking*. The timely, reliable, and secure production and worldwide dissemination of information, using shared communications media and common hardware and applications software from originators to DoD consumers, in support of joint-Service mission planning, simulation, rehearsal, and execution.

11.4 *Electronic Devices*. Ultra-small (nanoscale) electronic and optoelectronic devices, combined with electronic packaging and photonics, for high speed computers, data storage modules, communications systems, advanced sensors, signal processing, radar, imaging systems, and automatic control.

11.5 *Materials and Processes*. Development of man-made materials (e.g., composites, electronic and photonic materials, smart materials) for improved structures, higher temperature engines, signature reduction, and electronics, and the synthesis and processing required for their application.

11.6 *Energy Storage*. The safe, compact storage of electrical or chemical energy, including energetic materials for military systems.

11.7 *Propulsion and Energy Conversion*. The efficient conversion of stored energy into usable forms, as in fuel efficient aircraft turbine engines and hypersonic systems.

11.8 *Design Automation*. Computer-aided design, concurrent engineering, simulation, and modeling; including the computational aspects of fluid dynamics, electromagnetics, advanced structures, structural dynamics, and other automated design processes.

11.9 *Human-System Interfaces*. The machine integration and interpretation of data and its presentation in a form convenient to the human operator; displays; human intelligence emulated in computational devices; and simulation and synthetic environments.

11.10 *Other Technology Base Programs*. All technology base programs (Budget Categories 6.1 and 6.2 only) that do not fit into the above warfare-focused functional support areas (#1 - #10), or within the above generic technology base areas (#11.1 - #11.9).

## II. LIFE-CYCLE WORK AREA DEFINITIONS

### RDT&E

1. **BASIC RESEARCH.** (Budget Category 6.1 only) This area includes scientific study and experimentation to increase knowledge and understanding in the physical, engineering, environmental and life sciences related to long-term national security needs.
2. **EXPLORATORY DEVELOPMENT.** (Budget Category 6.2 only) This area includes efforts to solve specific military problems, short of major development. Exploratory development may vary from fairly fundamental applied research to sophisticated breadboard hardware, study programming and planning efforts.
3. **ADVANCED DEVELOPMENT.** (Budget Category 6.3 only) This area includes efforts on projects which have moved into the development of hardware for test. The prime objective is proof of design concept rather than the development of hardware for service use.
4. **ENGINEERING AND MANUFACTURING DEVELOPMENT.** (Budget Category 6.4 only) This area includes programs in full scale development, but which have not received approval for production or had production funds included in the DoD budget submission for the budget or subsequent fiscal year.
5. **RDT&E MANAGEMENT SUPPORT.** (Budget Category 6.5 only) This area includes support of installations or operations required for general research and development use. Included would be test ranges, military construction, maintenance support of laboratories, operations and maintenance of test aircraft and ships, and studies and analyses in support of the R&D program.
6. **OPERATIONAL SYSTEMS DEVELOPMENT.** (Budget Category 6.6 only) This area includes projects still in full-scale development, but which have received approval for production through Defense Acquisition Board or other action, or for which production funds have been included in the DoD budget submission for the budget or subsequent fiscal year. All work in this area is identified by major line item projects that appear as "RDT&E Costs of Weapon System Elements" in other programs.

### ACQUISITION

7. **PRODUCTION.** During this phase, the system, including training equipment, spares, etc., is produced for operational use.
8. **ACCEPTANCE TESTING.** This phase involves the test and evaluation of production items to demonstrate that the items procured fulfill the requirements and specifications of the procuring contract on agreement.
9. **MODERNIZATION.** This phase of the work involves the modification, upgrade, or improvement of a system or subsystem.
10. **PROGRAM SUPPORT.** This phase involves all work not fully under the category of production (#7), acceptance testing (#8), or modernization (#9), that occurs during the acquisition of new systems or subsystems.

### LIFE-TIME SUPPORT

11. **MAINTENANCE.** This phase of work involves the maintenance of systems and subsystems.

12. **REPAIR.** This phase of work involves the repair of systems or subsystems.
13. **TESTING.** This phase is typically funded from Budget Category 6.5 or procurement program elements. Work in this area supports developmental and/or operational testing and focuses on the evaluation of system safety, technical performance, environmental (climatic, electromagnetic, etc.) effects, sustainability and operational suitability, maturity of production processes, and compliance with the specifications and quality standards.
14. **IN-SERVICE ENGINEERING.** This phase is typically funded from Budget Category 6.6 or operations and maintenance (O&M) program elements. In-service engineering tends to focus on system peculiar capabilities in order to conduct check-out of the system and/or subsystem after they have undergone a modification, upgrade or improvement.
15. **PROGRAM SUPPORT.** This phase involves all work falling under the categories of maintenance (#11), repair (#12), testing (#13), in-service engineering (#14) and retirement (#16) that occur during the life-time support of new systems and/or subsystems.
16. **RETIREMENT.** This phase includes the retirement and disposal of obsolete systems and/or subsystems.

#### **GENERAL**

17. **TRAINING/OPERATIONAL SUPPORT.** Efforts in this area, involve the training of operational forces in the use of new techniques, equipment and systems, tactics or doctrine. Training and operational support is typically funded from O&M program elements.
18. **SIMULATION, MODELING AND ANALYSIS.** This phase of work provides a simulated test environment or representation of systems, components and platforms. This work can be carried out throughout the development and test process as analytical tools, as well as tools to drive or control electronic and other environmental stimuli.

NSWC DAHLGREN, PANAMA City

DATA CALL #5

JL  
SEA COX  
5/13/94

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

N. S. SCOTT, CAPT. USN  
NAME (Please type or print)

[Signature]  
Signature

COMMANDER  
Title

10 May 94  
Date

NAVAL SURFACE WARFARE CENTER  
DAHLGREN DIVISION  
Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

RADM (SEL) D. P. SARGENT, JR.  
NAME (Please type or print)

[Signature]  
Signature

COMMANDER  
Title

5/11/94  
Date

NAVAL SURFACE WARFARE CENTER  
Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

G. R. STERNER  
NAME (Please type or print)

[Signature]  
Signature

Commander  
Naval Sea Systems Command  
Activity

5-13-94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

J. B. Greene, Jr  
NAME (Please type or print)

[Signature]  
Signature

Acting  
Title

20 MAY 1994  
Date

BRAC-95 CERTIFICATION

Data Call: 5

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian, who provide information for use in the BRAC-95 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief."

The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

Each individual in your activity generating information for the BRAC-95 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated as necessary. You are directed to maintain those certifications at your activity for audit purposes. For purposes of this certification sheet, the commander of the activity will begin the certification process and each reporting senior in the Chain of Command reviewing the information will also sign this certification sheet. This sheet must remain attached to this package and be forwarded up the Chain of Command. Copies must be retained by each level in the Chain of Command for audit purposes.

I certify the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

D. C. STEERE  
NAME (Please type or print)

  
Signature

COMMANDING OFFICER  
Title

6 May 94  
Date

NAVAL SURFACE WARFARE CENTER  
DAHLGREN DIVISION  
COASTAL SYSTEMS STATION  
Activity

DATA CALL #5  
PANAMA CITY SITE  
1910411

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

J. C. OVERTON, CAPT, USN  
NAME (Please type or print)  
COMMANDER  
Title

[Signature]  
Signature  
22 Aug 94  
Date

NAVAL SURFACE WARFARE CENTER  
DAHLGREN DIVISION  
Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

RADM (SEL) D. P. SARGENT, JR.  
NAME (Please type or print)  
COMMANDER  
Title

[Signature]  
Signature  
8/23/94  
Date

NAVAL SURFACE WARFARE CENTER  
Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

[Signature]  
NAME (Please type or print)  
G. R. STERNER  
Title  
Commander  
Activity  
Naval Sea Systems Command

[Signature]  
Signature  
8/27/94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

W. A. EARNER  
NAME (Please type or print)  
Title

[Signature]  
Signature  
9/1/94  
Date

DATA CALL #5  
PANAMA CITY SITE

pg 10 of 11

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

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I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

CAPT D. C. STEERE  
NAME (Please type or print)

  
Signature

Commanding Officer  
Title

19 Aug 94  
Date

Coastal Systems Station, Dahlgren Division  
Activity

# Document Separator

200

**DATA CALL 66  
INSTALLATION RESOURCES**

**Activity Information:**

Activity Name:	<b>NSWC, Dahlgren Division, Coastal Systems Station</b>
UIC:	<b>N61331</b>
Host Activity Name (if response is for a tenant activity):	
Host Activity UIC:	

**General Instructions/Background.** A separate response to this data call must be completed for each Department of the Navy (DON) host, independent and tenant activity which separately budgets BOS costs (regardless of appropriation), and, is located in the United States, its territories or possessions.

**1. Base Operating Support (BOS) Cost Data.** Data is required which captures the total annual cost of operating and maintaining Department of the Navy (DON) shore installations. Information must reflect FY 1996 budget data supporting the FY 1996 NAVCOMPT Budget Submit. Two tables are provided. Table 1A identifies "Other than DBOF Overhead" BOS costs and Table 1B identifies "DBOF Overhead" BOS costs. These tables must be completed, as appropriate, for all DON host, independent or tenant activities which separately budget BOS costs (regardless of appropriation), and, are located in the United States, its territories or possessions. Responses for DBOF activities may need to include both Table 1A and 1B to ensure that all BOS costs, including those incurred by the activity in support of tenants, are identified. If both table 1A and 1B are submitted for a single DON activity, please ensure that no data is double counted (that is, included on both Table 1A and 1B). The following tables are designed to collect all BOS costs currently budgeted, regardless of appropriation, e.g., Operations and Maintenance, Research and Development, Military Personnel, etc. Data must reflect FY 1996 and should be reported in thousands of dollars.

**a. Table 1A - Base Operating Support Costs (Other Than DBOF Overhead).** This Table should be completed to identify "Other Than DBOF Overhead" Costs. Display, in the format shown on the table, the O&M, R&D and MPN resources currently budgeted for BOS services. O&M cost data must be consistent with data provided on the BS-1 exhibit. Report only direct funding for the activity. Host activities should not include reimbursable support provided to tenants, since tenants will be separately reporting these costs. Military personnel costs should be included on the appropriate lines of the table. Please ensure that individual lines of the table do not include duplicate costs. Add additional lines to the table (following line 2j., as necessary, to identify any additional cost elements not currently shown). **Leave shaded areas of table blank.**

**DATA CALL 66  
INSTALLATION RESOURCES**

<b>Table 1A - Base Operating Support Costs (Other Than DBOF Overhead)</b>			
<b>Activity Name: Coastal Systems Station, Dahlgren Division</b>		<b>UIC: 61331</b>	
Category	FY 1996 BOS Costs (\$000)		
	Non-Labor	Labor	Total
<b>1. Real Property Maintenance Costs:</b>			
1a. Maintenance and Repair	242	159	401
1b. Minor Construction			
<b>1c. Sub-total 1a. and 1b.</b>	<b>242</b>	<b>159</b>	<b>401</b>
<b>2. Other Base Operating Support Costs:</b>			
2a. Utilities	231	0	231
2b. Transportation	0	0	0
2c. Environmental	0	0	0
2d. Facility Leases	0	0	0
2e. Morale, Welfare & Recreation	124	445	569
2f. Bachelor Quarters	958	0	958
2g. Child Care Centers	0	0	0
2h. Family Service Centers	0	0	0
2i. Administration		22	22
2j. Other (Specify)*	238	205	443
<b>2k. Sub-total 2a. through 2j:</b>	<b>1,551</b>	<b>672</b>	<b>2,223</b>
<b>3. Grand Total (sum of 1c. and 2k.):</b>	<b>1,793</b>	<b>831</b>	<b>2,624</b>

**\*2j. Other includes Fire/Security Protection, Service Contracts, and Miscellaneous Costs.**

**NOTE: These numbers are based on controls provided by the major claimant and do not reflect the true BOS requirements of the Coastal Systems Station.**

**DATA CALL 66  
INSTALLATION RESOURCES**

**b. Funding Source.** If data shown on Table 1A reflects more than one appropriation, then please provide a break out of the total shown for the "3. Grand-Total" line, by appropriation:

<u>Appropriation</u>	<u>Amount (\$000)</u>
----------------------	-----------------------

**c. Table 1B - Base Operating Support Costs (DBOF Overhead).** This Table should be submitted for all current DBOF activities. Costs reported should reflect BOS costs supporting the DBOF activity itself (usually included in the G&A cost of the activity). For DBOF activities which are tenants on another installation, total cost of BOS incurred by the tenant activity for itself should be shown on this table. It is recognized that differences exist among DBOF activity groups regarding the costing of base operating support: some groups reflect all such costs only in general and administrative (G&A), while others spread them between G&A and production overhead. Regardless of the costing process, all such costs should be included on Table 1B. The Minor Construction portion of the FY 1996 capital budget should be included on the appropriate line. Military personnel costs (at civilian equivalency rates) should also be included on the appropriate lines of the table. Please ensure that individual lines of the table do not include duplicate costs. Also ensure that there is no duplication between data provided on Table 1A. and 1B. These two tables must be mutually exclusive, since in those cases where both tables are submitted for an activity, the two tables will be added together to estimate total BOS costs at the activity. Add additional lines to the table (following line 21., as necessary, to identify any additional cost elements not currently shown). **Leave shaded areas of table blank.**

**Other Notes:** All costs of operating the five Major Range Test Facility Bases at DBOF activities (even if direct RDT&E funded) should be included on Table 1B. Weapon Stations should include underutilized plant capacity costs as a DBOF overhead "BOS expense" on Table 1B.

**DATA CALL 66  
INSTALLATION RESOURCES**

<b>Table 1B - Base Operating Support Costs (DBOF Overhead)</b>			
<b>Activity Name: Dahlgren Division - Coastal Systems Station</b>		<b>UIC: N61331</b>	
Category	FY 1996 Net Cost From UC/FUND-4 (\$000)		
	Non-Labor	Labor	Total
<b>1. Real Property Maintenance Costs:</b>			
1a. Real Property Maintenance (>\$25K)	1398	0	1398
1b. Real Property Maintenance (<\$25K)	1300	0	1300
1c. Minor Construction (Expensed)	100	0	100
1d. Minor Construction (Capital Budget)	0	0	0
<b>1c. Sub-total 1a. through 1d.</b>	<b>2798</b>	<b>0</b>	<b>2798</b>
<b>2. Other Base Operating Support Costs:</b>			
2a. Command Office	195	644	839
2b. ADP Support	2380	1539	3919
2c. Equipment Maintenance	246	0	246
2d. Civilian Personnel Services	605	1058	1663
2e. Accounting/Finance	454	1531	1985
2f. Utilities	776	167	943
2g. Environmental Compliance	529	837	1366
2h. Police and Fire	237	1527	1764
2i. Safety	61	159	220
2j. Supply and Storage Operations	174	1936	2110
2k. Major Range Test Facility Base Costs	0	0	0
2l. Other (Specify)*	3180	3820	7000
<b>2m. Sub-total 2a. through 2l:</b>	<b>8837</b>	<b>13218</b>	<b>22055</b>
<b>3. Depreciation</b>	<b>3839</b>	<b>0</b>	<b>3839</b>
<b>4. Grand Total (sum of 1c., 2m., and 3.):</b>	<b>15474</b>	<b>13218</b>	<b>28692</b>

**DATA CALL 66  
INSTALLATION RESOURCES**

- \* **Other includes Military Labor, Base Communications, Other Engineering Support, Rents and Leases, VERA/SIPS, and ISA's.**

**2. Services/Supplies Cost Data.** The purpose of Table 2 is to provide information about projected FY 1996 costs for the purchase of services and supplies by the activity. **(Note: Unlike Question 1 and Tables 1A and 1B, above, this question is not limited to overhead costs.)** The source for this information, where possible, should be either the NAVCOMPT OP-32 Budget Exhibit for O&M activities or the NAVCOMPT UC/FUND-1/IF-4 exhibit for DBOF activities. Information must reflect FY 1996 budget data supporting the FY 1996 NAVCOMPT Budget Submit. Break out cost data by the major sub-headings identified on the OP-32 or UC/FUND-1/IF-4 exhibit, disregarding the sub-headings on the exhibit which apply to civilian and military salary costs and depreciation. Please note that while the OP-32 exhibit aggregates information by budget activity, this data call requests OP-32 data for the activity responding to the data call. Refer to NAVCOMPTINST 7102.2B of 23 April 1990, Subj: Guidance for the Preparation, Submission and Review of the Department of the Navy (DON) Budget Estimates (DON Budget Guidance Manual) with Changes 1 and 2 for more information on categories of costs identified. Any rows that do not apply to your activity may be left blank. However, totals reported should reflect all costs, exclusive of salary and depreciation.

<b>Table 2 - Services/Supplies Cost Data</b>	
<b>Activity Name: Dahlgren Division -Coastal Systems Station</b>	<b>UIC: N61331</b>
Cost Category	FY 1996 Projected Costs (\$000)
<b>Travel: DBC 7120</b>	<b>12,469</b>
<b>Material and Supplies (including equipment): DBC 7200</b>	<b>22,629</b>
<b>Industrial Fund Purchases (other DBOF purchases): DBC 7300</b>	<b>14,188</b>
<b>Transportation: DBC 7130</b>	<b>926</b>
<b>Other Purchases (Contract support, etc.): DBC 7400</b>	<b>56,787</b>
<b>Total:</b>	<b>106,999</b>

**DATA CALL 66  
INSTALLATION RESOURCES**

**3. Contractor Workyears.**

**a. On-Base Contract Workyear Table.** Provide a projected estimate of the number of contract workyears expected to be performed "on base" in support of the installation during FY 1996. Information should represent an annual estimate on a full-time equivalency basis. Several categories of contract support have been identified in the table below. While some of the categories are self-explanatory, please note that the category "mission support" entails management support, labor service and other mission support contracting efforts, e.g., aircraft maintenance, RDT&E support, technical services in support of aircraft and ships, etc.

<b>Table 3 - Contract Workyears</b>	
<b>Activity Name: Coastal Systems Station, Dahlgren Division</b>	<b>UIC: N61331</b>
<b>Contract Type</b>	<b>FY 1996 Estimated Number of Workyears On-Base</b>
Construction:	0
Facilities Support:	45
Mission Support:	30
Procurement:	187
Other:*	0
<b>Total Workyears:</b>	<b>262</b>

\* **Note:** Provide a brief narrative description of the type(s) of contracts, if any, included under the "Other" category.

**DATA CALL 66  
INSTALLATION RESOURCES**

**b. Potential Disposition of On-Base Contract Workyears.** If the mission/functions of your activity were relocated to another site, what would be the anticipated disposition of the on-base contract workyears identified in Table 3.?

1) Estimated number of contract workyears which would be transferred to the receiving site (This number should reflect the number of jobs which would in the future be contracted for at the receiving site, not an estimate of the number of people who would move or an indication that work would necessarily be done by the same contractor(s)):

**202 Work Years**

2) Estimated number of workyears which would be eliminated:

**5 Work Years**

3) Estimated number of contract workyears which would remain in place (i.e., contract would remain in place in current location even if activity were relocated outside of the local area):

**55 Work Years**

**DATA CALL 66  
INSTALLATION RESOURCES**

c. **"Off-Base" Contract Workyear Data.** Are there any contract workyears located in the local community, but not on-base, which would either be eliminated or relocated if your activity were to be closed or relocated? If so, then provide the following information (**ensure that numbers reported below do not double count numbers included in 3.a. and 3.b., above**):

No. of Additional Contract Workyears Which Would Be Eliminated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
<b>0</b>	<b>R &amp; D Support</b>

No. of Additional Contract Workyears Which Would Be Relocated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
<b>673</b>	<b>R &amp; D Support</b>

BRAC Data Call #66

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

N. S. SCOTT, CAPT, USN

NAME (Please type or print)

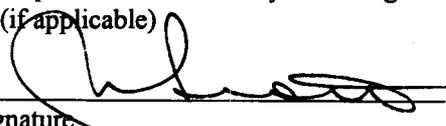
COMMANDER

Title

NAVAL SURFACE WARFARE CENTER

DAHLGREN DIVISION

Activity

  
Signature

28 July 94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

RADM (SEL) D. P. SARGENT, JR.

NAME (Please type or print)

COMMANDER

Title

NAVAL SURFACE WARFARE CENTER

Activity

  
Signature

29 July 94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

G. R. STEWART

NAME (Please type or print)

Commander  
Title Naval Sea Systems Command

Activity

  
Signature

8-4-94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

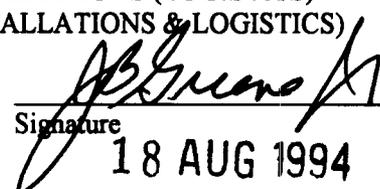
DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

J. B. GREENE, JR.

NAME (Please type or print)

ACTING

Title

  
Signature

18 AUG 1994  
Date

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian, who provide information for use in the BRAC-95 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief."

The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

Each individual in your activity generating information for the BRAC-95 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated as necessary. You are directed to maintain those certifications at your activity for audit purposes. For purposes of this certification sheet, the commander of the activity will begin the certification process and each reporting senior in the Chain of Command reviewing the information will also sign this certification sheet. This sheet must remain attached to this package and be forwarded up the Chain of Command. Copies must be retained by each level in the Chain of Command for audit purposes.

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

CAPT D. C. STEERE

NAME (Please type or print)

Signature

Commanding Officer

Title

Date

Coastal Systems Station

Activity

BRAC DATA CALL # 66

# Document Separator

**DATA CALL 1: GENERAL INSTALLATION INFORMATION**

1. **ACTIVITY:** Follow example as provided in the table below (*delete the examples when providing your input*). If any of the questions have multiple responses, please provide all. If any of the information requested is subject to change between now and the end of Fiscal Year (FY) 1995 due to known redesignations, realignments/closures or other action, provide current and projected data and so annotate.

- Name

Official name	<i>Naval Surface Warfare Center Dahlgren Division Coastal Systems Station</i>
<i>Acronym(s) used in correspondence</i>	COASTSYSTA
Commonly accepted short title(s)	CSS

- Complete Mailing Address

Commanding Officer  
Coastal Systems Station Dahlgren Division  
Naval Surface Warfare Center  
6703 West Highway 98  
Panama City, FL 32407-7001

- PLAD

NAVSURFWARCEN COASTSYSTA PANAMA CITY

- PRIMARY UIC: 61331 (Plant Account UIC for Plant Account Holders)

Enter this number as the Activity identifier at the top of each Data Call response page.

- ALL OTHER UIC(s): 47628 PURPOSE: Base Support (Military)

BRAC 95 Data Call #1

\_\_\_\_\_  
\_\_\_\_\_

2. PLANT ACCOUNT HOLDER:

• Yes  X  No \_\_\_\_\_ (check one)

3. ACTIVITY TYPE: Choose most appropriate type that describes your activity and completely answer all questions.

• **HOST COMMAND:** A host command is an activity that provides facilities for its own functions and the functions of other (tenant) activities. A host has accountability for Class 1 (land), and/or Class 2 (buildings, structures, and utilities) property, regardless of occupancy. It can also be a tenant at other host activities.

• Yes  X  No \_\_\_\_\_ (check one)

• **TENANT COMMAND:** A tenant command is an activity or unit that occupies facilities for which another activity (i.e., the host) has accountability. A tenant may have several hosts, although one is usually designated its primary host. If answer is "Yes," provide best known information for your primary host only.

• Yes \_\_\_\_\_ No  X  (check one)

• Primary Host (current) UIC: \_\_\_\_\_

• Primary Host (as of 01 Oct 1995) UIC: \_\_\_\_\_

• Primary Host (as of 01 Oct 2001) UIC: \_\_\_\_\_

• **INDEPENDENT ACTIVITY:** For the purposes of this Data Call, this is the "catch-all" designator, and is defined as any activity not previously identified as a host or a tenant. The activity may occupy owned or leased space. Government Owned/Contractor Operated facilities should be included in this designation if not covered elsewhere.

• Yes \_\_\_\_\_ No  X  (check one)

UIC: #N61331  
4 Feb 94

4. SPECIAL AREAS: List all Special Areas. Special Areas are defined as Class 1/Class 2 property for which your command has responsibility that is not located on or contiguous to main complex.

Name	Location	UIC
N/A		

5. DETACHMENTS: If your activity has detachments at other locations, please list them in the table below.

Name	UIC	Location	Host name	Host UIC
Naval Coastal Systems Center Detachment	N61331	Sturgeon Bay, WI	Supervisor of Shipbuilding, Conversion and Repair, U.S. Navy	N62990
Coastal Systems Station Dahlgren Division, Naval Surface Warfare Center, Detachment Ft. Monroe	N63238	Ft. Monroe, VA	Ft. Monroe (U.S. Army)	W26DHV
Naval Surface Warfare Center Dahlgren Division, Detachment Fort Lauderdale	N62701	Ft. Lauderdale, FL	Naval Surface Warfare Center Dahlgren Division, Detachment Fort Lauderdale	N62701

BRAC 95 Data Call #1

6. BRAC IMPACT: Were you affected by previous Base Closure and Realignment decisions (BRAC-88, -91, and/or -93)? If so, please provide a brief narrative.

Prior to BRAC 91, the Naval Coastal Systems Center (NCSC) was an independent Laboratory, reporting directly to the Director of Navy Laboratories. BRAC 91 established the Naval Surface Warfare Center, with subordinate Divisions. Also as part of BRAC 91, the Coastal Systems Station (CSS, formerly NCSC) became an operating site of the Dahlgren Division under the Naval Surface Warfare Center. Additionally, BRAC 91 reassigned the mission area of Sonar and Torpedo Countermeasures from CSS to the Naval Undersea Warfare Center.

BRAC 91 directed that the Mine Development functions be relocated from the Naval Surface Warfare Center, Dahlgren Division, White Oak Detachment, Silver Spring, MD to the Naval Surface Warfare Center, Dahlgren Division, Dahlgren, VA. BRAC 93 redirected the destination for the Mine Development function to Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station, Panama City, FL.

BRAC 91 directed that the Navy Mine Warfare Engineering Activity be relocated from Naval Surface Warfare Center, Port Hueneme Division, Yorktown, VA to Naval Surface Warfare Center, Port Hueneme Division, Dam Neck, VA. BRAC 93 redirected the assignment to Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station, Panama City, FL.

The collocation of these two functions with those already at Panama City enabled the establishment of a Mine Warfare Center of Excellence at the Dahlgren Division, Coastal Systems Station. The Coastal Systems Station will lead the research, development, acquisition support, and life cycle support for all Navy Mine and Mine Countermeasures work for the Navy. Other primary mission areas at the Coastal Systems Station are Special Warfare, Amphibious Warfare, and Diving and Life Support, all of which provide synergistic benefits in the Littoral Warfare environment. These mission areas are operationally and technologically interrelated and collocated at CSS results in high quality, low cost and interoperable products. The physical consolidation will be completed by the end of FY 97. The integration of the scientific and in-service engineering laboratory equipment will result in a superior capability, while eliminating excess capacity.

7. MISSION: Do not simply report the standard mission statement. Instead, describe important functions in a bulletized format. Include anticipated mission changes and brief narrative explanation of change; also indicate if any current/projected mission changes are a result of

previous BRAC-88, -91,-93 action(s).

Current Missions

- Mine warfare systems research and development, test and evaluation, acquisition support, and in-service engineering
  - Surface and airborne mine countermeasures (MCM) systems and platform systems integration
  - MCM systems and mission packages for underwater vehicles
  - Sea mines and sea mine employment/deployment systems
  - Specialties in mine detection and avoidance sonars, superconducting magnetometers, electro-optic signal processing and imagery, influence and mechanical minesweeping, threat mine exploitation, hardware-in-the-loop simulation
  - Mission, operations analysis
- Amphibious warfare systems research and development, test and evaluation, acquisition support, and in-service engineering
  - Air cushion vehicle systems and technology specialities
  - Ship/craft interface systems
  - Mission, operations analysis
- Special warfare systems research and development, test and evaluation, acquisition support, and in-service engineering
  - Navy diver mobility systems, including swimmer delivery vehicles and other methods of covert insertion and extraction
  - Mission support systems such as covert mine countermeasures equipment, target locators, etc.
- Diving and life support systems research and development, test and evaluation,

acquisition support, and in-service engineering

- Underwater breathing equipment and other life support systems such as thermal protection, hyperbaric systems, re-breathers
- Diver tools for underwater ship husbandry and salvage operations
- Fire fighter's breathing systems and equipment

Projected Missions for FY 2001

(no change)

8. **UNIQUE MISSIONS:** Describe any missions which are unique or relatively unique to the activity. Include information on projected changes. Indicate if your command has any National Command Authority or classified mission responsibilities.

Current Unique Missions

- Certain classified assignments and responsibilities that are not and could not be easily duplicated elsewhere
- Collocation of important littoral warfare mission areas of Naval Special Warfare, Mine Warfare, and Amphibious Warfare leading to integrated assessment, planning, development, and deployment/employment.
- Diving and life support systems (Navy, Marine Corps, and Army) and collocation with diving-related tenants (Explosive Ordnance Disposal, Navy Experimental Diving Unit, and Navy Diving and Salvage Training Center)
- Exploitation of foreign weapons (threats) and hardware in-the-loop simulations for MCM and Special Warfare
- Test and evaluation of important Littoral Warfare Systems in coastal environments

realistically duplicating most third-world scenarios, particularly the Persian Gulf

Projected Unique Missions for FY 2001

(no change)

9. IMMEDIATE SUPERIOR IN COMMAND (ISIC): Identify your ISIC. If your ISIC is not your funding source, please identify that source in addition to the operational ISIC.

- Operational name UIC  
Commander, Naval Surface Warfare Center N63238  
Dahlgren Division
  
- Funding Source UIC  
DBOF Multiple

10. PERSONNEL NUMBERS: Host activities are responsible for totalling the personnel numbers for all of their tenant commands, even if the tenant command has been asked to separately report the data. The tenant totals here should match the total tally for the tenant listing provided subsequently in this Data Call (see Tenant Activity list). (Civilian count shall include Appropriated Fund personnel only.)

On Board Count as of 01 January 1994

	Officers	Enlisted	Civilian (Appropriated)
• Reporting Command	<u>13</u>	<u>102</u>	<u>1207</u>
• Tenants (total)	<u>37</u>	<u>295</u>	<u>73</u>

30 September 1994

	Officers	Enlisted	Civilian (Appropriated)
• Reporting Command	<u>12</u>	<u>83</u>	<u>1147</u>
• Tenants (total)	<u>35</u>	<u>281</u>	<u>79</u>

11. KEY POINTS OF CONTACT (POC): Provide the work, FAX, and home telephone numbers for the Commanding Officer or OIC, and the Duty Officer. Include area code(s). You may provide other key POCs if so desired in addition to those above.

	<u>Title/Name</u>	<u>Office</u>	<u>Fax</u>	<u>Home</u>
• CO	<u>CAPT David C. Steere</u>	(904) 234-4201	(904) 234-4522	(904) 233-0238
• Duty Officer	<u>MAC(AW) Rhonda Guthrie</u>	(904) 235-5599	(904) 234-4801	(904) 874-2757

12. TENANT ACTIVITY LIST: This list must be all-inclusive. Tenant activities are to ensure that their host is aware of their existence and any "subleasing" of space. This list should include the name and UIC(s) of all organizations, shore commands and homeported units, active or reserve, DOD or non-DOD (include commercial entities). The tenant listing should be reported in the format provide below, listed in numerical order by UIC, separated into the categories listed below. Host activities are responsible for including authorized personnel numbers, on board as of **30 September 1994**, for all tenants, even if those tenants have also been asked to provide this information on a separate Data Call. (Civilian count shall include Appropriated Fund personnel only.)

• Tenants residing on main complex (shore commands)

Tenant Command Name	UIC	Officer	Enlisted	Civilian
Navy Experimental Diving Unit	N0463A	13	62	33
Naval Diving and Salvage Training Center	N0610A	1	8	13
Explosive Ordnance Disposal Mobile Unit SIX DET - Panama City, FL	N30712	1	4	0
Naval Hospital Pensacola , Branch Clinic	N41430	1	7	1
Naval Diving and Salvage Training Center	N42113	15	182	0
Personnel Support Activity Detachment	N43085	1	9	8
Naval Regional Dental Center - Branch Dental Clinic	N43619	1	3	1
Naval Diving and Salvage Training Center	N45783	0	3	0
Naval Diving and Salvage Training Center	N46718	0	3	0
DoN, Defense Printing Service	N48923	0	0	2

Naval Diving and Salvage Training Center	N49651	0	1	0
Resident Officer in Charge of Construction	N61331	2	0	10
Naval Criminal Investigative Service	N67556	0	0	1
Defense Finance and Accounting Service Cleveland Center	XBH	0	0	10

- Tenants residing on main complex (homeported units.)

Tenant Command Name	UIC	Officer	Enlisted	Civilian
N/A				

- Tenants residing in Special Areas (Special Areas are defined as real estate owned by host command not contiguous with main complex; e.g. outlying fields).

Tenant Command Name	UIC	Location	Officer	Enlisted	Civilian
N/A					

- Tenants (Other than those identified previously)

Tenant Command Name	UIC	Location	Officer	Enlisted	Civilian
N/A					

13. REGIONAL SUPPORT: Identify your relationship with other activities, not reported as a host/tenant, for which you provide support. Again, this list should be all-inclusive. The intent

of this question is capture the full breadth of the mission of your command and your customer/supplier relationships. Include in your answer any Government Owned/Contractor Operated facilities for which you provide administrative oversight and control.

Activity name	Location	Support function (include mechanism such as ISSA, MOU, etc.)
<i>U.S. Coast Guard Station - CG Cutter Kodiak Island - CG Cutter Courageous - Aid to Navigation Team</i>	<i>Coastal Systems Station (contiguous to CSS)</i>	<i>ISSA - Complete support functions including fire protection, security, communications, and real property maintenance</i>  <i>MOA - Fire Protection</i>
<i>Florida Marine Patrol</i>	<i>U.S. Coast Guard Station (contiguous to CSS)</i>	
<i>Government Owned Contractor Operated (DTRC/MAR, Inc.) Research Vessels(Athena I and II and Lauren) based at CSS -</i>	<i>Pierside</i>	<i>ISSA with owner of research vessels (Carderock Division of NSWC) - Berthing - Fire</i>

14. FACILITY MAPS: This is a primary responsibility of the plant account holders/host commands. Tenant activities are not required to comply with submission if it is known that your host activity has complied with the request. Maps and photos should not be dated earlier than 01 January 1991, unless annotated that no changes have taken place. Any recent changes should be annotated on the appropriate map or photo. Date and label all copies.

- Local Area Map. This map should encompass, at a minimum, a 50 mile radius of your activity. Indicate the name and location of all DoD activities within this area, whether or not you support that activity. Map should also provide the geographical relationship to the major civilian communities within this radius. (Provide 12 copies.)
- Installation Map / Activity Map / Base Map / General Development Map / Site Map. Provide the most current map of your activity, clearly showing all the land under ownership/control of

your activity, whether owned or leased. Include all outlying areas, special areas, and housing. Indicate date of last update. Map should show all structures (numbered with a legend, if available) and all significant restrictive use areas/zones that encumber further development such as HERO, HERP, HERF, ESQD arcs, agricultural/forestry programs, environmental restrictions (e.g., endangered species). (Provide in two sizes: 36"x 42" (2 copies, if available); and 11"x 17" (12 copies).)

- Aerial photo(s). Aerial shots should show all base use areas (both land and water) as well as any local encroachment sites/issues. You should ensure that these photos provide a good look at the areas identified on your Base Map as areas of concern/interest - remember, a picture tells a thousand words. Again, date and label all copies. (Provide 12 copies of each, 8½"x 11".)
- Air Installations Compatible Use Zones (AICUZ) Map. (Provide 12 copies.)

UIC 00178, 60921, 61331, 62701, 63238, 0708A

BRAC-95  
DATA CALL #1  
DANL GREEN DV.

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

JL  
SEA09X  
2/16/94

NEXT ECHELON LEVEL (if applicable)

E.S. MCGINLEY II  
NAME (Please type or print)  
COMMANDER  
Title  
NAVAL SURFACE WARFARE CENTER  
Activity

[Signature]  
Signature  
2/9/94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

~~NAME (Please type or print)  
Title  
Activity~~

~~Signature  
Date~~

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

K. P. Malley  
NAME (Please type or print)  
Commander  
Title  
Naval Sea System Council  
Activity

[Signature]  
Signature  
2/12/94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

**DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)**

**S. F. Loftus**  
Vice Admiral, U.S. Navy  
NAME (Please type or print)  
**Operations (Logistics)**  
Title

[Signature]  
Signature  
**23 FEB 1994**  
Date

UIC 00178, 60921, 61331, 62701, 63238, 0708A

JL  
SCA 09  
2/16/94

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian, who provide information for use in the BRAC-95 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief."

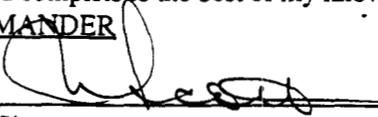
The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

Each individual in your activity generating information for the BRAC-95 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated as necessary. You are directed to maintain those certifications at your activity for audit purposes. For purposes of this certification sheet, the commander of the activity will begin the certification process and each reporting senior in the Chain of Command reviewing the information will also sign this certification sheet. This sheet must remain attached to this package and be forwarded up the Chain of Command. Copies must be retained by each level in the Chain of Command for audit purposes.

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

N. S. SCOTT, CAPT, USN  
NAME (Please type or print)

  
Signature

COMMANDER  
Title  
NAVAL SURFACE WARFARE CENTER  
DAHLGREN DIVISION  
Activity

8 FEB 1994  
Date

# Document Separator

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**ENVIRONMENTAL DATA CALL:  
DATA CALL TO BE SUBMITTED TO  
ALL NAVY/MARINE CORPS HOST ACTIVITIES**

**FORT LAUDERDALE DETACHMENT  
DAHLGREN DIVISION  
NAVAL SURFACE WARFARE CENTER**

**20 APRIL 1994**

Data Call 33  
UIC N62701

**BRAC 1995 ENVIRONMENTAL DATA CALL:  
All Navy/Marine Corps Host Activities**

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## ENVIRONMENTAL DATA CALL

Responses to the following questions provide data that will allow an assessment of the potential environmental impact associated with the closure or realignment of a Navy shore activity. This criterion consists of:

- Endangered/Threatened Species and Biological Habitat
- Wetlands
- Cultural Resources
- Environmental Facilities
- Air Pollution
- Environmental Compliance
- Installation Restoration
- Land/Air/Water Use

As part of the answers to these questions, a *source citation* (e.g., 1993 base loading, 1993 base-wide Endangered Species Survey, 1993 letter from USFWS, 1993 Base Master Plan, 1993 Permit Application, 1993 PA/SI, etc.) must be included. It is probable that, at some point in the future, you will be asked to provide additional information detailing specifics of individual characteristics. In anticipation of this request, supporting documentation (e.g., maps, reports, letters, etc.) regarding answers to these questions should be retained. Information needed to answer these questions is available from the cognizant EFD Planning and Real Estate Divisions, and Environment, Safety, and Health Divisions; and from the activity Public Works Department, and activity Health Monitoring and Safety Offices.

For purposes of the questions associated with land use at your base is *defined* as *land* (acreage owned, withdrawn, leased, and controlled through easements); *air* (space controlled through agreements with the FAA, e.g., MOAs); and *water* (navigation channels and waters along a base shoreline) *under the control of the Navy*.

Provide a list of the tenant activities with UICs that are covered in this response.

**1. ENDANGERED/THREATENED SPECIES AND BIOLOGICAL HABITAT**

**1a.** For federal or state listed endangered, threatened, or category 1 plant and/or animal species on your base, complete the following table. Critical/sensitive habitats for these species are designated by the U. S. Fish and Wildlife Service (USFWS). A species is present on your base if some part of its life-cycle occurs on Navy controlled property (e.g., nesting, feeding, loafing). Important Habitat refers to that number of acres of habitat that is important to some life cycle stage of the threatened/endangered species that is not formally designated.

SPECIES (plant or animal)	Designation (Threatened/ Endangered)	Federal/ State	Critical / Designated Habitat (Acres)	Important Habitat (acres)
<i>example: Haliaeetus leucocephalus - bald eagle</i>	<i>threatened</i>	<i>Federal</i>	<i>25</i>	<i>0</i>
None				

Source Citation: **PHONCON with SOUTHDIIV and BRAC 93 Data Call**

**1b.**

Have your base operations or development plans been constrained due to: - USFWS or National Marine Fisheries Service (NMFS)? - State required modifications or constraints? If so, identify below the impact of the constraints including any restrictions on land use.	<b>NO</b>
Are there any requirements resulting from species not residing on base, but which migrate or are present nearby? If so, summarize the impact of such constraints.	<b>YES</b>

The work boat must curtail operations for 30 minutes after Manatees are sighted. In operating area (not on base property).

**1c.** If the area of the habitat and the associated species have not been identified on base maps provided in Data Call 1, submit this information on an updated version of Data Call 1 map.

**Not Required.**

**1d.**

Have any efforts been made to relocate any species and/or conduct any mitigation with regards to critical habitats or endangered/threatened species? Explain what has been done and why.	<b>NO</b>
--	-----------

**1e.**

Will any state or local laws and/or regulations applying to endangered/threatened species which have been enacted or promulgated but not yet effected, constrain base operations or development plans beyond those already identified? Explain.	<b>NO</b>
---	-----------

**2. WETLANDS**

**Note:** Jurisdictional wetlands are those areas that meet the wetland definitional criteria detailed in the Corps of Engineers (COE) Wetland Delineation Manual, 1987, Technical Report Y-87-1, U.S. Army Engineer Waterway Experiment Station, Vicksburg, MS or officially adapted state definitions.

**2a.**

Does your base possess federal jurisdictional wetlands?	<b>NO</b>
Has a wetlands survey in accordance with established standards been conducted for your base?	<b>NO</b>
When was the survey conducted or when will it be conducted? ____/____/____	<b>Unknown</b>
What percent of the base has been surveyed?	<b>None</b>
What is the total acreage of jurisdictional wetlands present on your base?	<b>Unknown</b>

Source Citation: \_\_\_\_\_

**2b.** If the area of the wetlands has not been identified on base maps provided in Data Call 1, submit this on an updated version of Data Call 1 map.

**2c.** Has the EPA, COE or a state wetland regulatory agency required you to modify or constrain base operations or development plans in any way in order to accommodate a jurisdictional wetland? NO If YES, summarize the results of such modifications or constraints.

**3. CULTURAL RESOURCES**

**3a.**

Has a survey been conducted to determine historic sites, structures, districts or archaeological resources which are listed, or determined eligible for listing, on the National Register of Historic Places? If so, list the sites below.	<b>NO</b>
--	-----------

3b.

Has the President's Advisory Council on Historic Preservation or the cognizant State Historic Preservation Officer required you to mitigate or constrain base operations or development plans in any way in order to accommodate a National Register cultural resource? If YES, list the results of such modifications or constraints below.	NO
--	----

Note: There are buildings at the airport site that are considered potentially eligible for the National Register by the Florida State Historic Preservation Officer.

3c.

Are there any on base areas identified as sacred areas or burial sites by Native Americans or others? List below.	NO
---	----

**4. ENVIRONMENTAL FACILITIES**

**Notes:** If your facility is permitted for less than maximum capacity, state the maximum capacity and explain below the associated table why it is not permitted for maximum capacity. Under "Permit Status" state when the permit expires, and whether the facility is operating under a waiver. For permit violations, limit the list to the last 5 years.

4a.

Does your base have an operating landfill? .....					NO
ID/Location of Landfill	Permitted Capacity (CYD)		Maximum Capacity (CYD)	Contents <sup>1</sup>	Permit Status
	TOTAL	Remaining			

<sup>1</sup> Contents (e.g. building demolition, asbestos, sanitary debris, etc)

Are there any current or programmed projects to correct deficiencies or improve the facility.

N/A

4b. If there are any non-Navy users of the landfill, describe the user and conditions/agreements.

Not applicable

4c.

Does your base have any disposal, recycling, or incineration facilities for solid waste?					NO
Facility/Type of Operation	Permitted Capacity	Ave Daily Throughput	Maximum Capacity	Permit Status	Comments

List any permit violations and projects to correct deficiencies or improve the facility.

4d.

Does your base own/operate a Domestic Wastewater Treatment Plant (WWTP) ?					NO
ID/Location of WWTP	Permitted Capacity	Ave Daily Discharge Rate	Maximum Capacity	Permit Status	Level of Treatment/Year Built

List permit violations and discuss any projects to correct deficiencies.

4e. If you do not have a domestic WWTP, describe the average discharge rate of your base to the local sanitary sewer authority, discharge limits set by the sanitary sewer authority (flow and pollutants) and whether the base is in compliance with their permit. Discuss recurring discharge violations.

**Airport site average discharge rate is 0.0067 MGD (no permit is required). Jetty site average discharge rate is 0.00042 MGD to drain field of septic tank system (permitted: Base is, in compliance with permit).**

4f.

Does your base operate an Industrial Waste Treatment Plant (IWTP)?					NO
ID/Location of IWTP	Type of Treatment	Permitted Capacity	Ave Daily Discharge Rate	Maximum Capacity	Permit Status

List any permit violations and projects to correct deficiencies or improve the facility.

4g. Are there other waste treatment flows not accounted for in the previous tables? Estimate capacity and describe the system.

**Yes, three septic tanks at jetty site. One tank has a 1500 gallon capacity. Two other tanks have unknown capacities.**

4h.

Does your base operate drinking Water Treatment Plants (WTP)?				NO	
ID/Location of WTP	Operating (GPD)		Method of Treatment	Maximum Capacity	Permit Status
	Permitted Capacity	Daily Rate			

List permit violations and projects/actions to correct deficiencies or improve the facility.

4i. If you do not operate a WTP, what is the source of the base potable water supply. State terms and limits on capacity in the agreement/contract, if applicable.

**Airport site - City of Fort Lauderdale Water Department**

**Jetty site - City of Hollywood Water Department.**

4j.

Does the presence of contaminants or lack of supply of water constrain base operations. Explain.	NO
--	----

4k.

Other than those described above does your base hold any NPDES or stormwater permits? If YES, describe permit conditions.	NO
If NO, why not and provide explanation of plan to achieve permitted status.	

**Airport site is tied into a sanitary sewer system and jetty site is tied into a septic tank system. Based on ECE, stormwater permits are not required.**

4l.

YES/NO

Does your base have bilge water discharge problem?	NO
Do you have a bilge water treatment facility?	NO

Explain:

**Contractor removes and treats bilge water off site.**

4m.

Will any state or local laws and/or regulations applying to Environmental Facilities, which have been enacted or promulgated but not yet effected, constrain base operations or development plans beyond those already identified? Explain.	NO
---	----

**4n.** What expansion capacity is possible with these Environmental Facilities? Will any expansions/upgrades as a result of BRACON or projects programmed through the Presidents budget through FY1997 result in additional capacity? Explain.

**For a nominal price, additional ties to city water and sewage can be made.**

**4o.** Do capacity limitations on any of the facilities discussed in question 4 pose a present or future limitation on base operations? Explain.

**No.**

**5. AIR POLLUTION**

**5a.**

<p>What is the name of the Air Quality Control Areas (AQCA) in which the base is located?  <b>Southeast Florida</b></p>
<p>Is the installation or any of its OLFs or non-contiguous base properties located in different AQCA's? <b>NO</b> . List site, location and name of AQCA.</p>

**5b.** For each parcel in a separate AQCA fill in the following table. Identify with and "X" whether the status of each regulated pollutant is: attainment/nonattainment/maintenance. For those areas which are in non-attainment, state whether they are: Marginal, Moderate, Serious, Severe, or Extreme. State target attainment year.

Site: Fort Lauderdale

AQCA: Southwest Florida

Pollutant	Attainment	Non-Attainment	Maintenance	Target Attainment Year <sup>1</sup>	Comments <sup>2</sup>
CO	X				
Ozone		X		1994	Moderate. Application is in for return to attainment status. Not dependent on BRACON, MILCON -- Not Programmed
PM-10	X				
SO <sub>2</sub>	X				
NO <sub>2</sub>	X				
Pb	X				

<sup>1</sup> Based on national standard for Non-Attainment areas or SIP for Maintenance areas.

<sup>2</sup> Indicate if attainment is dependent upon BRACON, MILCON or Special Projects. Also indicate if the project is currently programmed within the Presidents FY1997 budget.

5c. For your base, identify the baseline level of emissions, established in accordance with the Clean Air Act. Baseline information is assumed to be 1990 data or other year as specified. Determine the total level of emissions (tons/yr) for CO, NOx, VOC, PM10 for the general sources listed. For all data provide a list of the sources and show your calculations. Use known emissions data, or emissions derived from use of state methodologies, or identify other sources used. "Other Mobile" sources include such items as ground support equipment.

Emission Sources (Tons/Year)					
Pollutant	Permitted Stationary	Personal Automobiles	Aircraft Emissions	Other Mobile	Total
CO	Not Applicable	0.024	Not Applicable	Not Applicable	0.024
NOx	Not Applicable	0.007	Not Applicable	Not Applicable	0.007
VOC	Not Applicable	0.0003	Not Applicable	Not Applicable	0.0003
PM10	Not Applicable	Not Available	Not Applicable	Not Applicable	Not Available

Source Document: Based on Estimated Vehicle Traffic and 1982 Max Auto Emission Standards

Calculations provided below:

**CALCULATIONS:**

- Based on 20 POVs + 5 government vehicles**  
 Average of 1 mile/day on base  
 5 days/wk  
 52 wks/yr  
 = (25) (1) (5) (52) = 6500 miles/yr of on base driving
- Emission factors - from 1982 maximum auto emission standards**  
 CO = 3.4 gram/mile  
 NOx - 1.0 gram/mile  
 VOC = 0.41 gram/mile
- CO = (6500) (3.4 g/mile (1 lb/454 g) (1 ton/2000 lb) = 0.024 tons/yr  
 NOx = (6500) (1.0) (1/454) (1/2000) = 0.007 tons/yr  
 VOC = (6500) (0.41) (1/454) (1/2000) = .0003 tons/yr

**5d.** For your base, determine the total FY1993 level of emissions (tons/yr) for CO, NO<sub>x</sub>, VOC, PM10 for the general sources listed. For all data provide a list of the sources and show your calculations. Use known emissions data, or emissions derived from use of state methodologies, or identify other sources used. "Other Mobile" sources include such items as ground support equipment.

<b>Emissions Sources (Tons/Year)</b>					
<b>Pollutant</b>	<b>Permitted Stationary</b>	<b>Personal Automobiles</b>	<b>Aircraft Emissions</b>	<b>Other Mobile</b>	<b>Total</b>
<b>CO</b>	<b>Not Applicable</b>	<b>0.024</b>	<b>Not Applicable</b>	<b>Not Applicable</b>	<b>0.024</b>
<b>NO<sub>x</sub></b>	<b>Not Applicable</b>	<b>0.007</b>	<b>Not Applicable</b>	<b>Not Applicable</b>	<b>0.007</b>
<b>VOC</b>	<b>Not Applicable</b>	<b>0.0003</b>	<b>Not Applicable</b>	<b>Not Applicable</b>	<b>0.0003</b>
<b>PM10</b>	<b>Not Applicable</b>	<b>Not Available</b>	<b>Not Applicable</b>	<b>Not Applicable</b>	<b>Not Available</b>

Source Document: **Based on Estimated Vehicle Traffic and 1982 Max Auto Emission Standards**

**Calculations same as Table 5c, see calculations above.**

**5e.** Provide estimated increases/decreases in air emissions (Tons/Year of CO, NO<sub>x</sub>, VOC, PM10) expected within the next six years (1995-2001). Either from previous BRAC realignments and/or previously planned downsizing shown in the Presidents FY1997 budget. Explain.

**No impact.**

**5f.** Are there any critical air quality regions (i.e. non-attainment areas, national parks, etc.) within 100 miles of the base?

**Yes, the counties of Dade, Broward, and Palm Beach are currently in non-attainment status for ozone. Everglades National Park is also within 100 miles of the base.**

**5g.** Have any base operations/mission/functions (i.e.: training, R&D, ship movement, aircraft movement, military operations, support functions, vehicle trips per day, etc.) been restricted or delayed due to air quality considerations. Explain the reason for the restriction and the "fix" implemented or planned to correct.

**No.**

**5h.** Does your base have Emission Reduction Credits (ERCs) or is it subject to any emission offset requirements? If yes, provide details of the sources affected and conditions of the ERCs and offsets. Is there any potential for getting ERCs?

No

**6. ENVIRONMENTAL COMPLIANCE**

**6a.** Identify compliance costs, currently known or estimated that are required for permits or other actions required to bring existing practices into compliance with appropriate regulations. Do not include Installation Restoration costs that are covered in Section 7 or recurring costs included in question 6c. For the last two columns provide the combined total for those two FY's.

Program	Survey Completed?	Costs in \$K to correct deficiencies					
		FY94	FY95	FY96	FY97	FY98-99	FY00-01
Air	No	0	0	0	0	0	0
Hazardous Waste	No	0	0	0	0	0	0
Safe Drinking Water Act	No	0	0	0	0	0	0
PCBs	No	0	0	0	0	0	0
Other (non-PCB) Toxic Substance Control Act	No	0	0	0	0	0	0
Lead Based Paint	No	0	0	0	0	0	0
Radon	No	0	0	0	0	0	0
Clean Water Act	No	0	0	0	0	0	0
Solid Waste	No	0	0	0	0	0	0
Oil Pollution Act	No	0	0	0	0	0	0
USTs	Yes	0	0	0	0	0	0
Other	No	0	0	0	0	0	0
<b>Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Provide a separate list of compliance projects in progress or required, with associated cost and estimated

start/completion date.

**Fort Lauderdale is currently in compliance with all the listed environmental programs. There are no compliance costs, currently known or estimated that are required for permits or other actions required to bring existing practices into compliance with appropriate regulations.**

**6b.**

Does your base have structures containing asbestos? YES What % of your base has been surveyed for asbestos? 100% Are additional surveys planned? NO What is the estimated cost to remediate asbestos (\$K) \$180K. Are asbestos survey costs based on encapsulation, removal or a combination of both? REMOVAL

**6c.** Provide detailed cost of recurring operational (environmental) compliance costs, with funding source.

Funding Source	FY92	FY93	FY94	FY95	FY96	FY97	FY98-99	FY00-01
<b>O&amp;MN</b>	0	0	0	0	0	0	0	0
<b>HA</b>	0	0	0	0	0	0	0	0
<b>PA</b>	0	0	0	0	0	0	0	0
<b>Other (specify)</b>	21	22	22	23	24	24	51	54
<b>TOTAL</b>	21	22	22	23	24	24	51	54

Funding Source: **DBOF**

**6d.** Are there any compliance issues/requirements that have impacted operations and/or development plans at your base.

**NO.**

## **7. INSTALLATION RESTORATION**

**7a.**

Does your base have any sites that are contaminated with hazardous substances or petroleum products?	<b>NO</b>
Is your base an NPL site or proposed NPL site?	<b>NO</b>

**7b.** Provide the following information about your Installation Restoration (IR) program. Project list may be provided in separate table format. Note: List only projects eligible for funding under the Defense Environmental Restoration Account (DERA). Do not include UST compliance projects properly listed in section VI.

Site # or name	Type site <sup>1</sup>	Groundwater Contaminated?	Extends off base?	Drinking Water Source?	Cost to Complete (\$M)/Est. Compl. Date	Status <sup>2</sup> /Comments
None						

<sup>1</sup> Type site: CERCLA, RCRA corrective action (CA), UST or other (explain)

<sup>2</sup> Status = PA, SI, RI, RD, RA, long term monitoring, etc.

**7c.** Have any contamination sites been identified for which there is no recognized/accepted remediation process available? List.

NO

**7d.**

Is there a groundwater treatment system in place?	NO
Is there a groundwater treatment system planned?	NO

State scope and expected length of pump and treat operation.

N/A

**7e.**

Has a RCRA Facilities Assessment been performed for your base?	NO
--	----

7f. Does your base operate any conforming storage facilities for handling **hazardous materials**? If YES, describe facility, capacity, restrictions, and permit conditions.

**Jetties site - Bldg 40 - 45cu. ft.**  
**Airport site - Bldg 1 - 90 cu. ft.**  
**Acid Storage Locker**  
**10 Flamable Storage Lockers (Paints, thinners, acetone, oil and greases, aerosol cans.)**

7g. Does your base operate any conforming storage facilities for handling **hazardous waste**? If YES, describe facility, capacity, restrictions, and permit conditions.

**Hazardous wastes are stored in Bldgs 1 and 40, separated from the hazardous materials. Permit not required because of small quantity generator exemption.**

7h. Is your base responsible for any non-appropriated fund facilities (exchange, gas station) that require cleanup? If so, describe facility/location and cleanup required/status.

**No.**

7i.

Do the results of any radiological surveys conducted indicate limitations on future land use? Explain below.	<b>NO</b>
--	-----------

**Survey started but never completed due to lack of funding.**

7j. Have any base operations or development plans been restricted due to Installation Restoration considerations?

**No.**

7k. List any other hazardous waste treatment or disposal facilities not included in question 7b. above. Include capacity, restrictions and permit conditions.

**None.**

## 8. LAND / AIR / WATER USE

8a. List the acreage of each real estate component controlled or managed by your base (e.g., Main Base - 1,200 acres, Outlying Field - 200 acres, Remote Range - 1,000 acres, remote antenna site - 5 acres, Off-Base Housing Area - 25 acres).

Parcel Descriptor	Acres	Location
<b>Main Base</b>	<b>9.5</b>	<b>Jetty Local</b>
<b>Alternate Base</b>	<b>19.5</b>	<b>Airport</b>
<b>Leased Site</b>	<b>1.7</b>	<b>Tracking site</b>

**8b.** Provide the acreage of the land use categories listed in the table below:

LAND USE CATEGORY		ACRES
Total Developed: (administration, operational, housing, recreational, training, etc.)		<b>20.0</b>
Total Undeveloped (areas that are left in their natural state but are under specific environmental development constraints, i.e.: wetlands, endangered species, etc.)		Wetlands: <b>0.5</b>
		All Others: <b>4.0<sup>1</sup></b>
Total Undeveloped land considered to be without development constraints, but which may have operational/man caused constraints (i.e.: HERO, HERF, HERP, ESQD, AICUZ, etc.) TOTAL		<b>0</b>
Total Undeveloped land considered to be without development constraints		<b>5.0</b>
Total Off-base lands held for easements/lease for specific purposes		<b>1.7</b>
Breakout of undeveloped, restricted areas. Some restricted areas may overlap:	ESQD	<b>3.8</b>
	HERF	<b>0</b>
	HERP	<b>0</b>
	HERO	<b>0</b>
	AICUZ	<b>0</b>
	Airfield Safety Criteria	<b>0</b>
	Other	<b>0</b>

<sup>1</sup> Includes the 0.5 acres identified in Wetlands.

**8c.** How many acres on your base (includes off base sites) are dedicated for training purposes (e.g., vehicular, earth moving, mobilization)? This does not include buildings or interior small arms ranges used for training purposes. 0

**8d.** What is the date of your last AICUZ update? N/A /      /      Are any waivers of airfield safety criteria in effect on your base? **NO**. Summarize the conditions of the waivers below.

**No aircraft facilities on base.**

8e. List the off-base land use *types* (e.g, residential, industrial, agricultural) and *acreage* within Noise Zones 2 & 3 generated by your flight operations and whether it is compatible/incompatible with AICUZ guidelines on land use.

Acreage/Location/ID	Zones 2 or 3	Land Use	Compatible/ Incompatible
None			

8f. List the navigational channels and berthing areas controlled by your base which require maintenance dredging? Include the frequency, volume, current project depth, and costs of the maintenance requirement.

Navigational Channels/ Berthing Areas	Location / Description	Maintenance Dredging Requirement			
		Frequency	Volume (MCY)	Current Project Depth (FT)	Cost (\$M)
Berthing	Jetty Site	6 years	0.01	19	.15

8g. Summarize planned projects through FY 1997 requiring **new channel or berthing area** dredged depths, include location, volume and depth.

None.

8h.

Are there available <b>designated dredge disposal areas</b> for maintenance dredging material? List location, remaining capacity, and future limitations.	<b>Jetty site</b>
Are there available <b>designated dredge disposal areas</b> for new dredge material? List location, remaining capacity, and future limitations.	<b>Yes, 0.5 mecy</b>
Are the dredged materials considered contaminated? List known contaminants.	<b>None</b>

8.i. List any requirements or constraints resulting from consistency with **State Coastal Zone Management Plans**.

**4± acres at Jetty site (Main Base) within CCCL (Coastal Construction Control Line). These are state controlled coastal lands.**

8j. Describe any **non-point source pollution problems affecting water quality** e.g.: coastal erosion.

**None.**

8k.

If the base has a cooperative agreement with the US Fish and Wildlife Service and/or the State Fish and Game Department for conducting a hunting and fishing program, does the agreement or these resources constrain either current or future operations or activities? Explain the nature and extent of restrictions.	<b>Not Applicable</b>
---	-----------------------

**There are no agreements.**

8l. List any other areas on your base which are indicated as protected or preserved habitat other than threatened/endangered species that have been listed in Section 1. List the species, whether or not treated, and the acres protected/preserved.

**None.**

**9. WRAPUP**

**9a.** Are there **existing or potential environmental showstoppers** that have affected or will affect the accomplishment of the installation mission that have not been covered in the previous 8 questions?

**No.**

**9b.** Are there any **other environmental permits** required for base operations, include any relating to industrial operations.

**No.**

**9c.** Describe any **other environmental or encroachment restrictions** on base property not covered in the previous 8 sections.

**None.**

**9d.** List any **future/proposed laws/regulations** or any **proposed laws/regulations** which will constrain base operations or development plans in any way. Explain.

**None.**



BRAC-95 CERTIFICATION

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian, who provide information for use in the BRAC-95 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief."

The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

Each individual in your activity generating information for the BRAC-95 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated as necessary. You are directed to maintain those certifications at your activity for audit purposes. For purposes of this certification sheet, the commander of the activity will begin the certification process and each reporting senior in the Chain of Command reviewing the information will also sign this certification sheet. This sheet must remain attached to this package and be forwarded up the Chain of Command. Copies must be retained by each level in the Chain of Command for audit purposes.

I certify the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

MARK C. RUDDEFORTH  
NAME (Please type of print)

OFFICER IN CHARGE  
Title

NAVAL SURFACE WARFARE CENTER  
Activity

Mark C. Ruddeforth  
Signature

25 MAY 94  
Date



DATA CALL #33  
FT. LAUDERDALE

BRAC-95 CERTIFICATION

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian, who provide information for use in the BRAC-95 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief."

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I certify the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

MARK C. RUDDEFORTH  
NAME (Please type of print)

Mark C. Ruddeforth  
Signature

OFFICER IN CHARGE  
Title

25 MAY 94  
Date

NAVEL SURFACE WARFARE CENTER  
Activity

200

**DATA CALL 65  
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**Activity Identification:** Please complete the following table, identifying the activity for which this response is being submitted.

<b>Activity Name:</b>	Fort Lauderdale Detachment, Carderock Division Naval Surface Warfare Center
<b>UIC:</b>	62701 <i>← And UIC</i> <i>Doc # 61331 For</i>
<b>Major Claimant:</b>	Naval Sea Systems Command

*NEW 6/13/01 For*

**General Instructions/Background:**

Information requested in this data call is required for use by the Base Structure Evaluation Committee (BSEC), in concert with information from other data calls, to analyze both the impact that potential closure or realignment actions would have on a local community and the impact that relocations of personnel would have on communities surrounding receiving activities. In addition to Cost of Base Realignment Actions (COBRA) analyses which incorporate standard Department of the Navy (DON) average cost factors, the BSEC will also be conducting more sophisticated economic and community infrastructure analyses requiring more precise, activity-specific data. For example, activity-specific salary rates are required to reflect differences in salary costs for activities with large concentrations of scientists and engineers and to address geographic differences in wage grade salary rates. Questions relating to "Community Infrastructure" are required to assist the BSEC in evaluating the ability of a community to absorb additional employees and functions as the result of relocation from a closing or realigning DON activity.

Due to the varied nature of potential sources which could be used to respond to the questions contained in this data call, a block appears after each question, requesting the identification of the source of data used to respond to the question. To complete this block, identify the source of the data provided, including the appropriate references for source documents, names and organizational titles of individuals providing information, etc. Completion of this "Source of Data" block is critical since some of the information requested may be available from a non-DoD source such as a published document from the local chamber of commerce, school board, etc. Certification of data obtained from a non-DoD source is then limited to certifying that the information contained in the data call response is an accurate and complete representation of the information obtained from the source. Records must be retained by the certifying official to clearly document the source of any non-DoD information submitted for this data call.

**DATA CALL 65  
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**General Instructions/Background (Continued):**

The following notes are provided to further define terms and methodologies used in this data call. Please ensure that responses consistently follow this guidance:

**Note 1:** Throughout this data call, the term "activity" is used to refer to the DON installation that is the addressee for the data call.

**Note 2:** Periodically throughout this data call, questions will include the statement that the response should refer to the "area defined in response to question 1.b., (page 3)". Recognizing that in some large metropolitan areas employee residences may be scattered among many counties or states, the scope of the "area defined" may be limited to the sum of:

- those counties that contain government (DoD) housing units (as identified in 1.b.2)), and,
- those counties closest to the activity which, in the aggregate, include the residences of 80% or more of the activity's employees.

**Note 3:** Responses to questions referring to "civilians" in this data call should reflect federal civil service appropriated fund employees.

**1. Workforce Data**

**a. Average Federal Civilian Salary Rate.** Provide the projected FY 1996 average gross annual appropriated fund civil service salary rate for the activity identified as the addressee in this data call. This rate should include all cash payments to employees, and exclude non-cash personnel benefits such as employer retirement contributions, payments to former employees, etc.

<b>Average Appropriated Fund Civilian Salary Rate:</b>	\$34,644.
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<b>Source of Data (1.a. Salary Rate): Budget Submission for FY96</b>
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**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**b. Location of Residence.** Complete the following table to identify where employees live. Data should reflect current workforce.

**1) Residency Table.** Identify residency data, by county, for both military and civilian (civil service) employees working at the installation (including, for example, operational units that are homeported or stationed at the installation). For each county listed, also provide the estimated average distance from the activity, in miles, of employee residences and the estimated average length of time to commute one-way to work. For the purposes of displaying data in the table, any county(s) in which 1% or fewer of the activity's employees reside may be consolidated as a single line entry in the table, titled "Other".

County of Residence	State	No. of Employees Residing in County		Percentage of Total Employees	Average Distance From Base (Miles)	Average Duration of Commute (Minutes)
		Military	Civilian			
Broward	FL	4	22	90%	15	20
Palm Beach	FL	0	3	10%	34	45

= 100%

As discussed in Note 2 on Page 2, subsequent questions in the data call refer to the "area defined in response to question 1.b., (page 3)". In responding to these questions, the scope of the "area defined" may be limited to the sum of: a) those counties that contain government (DoD) housing units (as identified below), and, b) those counties closest to the activity which, in the aggregate, include the residences of 80% or more of the activity's employees.

**2) Location of Government (DoD) Housing.** If some employees of the base live in government housing, identify the county(s) where government housing is located:

**DATA CALL 65  
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**Source of Data (1.b. 1) & 2) Residence Data):** Personnel records

**c. Nearest Metropolitan Area(s).** Identify all major metropolitan area(s) (i.e., population concentrations of 100,000 or more people) which are within 50 miles of the installation. If no major metropolitan area is within 50 miles of the base, then identify the nearest major metropolitan area(s) (100,000 or more people) and its distance(s) from the base.

City	County	Distance from base (miles)
Fort Lauderdale	Broward	0
Miami	Dade	25
West Palm Beach	Palm Beach	50

**Source of Data (1.c. Metro Areas):** Chamber of Commerce (Gwen)305-927-2641

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**d. Age of Civilian Workforce.** Complete the following table, identifying the age of the activity's civil service workforce.

<b>Age Category</b>	<b>Number of Employees</b>	<b>Percentage of Employees</b>
<b>16 - 19 Years</b>	0	0
<b>20 - 24 Years</b>	0	0
<b>25 - 34 Years</b>	4	16%
<b>35 - 44 Years</b>	7	28%
<b>45 - 54 Years</b>	7	28%
<b>55 - 64 Years</b>	7	28%
<b>65 or Older</b>	0	0
<b>TOTAL</b>	25	100 %

<b>Source of Data (1.d.) Age Data): Personnel Records</b>
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**DATA CALL 65  
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**e. Education Level of Civilian Workforce**

1) **Education Level Table.** Complete the following table, identifying the education level of the activity's **civil service** workforce.

<b>Last School Year Completed</b>	<b>Number of Employees</b>	<b>Percentage of Employees</b>
<b>8th Grade or less</b>	0	0%
<b>9 through 11th Grade</b>	0	0%
<b>12th Grade or High School Equivalency</b>	11	44%
<b>1-3 Years of College</b>	6	24%
<b>4 Years of College (Bachelors Degree)</b>	6	24%
<b>5 or More Years of College (Graduate Work)</b>	2	8%
<b>TOTAL</b>	25	100 %

2) **Degrees Achieved.** Complete the following table for the activity's **civil service** workforce. Identify the number of employees with each of the following degrees, etc. To avoid double counting, only identify the highest degree obtained by a worker (e.g., if an employee has both a Master's Degree and a Doctorate, only include the employee under the category "Doctorate").

<b>Degree</b>	<b>Number of Civilian Employees</b>
Terminal Occupation Program - Certificate of Completion, Diploma or Equivalent (for areas such as technicians, craftsmen, artisans, skilled operators, etc.)	14
Associate Degree	3
Bachelor Degree	6
Masters Degree	1
Doctorate	1

**DATA CALL 65  
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**Source of Data (1.e.1) and 2) Education Level Data): Personnel Records**

**f. Civilian Employment By Industry.** Complete the following table to identify by "industry" the type of work performed by civil service employees at the activity. The intent of this table is to attempt to stratify the activity civilian workforce using the same categories of industries used to identify private sector employment. Employees should be categorized based on their primary duties. Additional information on categorization of private sector employment by industry can be found in the Office of Management and Budget Standard Industrial Classification (SIC) Manual. However, you do not need to obtain a copy of this publication to provide the data requested in this table.

Note the following specific guidance regarding the "Industry Type" codes in the first column of the table: Even though categories listed may not perfectly match the type of work performed by civilian employees, please attempt to assign each civilian employee to one of the "Industry Types" identified in the table. However, only use the Category 6, "Public Administration" sub-categories when none of the other categories apply. Retain supporting data used to construct this table at the activity-level, in case questions arise or additional information is required at some future time. Leave shaded areas blank.

Industry	SIC Codes	No. of Civilians	% of Civilians
<b>1. Agriculture, Forestry &amp; Fishing</b>	01-09	0	0
<b>2. Construction</b> (includes facility maintenance and repair)	15-17	0	0
<b>3. Manufacturing</b> (includes Intermediate and Depot level maintenance)	20-39		
3a. Fabricated Metal Products (include ordnance, ammo, etc.)	34	0	0
3b. Aircraft (includes engines and missiles)	3721 et al	0	0
3c. Ships	3731	0	0
3d. Other Transportation (includes ground vehicles)	various	0	0
3e. Other Manufacturing not included in 3a. through 3d.	various	0	0
<b>Sub-Total 3a. through 3e.</b>	20-39	0	0

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

Industry	SIC Codes	No. of Civilians	% of Civilians
<b>4. Transportation/Communications/Utilities</b>	<b>40-49</b>		
4a. Railroad Transportation	40	0	0
4b. Motor Freight Transportation & Warehousing (includes supply services)	42	1	4%
4c. Water Transportation (includes organizational level maintenance)	44	0	0
4d. Air Transportation (includes organizational level maintenance)	45	0	0
4e. Other Transportation Services (includes organizational level maintenance)	47	0	0
4f. Communications	48	0	0
4g. Utilities	49	0	0
<b>Sub-Total 4a. through 4g.</b>	<b>40-49</b>	<b>1</b>	<b>4%</b>
<b>5. Services</b>	<b>70-89</b>		
5a. Lodging Services	70	0	0
5b. Personal Services (includes laundry and funeral services)	72	0	0
5c. Business Services (includes mail, security guards, pest control, photography, janitorial and ADP services)	73	7	28%
5d. Automotive Repair and Services	75	0	0
5e. Other Misc. Repair Services	76	0	0
5f. Motion Pictures	78	0	0
5g. Amusement and Recreation Services	79	0	0
5h. Health Services	80	0	0
5i. Legal Services	81	0	0

**DATA CALL 65  
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

Industry	SIC Codes	No. of Civilians	% of Civilians
5j. Educational Services	82	0	0
5k. Social Services	83	0	0
5l. Museums	84	0	0
5m. Engineering, Accounting, Research & Related Services (includes RDT&E, ISE, etc.)	87	6	24%
5n. Other Misc. Services	89	10	40%
<b>Sub-Total 5a. through 5n.:</b>	70-89	23	92%
<b>6. Public Administration</b>	91-97		
6a. Executive and General Government, Except Finance	91	1	4%
6b. Justice, Public Order & Safety (includes police, firefighting and emergency management)	92	0	0
6c. Public Finance	93	0	0
6d. Environmental Quality and Housing Programs	95	0	0
<b>Sub-Total 6a. through 6d.</b>	0	0	0
<b>TOTAL</b>		25	100 %

**Source of Data (1.f.) Classification By Industry Data): PDs**

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**g. Civilian Employment by Occupation.** Complete the following table to identify the types of "occupations" performed by civil service employees at the activity. Employees should be categorized based on their primary duties. Additional information on categorization of employment by occupation can be found in the Department of Labor Occupational Outlook Handbook. However, you do not need to obtain a copy of this publication to provide the data requested in this table.

Note the following specific guidance regarding the "Occupation Type" codes in the first column of the table: Even though categories listed may not perfectly match the type of work performed by civilian employees, please attempt to assign each civilian employee to one of the "Occupation Types" identified in the table. Refer to the descriptions immediately following this table for more information on the various occupational categories. Retain supporting data used to construct this table at the activity-level, in case questions arise or additional information is required at some future time. Leave shaded areas blank.

Occupation	Number of Civilian Employees	Percent of Civilian Employees
<b>1. Executive, Administrative and Management</b>	2	8%
<b>2. Professional Specialty</b>		
2a. Engineers	6	24%
2b. Architects and Surveyors	0	0
2c. Computer, Mathematical & Operations Research	0	0
2d. Life Scientists	0	0
2e. Physical Scientists	0	0
2f. Lawyers and Judges	0	0
2g. Social Scientists & Urban Planners	0	0
2h. Social & Recreation Workers	0	0
2i. Religious Workers	0	0
2j. Teachers, Librarians & Counselors	0	0
2k. Health Diagnosing Practitioners (Doctors)	0	0
2l. Health Assessment & Treating (Nurses, Therapists, Pharmacists, Nutritionists, etc.)	0	0

**DATA CALL 65  
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

Occupation	Number of Civilian Employees	Percent of Civilian Employees
2m. Communications	0	0
2n. Visual Arts	0	0
<b>Sub-Total 2a. through 2n.:</b>	6	24%
<b>3. Technicians and Related Support</b>		
3a. Health Technologists and Technicians	0	0
3b. Other Technologists	2	8%
<b>Sub-Total 3a. and 3b.:</b>	2	8%
<b>4. Administrative Support &amp; Clerical</b>	0	0
<b>5. Services</b>		
5a. Protective Services (includes guards, firefighters, police)	7	28%
5b. Food Preparation & Service	0	0
5c. Dental/Medical Assistants/Aides	0	0
5d. Personal Service & Building & Grounds Services (includes janitorial, grounds maintenance, child care workers)	0	0
<b>Sub-Total 5a. through 5d.</b>	7	28%
<b>6. Agricultural, Forestry &amp; Fishing</b>	0	0
<b>7. Mechanics, Installers and Repairers</b>	7	28%
<b>8. Construction Trades</b>	0	0
<b>9. Production Occupations</b>	0	0
<b>10. Transportation &amp; Material Moving</b>	1	4%
<b>11. Handlers, Equipment Cleaners, Helpers and Laborers</b> (not included elsewhere)	0	0
<b>TOTAL</b>	25	100 %

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

<b>Source of Data (1.g.) Classification By Occupation Data): PDs</b>
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**Description of Occupational Categories used in Table 1.g.** The following list identifies public and private sector occupations included in each of the major occupational categories used in the table. Refer to these examples as a guide in determining where to allocate appropriated fund civil service jobs at the activity.

1. **Executive, Administrative and Management.** Accountants and auditors; administrative services managers; budget analysts; construction and building inspectors; construction contractors and managers; cost estimators; education administrators; employment interviewers; engineering, science and data processing managers; financial managers; general managers and top executives; chief executives and legislators; health services managers; hotel managers and assistants; industrial production managers; inspectors and compliance officers, except construction; management analysts and consultants; marketing, advertising and public relations managers; personnel, training and labor relations specialists and managers; property and real estate managers; purchasing agents and managers; restaurant and food service managers; underwriters; wholesale and retail buyers and merchandise managers.
2. **Professional Specialty.** Use sub-headings provided.
3. **Technicians and Related Support.** Health Technologists and Technicians sub-category - self-explanatory. Other Technologists sub-category includes aircraft pilots; air traffic controllers; broadcast technicians; computer programmers; drafters; engineering technicians; library technicians; paralegals; science technicians; numerical control tool programmers.
4. **Administrative Support & Clerical.** Adjusters, investigators and collectors; bank tellers; clerical supervisors and managers; computer and peripheral equipment operators; credit clerks and authorizers; general office clerks; information clerks; mail clerks and messengers; material recording, scheduling, dispatching and distributing; postal clerks and mail carriers; records clerks; secretaries; stenographers and court reporters; teacher aides; telephone, telegraph and teletype operators; typists, word processors and data entry keyers.
5. **Services.** Use sub-headings provided.
6. **Agricultural, Forestry & Fishing.** Self explanatory.
7. **Mechanics, Installers and Repairers.** Aircraft mechanics and engine specialists; automotive body repairers; automotive mechanics; diesel mechanics; electronic equipment repairers; elevator installers and repairers; farm equipment mechanics; general maintenance mechanics; heating, air conditioning and refrigeration technicians; home appliance and power tool repairers, industrial machinery repairers; line installers and cable splicers; millwrights; mobile heavy equipment mechanics; motorcycle, boat and small engine mechanics; musical instrument repairers and tuners; vending machine servicers and repairers.
8. **Construction Trades.** Bricklayers and stonemasons; carpenters; carpet installers; concrete masons and terrazzo workers; drywall workers and lathers; electricians; glaziers; highway maintenance; insulation workers; painters and paperhangers; plasterers; plumbers and pipefitters; roofers; sheet metal workers; structural and reinforcing ironworkers; tilesetters.
9. **Production Occupations.** Assemblers; food processing occupations; inspectors, testers and graders; metalworking and plastics-working occupations; plant and systems operators, printing occupations; textile, apparel and furnishings occupations; woodworking occupations; miscellaneous production operations.
10. **Transportation & Material Moving.** Busdrivers; material moving equipment operators; rail transportation occupations; truckdrivers; water transportation occupations.
11. **Handlers, Equipment Cleaners, Helpers and Laborers** (not included elsewhere). Entry level jobs not requiring significant training.

**DATA CALL 65  
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**h. Employment of Military Spouses.** Complete the following table to provide estimated information concerning military spouses who are also employed in the area defined in response to question 1.b., above. **Do not fill in shaded area.**

1. Percentage of Military Employees Who Are Married:	25%
2. Percentage of Military Spouses Who Work Outside of the Home:	0%
3. Break out of Spouses' Location of Employment (Total of rows 3a. through 3d. should equal 100% and reflect the number of spouses used in the calculation of the "Percentage of Spouses Who Work Outside of the Home".	
3a. Employed "On-Base" - Appropriated Fund:	0
3b. Employed "On-Base" - Non-Appropriated Fund:	0
3c. Employed "Off-Base" - Federal Employment:	0
3d. Employed "Off-Base" - Other Than Federal Employment	0

<b>Source of Data (1.h.) Spouse Employment Data): Military Personnel</b>
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**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**2. Infrastructure Data.** For each element of community infrastructure identified in the two tables below, rate the community's ability to accommodate the relocation of additional functions and personnel to your activity. Please complete each of the three columns listed in the table, reflecting the impact of various levels of increase (20%, 50% and 100%) in the number of personnel working at the activity (and their associated families). In ranking each category, use one of the following three ratings:

- A - Growth can be accommodated with little or no adverse impact to existing community infrastructure and at little or no additional expense.
- B - Growth can be accommodated, but will require some investment to improve and/or expand existing community infrastructure.
- C - Growth either cannot be accommodated due to physical/environmental limitations or would require substantial investment in community infrastructure improvements.

**Table 2.a., "Local Communities":** This first table refers to the local community (i.e., the community in which the base is located) and its ability to meet the increased requirements of the installation.

**Table 2.b., "Economic Region":** This second table asks for an assessment of the infrastructure of the economic region (those counties identified in response to question 1.b., (page 3) - taken in the aggregate) and its ability to meet the needs of additional employees and their families moving into the area.

**For both tables, annotate with an asterisk (\*) any categories which are wholly supported on-base, i.e., are not provided by the local community. These categories should also receive an A-B-C rating. Answers for these "wholly supported on-base" categories should refer to base infrastructure rather than community infrastructure.**

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

a. **Table A: Ability of the local community to meet the expanded needs of the base.**

1) Using the A - B - C rating system described above, complete the table below.

Category	20% Increase	50% Increase	100% Increase
Off-Base Housing	A	A	A
Schools - Public	A	A	A
Schools - Private	A	A	A
Public Transportation - Roadways	A	A	A
Public Transportation - Buses/Subways	A	A	A
Public Transportation - Rail	A	A	A
Fire Protection	A	A	A
Police	A	A	A
Health Care Facilities	A	A	A
Utilities:	A	A	A
Water Supply	A	A	A
Water Distribution	A	A	A
Energy Supply	A	A	A
Energy Distribution	A	A	A
Wastewater Collection	A	A	A
Wastewater Treatment	A	A	A
Storm Water Collection	A	A	A
Solid Waste Collection and Disposal	A	A	A
Hazardous/Toxic Waste Disposal	A	A	A
Recreational Activities	A	A	A

Remember to mark with an asterisk any categories which are wholly supported on-base.

**DATA CALL 65  
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

2) For each rating of "C" identified in the table on the preceding page, attach a brief narrative explanation of the types and magnitude of improvements required and/or the nature of any barriers that preclude expansion.

N/A

**Source of Data (2.a. 1) & 2) - Local Community Table):**see note below

\*Note: Due to the small number of employees (29), all categories were rated "A". No sources were necessary.

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**b. Table B: Ability of the region described in the response to question 1.b. (page 3) (taken in the aggregate) to meet the needs of additional employees and their families relocating into the area.**

1) Using the A - B - C rating system described above, complete the table below.

Category	20% Increase	50% Increase	100% Increase
Off-Base Housing	A	A	A
Schools - Public	A	A	A
Schools - Private	A	A	A
Public Transportation - Roadways	A	A	A
Public Transportation - Buses/Subways	A	A	A
Public Transportation - Rail	A	A	A
Fire Protection	A	A	A
Police	A	A	A
Health Care Facilities	A	A	A
Utilities:	A	A	A
Water Supply	A	A	A
Water Distribution	A	A	A
Energy Supply	A	A	A
Energy Distribution	A	A	A
Wastewater Collection	A	A	A
Wastewater Treatment	A	A	A
Storm Water Collection	A	A	A
Solid Waste Collection and Disposal	A	A	A
Hazardous/Toxic Waste Disposal	A	A	A
Recreation Facilities	A	A	A

Remember to mark with an asterisk any categories which are wholly supported on-base.

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

2) For each rating of "C" identified in the table on the preceding page, attach a brief narrative explanation of the types and magnitude of improvements required and/or the nature of any barriers that preclude expansion.

None.

<b>Source of Data (2.b. 1) &amp; 2) - Regional Table):</b> See note below
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\*Note: Due to the small number of employees (29), all categories were rated "A". No sources were necessary.

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**3. Public Facilities Data:**

- a. **Off-Base Housing Availability.** For the counties identified in the response to question 1.b. (page 3), in the aggregate, estimate the current average vacancy rate for community housing. Use current data or information identified on the latest family housing market analysis. For each of the categories listed (rental units and units for sale), combine single family homes, condominiums, townhouses, mobile homes, etc., into a single rate:

Rental Units:

9 %

Units for Sale:

7 %

<b>Source of Data (3.a. Off-Base Housing):</b> North Broward County Association of Realtors
---

**DATA CALL 65  
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**b. Education.**

1) Information is required on the current capacity and enrollment levels of school systems serving employees of the activity. Information should be keyed to the counties identified in the response to question 1.b. (page 3).

School District	County	Number of Schools			Enrollment		Pupil-to-Teacher Ratio		Does School District Serve Gov't Housing Units? *
		Elementary	Middle	High	Current	Max. Capacity	Current	Max. Ratio	
Broward County School District	Broward	114	31	22	186,432	155,384	40:1	30:1	yes

\* Answer "Yes" in this column if the school district in question enrolls students who reside in government housing.

**Source of Data (3.b.1) Education Table): Broward County School Board**

2) Are there any on-base "Section 6" Schools? If so, identify number of schools and current enrollment.

No.

**Source of Data (3.b.2) On-Base Schools): Site Director**

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

3) For the counties identified in the response to question 1.b. (page 3), in the aggregate, list the names of undergraduate and graduate colleges and universities which offer certificates, Associate, Bachelor or Graduate degrees :

**BROWARD COUNTY**

**COLLEGES (all colleges listed below are accredited):**

Barry University  
Broward Community College  
Buader Fashion College  
Concord Career College  
Florida Atlantic University  
Florida International University  
Nova University  
Florida Arts Institute

**Source of Data (3.b.3) Colleges:** Broward County School Board Counselor

4) For the counties identified in the response to question 1.b. (page 3), in the aggregate, list the names and major curriculums of vocational/technical training schools:

Vocational and Technical Schools:

Atlantic Vocational  
Florida Institute of Message Therapy  
McFatter Vocational  
Sheridan Vocational Center

Major curriculums:

Agriculture	Industrial Education
Business Technician	Marketing
Computer Science	Marine Mechanic
Cosmetology	Message Therapy
Hairdressing	Medical Technician
Home Economics	

**Source of Data (3.b.4) Vo-tech Training):** Broward County School Board

**DATA CALL 65  
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**c. Transportation.**

1) Is the activity served by public transportation?

Site 1	Yes	No
Bus:	x	
Rail:		x
Subway:		x
Ferry:		x
Site 2	Yes	No
Bus:	x	
Rail:		x
Subway:		x
Ferry:		x

\*Site 1 is located at 1650 SW 39th St, Fort Lauderdale, FL

\*Site 2 is located at 8010 N. Ocean Drive, Dania, FL

**Source of Data (3.c.1) Transportation):** Department of Transportation

2) Identify the location of the nearest passenger railroad station (long distance rail service, not commuter service within a city) and the distance from the activity to the station.

The railroad station extends through three counties and is located at 275 Tigertail Road in Fort Lauderdale, FL . This station is approximately 5 miles from site 1 (airport site). There is no railroad station located near site 2 (jetty site).

**Source of Data (3.c.2) Transportation):** Tri-rail of Fort Lauderdale

3) Identify the name and location of the nearest commercial airport (with public carriers, e.g., USAIR, United, etc.) and the distance from the activity to the airport.

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

Fort Lauderdale International Airport (located about 8 miles from site 2 and 1 mile from site 1)

**Source of Data (3.c.3) Transportation):** Fort Lauderdale Airport Dir. Office

4) How many carriers are available at this airport?

15 carriers

**Source of Data (3.c.4) Transportation):** Fort Lauderdale Airport Dir. Office

**DATA CALL 65  
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

5) What is the Interstate route number and distance, in miles, from the activity to the nearest Interstate highway?

I-95

From site 1 (airport site) 1/2 mile

From site 2 (jetty site) 6 miles

<b>Source of Data (3.c.5) Transportation): AAA</b>
--

6) Access to Base:

a) Describe the quality and capacity of the road systems providing access to the base, specifically during peak periods. (Include both information on the area surrounding the base and information on access to the base, e.g., numbers of gates, congestion problems, etc.)

Site 1 (airport site): The road system providing access to site 1 is satisfactory. No change exists during peak periods. The site is located parallel to the flight line of the Fort Lauderdale International airport; however, airport traffic does not influence access, as the site access is independent from the airport access.

Site 2 (jetty site): The jetty site is located at the far end of John U. Lloyd State Park. Access to the base requires clearance to drive through the park. Because the employees of the park have become familiar with the base employees, they will often times flag the base employees forward not requiring them to stop and present their access badge. However, during tourist season the line to enter the park becomes very long and traffic becomes congested and base employees must wait in line in order to enter the park.

There are two access roads to the park- both roads are single laned roads; however one road system requires crossing a draw bridge. Congestion occurs when the draw bridge is active. On occasions, the draw bridge may be under construction causing congestion. Fortunately, if an employee is fore-warned he/she may gain access to John U. Lloyd State Park via a detour using access road 2.

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

b) Do access roads transit residential neighborhoods?

No.

c) Are there any easements that preclude expansion of the access road system?

Site 2 (jetty site): Because this base is located within John U. Lloyd State Park, we have only one access road. Expansion of the access road would require State approval.

d) Are there any man-made barriers that inhibit traffic flow (e.g., draw bridges, etc.)?

Site 2 (jetty site): A draw bridge is enroute via one of the access roads to the park

<b>Source of Data (3.c.6) Transportation): Department of Transportation (Roads)</b>
---

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

- d. **Fire Protection/Hazardous Materials Incidents.** Does the activity have an agreement with the local community for fire protection or hazardous materials incidents? Explain the nature of the agreement and identify the provider of the service.

Site 1 is supported by Broward County Fire Department, Airport Division  
Site 2 is supported by City of Hollywood Fire Department

Verbal agreements held with both departments for support. Previous attempts to enter into written agreements by this activity have been declined by prospective departments.

<b>Source of Data (3.d. Fire/Hazmat): Security Officer, Dan Sawyer</b>
--

- e. **Police Protection.**

- 1) What is the level of legislative jurisdiction held by the installation?

Exclusive and proprietor legislative jurisdiction are held for site 1.

Proprietorial legislative jurisdiction are held for site 2

- 2) If there is more than one level of legislative jurisdiction for installation property, provide a brief narrative description of the areas covered by each level of legislative jurisdiction and whether there are separate agreements for local law enforcement protection.

Site 1 containing 18 acres, hold two legislative jurisdictions as follows:

Exclusive jurisdiction was granted over site 1, containing 7.55 acres of land by a Deed of Cession signed by the governor of the State of Florida on 4 March 1943 and was accepted by the United States of America by letter dated 5 April 1943. Law enforcement protection provided by activity's DOD Police Department with emergency support from Broward County Sheriff's Office per verbal agreement.

The remaining 11 acres were received in an exchange of property with Broward County, Florida via quit claim deeds (6.16 acres 1970 and 4.805 acres 1984) and are of the proprietorial legislative jurisdiction of Broward County, Florida.

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

Site 2 containing 9.54 acres and plotting tower containing .07 acres:

Site 2 contains 9.54 acres of leased property from the State of Florida which is located within a State Park. Site 2 is currently the activity's headquarters, operations, and pier site.

The plotting Tower contains .07 acres of leased property from the State of Florida.

The legislative jurisdiction is that of the state for both properties, with the detachment holding proprietary jurisdiction. Only verbal law enforcement agreements exist for state and city support to activities DAD Police Department.

3) Does the activity have a specific written agreement with local law enforcement concerning the provision of local police protection?

No. Attempts made to enter into written agreements with local agencies by this activity have been declined.

4) If agreements exist with more than one local law enforcement entity, provide a brief narrative description of whom the agreement is with and what services are covered.

Verbal agreements exist between this activity and the Broward County Sheriffs Office (Airport Division) for emergency support and assistance to DAD Police Officers at the Airport Site.

Verbal agreements exist between this activity, State Park Rangers, and the City of Hollywood Police Department for emergency support and assistance to DAD Police Officers.

5) If military law enforcement officials are routinely augmented by officials of other federal agencies (BLM, Forest Service, etc.), identify any written agreements covering such services and briefly describe the level of support received.

None.

<b>Source of Data (3.e. 1) - 5) - Police): Security Officer, Dan Sawyer</b>
---

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**f. Utilities.**

1) Does the activity have an agreement with the local community for water, refuse disposal, power or any other utility requirements? Explain the nature of the agreement and identify the provider of the service.

A contract exists with local contractors for refuse disposal at both sites.

No written agreement exists with the local community for water and sewer or power. Both sites are billed according to use through the local power and utilities company.

2) Has the activity been subject to water rationing or interruption of delivery during the last five years? If so, identify time period during which rationing existed and the restrictions imposed. Were activity operations affected by these situations? If so, explain extent of impact.

No.

3) Has the activity been subject to any other significant disruptions in utility service, e.g., electrical "brown outs", "rolling black outs", etc., during the last five years? If so, identify time period(s) covered and extent/nature of restrictions/disruption. Were activity operations affected by these situations? If so, explain extent of impact.

Both sites are located in a geographic location which experiences periodic loss of power (especially during the hurricane season from May to October). In order to deal with these disruptions, uninterrupted power supplies and generators have been installed where needed.

Source of Data (3.f. 1) - 3) Utilities): Southern Division (Linda Missel) 803-743-0634
--

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

4. **Business Profile.** List the top ten employers in the geographic area defined by your response to question 1.b. (page 3), taken in the aggregate, (include your activity, if appropriate):

Employer	Product/Service	No. of Employees
1. Motorola	Portable Radios	2200
2. Broward County	Public Service	6506
3. Winn Dixie	Food Service	5500
4. Sun Sentinel	Publishing	1700
5. Racal Datacom	Data Communications	1600
6. Bendix King	Avionics & Radar	1140
7. School Board of Broward	Education	19000
8. Publix	Food Service	7000
9. Broward County Hospital	Medical Services	5000
10. Eckerd's Drug Stores	Drug Store	4800

**Source of Data (4. Business Profile):** Broward Economic Development Board

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**5. Other Socio-Economic Impacts.** For each of the following areas, describe other recent (past 5 years), on-going or projected economic impacts (both positive and negative) on the geographic region defined by your response to question 1.b. (page 3), in the aggregate:

a. Loss of Major Employers:

Due to Hurricane Andrew Aug 1992, Homestead Air Force Base closed. Although Homestead Air Force Base is not located within Broward County, several residents from Broward County commuted to the base.

Eastern Airlines and Pan American Airlines went out of business, impacting the area heavily. Although the offices were primarily located within Dade County, several residents of Broward County have been affected.

The decline in interest rates has had a big impact on the local community as well, as a large percentage of the community consists of elderly (retired) residents. Along the same lines, the consolidation and problems of the Savings and Loans created a financial impact on the retirees.

The recession in the construction industry has had a financial impact on the expansion of the area and the reconstruction after Hurricane Andrew.

b. Introduction of New Businesses/Technologies:

Blockbuster Video has been developing quite heavily in the area, creating new service oriented jobs for Broward County.

c. Natural Disasters:

Hurricane Andrew - August 1992. This hurricane affected both Broward County and our neighboring Dade County. Most damage occurred in Dade County, FL. Due to business closings as a result of physical damage to the structures and access roads, many Dade County residents migrated to Broward County. This hurricane has had a devastating affect on the Homestead Air Force Base, putting many people out of business. Many areas are still recovering from this hurricane, which was marked as a national federal disaster.

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

d. Overall Economic Trends:

Overall, the first 3 years of the 5 past years has seen a downward trend; however, we have been experiencing an upward trend in the past 2 years as the economy has been growing and trying to recover.

**Source of Data (5. Other Socio/Econ):** Dr. Strong, Dir, School of Economics

**6. Other.** Identify any contributions of your activity to the local community not discussed elsewhere in this response.

Our military has been providing logistic support for incoming U.S. and British ships as well as submarines entering the port. The Officer in Charge has responded to many community requests to speak at meetings and conferences within the local community.

**Source of Data (6. Other):** Administrative Office

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

D. K. Kruse; Captain, USN  
NAME (Please type or print)

Commander  
Title

Carderock Division, USN  
Activity

*D. K. Kruse*  
Signature

7/15/94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

D. P. Sargent, Jr.; RADM (Sel), USN  
NAME (Please type or print)

Commander  
Title

Naval Surface Warfare Center  
Activity

*D. P. Sargent*  
Signature

7/18/94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

G. R. STERNER  
NAME (Please type or print)

Commander  
Title

Naval Systems Command  
Activity

*G. R. Sterner*  
Signature

7/25/94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

NAME (Please type or print)

Title

Activity

*W. Steamer*  
Signature

8/16/94  
Date

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian, who provide information for use in the BRAC-95 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief."

The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

Each individual in your activity generating information for the BRAC-95 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated as necessary. You are directed to maintain those certifications at your activity for audit purposes. For purposes of this certification sheet, the commander of the activity will begin the certification process and each reporting senior in the Chain of Command reviewing the information will also sign this certification sheet. This sheet must remain attached to this package and be forwarded up the Chain of Command. Copies must be retained by each level in the Chain of Command for audit purposes.

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

R. J. King  
NAME (Please type or print)

*R J King*  
Signature

Detachment Director  
Title

17 JULY 94  
Date

Fort Lauderdale Detachment  
Carderock Division; NSWC  
Activity

**CAPACITY ANALYSIS:  
DATA CALL #4 WORK SHEET FOR  
TECHNICAL CENTER or LABORATORY:**

**COASTAL SYSTEMS STATION  
DAHLGREN DIVISION PANAMA CITY  
NAVAL SURFACE WARFARE CENTER**

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**TAB A:** Ship Berthing Capacity  
**TAB B:** Operational Airfield Capacity  
**TAB C:** Depot Level Maintenance Capacity  
**TAB D:** Ordnance Storage Capacity

\*\*\*\*\*If any responses are classified, attach a separate classified annex.\*\*\*\*\*

7 April 1994

**1. Historical and Projected Workload.** Use Tables 1.1, 1.2, 1.3 & 1.4 below to provide historical and currently projected workload data for your activity in terms of funding and workyears. Assume previous BRAC closures and realignments are implemented on schedule. Dollar amounts should be in then-year dollars. Workyears should be separated for in-house government efforts and on-site contractor work.

- a. Use Table 1.1 to provide data on your site.
- b. Use Table 1.2 to provide data on your Detachments that did not receive this Data Call directly. Compile the information from all of these Detachments into one table. Attach a list of the titles & UIC's of the Detachments included in the table.
- c. For FY's 1993 thru 1997 provide a breakout of the "Total Funds Budgeted" line showing the appropriation and amounts of funding budgeted from your major customers. Major resource Sponsors are defined as, but not limited to, all systems commands, ONR, SSPO, CNO, FLT CINCs, Other DON, Other DOD by Department, Other Federal Government, All other. Use Table 1.3 to report this breakout for your site. Use Table 1.4 to report this breakout for your compiled Detachments that did not receive this Data Call directly. Provide separate tables for FY's 1993 thru 1997.

Use the following definitions when providing data for the tables below:

Workyears: Consistent with those used in the preparation of inputs to the President's budget.

In-House government efforts or In-House workyears: Includes both military and civil servant employees

On-Site Contractor workyears: Actual or estimated workyears performed by support contractors with workyears defined consistent with the definition used in the President's budget.

On-site Contractors: Those contractors that occupy space directly on the site on nearly a full time basis.

Total Funds Budgeted: The funds used as inputs to the President's Budget.

Civilian Personnel On-Board: Full Time Permanent employees (FTP).

**Table 1.1 Historical and Projected Workload for CSS  
(UIC 61331)**

<b>Fiscal Year</b>	<b>Total Funds Budgeted (\$K)</b>	<b>Total Funds Received w/o Direct Cite (\$K)</b>	<b>Direct Cite Funds Received (\$K)</b>	<b>Budgeted Wkys</b>	<b>Actual In-House Wkys</b>	<b>Actual Onsite Contract Wkys</b>
86	88,848	96,642	22,200	1210	1211	91
87	106,493	84,066	26,600	1207	1214	62
88	113,303	104,865	41,300	1300	1286	59
89	120,179	122,870	32,326	1333	1348	79
90	123,826	154,383	45,656	1246	1380	97
91	161,791	181,312	11,146	1242	1358	130
92	148,041	180,185	12,615	1300	1342	175
93	161,051	185,598	17,427	1211	1291	197
94	158,365			1245		
95	178,079*			1352		
96	173,282*			1250		
97	169,981*			1156		

\* FY 95-97 budgets include BRAC 91/93 geographical consolidations of Naval Mine Warfare Engineering Activity (NMWEA), and White Oak mine warfare operations into CSS operations.

**Table 1.2 Historical and Projected Workload for Detachments of CSS  
(UIC N62701, N60921)**

<b>Fiscal Year</b>	<b>Total Funds Budgeted (\$K)</b>	<b>Total Funds Received w/o Direct Cite (\$K)</b>	<b>Direct Cite Funds Received (\$K)</b>	<b>Budgeted Wkyrs</b>	<b>Actual In-House Wkyrs</b>	<b>Actual Onsite Contract Wkyrs</b>
<b>86</b>	*	*	*	*	*	*
<b>87</b>	*	*	*	*	*	*
<b>88</b>	*	*	*	*	*	*
<b>89</b>	*	*	*	*	*	*
<b>90</b>	*	*	*	*	*	*
<b>91</b>	*	*	*	*	*	*
<b>92</b>	*	*	*	*	*	*
<b>93</b>	*	*	*	*	*	*
<b>94</b>	<b>3,887</b>			<b>33</b>		
<b>95</b>	<b>3,918</b>			<b>33</b>		
<b>96</b>	<b>4,830</b>			<b>33</b>		
<b>97</b>	<b>4,838</b>			<b>33</b>		

**\* Historical data (FY 1993 and prior) for Ft. Lauderdale and Ft. Monroe detachments are included in Table 1.1 of the White Oak (UIC N60921), Naval Surface Warfare Center Dahlgren Division submission.**

**TABLE 1.3 FY 1993 BREAKOUT OF FUNDS BUDGETED for CSS**  
**(UIC 61331 ) \$M**

SPONSOR	RDT&E(N)							Other RDT& E	Other Appropriation						
	6.1	6.2	6.3a	6.3b	6.4	6.5	6.6		OMN	APN	OPN	WPN	SCN	Other Navy	All Other
NAVAIR			.6	9.6		1.1			5.4						.2
NAVSEA	.4		3.2	37.6	12.8		4.0		8.4		4.2		14.7		8.2
CNO						.1			.2						
CNR	.1	22.6		.8		.2	.2								
NAVINTELLCOM							1.3		.1						
SPAWAR				.5		.2									
OTHER NAVY	6.2	5.7		.2	1.6	.4	3.7	.1	1.1		.4			1.0	.3
AIR FORCE															
ARMY															3.6
OTHER DOD															
OTHER GOVT															
OTHER															.1
<b>TOTAL</b>	<b>6.7</b>	<b>28.3</b>	<b>3.8</b>	<b>48.7</b>	<b>14.4</b>	<b>2.0</b>	<b>9.2</b>	<b>.1</b>	<b>15.2</b>		<b>4.6</b>		<b>14.7</b>	<b>1.0</b>	<b>12.4</b>

TABLE 1.3 FY 1994 BREAKOUT OF FUNDS BUDGETED for CSS  
(UIC 61331 ) \$M

SPONSOR	RDT&E(N)						Other RDT&E	Other Appropriation							
	6.1	6.2	6.3a	6.3b	6.4	6.5		6.6	OMN	APN	OPN	WPN	SCN	Other Navy	All Other
NAVAIR		.5	3.5	10.6	2.4	.9		.1	3.6						
NAVSEA			4.0	25.0	5.8			14.5	7.1		5.6		15.5		6.7
CNO								1.4							
CNR	1.3	16.3		.1	.1				1.4						
NAVINTELCOM									2						
SPAWAR			.1			.2									
OTHER NAVY		3.5		1.0	.2	.2		2.1	4.3		5.7			1.5	.7
AIR FORCE															
ARMY															.1
OTHER DOD								.4							
OTHER GOV'T															.1
OTHER															
TOTAL	1.3	20.3	7.6	36.7	8.5	1.3	13.0	17.1	16.6		11.3		15.5	1.5	7.7

**TABLE 1.3 FY 1995 BREAKOUT OF FUNDS BUDGETED for CSS  
(UIC 61331) \$M**

SPONSOR	RDT&E(N)							Other RDT& E	Other Appropriation						
	6.1	6.2	6.3a	6.3b	6.4	6.5	6.6		OMN	APN	OPN	WPN	SCN	Other Navy	All Other
NAVAIR		.3	3.7	7.9	1.8	.8		1.6	5.2						
NAVSEA			3.2	27.2	6.3		2.7	6.2	19.2		10.4		13.4		17.3
CNO							3.0								
CNR	1.1	25.4				.1			2.3						
NAVINTELLCOM							.9		.3						
SPAWAR						.2									
OTHER NAVY		2.9		.7	.2	.6	.9	1.4	2.2		5.0			1.5	1.1
AIR FORCE															.6
ARMY															
OTHER DOD								.4							
OTHER GOVT															
OTHER															.1
<b>TOTAL</b>	<b>1.1</b>	<b>28.6</b>	<b>6.9</b>	<b>35.8</b>	<b>8.3</b>	<b>1.7</b>	<b>7.5</b>	<b>9.6</b>	<b>29.2</b>		<b>15.4</b>		<b>13.4</b>	<b>1.5</b>	<b>19.1</b>

TABLE 1.3 FY 1996 BREAKOUT OF FUNDS BUDGETED for CSS  
(UIC 61331) \$M

SPONSOR	RDT&E(N)							Other RDT& E	Other Appropriation						
	6.1	6.2	6.3a	6.3b	6.4	6.5	6.6		OMN	APN	OPN	WPN	SCN	Other Navy	All Other
NAVAIR			1.7	10.1	2.3	.9			5.2						
NAVSEA			3.4	21.5	5.0		2.7	5.6	16.9		7.3	.4	11.4		22.6
CNO							2.3								
CNR	1.1	34.4							2.6						
NAVINTELLCOM							.9		.4						
SPAWAR						.4									
OTHER NAVY		.9		.5	.1	.5	.9	1.1	2.4		4.8			1.5	1.1
AIR FORCE															
ARMY															
OTHER DOD								.4							
OTHER GOVT															
OTHER															.1
TOTAL	1.1	35.3	5.1	32.1	7.4	1.8	6.8	7.1	27.5		12.1	.4	11.4	1.5	23.8

TABLE 1.3 FY 1997 BREAKOUT OF FUNDS BUDGETED for CSS  
(UIC 61331) \$M

SPONSOR	RDT&E(N)							Other RDT& E	Other Appropriation						
	6.1	6.2	6.3a	6.3b	6.4	6.5	6.6		OMN	APN	OPN	WPN	SCN	Other Navy	All Other
NAVAIR				15.6	3.6	.9			4.6						
NAVSEA			3.7	22.2	5.1		2.7	4.6	20.2		5.6	.4	8.1		20.6
CNO							.7								
CNR	1.0	33.6							1.7						
NAVINTELLCOM							.9		.1						
SPAWAR						.4									
OTHER NAVY		.9		.3	.1	.5	.7	1.1	2.2		4.7			1.5	1.1
AIR FORCE															
ARMY															
OTHER DOD								.4							
OTHER GOVT															
OTHER															.1
TOTAL	1.0	34.5	3.7	38.1	8.8	1.8	5.0	6.1	28.8		10.3	.4	8.1	1.5	21.8

TABLE 1.4 FY 1993 BREAKOUT OF FUNDS BUDGETED for DETACHMENTS of CSS  
 ( UIC N62701, N60921 ) \$M

SPONSOR	RDT&E(N)							Other RDT& E	Other Appropriation						
	6.1	6.2	6.3a	6.3b	6.4	6.5	6.6		OMN	APN	OPN	WPN	SCN	Other Navy	All Other
NSWC/C															.1
NAS/VA									.1						
ATLFLT/VA									.3						
NUSC/RI															.2
DRTC/MD															.5
NSWSES/CN															.1
ARA/EX/AD															.1
RAYTHEON															.8
NAVSEA							.2	.9	.1						.2
NSWC/MD									.1						

Includes Ft. Monroe and Ft. Lauderdale detachments.

**TABLE 1.4 FY 1994 BREAKOUT OF FUNDS BUDGETED for DETACHMENTS of        CSS**  
**(UIC   N62701, N60921   ) (\$M)**

SPONSOR	RDT&E(N)							Other RDT&E	Other Appropriation						
	6.1	6.2	6.3a	6.3b	6.4	6.5	6.6		OMN	APN	OPN	WPN	SCN	Other Navy	All Other
NAS/VA									.2						
ATLFTL/VA									.3						
ARA/EX/AD															.3
NAVOC OFC									.5						
NSWC									.2						1.2
NAVSEA									.7			.1			.2
MDR									.2						

Includes Ft. Monroe and Ft. Lauderdale detachments.

**TABLE 1.4 FY 1995 BREAKOUT OF FUNDS BUDGETED for DETACHMENTS of        CSS  
(UIC   N62701, N60921  ) (\$M)**

SPONSOR	RDT&E(N)							Other RDT&E	Other Appropriation						
	6.1	6.2	6.3a	6.3b	6.4	6.5	6.6		OMN	APN	OPN	WPN	SCN	Other Navy	All Other
ATLFTL/VA									.2						
NSWC/C															.3
IRE									.2						
NAVSEA									1.0		.1				.3
MDR									.3						
NSWC															.4
DTRC/MD															.3
ARA/EX/AD															.3
UUV									.3						
APL															.3
ROV									.5						
SWAR									.2						

Includes Ft. Monroe and Ft. Lauderdale detachments.

**TABLE 1.4 FY 1996 BREAKOUT OF FUNDS BUDGETED for DETACHMENTS of CSS, Ft. Lauderdale Det  
(UIC N 62701, N60921 ) (\$M)**

SPONSOR	RDT&E(N)							Other RDT&E	Other Appropriation						
	6.1	6.2	6.3a	6.3b	6.4	6.5	6.6		OMN	APN	OPN	WPN	SCN	Other Navy	All Other
CSC/FL															.2
ATLFTLVA									.3						
UUV									.3						
NAVOC OFC									.3						
NSWC									.2						.4
MDR									.5						
NAVSEA									.7			.1			.3
TRIDENT									1.4						
OTHER									.3						

Includes Ft. Monroe and Ft. Lauderdale detachments.

**TABLE 1.4 FY 1997 BREAKOUT OF FUNDS BUDGETED for DETACHMENTS of        CSS         
(UIC   N62701, N60921   )((\$M)**

SPONSOR	RDT&E(N)							Other RDT&E	Other Appropriation						
	6.1	6.2	6.3a	6.3b	6.4	6.5	6.6		OMN	APN	OPN	WPN	SCN	Other Navy	All Other
CSC/FL															.2
ATLFLT/VA									.3						
UUV									.3						
NAVOC OFC									.3						
NSWC									.2						.4
MDR									.5						
NAVSEA									.6			.2			.3
TRIDENT									1.4						
OTHER									.3						

Includes Ft. Monroe and Ft. Lauderdale detachments.

**2. Current Class 2 Assets.** Complete Tables 2.1 thru 2.6 below as directed. Tables 2.1, 2.2 & 2.3 will define the Class 2 property owned or leased by your activity (less Detachments). Tables 2.4, 2.5 & 2.6 will define the combined Class 2 assets owned or occupied at your Detachment sites which did not receive this Data Call directly. Report space holdings and assignments as of 31 March 1994. Provide numbered notes to explain imminent changes, additions & deletions such as previous BRAC realignments, MILCON (including BRAC related MILCON) & Special Projects that are currently programmed in the FYDP. Give the project number & title, cost, short description, quantity of additional square footage, award date, estimated/actual construction start date and estimated BOD. Square footage of space is to be reported in "Gross Floor/Building Area" (GF/BA) as defined in NAVFAC P-80. Many of the P-80 Category Code Numbers (CCN's) have assets that are reported in units of measure other than square feet (SF). The only unit of measure desired for this Data Call is SF. Only report the assets in each CCN that are normally reported in SF.

For your Site:

- a. Use Table 2.1 below to indicate the total amount of Class 2 space at your site for which you are the plant account holder as of 31 March 1994.
- b. Use Table 2.2 below to indicate the total amount of your Class 2 space reported in Table 2.1 that is assigned to your tenant commands and/or independent activities at your site as of 31 March 1994.
- c. Use Table 2.3 below to indicate the total amount of Class 2 space, for which you are not the plant account holder, but which is utilized/leased by you (less Detachments). Provide numbered notes to identify the title and UIC of the plant account holder/lessor, quantity of leased space and the associated lease cost.

Table 2.1 Main Site Class 2 Assets of CSS  
(UIC 61331 )

Building type	NAVFAC (P-80) category	Gross Floor/Building Area (KSF)			
		Adequate	Substandard	Inadequate	Total
Operational & Training	100	154.9	0.3		155.2
Maintenance & Production	200	63.2	10.4		73.6
Science labs	310	229.0	3.0		232.0
Aircraft labs	311	0			
Missile and Space labs	312	0			
Ship and Marine labs	313	0			
Ground Transportation labs	314	0			
Weapon and Weapon Systems labs	315	44.3			44.3
Ammunition, Explosives, & Toxics labs	316	0			
Electrical Equip. labs	317	0.8			0.8
Propulsion labs	318	0			
Miscellaneous labs	319	8.2	1.7		9.9
Underwater Equip. labs	320	134.4	7.9		142.3
Technical Services labs	321	57.0			57.0

Building type	NAVFAC (P-80) category	Gross Floor/Building Area (KSF)			
		Adequate	Substandard	Inadequate	Total
Supply Facilities	400	14.2	21.1		35.6
Hospital & other Medical	500	9.5			9.5
Administrative Facilities	600	81.1			81.1
Housing & Community	700	244.4			244.4
Utilities & Grounds	800	10.1			10.1
Other					
Total		992.3	44.4		1036.7

d. In accordance with NAVFACINST 11010.44E, an Inadequate facility cannot be made Adequate for its present use through "economically justifiable means". For all the categories above where Inadequate facilities are identified provide the following information:

CSS has no inadequate facilities

- (1) FACILITY TYPE/CODE:
- (2) WHAT MAKES IT INADEQUATE?
- (3) WHAT USE IS BEING MADE OF THE FACILITY?
- (4) WHAT IS THE COST TO UPGRADE THE FACILITY TO SUBSTANDARD?
- (5) WHAT OTHER USE COULD BE MADE OF THE FACILITY AND AT WHAT COST?
- (6) CURRENT IMPROVEMENT PLANS AND PROGRAMMED FUNDING:
- (7) HAS THIS FACILITY CONDITION RESULTED IN C3 OR C4 DESIGNATION ON YOUR BASEREP?

**Table 2.2 Main Site Class 2 Space of   CSS   (UIC   61331  )  
Assigned to Tenants**

TENANT		NAVFAC (P-80) Category Code	GF/BA Assigned (KSF)
Name	UIC		
Naval Diving & Salvage Training Center	N0610A	143	3.0
"	"	171	120.7
"	"	550	2.5
NAVY EXPERIMENTAL DIVING UNIT	N0463A	320	42.9
		<b>TOTAL:</b>	169.1

Table 2.3 Class 2 Space Utilized/Leased by CSS (UIC 61331 )

Building type	NAVFAC (P-80) category	GF/BA (KSF)			
		Adequate	Substandard	Inadequate	Total
Operational & Training	100	-			
Maintenance & Production	200	-			
Science labs	310	5.3			5.3
Aircraft labs	311	-			
Missile and Space labs	312	-			
Ship and Marine labs	313	-			
Ground Transportation labs	314	-			
Weapon and Weapon Systems labs	315	26.9			26.9
Ammunition, Explosives, and Toxics labs	316	-			
Electrical Equip. labs	317	-			
Propulsion labs	318	-			
Miscellaneous labs	319	-			
Underwater Equip. labs	320	3.0			3.0
Technical Services labs	321	-			
Supply Facilities	400	9.1			9.1
Hospital & other Medical	500	-			

Building type	NAVFAC (P-80) category	GF/BA (KSF)			
		Adequate	Substandard	Inadequate	Total
Administrative Facilities	600	5.0			5.0
Housing & Community	700	-			
Utilities & Grounds	800	-			
Other					
Totals		49.3			49.3

For your Detachment sites not receiving this Data Call directly:

e. Use Table 2.4 below to indicate the combined total amount of Class 2 space that is occupied by your Detachments for which you are the plant account holder as of 31 March 1994. Attach a list with the titles and UIC's of these Detachments.

f. Use Table 2.5 below to indicate the total amount of your Class 2 space reported in Table 2.4 that is assigned to tenant commands and/or independent activities as of 31 March 1994. Include numbered notes to indicate the Detachment site that hosts the tenant.

g. Use Table 2.6 below to indicate the combined total amount of Class 2 space utilized/leased by your Detachments for which you are not the plant account holder. Provide numbered notes to indicate the quantity of leased space and their associated rental cost.

Table 2.4 Class 2 Assets of Occupied by Detachments CSS/Ft. Lauderdale  
(UICN06921)

Building type	NAVFAC (P-80) category	GF/BA (KSF)			
		Adequate	Substandard	Inadequate	Total
Operational & Training	100	1			1
Maintenance & Production	200				
Science labs	310				
Aircraft labs	311				
Missile and Space labs	312				
Ship and Marine labs	313				
Ground Transportation labs	314				
Weapon and Weapon Systems labs	315				
Ammunition, Explosives, and Toxics labs	316				
Electrical Equip. labs	317				
Propulsion labs	318				
Miscellaneous labs	319				
Underwater Equip. labs	320				
Technical Services labs	321				
Supply Facilities	400	8			8

Building type	NAVFAC (P-80) category	GF/BA (KSF)			
		Adequate	Substandard	Inadequate	Total
Hospital & other Medical	500				
Administrative Facilities	600	1			1
Housing & Community	700				
Utilities & Grounds	800				
Other		42			42
Totals		52			52

h. In accordance with NAVFACINST 11010.44E, an Inadequate facility cannot be made Adequate for its present use through "economically justifiable means". For all the categories above where Inadequate facilities are identified provide the following information:

CSS detachments and sites have no inadequate facilities.

- (1) FACILITY TYPE/CODE:
- (2) WHAT MAKES IT INADEQUATE?
- (3) WHAT USE IS BEING MADE OF THE FACILITY?
- (4) WHAT IS THE COST TO UPGRADE THE FACILITY TO SUBSTANDARD?
- (5) WHAT OTHER USE COULD BE MADE OF THE FACILITY AND AT WHAT COST?
- (6) CURRENT IMPROVEMENT PLANS AND PROGRAMMED FUNDING:
- (7) HAS THIS FACILITY CONDITION RESULTED IN C3 OR C4 DESIGNATION ON YOUR BASEREP?



Table 2.6 Class 2 Space Utilized/Leased by Detachments of CSS/Ft. Monroe  
(UIC N06921)

Building type	NAVFAC (P-80) category	GF/BA (KSF)			
		Adequate	Substandard	Inadequate	Total
Operational & Training	100	2			2
Maintenance & Production	200				
Science labs	310				
Aircraft labs	311				
Missile and Space labs	312				
Ship and Marine labs	313				
Ground Transportation labs	314				
Weapon and Weapon Systems labs	315				
Ammunition, Explosives, and Toxics labs	316				
Electrical Equip. labs	317				
Propulsion labs	318				
Miscellaneous labs	319				
Underwater Equip. labs	320				
Technical Services labs	321				
Supply Facilities	400	39			39
Hospital & other Medical	500				
Administrative Facilities	600	2			2

Building type	NAVFAC (P-80) category	GF/BA (KSF)			
		Adequate	Substandard	Inadequate	Total
Housing & Community	700				
Utilities & Grounds	800				
Other		75			75
Totals		118			118

Detachments have no leased space or rental costs.

**3. Class 2 Space Available for Expansion.** An activity's expansion capability is a function of it's ability to reconfigure and/or expand existing facilities to accept new or increased roles. Such a reconfiguration may require rehabilitation or buildout of a space to support the new or expanded role. A space expansion could include converting an underutilized storage space into laboratory spaces, or buildout of a high bay area into a multifloor office/laboratory space. All questions refer to Class 2 property for which you are the plant account holder as of 31 March 1994. Do not report any currently programmed changes or additions previously reported in question #2 above. Expansion opportunities must follow the guidance of NAVFAC P-80 for the appropriate facility category code, as well as applicable fire and safety codes. Personnel loading density should not exceed those specified in the P-80. Space is only available if it is currently unoccupied or the current occupants are officially designated for relocation. Report space as Net Floor Area (NFA) as defined in the P-80. Do not include opportunities that are being reported by your Detachments who received this Data Call directly. Reported expansion opportunities must be able to accommodate the necessary ancillary facilities and equipment, such as adequate parking space, required to support the amount of people projected.

a. What is the maximum quantity of space that could be made available for expansion to accommodate other functions and/or increased efforts? Report in terms of the "Current NFA" as shown in Tables 3.1 & 3.2. 2,694,834.5 SQFT.

b. How much of the space reported in question 3.a. above is currently available with minimal or no reconfiguration costs? Report in terms of the "Current NFA" as shown in Tables 3.1 & 3.2. 25,493 SQFT.

c. Use Table 3.1 below to indicate the constrained growth opportunities for accepting expanded or new roles. Constrained growth is defined as growth limited to buildings and structures currently on your Class 2 plant account. Add numbered notes to highlight and explain opportunities that require remediation or waiver of a restriction or encumbrance as part of the expansion. Provide lettered notes to clearly identify each opportunity with the title & UIC of the site it refers to. The "Current NFA (KSF)" column total should match the quantity provided in question #3.a. above. Annotate those opportunities that were used to obtain the answer to question #3.b. above. Report space once, do not use the same space for different expansion opportunities. Include in this table space that will become available once planned downsizing (separate from BRAC realignments) has been completed, provide the estimated completion date of the downsizing effort.

d. Use Table 3.2 below to indicate additional unconstrained growth opportunities for accepting expanded or new roles. Unconstrained growth allows for construction of new facilities on existing buildable Class 1 property. The only constraint being that the land must currently be on your plant account holdings as of 31 March 1994 and free of existing land use constraints. Limit new buildings to three stories. Add numbered notes to highlight and explain additional opportunities that would require remediation or waiver of a land use constraint as part of the expansion. Provide lettered notes to clearly identify each opportunity with the title & UIC of the site it refers to. Do not include space that has been reported in Table 3.1.

Table 3.1 Constrained Class 2 Space Available for Expansion at CSS  
(UIC 61331 )

Building # / Category Code (3 digit)	Current NFA (KSF)	Additional Capacity Provided By Expansion		Height of High Bay (FT)	Estimated Cost of Rehab (\$K's)
		NFA (KSF)	# of Personnel		
Bldg. 94/310-33	10,125	10,125	66		-
Bldg. 371/171-35	14,400	2,018	13		-
(1)	943,075	13,350	89		-
<b>Totals</b>	<b>967,600</b>	<b>25,493</b>	<b>168</b>		

(1) Administrative spaces available due to general draw down in personnel from FY 94 to FY 97, various buildings and NAVAC P80 codes (primarily 100, 600 series) are affected on an employee by employee basis.

TABLE 3.2 UNCONSTRAINED CLASS 2 SPACE AVAILABLE FOR EXPANSION AT     CSS      
(UIC 61331 )

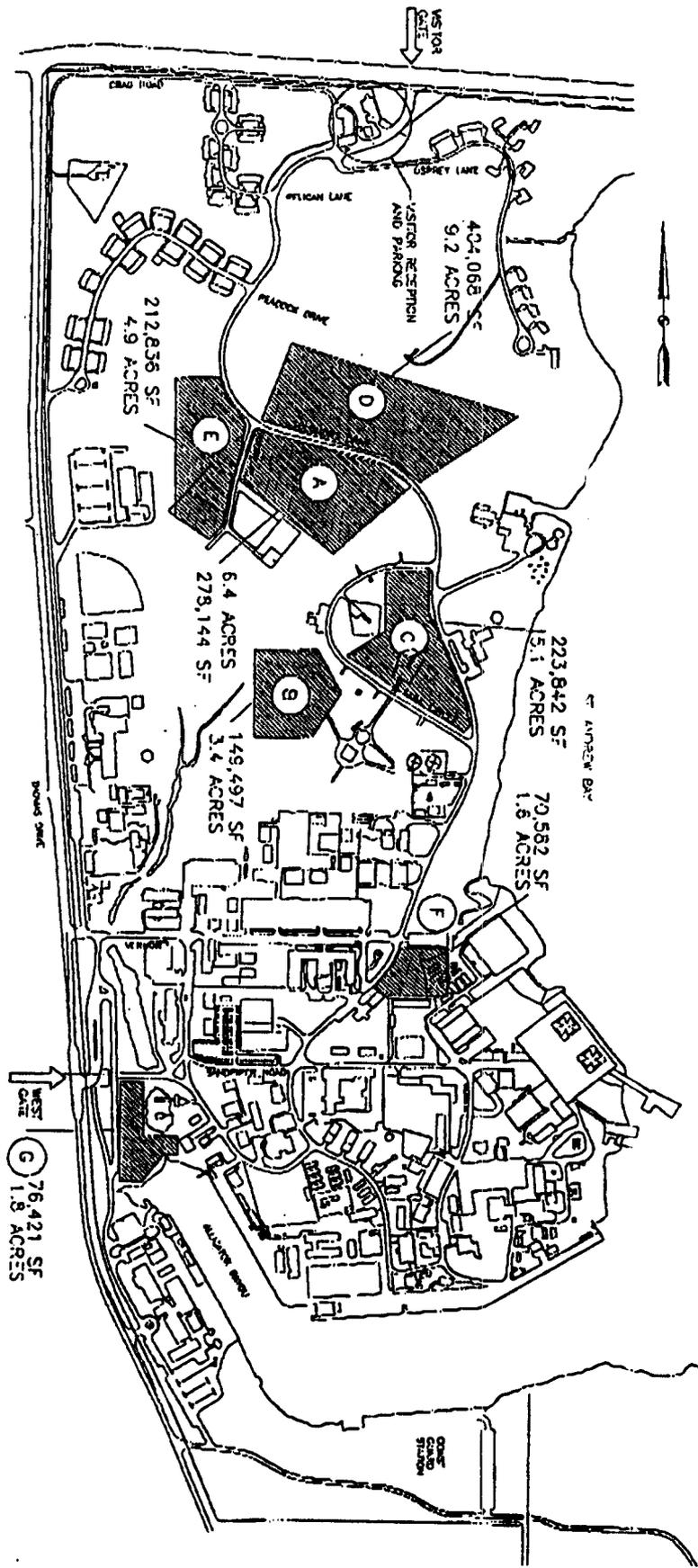
BUILDING # / CATEGORY CODE (3 DIGIT)	CURRENT NFA (KSF)	ADDITIONAL CAPACITY PROVIDED BY EXPANSION		HEIGHT OF HIGH BAY (FT)	ESTIMATED COST OF REHAB (\$K'S) \$90.00 FT <sup>2</sup>
		NFA <sup>1</sup> (KSF) /ACRES	# OF PERSONNEL <sup>2</sup>		
SITE "A" <sup>3,4</sup>		278,144/6.4	238	20-30	12,516.5
SITE "B" <sup>4</sup>		149,497/3.4	128	20-30	6,727.4
SITE "C" <sup>4</sup>		223,842/5.1	191	20-30	10,072.9
SITE "D" <sup>4</sup>		404,068/9.2	346	N/A	18,183.0
SITE "E" <sup>4</sup>		212,836/4.9	182	20-30	9,577.6
SITE "F" <sup>4</sup>		70,582/1.6	60	N/A	3,176.3
SITE "G" <sup>4</sup>		76,421/18	65	20-30	3,438.9
SITE "H" <sup>4</sup>		2,112,340/48.5	1810	20-30	95,055.3
SITE "I" <sup>4</sup>		439,362/10.5	376	20-30	19,771.3
SITE "J" <sup>4</sup>		366,076/8.4	313	20-30	16,473.4
SITE "K" <sup>4</sup>		981,559/22.5	841	N/A	44,170.1
<b>TOTALS</b>		2,657,363.5	4550		239,162.7

<sup>1</sup> 50% OF LAND AVAILABLE WAS ASSUMED TO BE AVAILABLE FOR CONSTRUCTION. THE OTHER 50% WOULD BE USED FOR PARKING, ACCESS, UTILITIES, ETC.

<sup>2</sup> SPACE AVAILABLE FOR PERSONNEL WAS ASSUMED TO BE 30% OF TOTAL SPACE. LABORATORY AND EQUIPMENT SPACE WERE ASSUMED TO BE 70% OF TOTAL SPACE.

<sup>3</sup> SEE ATTACHED MAPS FOR LOCATION OF SITES.

<sup>4</sup> APPLICABLE TO ANY REQUIRED CATEGORY CODE.



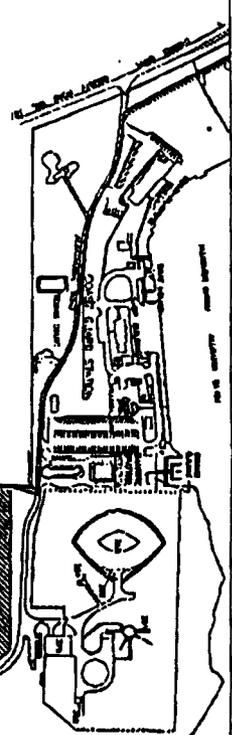
BASE MAP  
SCALE 800:1



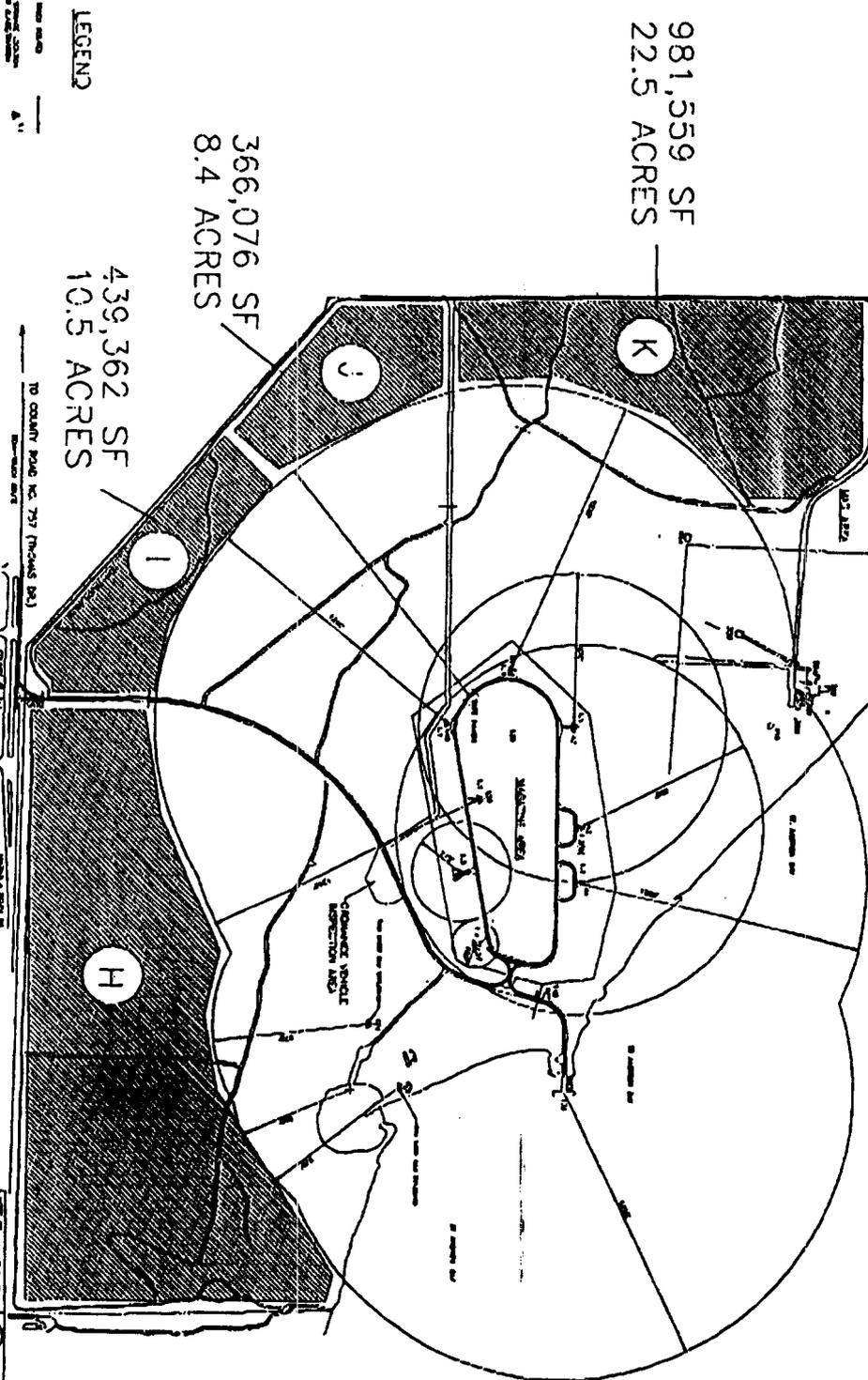
COASTAL SYSTEMS STATION  
PANAMA CITY, FLORIDA 32407  
DR'N BY:  
DATE:

BRAC-95  
UNCONSTRAINED GROWTH AREAS

S-



BRAC-95  
UNCONSTRAINED GROWTH AREAS



981,559 SF  
22.5 ACRES

366,076 SF  
8.4 ACRES

439,362 SF  
10.5 ACRES

2,112,034 SF  
48.5 ACRES

**LEGEND**

SHADING PATTERN: 8"11"

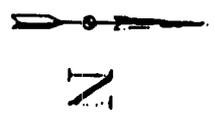
BOUNDARY LINE: 8"11"

ROAD: 8"11"

TO COUNTY ROAD NO. 797 (MICHIGAN RD)



BASE ESOD ARCS MAP  
SCALE: 1"=200'



DEPARTMENT OF THE ARMY COASTAL SYSTEMS STATION PAVAN, VA, 22131	
TITLE: BASE ESOD ARCS MAP STATION: STATION OF ALBATROSS BRIDGE	DATE: 1980 DRAWN BY: [Name] CHECKED BY: [Name]
SHEET NO. 1 OF 3	SCALE: 1"=200'

4. Class 1 Space Available for Expansion.

a. Identify in Table 4.1 below the real estate resources which have the potential to facilitate future development, and for which you are the plant account holder as of 31 March 1994, or into which, though a tenant, your activity could reasonably expect to expand. Complete a separate table for each individual site (i.e., main base, outlying airfields, special off-site areas, etc.) and Detachment that did not receive this Data Call directly. The unit of measure is acres. Developed area is defined as land currently with buildings, roads, and utilities where further development is not possible without demolition of existing improvements. Include in "Restricted" acreage that is restricted for future development due to environmental constraints (e.g. wetlands, landfills, archaeological sites), operational restrictions (e.g. ESQD arcs, HERO, HERP, HERF, AICUZ, ranges) or cultural resources restrictions. Identify the reason for the restriction when providing the acreage in the table. Specify any entry in "Other" (e.g. submerged lands).

b. Are there any constraints such as parking, utilities, legal restrictions that limit the potential for using Undeveloped land for expansion?

**There are approximately 50 acres of unrestricted land available for expansion which are already accessible by roads and existing utility line. Approximately 95 acres will to some extent require utility runs and in some case access roads. Parking would have to be provided for all sites.**

c. Explain the radio frequency constraints/opportunities within your Class 1 holdings.

**The Station has very limited constraints involving radio/electromagnetic interference. The Station does not use live weapons and interference with existing computer systems is non-existent.**

Class 1 Resources of CSS (UIC: 61331 )

Site Location: Panama City, FL

Land Use	Total Acres	Developed Acreage	Available for Development	
			Restricted	Unrestricted
Maintenance	24.8	5.6	-	19.2
Operational	21.7	15.	-	6.7
Training	6.8	6.8	-	-
R & D	154.9	61.6	30	63.3
Supply & Storage	22.6	18.7	-	3.9
Admin	18.6	9.1	-	9.5
Housing	140.	96.	10	34
Recreational	36.1	18.	10	8.1
Navy Forestry Program	N/A	N/A	N/A	N/A
Navy Agricultural Outlease Program	N/A	N/A	N/A	N/A
Hunting/Fishing Programs	N/A	N/A	N/A	N/A
Other (Ordnance Magazines)	219.3	30.	189.3	-
<b>Total:</b>	<b>644.8</b>	<b>260.8</b>	<b>239.3</b>	<b>144.7</b>

d. Of the total Unrestricted Acres reported above, how much of it has existing roads and/or utilities that could support expansion efforts? 50 Acres. Explain.

These fifty acres are within the existing developed area of the Coastal Systems Station, readily accessible by roads and utilities.

5. Base Infrastructure Capacity. Provide base infrastructure data as of 31 March 1994. Provide numbered notes to explain imminent changes, additions & deletions driven by previous BRAC realignments, MILCON (including BRAC related MILCON) & Special Projects that are currently programmed in the FYDP. Give the project number & title, cost, short description, quantity of additional square footage, award date, estimated/actual construction start date and estimated BOD.

a. Utilize Table 5.1 below to provide information on your activity's base infrastructure capacity and load. Do not report this information if you are a tenant activity.

Table 5.1 Base Infrastructure Capacity & Load

	On Base Capacity	Off base long term contract	Normal Steady State Load	Peak Demand
Electrical Supply (KWH)	106.4 x 10 <sup>6</sup>	>500 x 10 <sup>6</sup>	29.9 x 10 <sup>6</sup>	6830 KW *1
Natural Gas (CFH)	40,000	>500,000	416	1,464
Sewage (GPD)	200,000		105,000	219,000 *2
Potable Water (GPD)	4.8 x 10 <sup>6</sup>	>6 x 10 <sup>6</sup>	.33 x 10 <sup>6</sup>	.61 x 10 <sup>6</sup>
Steam (PSI & lbm/Hr)	N/A			
Long Term Parking		N/A	N/A	N/A
Short Term Parking (CSS)	1486	N/A	N/A	N/A

<sup>1</sup>Peak demand for electrical supply is a KW measurement and is not transferable to KWH. The peak demand for CSS in 1993 was 6830 KW. The only other figure available would be a monthly total which also has no relation to the question.

<sup>2</sup> Peak demand for sewage is a single point experienced with heavy rainfall and local flooding. In addition, the on-base capacity is the licensed amount.

b. Maintenance, Repair & Equipment Expenditure Data: Use Table 5.2 below to provide data on facilities and equipment expenditures at your activity. Project expenditures to FY 1997. Do not include data on Detachments who have received this Data Call directly. Do not report

this information if you are a tenant activity. The following definitions apply:

**Maintenance of Real Property (MRP) Dollars:** MRP is a budgetary term used to gather the expenses or budget requirements for facility work including recurring maintenance, major repairs & minor construction (non-MILCON) inclusive of all Major Claimant funded Special Projects. It is the amount of funds spent on or budgeted for maintenance and repair of real property assets to maintain the facility in satisfactory operating condition. For purposes of this Data Call MRP includes all M1/R1 and M2/R2 expenditures.

**Current Plant Value (CPV) of Class 2 Real Property:** The hypothetical dollar amount to replace a Class 2 facility in kind with today's dollars. Example: the cost today to replace a wood frame barracks with a wood frame barracks.

**Acquisition Cost of Equipment (ACE):** The total cumulative acquisition cost of all "personal property" equipment maintained at your activity which includes the cost of installed equipment directly related to mission execution, such as lab test equipment. Class 2 installed capital equipment that is an integral part of the facility will not be reported as ACE.

Table 5.2 Maintenance, Repair & Equipment Expenditure Data for CSS  
(UIC:19)

<b>Fiscal Year</b>	<b>MRP (\$M)</b>	<b>CPV (\$M)</b>	<b>ACE (\$M)</b>
1985	1.5	123.9	29.8
1986	2.1	126.5	34.5
1987	2.2	128.8	38.5
1988	3.4	149.7	55.8
1989	2.6	159.0	53.4
1990	2.7	163.4	57.3
1991	2.8	168.8	63.9
1992	2.9	173.8	65.7
1993	3.1	180.8	65.0
1994*	4.1	199.7	65.0
1995*	4.1	205.7	65.1
1996*	4.3	210.8	65.1
1997*	4.4	212.9	65.1

\* Estimated

C. TRAINING FACILITIES:

(1) BY FACILITY CATEGORY CODE NUMBER (CCN), PROVIDE THE USAGE REQUIREMENTS FOR EACH COURSE OF INSTRUCTION REQUIRED FOR ALL FORMAL SCHOOLS ON YOUR INSTALLATION. A FORMAL SCHOOL IS A PROGRAMMED COURSE OF INSTRUCTION FOR MILITARY AND/OR CIVILIAN PERSONNEL THAT HAS BEEN FORMALLY APPROVED BY AN AUTHORIZED AUTHORITY (IE: SERVICE SCHOOLS COMMAND, WEAPONS TRAINING BATTALION, HUMAN RESOURCES OFFICE). DO NOT INCLUDE REQUIREMENTS FOR MAINTAINING UNIT READINESS, GMT, SEXUAL HARASSMENT, ETC. INCLUDE ALL APPLICABLE 171-xx, 179-xx CCN'S.

TYPE OF TRAINING FACILITY/CCN	SCHOOL	TYPE OF TRAINING	FY 1993 REQUIREMENTS			FY 2001 REQUIREMENTS		
			A	B	C	A	B	C
LANDING CRAFT TRAINER / 171-35	FLEET	LCAC CREW TRAINING	150	320	48,000	120	520	62,400
NDSTC / 171-10	DIVING	FIRST CLASS DIVER	100	1600	160,000	110	1600	176,000
NDSTC / 171-10	DIVING	SECOND CLASS DIVER	108	4800	518,400	112	4800	537,600
NDSTC / 171-10	DIVING	MEDICAL DEEP SEA DIVING TECHNICIAN	48	4800	230,400	55	4800	264,000
NDSTC / 171-10	DIVING	SCUBA	150	1200	180,000	165	1200	198,000
NDSTC / 171-10	DIVING	EOD	50	240	12,000	55	240	13,200
NDSTC / 171-10	DIVING	MARINE CORPS COMBATANT DRIVER	157	1520	238,640	170	1520	258,900
NDSTC / 171-10	DIVING	AMPHIBIOUS RECON. CORPSMAN	60	600	36,000	65	600	39,000
NDSTC / 171-10	DIVING	BASIC DIVING OFFICER	100	3200	320,000	110	3200	352,000
NDSTC / 171-10	DIVING	SALVAGE DIVING OFFICER	75	2080	156,000	80	2080	166,400
NDSTC / 171-10	DIVING	EOD MIXED GAS DIVING	125	600	75,000	130	600	78,000
NDSTC / 171-10	DIVING	1140 MUNITIONS FUNDAMENTALS	75	400	50,000	80	400	32,000
NDSTC / 171-10	DIVING	MEDICAL DEPARTMENT DIVING OFFICER	50	1800	90,000	55	1800	99,000

Type of Training Facility/CCN	School	Type of Training	FY 1993 Requirements			FY 2001 Requirements		
			A	B	C	A	B	C
NDSTC / 171-10	Diving	SCUBA Supervisor	50	200	10,000	55	200	11,000
NDSTC / 171-10	Diving	Master Diver	16	800	12,800	18	800	14,400

A = STUDENTS PER YEAR

B = NUMBER OF HOURS EACH STUDENT SPENDS IN THIS TRAINING FACILITY FOR THE TYPE OF TRAINING RECEIVED

C = A x B

(2) By Category Code Number (CCN), complete the following table for all training facilities aboard the installation. Include all 171-xx and 179-xx CCN's.

For example: in the category 171-10, a type of training facility is academic instruction classroom. If you have 10 classrooms with a capacity of 25 students per room, the design capacity would be 250. If these classrooms are available 8 hours a day for 300 days a year, the capacity in student hours per year would be 600,000.

Type Training Facility/CCN	Total Number	Design Capacity (PN) <sup>1</sup>	Capacity (Student HRS/YR)
Fleet/171-35	1	50	124,800
Formal Schools/171-10	21	695	1,734,720
General Purpose/171-10	6	144	359,424

<sup>1</sup> Design Capacity (PN) is the total number of seats available for students in spaces used for academic instruction; applied instruction; and seats or positions for operational trainer spaces and training facilities other than buildings, i.e., ranges. Design Capacity (PN) must reflect current use of the facilities.

8 hours per day, 6 days per week, 52 weeks per year.

6. Ship Berthing Capacity. If your activity has the capacity to berth ships fill out the data sheets provided at TAB A.

7. Operational Airfield Capacity. If your activity owns and operates an operational airfield fill out the data sheets provided at TAB B.

8. Depot Level Maintenance Capacity. Fill out the data sheets provided at TAB C if you or your subordinate activities perform depot level maintenance on a piece of equipment or system.

9. Ordnance Storage Capacity. If your activity has the capability to store or maintain weapons and ordnance fill out the data sheets provided at TAB D.

**TAB A**

**SHIP BERTHING CAPACITY**

**Note:** Question numbers in [ ]'s are for internal BSAT purposes.

## SHIP BERTHING CAPACITY

1. [11.] For each Pier/Wharf at your facility list the following structural characteristics. Indicate the additional controls required if the pier is inside a Controlled Industrial Area or High Security Area. Provide the average number of days per year over the last eight years that the pier was out of service (OOS) because of maintenance, including dredging of the associated slip:

Table 11.1

Pier/Wharf & Age <sup>1</sup>	CCN <sup>2</sup>	Moor Length (ft)	Design Dredge Depth <sup>3</sup> (ft) (MLLW)	Slip Width <sup>4</sup> (ft)	Pier Width (ft) <sup>5</sup>	CIA/Security Area? (Y/N) <sup>6</sup>	ESQD Limit <sup>7</sup>	# Days OOS for maint.
136 7 yrs	151-10	94	10	N/A	20'	N	1250' esqd arc	0
146 41 yr	152-20	2823	22	N/A	25'	N	N/A	0
227, 295, 302 30 yrs	155-20	411	10	N/A	15'	N	N/A	0

<sup>1</sup>Original age and footnote a list of MILCON improvements in the past 10 years. None.

<sup>2</sup>Use NAVFAC P-80 for category code number.

<sup>3</sup>Comment if unable to maintain design dredge depth

<sup>4</sup>Water distance between adjacent finger piers.

<sup>5</sup>Indicate if RO/RO and/or Aircraft access.

<sup>6</sup>Describe the additional controls for the pier.

<sup>7</sup>Net explosive weight. List all ESQD waivers that are in effect with expiration date.

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2. [12.] For each Pier/Wharf at your facility list the following ship support characteristics:

Table 12.1

Pier/Wharf	OPNAV 3000.8 (Y/N)	Shore Pwr (KVA) & 4160V (KVA)	Comp. Air Press. & Capacity <sup>1</sup>	Potable Water (GPD)	CHT (GPD)	Oily Waste <sup>1</sup> (gpd)	Steam (lbm/hr & PSI) <sup>2</sup>	Fendering limits <sup>3</sup>
Hotel A	Y	2-400 amp/480 1-100 amp 3Ph 208	1" at 120 lbs	2" at 55/60 lbs	4" unlimited	4"	N/A	None
Hotel B	Y	2-400 amp 3 Ph 480 1-100 amp 3 Ph 208	1" at 120 lbs	2" at 55/60 lbs	4" unlimited	4"	N/A	None
Hotel C	Y	2-200 amp 3 Ph 480 1-50 amp 3 Ph 480 1-100 amp 3 Ph 120/208	1" at 120 lbs	2" at 55/60 lbs	4" unlimited	4"	N/A	None
Hotel D	Y	1-200 amp 3 Ph 480 1-50 amp 3 Ph 480 1-100 amp 3 Ph 120-208	1" at 120 lbs	2" at 55/60 lbs	4" unlimited	4"	N/A	None

<sup>1</sup> List only permanently installed facilities.

<sup>2</sup> Indicate if the steam is certified steam.

<sup>3</sup> Describe any permanent fendering arrangement limits on ship berthing.

3. [13.] For each pier/wharf listed above state today's normal loading, the maximum capacity for berthing, maximum capacity for weapons handling evolutions, and maximum capacity to conduct intermediate maintenance.

Table 13.1

Pier/Wharf	Typical Steady State Loading <sup>1</sup>	Ship Berthing Capacity <sup>4</sup>	Ordnance Handling Pier Capacity <sup>2</sup>	IMA Maintenance Pier Capacity <sup>3</sup>
136	1	1	1	N/A
146	3	5	N/A	N/A
227	0	1	N/A	N/A
295	3	6	N/A	N/A
302	1	2	N/A	N/A

<sup>1</sup> Typical pier loading by ship class with current facility ship loading.

<sup>2</sup> List the maximum number of ships that can be moored to conduct ordnance handling evolutions at each pier/berth without berth shifts. Consider safety, ESQD and access limitations.

<sup>3</sup> List the maximum number of ships that can be serviced in maintenance availabilities at each pier without berth shifts because of crane, laydown or access limitations.

<sup>4</sup> MCM-1 class or similar

\* N/A - not applicable

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4. [14.] For each pier/wharf listed above, based on Presidential Budget 1995 budgeted infrastructure improvements in the Presidential Budget 1995 through FY 1997 and the BRAC-91 and BRAC-93 realignments, state the expected normal loading, the maximum capacity for berthing, maximum capacity for weapons handling evolutions, and maximum capacity to conduct intermediate maintenance.

Table 14.1

Pier/ Wharf	Typical Steady State Loading <sup>1</sup>	Ship Berthing Capacity	Ordnance Handling Pier Capacity <sup>2</sup>	IMA Maintenance Pier Capacity <sup>3</sup>
136	1	1	1	N/A
146	3	5	N/A	N/A
227	0	1	N/A	N/A
295	3	6	N/A	N/A
302	1	2	N/A	N/A

<sup>1</sup> Typical pier loading by ship class with current facility ship loading.

<sup>2</sup> List the maximum number of ships that can be moored to conduct ordnance handling evolutions at each pier/berth without berth shifts. Consider safety, ESQD and access limitations.

<sup>3</sup> List the maximum number of ships that can be serviced in maintenance availabilities at each pier without berth shifts because of crane, laydown, or access limitations.

N/A - not applicable.

**5. [15.a.]** How much pier space is required to berth and support ancillary craft (tugs, barges, floating cranes, etc.) currently at your facility? Indicate if certain piers are uniquely suited to support these craft.

**None.**

**6. [15.b.]** What is the average pier loading in ships per day due to visiting ships at your base. Indicate if it varies significantly by season.

**Visiting ships, one/day. Does not vary by season.**

**7. [15.c.]** Given no funding or manning limits, what modifications or improvements would you make to the waterfront infrastructure to increase the cold iron ship berthing capacity of your installation? Provide a description, cost estimates, and additional capacity gained.

**Piers are adequate for mission.**

**8. [15.d.]** Describe any unique limits or enhancements on the berthing of ships at specific piers at your base.

**N/A.**

**TAB B**

**OPERATIONAL AIRFIELD CAPACITY**

**Note:** Question numbers in []'s are for internal BSAT purposes.

1. [1a.] For the **main airfield and each auxiliary airfield**, answer the following questions:

Airfield Name CSS heliport

For each runway, give its designation, length, width, load capacity, lighting configurations, and arresting gear types. For each runway list any approach obstructions or any restrictions on flight patterns.

No airfield, helicopter landing pad.

Runway	Length (ft)	Width (ft)	Max load	Lighting				Arresting Gear Type(s)
				F	P	C	N	

F -- Full lighting (runway edge, center, and threshold)

P -- Partial lighting (less than full)

C -- Carrier deck lighting simulated

N -- No lighting

2. [1b.] Provide the **composition** (concrete, asphalt) and **load bearing capacity** of your aprons, ramps and taxiway.

Apron/ramp/taxiway Location - ID	SF	Comp.	Load Bearing Capacity	Comments
ramp between hangar and helo pads	15,000	concrete	100,000 lbs.	best guess on load bearing capacity

3. [1c.] Do you have **high speed taxiways**? Discuss number and impact on airfield operations.

None.

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4. [1d.] Are **all runways** with approved instrument approaches served by **hi-speed taxiways**?

N/A

5. [1e.] List any restrictions to **runways with approach obstructions** or any **restrictions on flight patterns**. Explain

- (1) Letter of agreement with Panama City ATCT, 500 ft and below while in Panama City Class D airspace
- (2) Multiple towers and obstructions directly over CSS. All arrivals and departures overwater.

6. [1f.] For the main airfield and each auxiliary and outlying field, discuss any **runway design features** that are specific to particular types of aircraft (i.e., are the airfield facilities designated primarily fixed wing jet, prop, or helo aircraft?)

Helicopter/VTOL aircraft only; AMCM MK 105 launch ramp; LCAC launch ramp

7. [2a.] List the **number of flight operations** (take-off, landing, or approach without landing) that the main airfield and all auxiliary fields can support on an hourly basis in both VMC and IMC. Comment on the factors at each field that limit this capacity (e.g., taxiway/runway limitations, airspace, ATC restrictions, environmental restrictions).

Airfield	# Flight Ops/Hr		Comments on Limiting Factors
	IMC	VMC	
Main	N/A	45*	No approved inst. approaches
Auxiliary			
Auxiliary			
Auxiliary			

\*Touch and go VMC traffic in pattern every 1 min. 20 sec.

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8. [2b.] Provide the average number of **(historical) flight operations** per month conducted at this station and the total number of days during which these operations were conducted. If data is not normally recorded, include estimates (and how derived). A flight operation is defined as a take-off, landing, or approach without a landing.

FY	Main Airfield		Auxiliary Field		Auxiliary Field		Auxiliary Field	
	# Ops	# Days	# Ops	# Days	# Ops.	# Days	# Ops.	# Days
1991	68*	17*						
1992	68*	17*						
1993	68*	17*						

\*Estimated.

9. [2c.] What percent of your flight operations are Fleet Carrier Landing Practices (FCLPs)?

< 1% for Station helo's only.

10. [2d.] Are you designated as an **authorized divert field** for any non-DoD aircraft? Explain.

No.

11. [2d.] Is your airfield designated as a **joint use airfield** (i.e. civilian/military)? Explain.

No.

12. [2e.] What **percentage of total operations are civilian?**

0%

13. [2f.] Describe the major **civilian air traffic structures** (routes, terminal control areas, approaches, etc.) discuss the present and likely future impact of each on air station operations.

Panama City Class D airspace: overlaps facility; must have 2-way comms w/PFN tower prior to transition. Must adhere to Letter of Agreement Flight Instruction (7 Jan 94).

Tyndall AFB Class D airspace: 10 nm to east; must establish 2-way comms IF desire to transit.

Impact present and future: None.

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14. [2g.] Are there any **air traffic control constraints/procedures** that currently, or may in the future, limit air station operations? If yes, fully explain impact.

Panama City Class D airspace: Special VFR procedure may limit usage depending on weather as per LOA (7 Jan 94)

15. [4.] List all **NAVAIDS** with published approaches that support the main airfield and/or your auxiliary airfields. Note any additions/upgrades to be added between now and FY1997.

NAVAID	DESCRIPTION/LOCATION
N/A	

16. [5a.] List all **active duty Navy/USMC squadrons/detachments** and the number of aircraft by type, model, and series (T/M/S), that will be permanently stationed/are scheduled to be stationed at this air station at the **end** of the indicated fiscal years.

Squadron/Det	# of Aircraft (PAA)	Aircraft (T/M/S)	FY 1994	FY 1995	FY 1997	FY 1999	FY 2001
N/A							

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17. [5b.] Summarize average **visiting squadron/det loading** on air station operations(i.e. airwing/wing weapons deployment).

Squadron/Det Size (#A/C)	Apron Space Used	Hangar Space Assigned	Maintenance Support	Ave length of stay
2 helos	1/2 (7500 sq ft)	1/2 (7000 sq ft)	None	7 days/year

18. [5c.] If a major percent of flight operations at your air station is from other than permanently stationed squadron/detachments, provide explanation.

N/A

19. [6a.] List all **reserve Navy/USMC squadrons/detachments** and the number of aircraft by type, model, and series (T/M/S), which will be stationed/are scheduled to be stationed at this air station at the **end** of the indicated fiscal years.

Squadron/Det	# of Aircraft (PAA)	Aircraft (T/M/S)	FY 1994	FY 1995	FY 1997	FY 1999	FY 2001
None							

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Squadron/Det	# of Aircraft (PAA)	Aircraft (T/M/S)	FY 1994	FY 1995	FY 1997	FY 1999	FY 2001
None							

20. [7.] List all **Station aircraft** by number, type, model, and series (T/M/S), which will be parked or stationed/are scheduled to be stationed at this air station at the **end** of the indicated fiscal years.

Squadron/Custodian	# of Aircraft (PAA)	Aircraft (T/M/S)	FY 1994	FY 1995	FY 1997	FY 1999	FY 2001
CSS	2	MH-53E	2	2	2	2	2
CSS	1	HH-1N	1	1	1	1	1

21. [8.] List all **DoD and non-DoD aircraft** not previously listed, by custodian, including number, type, model, and series (T/M/S) of aircraft, which will be parked or stationed/are scheduled to be stationed at this air station at the **end** of the indicated fiscal years.

Service/ Agency/ Custodian	# of Aircraft (PAA)	Aircraft (T/M/S)	FY 1994	FY 1995	FY 1997	FY 1999	FY 2001
None							

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**22. [9a.]** List other **operational command or support units** (ie. air wing staffs, MWSG, MWSS, MACG, MASS, etc.) stationed at this installation. For each Unit, give the unit identification number/UIC, mission, and facilities required (currently being used) to support the unit (i.e. equipment parking - 2500 SF; maintenance shop-200 SF; etc.).

Support Unit Identification/ UIC	Mission	Facilities Required	Equipment Laydown Requirement (covered/ uncovered in SF)
None			

**23. [9b.]** Due to BRAC or other realignments, what increases/decreases in operational command or support units will occur at your installation. Provide expected gains/losses by year through 2001.

Could possibly gain additional aircraft from fleet squadron draw downs. Could also gain additional Detachment activity from fleet squadrons due to Fleet Replacement squadron being disestablished in Sept 94 (HM-12). Due to disestablishment of HM-12, this helo pad facility will be the only one of its kind in the entire Navy to fully support AMCM operations from cradle to grave in R&D and fleet operations.

**24. [10a.]** List all other **USN/USNR, USMC/USMCR, and other DoD or non-DoD active and SELRES units** not listed previously, that are scheduled to be stationed at this air station at the end of the indicated fiscal years.

Unit	Active or Reserve	FY 1994	FY 1995	FY 1997	FY 1999	FY 2001
None						

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**25. [12b.]** For each **Special Use Airspace (SUA)** or airspace-for-special use routinely used by squadrons/units assigned to your installation (regardless of location<sup>1</sup>), indicate how many hours per year are **required** for each user to maintain required **readiness**. Special Use Airspace includes alert areas, military operating areas (MOA), restricted areas, and warning areas which are used for air-to-air, air-to-ground, electronic (EW, ECM), low level training routes (MTRs), and other training.

<sup>1</sup> include RON/domestic deployment training

SUA	Location/ Distance	Types/Uses	Scheduling Authority (UIC)	Squadron/Unit	Training Requirement (types of training)	Yearly Usage Rate (Hrs)
Eglin AFB W-1E	29°41 85° 26'40"	Warning	Eglin	CSS Air Ops	RDT&E Flights	100
Eglin AFB W-2E	29° 06'30" 85° 30'	Warning	Eglin	CSS Air Ops	RDT&E Flights	50
Eglin AFB W-3E	28° 43° 84° 49'	Warning	Eglin	CSS Air Ops	RDT&E Flights	50
Eglin AFB W-4E	28° 10 89° 39'20"	Warning	Eglin	CSS Air Ops	RDT&E Flights	50

Remarks:

No conflict with Tyndall or Eglin training ops due to RDT&E flight ops at 500' and below.

<sup>1</sup> include RON/domestic deployment training

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26. [12c.] For each **Special Use Airspace (SUA)** or airspace-for-special-use complete the following table:

SUA	Location/ Distance	Types/Uses	Scheduling Authority (UIC)	Fiscal Year	Scheduled	Utilized <sup>1</sup>	Operating Limitations <sup>2</sup>
					# Hours	# Hours	
Eglin AFB W-1E	29°41'N 85° 26'40"W	Warning	Eglin	1991	N/A <sup>(1)</sup>	100 <sup>(2)</sup>	None
				1992	N/A	100	None
				1993	N/A	100	None
Eglin AFB W-2E	29° 06'30" 85° 30'00"	Warning	Eglin	1991	N/A	50	None
				1992	N/A	50	None
				1993	N/A	50	None
Eglin AFB W-3E	28° 43'00" 84° 49'00"	Warning	Eglin	1991	N/A	50	None
				1992	N/A	50	None
				1993	N/A	50	None
Eglin AFB W-4E	28° 10'00" 84° 39'20"	Warning	Eglin	1991	N/A	50	None
				1992	N/A	50	None
				1993	N/A	50	None

<sup>1</sup> For the "Utilized" values, provide reasons for hours scheduled, but not utilized (e.g. 40% cancelled due to weather; 10% cancelled for unscheduled range maintenance, etc.).

CSS flights do not impact ops in these warning areas and are not required to be scheduled.

<sup>2</sup> Provide any comments on operating limitations.

Best guess.

27. [12d.] Assuming that the flight training facility is **not constrained by operational funding** (personnel support, increased overhead costs, etc.), with the present equipment, physical

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plant, etc. , what **additional use of airspace assets** could be realized? Provide details and assumptions for all calculations.

With additional personnel and money, could increase up to 24 hr/day operations.

**28. [12h.]** In the event that it became necessary to increase base loading at your installation, does the **airspace** overlying and adjacent to your installation have the **capacity** to assume an additional workload? Estimate the percentage of the possible increase. Provide the basis/calculations for these estimates.

Yes. Could assume additional workload.  
300% (triple) per PHONCON w/Ed Perry (FAA Airport Manager, PFN).

**29. [17a.]** Using the types (and mix) of aircraft currently stationed at your installation, project the additional number of these aircraft (maintain approximate current mix/ratio of A/C) that **could be based** and parked on your **current parking aprons**.

Provide two estimates:

1. Using NAVFAC P-80 standard measures
2. Using real world planning factors to accomodate a surge demand for space (maintaining safe operating procedures).

Aircraft Type	Current # of Aircraft Parked/Stationed	Maximum Additional Capacity (# of Aircraft)		Total *	
		NAVFAC	Surge	NAVFAC	Surge
H-1 *	1	1	2	2	4
H-53 *	2	4	2	6	8

Provide the **details of your calculations**, including your assumptions on the minimum separation between aircraft, parking angle, folding of aircraft wings and any obstructions that may limit the placement of aircraft on the parking apron spaces. Indicate if taxiway aprons are used in the projection.

\*Best guess based on what we feel we could put in the hangar/ramp area.

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30. [18a.] List the hangars at the air station. Identify by (P-80) type, year built, dimensions.

Hangar ID/#	Type I, II or (O)ther	Year Built	Hangar Deck Dimensions	Limiting Height	Current Usage	In SF			
						Adequate	Substandard	Inadequate	Total
Bldg. 147	I	57	100' x 133'	21'	rotary wing aircraft	13,300			

In accordance with NAVFACINST 11010.44E, an inadequate facility cannot be made adequate for its present use through "economically justifiable means". For all the categories above where inadequate facilities are identified describe why the facility is inadequate; indicate how it is being used and list other possible uses; and specify the costs to remove the deficiencies that make it inadequate. Indicate current plans to remove these deficiencies and the amount of any programmed funds. Discuss any material conditions of substandard facilities which have resulted in a C3 or C4 designation on your BASEREP.

31. [18b.] For each hangar provide space allocation information listed in table below. Indicate if OPS/ADMIN space is in a non-contiguous building, Provide subtotal for each hangar.

Hangar #/ID/Type	SQD/Mod# Assignment	Ops + Admin Spaces SF/ Module	Maint Shops SF/ Module (O Level)	Hangar Deck SF/Module	A/C Line parking spaces <sup>2,3</sup>		
					#/ Module	SF	Elec. Pwr.
Bldg. 147	CSS	1375	1186	13,300	line	15,000	no
<b>TOTAL</b>							

- <sup>1</sup> Provide which SQD/Det was assigned to the specific module at receipt of this Data Call. (i.e., VFA-15, Hgr 1, Mod C)
- <sup>2</sup> Dedicated aircraft parking spaces per Module and total square feet (SF) of A/C line parking spaces
- <sup>3</sup> Are there A/C line parking spaces supported by permanently installed electric power? (Y/N)

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**32. [18f.]** List all **squadrons/detachments** normally homeported at this air station that were deployed and **not assigned** hangar/maintenance spaces at receipt of this data call.

Squadron/Detachment	#/Type Aircraft	Deployed Location
None		

**33. [18g.]** List all **squadrons/detachments** normally homeported at this air station that were deployed and **were assigned** hangar/maintenance spaces at receipt of this data call.

Squadron/Detachment	#/Type Aircraft	Hanger Module Assignment
None		

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**34. [18h.]** Using the types (and mix) of **aircraft** currently stationed at your installation, project the maximum additional number of these aircraft (maintain approximate current mix/ratio of A/C) that could be housed and maintained in **your current hangars**. Provide two estimates:

1. Using NAVFAC P-80 standard measures
2. Using real world planning factors to accomodate a surge demand for space (maintaining safe operating procedures).

Aircraft Type	Current # of Aircraft Parked/Stationed	Maximum Additional Capacity (# of Aircraft)		Total (Current + Additional) *	
		NAVFAC	Surge	NAVFAC	Surge
H-1	1	1	2	2	4 *
H-53	2	4	2	6	8 *

Provide the **details of your calculations**, including your assumptions on the minimum separation between aircraft, folding of aircraft wings and any obstructions that may limit the placement of aircraft in the hangars.

\*Best guess based on what we feel we could put in the hangar/ramp area.

35. [19.] Do you have any of the following **special use facilities** at the Air Station?

CCN	Type of Facility	In SF				# of Units	Year Built
		Adequate	Substandard	Inadequate	Total		
211-01	Aircraft Acoustical Enclosure	N/A					
211-02	Nose Hangar	N/A					
211-03	Corrosion Control Hangar	N/A					
211-75	Parachute/Survival Equipment Shop	N/A					
211-81	Engine Test Cell	N/A					
211-88	Power Check Pad with Sound Suppression	N/A					
211-89	Power Check Pad without Sound Suppression	N/A					
211-96	Maintenance, Aircraft Spares Storage	N/A					
116-10	Airfield Washrack Pavement	6360				1	83
116-15	Aircraft Rinse Facility	N/A					
214-30	Refueling Vehicle Shop	N/A					
218-60	Aircraft Ground Support Equipment	3939				1	74
	Other (MK 105 launch ramp)	15,150				1	83

In accordance with NAVFACINST 11010.44E, an inadequate facility cannot be made adequate for its present use through "economically justifiable means". For all the categories above where inadequate facilities are identified describe why the facility is inadequate; indicate how it is being used and list other possible uses; and specify the costs to remove the deficiencies that make it inadequate. Indicate current plans to remove these deficiencies and the amount of any programmed funds. Discuss any material conditions of substandard facilities which have resulted in a C3 or C4 designation on your BASEREP.

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**TAB C**

**DEPOT LEVEL MAINTENANCE CAPACITY**

**The Coastal Systems Station (UIC N61331) does not perform any Depot Level Maintenance.**

**Thus, this tab is not applicable.**

**TAB D**

**ORDNANCE STORAGE CAPACITY**

## ORDNANCE STORAGE CAPACITY

Please answer the following questions if your activity performs any stowage or maintenance on any of the following ordnance commodities types:

ORDNANCE COMMODITY TYPES		
Mines	Other Threat	Expendables
Torpedoes		INERT
Air Launched Threat		CADS/PADS
Surface Launched Threat		Strategic Nuclear
		Tactical Nuclear

### 1. Ordnance Stowage and Support

1.1 Provide present and predicted inventories (coordinate with inventory control manager) and maximum rated capability of all stowage facilities at each weapons storage location controlled by this activity. In predicting the out year facility utilization, distribute overall ordnance compliment to the most likely configuration. The maximum rated capability is also an out year projection taking into account any known or programmed upgrades that may increase current stowage capacity. When listing stowage facilities, group by location (e.g. main base, outlying field, special area).

Table 1.1: Total Facility Ordnance Stowage Summary

Facility Number	PRESENT INVENTORY		PREDICTED INVENTORY FY 2001		MAXIMUM RATED CAPABILITY	
	TONS	SQ FT	TONS	SQ FT	TONS	SQ FT
137A	0.0171	256	0.0171	256	7.5	594
137B	0.0599	294	0.06	294	7.5	594
138A	0.2772	311	0.28	320	7.5	594
138B	0.2058	297	0.21	300	7.5	594
139A	0.0371	103	0.25	300	.5	594
139B	.2058	215	.20	215	.5	594

TAB D  
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UIC: 61331

140	.125	90	.125	90	4.5	980
141	1.025	350	1.25	400	7.5	980
142	0.0047	400	0.05	400	0.05	980
143	2.069	700	2.0	700	20	6000
144	2.275	1020	2.50	1200	15	6000
<b>TOTAL</b>	<b>6.3016</b>	<b>4036</b>	<b>5.95</b>	<b>4475</b>	<b>78.05</b>	<b>18504</b>

**TAB D**  
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**1.2** For each Stowage facility identified in question 1.1 above, identify the type of facility (specify if "igloo", "box", etc.). Identify the type of ordnance commodity (from the list above) which are currently stowed in that facility and all other ordnance types which, given existing restrictions, could be physically accommodated in that stowage facility. Specify below if such additional accommodation would require a modification of the facility (e.g. enhanced environmental controls, ESQD waiver).

- Identify the reason(s) for which this ordnance is stored at your facility from the following list: own activity use (training); own activity use (operational stock); Receipt/Segregation/Stowage/Issue (RSSI); transshipment/awaiting issue; deep stow (war reserve); deep stow (awaiting Demil); other. Explain each "other" entry in the space provided, including ordnance stowed which is not a DON asset.

**Table 1.2: Total Facility Ordnance Stowage Summary**

Facility Number/Type	Currently Stowed Commodity Type(s)	Reason for Stowage at your Activity	Commodity Type(s) Which Can Be Stowed
137A/Earth Cover Box	Small Arms/Cads	Operational/RSSI	Pyro/Demo*
137B/Earth Cover Box	Small Arms	Operational/RSSI	Pyro/Demo*
138A/Earth Cover Box	Pyro	Operational/RSSI	Small Arms/Demo*
138B/Earth Cover Box	Pyro	Operational/RSSI	Small Arms/Demo*
139A/Earth Cover Box	Demo	Operational	None, EOD Reaction Storage
139B/Earth Cover Box	Demo	Awaiting Demil	None, EOD Holding
140/Earth Cover Box	Experimental Demo	NEDU, Projects	None, non-DoD Munitions
141/Earth Cover Box	Demo	Dive School Training Assets	Small Arms/Pyro*
142/Earth Cover Box	Fuze/Detonator	Operational/RSSI/ Training Assets	Small Arms/Pyro

**TAB D**  
**Page 3 of 6**  
**UIC: 61331**

143/Igloo	Rockets/Bombs/ Small Arms/CADS	Operational/RSSI/ Projects	Pyro*/Demo**
144/Igloo	Demo/non-DoD Mines	Operational/RSSI/ Projects	Small Arms/Pyro*

Additional comments:

\* Requires storage compatibility waiver

\*\*Requires ESQD waiver

**TAB D**  
**Page 4 of 6**  
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1.3 Identify the rated category, rated NEW and status of ESQD arc for each stowage facility listed above.

Table 1.3: Facility Rated Status

Facility Number / Type	Hazard Rating (1.1-1.4)	Rated NEW	ESQD Arc		
			Established (Y / N)	Waiver (Y / N)	Waiver Expiration Date
137A/Earth Cover Box	1.4	15,000 lbs.	Y 100'	N	
137B/Earth Cover Box	1.4	15,000 lbs.	Y 100'	N	
138A/Earth Cover Box	1.3	15,000 lbs.	Y 215'	N	
138B/Earth Cover Box	1.3	15,000 lbs.	Y 215'	N	
139A/Earth Cover Box	1.1	1,000 lbs.	Y 1250'	N	
139B/Earth Cover Box	1.1	1,000 lbs.	Y 1250'	N	
140/Earth Cover Box	1.1	9,000 lbs.	Y 1250'	N	
141/Earth Cover Box	1.1	15,000 lbs.	Y 1235'	N	
142/Earth Cover Box	1.1	100 lbs.	Y 670'	N	
143/Igloo	1.2	30,000 lbs.	Y 800'	N	
144/Igloo	1.1	30,000 lbs.	Y 1250'	N	

TAB D  
Page 5 of 6  
UIC: 61331

**1.4** Identify any restrictions which prevent maximum utilization of your facilities. If restrictions are based on facility conditions, specify reason, the cost to correct the deficiency, and identify any programmed projects that will correct the deficiency and/or increase your capability.

Will never use existing new capacity due to packaging of munitions. Square footage is the limiting factor due to packaging.

**1.5** Identify if your activity performs any of the following functions on any of the ordnance commodities previously listed. Technical support includes planning, financial, administrative, process engineering and SOP support. Within each related function identify each ordnance commodity type for which you provide these services and the total Direct Labor Man Hours (DLMHs) expended (FY 1994); identify only those DLMHs expended by personnel under your command.

**Table 1.5: Related Ordnance Support**

Related Functions	Performed? (Y/N)	Type of Commodity	DLMHs
Maintenance (specify level)			
Testing (Movement)	Y	Non-DoD Mines/Demo	832
Manufacturing	N		
Outload	Y	Demo/Pyro/Small Arms	416
Technical Support	Y	Demo/Non-DoD Mines	1200

**TAB D**  
**Page 6 of 6**  
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**36. [21a.]** For the following **aircraft support facility** category codes, provide the amount of adequate substandard, and inadequate facilities.

CCN	Facility Type	Unit of Measure	Adequate	Substandard	Inadequate	Total	Number of Units
111-20	Landing Pads	SF	120,000				
121-10	Direct Fueling	OL/GM	250				
124-30	Fuel Storage	GA	60,000				
421-xx	Ammunition Storage	CF/TONS					
425-xx	Open Ammunition Storage	SF					
113-20	Parking Aprons	SF					
113-40	Access Aprons	SF					
116-56	Combat Aircraft Ordnance Loading Area	SF					
	Other						

In accordance with NAVFACINST 11010.44E, an inadequate facility cannot be made adequate for its present use through "economically justifiable means". For all the categories above where inadequate facilities are identified describe why the facility is inadequate; indicate how it is being used and list other possible uses; and specify the costs to remove the deficiencies that make it inadequate. Indicate current plans to remove these deficiencies and the amount of any programmed funds. Discuss any material conditions of substandard facilities which have resulted in a C3 or C4 designation on your BASEREP.

**TAB B**  
Page 16 of 16  
UIC N61331

NSWC DAHLGREN, PANAMA City

JL  
SEA 09X  
5/13/94

DATA CALL #4

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

N. S. SCOTT, CAPT. USN

NAME (Please type or print)

COMMANDER

Title

  
Signature

10 May 94  
Date

NAVAL SURFACE WARFARE CENTER

DAHLGREN DIVISION

Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

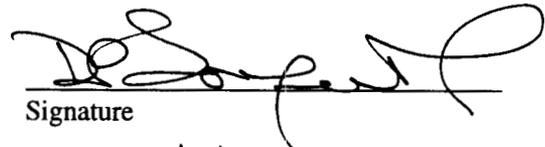
NEXT ECHELON LEVEL (if applicable)

RADM (SEL) D. P. SARGENT, JR.

NAME (Please type or print)

COMMANDER

Title

  
Signature

5/11/94  
Date

NAVAL SURFACE WARFARE CENTER

Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

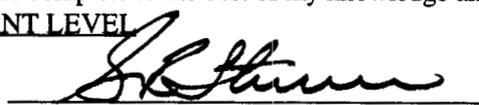
**G. R. STERNER**

MAJOR CLAIMANT LEVEL

NAME (Please type or print)

Commander  
Naval Sea Systems Command

Activity

  
Signature

5-13-94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

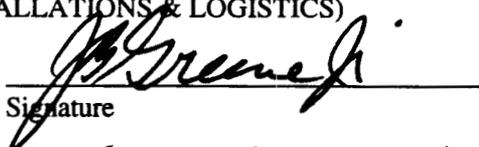
DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

J. B. Greene, Jr

NAME (Please type or print)

Acting

Title

  
Signature

20 MAY 1994  
Date

BRAC-95 CERTIFICATION

Data Call: 4

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian, who provide information for use in the BRAC-95 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief."

The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

Each individual in your activity generating information for the BRAC-95 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated as necessary. You are directed to maintain those certifications at your activity for audit purposes. For purposes of this certification sheet, the commander of the activity will begin the certification process and each reporting senior in the Chain of Command reviewing the information will also sign this certification sheet. This sheet must remain attached to this package and be forwarded up the Chain of Command. Copies must be retained by each level in the Chain of Command for audit purposes.

I certify the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

D. C. STEERE  
NAME (Please type or print)

COMMANDING OFFICER  
Title

NAVAL SURFACE WARFARE CENTER  
DAHLGREN DIVISION  
COASTAL SYSTEMS STATION  
Activity

  
Signature

6 May 94  
Date

200

**DATA CALL 66  
INSTALLATION RESOURCES**

**Activity Information:**

Activity Name:	Navy Experimental Diving Unit
UIC:	NO463A
Host Activity Name (if response is for a tenant activity):	Coastal Systems Station Dahlgren Division, Naval Surface Warfare Center Panama City, Florida
Host Activity UIC:	N61331

**General Instructions/Background.** A separate response to this data call must be completed for each Department of the Navy (DON) host, independent and tenant activity which separately budgets BOS costs (regardless of appropriation), and, is located in the United States, its territories or possessions.

**1. Base Operating Support (BOS) Cost Data.** Data is required which captures the total annual cost of operating and maintaining Department of the Navy (DON) shore installations. Information must reflect FY 1996 budget data supporting the FY 1996 NAVCOMPT Budget Submit. Two tables are provided. Table 1A identifies "Other than DBOF Overhead" BOS costs and Table 1B identifies "DBOF Overhead" BOS costs. These tables must be completed, as appropriate, for all DON host, independent or tenant activities which separately budget BOS costs (regardless of appropriation), and, are located in the United States, its territories or possessions. Responses for DBOF activities may need to include both Table 1A and 1B to ensure that all BOS costs, including those incurred by the activity in support of tenants, are identified. If both table 1A and 1B are submitted for a single DON activity, please ensure that no data is double counted (that is, included on both Table 1A and 1B). The following tables are designed to collect all BOS costs currently budgeted, regardless of appropriation, e.g., Operations and Maintenance, Research and Development, Military Personnel, etc. Data must reflect FY 1996 and should be reported in thousands of dollars.

**a. Table 1A - Base Operating Support Costs (Other Than DBOF Overhead).**

This Table should be completed to identify "Other Than DBOF Overhead" Costs. Display, in the format shown on the table, the O&M, R&D and MPN resources currently budgeted for BOS services. O&M cost data must be consistent with data provided on the BS-1 exhibit. Report only direct funding for the activity. Host activities should not include reimbursable support provided to tenants, since tenants will be separately reporting these costs. Military personnel costs should be included on the appropriate lines of the table. Please ensure that individual lines of the table do not include duplicate costs. Add additional

**DATA CALL 66  
INSTALLATION RESOURCES**

lines to the table (following line 2j., as necessary, to identify any additional cost elements not currently shown). Leave shaded areas of table blank.

<b>Table 1A - Base Operating Support Costs (Other Than DBOF Overhead)</b>			
<b>Activity Name:</b>		<b>UIC:</b>	
Category	FY 1996 BOS Costs (\$000)		
	Non-Labor	Labor	Total
<b>1. Real Property Maintenance Costs:</b>			
1a. Maintenance and Repair			
1b. Minor Construction			
<b>1c. Sub-total 1a. and 1b.</b>			
<b>2. Other Base Operating Support Costs:</b>			
2a. Utilities			
2b. Transportation			
2c. Environmental			
2d. Facility Leases			
2e. Morale, Welfare & Recreation			
2f. Bachelor Quarters			
2g. Child Care Centers			
2h. Family Service Centers			
2i. Administration			
2j. Other (Specify)			
<b>2k. Sub-total 2a. through 2j:</b>			
<b>3. Grand Total (sum of 1c. and 2k.):</b>			

\*Note: NEDU currently does not submit a BOS budget.

**DATA CALL 66  
INSTALLATION RESOURCES**

**b. Funding Source.** If data shown on Table 1A reflects more than one appropriation, then please provide a break out of the total shown for the "3. Grand-Total" line, by appropriation:

<u>Appropriation</u>	<u>Amount (\$000)</u>
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**c. Table 1B - Base Operating Support Costs (DBOF Overhead).** This Table should be submitted for all current DBOF activities. Costs reported should reflect BOS costs supporting the DBOF activity itself (usually included in the G&A cost of the activity). For DBOF activities which are tenants on another installation, total cost of BOS incurred by the tenant activity for itself should be shown on this table. It is recognized that differences exist among DBOF activity groups regarding the costing of base operating support: some groups reflect all such costs only in general and administrative (G&A), while others spread them between G&A and production overhead. Regardless of the costing process, all such costs should be included on Table 1B. The Minor Construction portion of the FY 1996 capital budget should be included on the appropriate line. Military personnel costs (at civilian equivalency rates) should also be included on the appropriate lines of the table. Please ensure that individual lines of the table do not include duplicate costs. Also ensure that there is no duplication between data provided on Table 1A. and 1B. These two tables must be mutually exclusive, since in those cases where both tables are submitted for an activity, the two tables will be added together to estimate total BOS costs at the activity. Add additional lines to the table (following line 21., as necessary, to identify any additional cost elements not currently shown). **Leave shaded areas of table blank.**

**Other Notes:** All costs of operating the five Major Range Test Facility Bases at DBOF activities (even if direct RDT&E funded) should be included on Table 1B. Weapon Stations should include underutilized plant capacity costs as a DBOF overhead "BOS expense" on Table 1B..

**DATA CALL 66  
INSTALLATION RESOURCES**

<b>Table 1B - Base Operating Support Costs (DBOF Overhead)</b>			
<b>Activity Name:</b>		<b>UIC:</b>	
Category	FY 1996 Net Cost From UC/FUND-4 (\$000)		
	Non-Labor	Labor	Total
<b>1. Real Property Maintenance Costs:</b>			
1a. Real Property Maintenance (> \$15K)			
1b. Real Property Maintenance (< \$15K)			
1c. Minor Construction (Expensed)			
1d. Minor Construction (Capital Budget)			
<b>1c. Sub-total 1a. through 1d.</b>			
<b>2. Other Base Operating Support Costs:</b>			
2a. Command Office			
2b. ADP Support			
2c. Equipment Maintenance			
2d. Civilian Personnel Services			
2e. Accounting/Finance			
2f. Utilities			
2g. Environmental Compliance			
2h. Police and Fire			
2i. Safety			
2j. Supply and Storage Operations			
2k. Major Range Test Facility Base Costs			
2l. Other (Specify)			
<b>2m. Sub-total 2a. through 2l:</b>			
<b>3. Depreciation</b>			
<b>4. Grand Total (sum of 1c., 2m., and 3.) :</b>			

**DATA CALL 66  
INSTALLATION RESOURCES**

**2. Services/Supplies Cost Data.** The purpose of Table 2 is to provide information about projected FY 1996 costs for the purchase of services and supplies by the activity. (Note: Unlike Question 1 and Tables 1A and 1B, above, this question is not limited to overhead costs.) The source for this information, where possible, should be either the NAVCOMPT OP-32 Budget Exhibit for O&M activities or the NAVCOMPT UC/FUND-1/IF-4 exhibit for DBOF activities. Information must reflect FY 1996 budget data supporting the FY 1996 NAVCOMPT Budget Submit. Break out cost data by the major sub-headings identified on the OP-32 or UC/FUND-1/IF-4 exhibit, disregarding the sub-headings on the exhibit which apply to civilian and military salary costs and depreciation. Please note that while the OP-32 exhibit aggregates information by budget activity, this data call requests OP-32 data for the activity responding to the data call. Refer to NAVCOMPTINST 7102.2B of 23 April 1990, Subj: Guidance for the Preparation, Submission and Review of the Department of the Navy (DON) Budget Estimates (DON Budget Guidance Manual) with Changes 1 and 2 for more information on categories of costs identified. Any rows that do not apply to your activity may be left blank. However, totals reported should reflect all costs, exclusive of salary and depreciation.

<b>Table 2 - Services/Supplies Cost Data</b>	
<b>Activity Name:</b> Experimental Diving Unit	<b>UIC:</b> O463A
Cost Category	FY 1996 Projected Costs (\$000)
<b>Travel:</b>	205
<b>Material and Supplies (including equipment):</b>	2,145
<b>Industrial Fund Purchases (other DBOF purchases):</b>	
<b>Transportation:</b>	11
<b>Other Purchases (Contract support, etc.):</b>	808
<b>Total:</b>	3,169

<u>TABLE 2 BREAKOUT</u>	<u>DIRECT</u>	<u>REIMBURSABLE</u>
TRAVEL	62	143
UTILITIES	330	27
MATERIAL /SUPPLIES	1,038	750
TRANSPORTATION	11	
OTHER PURCHASES	<u>458</u>	<u>350</u>
TOTAL	1,899	1,270

**DATA CALL 66  
INSTALLATION RESOURCES**

**3. Contractor Workyears.**

**a. On-Base Contract Workyear Table.** Provide a projected estimate of the number of contract workyears expected to be performed "on base" in support of the installation during FY 1996. Information should represent an annual estimate on a full-time equivalency basis. Several categories of contract support have been identified in the table below. While some of the categories are self-explanatory, please note that the category "mission support" entails management support, labor service and other mission support contracting efforts, e.g., aircraft maintenance, RDT&E support, technical services in support of aircraft and ships, etc.

<b>Table 3 - Contract Workyears</b>	
<b>Activity Name:</b> Experimental Diving Unit	<b>UIC:</b> O463A
<b>Contract Type</b>	<b>FY 1996 Estimated Number of Workyears On-Base</b>
Construction:	
Facilities Support:	
Mission Support:	9
Procurement:	
Other:*	
<b>Total Workyears:</b>	<b>9</b>

\* Note: Provide a brief narrative description of the type(s) of contracts, if any, included under the "Other" category.

**DATA CALL 66  
INSTALLATION RESOURCES**

**b. Potential Disposition of On-Base Contract Workyears.** If the mission/functions of your activity were relocated to another site, what would be the anticipated disposition of the on-base contract workyears identified in Table 3.?

1) Estimated number of contract workyears which would be transferred to the receiving site (This number should reflect the number of jobs which would in the future be contracted for at the receiving site, not an estimate of the number of people who would move or an indication that work would necessarily be done by the same contractor(s)):

9

2) Estimated number of workyears which would be eliminated:

3) Estimated number of contract workyears which would remain in place (i.e., contract would remain in place in current location even if activity were relocated outside of the local area):

**DATA CALL 66  
INSTALLATION RESOURCES**

c. **"Off-Base" Contract Workyear Data.** Are there any contract workyears located in the local community, but not on-base, which would either be eliminated or relocated if your activity were to be closed or relocated? If so, then provide the following information (ensure that numbers reported below do not double count numbers included in 3.a. and 3.b., above):

No. of Additional Contract Workyears Which Would Be Eliminated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
0	

No. of Additional Contract Workyears Which Would Be Relocated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
0	

DATA CALL #66  
NAVY EDU

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

Jesse A. Atkins  
NAME (Please type or print)  
Executive Director (Acting)  
Surface Ships  
Title  
Naval Sea Systems Command  
Activity

*Jesse A. Atkins*  
Signature  
7/22/94  
Date

~~I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.~~

~~NEXT ECHELON LEVEL (if applicable)~~

~~\_\_\_\_\_  
NAME (Please type or print)  
\_\_\_\_\_  
Title  
\_\_\_\_\_  
Activity~~

~~\_\_\_\_\_  
Signature  
\_\_\_\_\_  
Date~~

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

Commander  
NAME (Please type or print)  
Naval Sea Systems Command  
Title  
Activity

*S. R. Stinner*  
Signature  
7/29/94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

J. B. GREENE, JR.  
NAME (Please type or print)  
ACTING  
Title

*J. B. Greene Jr.*  
Signature  
17 AUG 1994  
Date

**BRAC-95 CERTIFICATION**

Reference: SECNAVNOTE 11000 of 08 December 1993

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian, who provide information for use in the BRAC-95 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief."

The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

Each individual in your activity generating information for the BRAC-95 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated as necessary. You are directed to maintain these certifications at your activity for audit purposes. For purposes of this certification sheet, the commander of the activity will begin the certification process and each reporting senior in the Chain of Command reviewing the information will also sign this certification sheet. This sheet must remain attached to this package and be forwarded up the Chain of Command. Copies must be retained by each level in the Chain of Command for audit purposes.

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

	<b><u>ACTIVITY COMMANDER</u></b>	
BERT MARSH, CDR, USN		
<u>NAME (Please type or print)</u>		<u>Signature</u>
COMMANDING OFFICER		7/14/94
<u>Title</u>		<u>Date</u>
NAVY EXPERIMENTAL DIVING UNIT		
<u>Activity</u>		

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Ara  
HEARD  
CMET  
N-4432  
2/27/44

DATA CALL 66  
INSTALLATION RESOURCES

**Activity Information:**

Activity Name:	NAVAL DIVING AND SALVAGE TRAINING CENTER, PANAMA CITY
UIC:	0610A
Host Activity Name (if response is for a tenant activity):	COASTAL SYSTEMS STATION
Host Activity UIC:	61331

1. **Base Operating Support (BOS) Cost Data.** Data is required which captures the total annual cost of operating and maintaining Department of the Navy (DON) shore installations. Information must reflect FY 1996 budget data supporting the FY 1996 NAVCOMPT Budget Submit. Two tables are provided. Table 1A identifies "Other than DBOF Overhead" BOS costs and Table 1B identifies "DBOF Overhead" BOS costs. These tables must be completed, as appropriate, for all DON host, independent or tenant activities which separately budget BOS costs (regardless of appropriation), and, are located in the United States, its territories or possessions. Responses for DBOF activities may need to include both Table 1A and 1B to ensure that all BOS costs, including those incurred by the activity in support of tenants, are identified. If both table 1A and 1B are submitted for a single DON activity, please ensure that no data is double counted (that is, included on both Table 1A and 1B). The following tables are designed to collect all BOS costs currently budgeted, regardless of appropriation, e.g., Operations and Maintenance, Research and Development, Military Personnel, etc. Data must reflect FY 1996 and should be reported in thousands of dollars.

a. **Table 1A - Base Operating Support Costs (Other Than DBOF Overhead).** This Table should be completed to identify "Other Than DBOF Overhead" Costs. Display, in the format shown on the table, the O&M, R&D and MPN resources currently budgeted for BOS services. O&M cost data must be consistent with data provided on the BS-1 exhibit. Report only direct funding for the activity. Host activities should not include reimbursable support provided to tenants, since tenants will be separately reporting these costs. Military personnel costs should be included on the appropriate lines of the table. Please ensure that individual lines of the table do not include duplicate costs. Add additional lines to the table (following line 2j., as necessary, to identify any additional cost elements not currently shown). Leave shaded areas of table blank.

SEE PAGE 2A.

AAA  
 HARRIS  
 ONET  
 N-4432  
 7/27/94

DATA CALL 66  
 INSTALLATION RESOURCES

Table 1A - Base Operating Support Costs (Other Than DBOF Overhead)			
Activity Name:		UIC:	
Category	FY 1996 BOS Costs (\$000)		
	Non-Labor	Labor	Total
<b>1. Real Property Maintenance Costs:</b>			
1a. Maintenance and Repair			
1b. Minor Construction			
1c. Sub-total 1a. and 1b.			
<b>2. Other Base Operating Support Costs:</b>			
2a. Utilities			
2b. Transportation			
2c. Environmental			
2d. Facility Leases			
2e. Morale, Welfare & Recreation			
2f. Bachelor Quarters			
2g. Child Care Centers			
2h. Family Service Centers			
2i. Administration			
2j. Other (Specify)			
2k. Sub-total 2a. through 2j:			
<b>3. Grand Total (sum of 1c. and 2k.):</b>			

MCD  
 Donaldson  
 N812  
 CNET  
 7-27-94

Table 1A - Base Operating Support Costs (Other Than DBOF Overhead)  
 Claimant : CNET

Activity Name: NAVDIVEBALVTRADEN PANAMA CITY FL      UID: 0610A

Category	FY 1996 BOS Costs (\$000)		
	Non-Labor	Labor	Total
1. REAL PROPERTY MAINTENANCE COSTS:			
1a. Maintenance and Repair	9	0	9
1b. Minor Construction	16	0	16
1c. Sub-total 1a. and 1b.	25	0	25
2. OTHER BASE OPERATING COSTS:			
2a. Utilities	156	0	156
2b. Transportation	18	0	18
2c. Environmental	0	0	0
2d. Facility Leases	0	0	0
2e. Morale, Welfare & Recreation	0	0	0
2f. Bachelor Quarters	0	0	0
2g. Child Care Centers	0	0	0
2h. Family Service Centers	0	0	0
2i. Administration	7	232	239
2j. Other	145	318	463
2k. Sub-total 2a. through 2j.	326	550	876
3. GRAND TOTAL (sum of 1c. and 2k.)	351	550	901
Appropriation:			
O&M,N	543		
MPN	358		

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DATA CALL 66  
INSTALLATION RESOURCES

b. **Funding Source.** If data shown on Table 1A reflects more than one appropriation, then please provide a break out of the total shown for the "3. Grand-Total" line, by appropriation:

Appropriation Amount (\$000)

SEE PAGE 2A

c. **Table 1B - Base Operating Support Costs (DBOF Overhead).**

This Table should be submitted for all current DBOF activities. Costs reported should reflect BOS costs supporting the DBOF activity itself (usually included in the G&A cost of the activity). For DBOF activities which are tenants on another installation, total cost of BOS incurred by the tenant activity for itself should be shown on this table. It is recognized that differences exist among DBOF activity groups regarding the costing of base operating support: some groups reflect all such costs only in general and administrative (G&A), while others spread them between G&A and production overhead. Regardless of the costing process, all such costs should be included on Table 1B. The Minor Construction portion of the FY 1996 capital budget should be included on the appropriate line. Military personnel costs (at civilian equivalency rates) should also be included on the appropriate lines of the table. Please ensure that individual lines of the table do not include duplicate costs. Also ensure that there is no duplication between data provided on Table 1A. and 1B. These two tables must be mutually exclusive, since in those cases where both tables are submitted for an activity, the two tables will be added together to estimate total BOS costs at the activity. Add additional lines to the table (following line 21., as necessary, to identify any additional cost elements not currently shown). Leave shaded areas of table blank.

Other Notes: All costs of operating the five Major Range Test Facility Bases at DBOF activities (even if direct RDT&E funded) should be included on Table 1B. Weapon Stations should include underutilized plant capacity costs as a DBOF overhead "BOS expense" on Table 1B.

NOT APPLICABLE - NOT A DBOF ACTIVITY

DATA CALL 66  
INSTALLATION RESOURCES

TABLE 2  
SERVICES/SUPPLIES COST DATA

WIC: 0610R

Cost Category FY 1996  
Projected Costs  
(\$000)

Travel: ~~\$0~~ 65  
Material and Supplies (including equipment): ~~\$283~~ 885  
Industrial Fund Purchases (other DBOF purchases): \$106  
Transportation: \$26  
Other Purchases (Contract support, etc.): ~~\$59~~ 121  
Total: ~~\$574~~ \$1,203

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DATA CALL 66  
INSTALLATION RESOURCES

3. Contractor Workyears.

a. **On-Base Contract Workyear Table.** Provide a projected estimate of the number of contract workyears expected to be performed "on base" in support of the installation during FY 1996. Information should represent an annual estimate on a full-time equivalency basis. Several categories of contract support have been identified in the table below. While some of the categories are self-explanatory, please note that the category "mission support" entails management support, labor service and other mission support contracting efforts, e.g., aircraft maintenance, RDT&E support, technical services in support of aircraft and ships, etc.

Table 3 - Contract Workyears	
Activity Name: NAVAL DIVING AND SALVAGE TRAINING SENTER	UIC: 0610A
Contract Type	FY 1996 Estimated Number of Workyears On-Base
Construction:	0
Facilities Support:	0
Mission Support:	0
Procurement:	0
Other:*	0
Total Workyears:	0

\* Note: Provide a brief narrative description of the type(s) of contracts, if any, included under the "Other" category.

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DATA CALL 66  
INSTALLATION RESOURCES

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b. **Potential Disposition of On-Base Contract Workyears.** If the mission/functions of your activity were relocated to another site, what would be the anticipated disposition of the on-base contract workyears identified in Table 3.?

1) Estimated number of contract workyears which would be transferred to the receiving site (This number should reflect the number of jobs which would in the future be contracted for at the receiving site, not an estimate of the number of people who would move or an indication that work would necessarily be done by the same contractor(s)):

0

2) Estimated number of workyears which would be eliminated:

0

3) Estimated number of contract workyears which would remain in place (i.e., contract would remain in place in current location even if activity were relocated outside of the local area):

0

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DATA CALL 66  
INSTALLATION RESOURCES

c. "Off-Base" Contract Workyear Data. Are there any contract workyears located in the local community, but not on-base, which would either be eliminated or relocated if your activity were to be closed or relocated? If so, then provide the following information (ensure that numbers reported below do not double count numbers included in 3.a. and 3.b., above):

No. of Additional Contract Workyears Which Would Be Eliminated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
0	

No. of Additional Contract Workyears Which Would Be Relocated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
0	

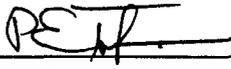
Command: NAVDIVESALVTRACEN

**Data Call Number Sixty-Six**

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

**MAJOR CLAIMANT LEVEL**

P. E. TOBIN  
NAME

  
Signature

CNET  
Title

20 JUL 1994  
Date

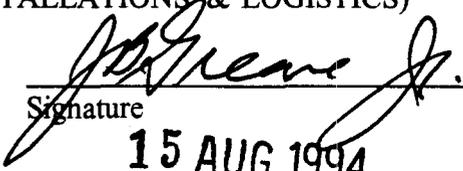
CNET  
Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

**J. B. GREENE, JR.**

J. B. GREENE, JR.  
NAME

  
Signature

**ACTING**

**15 AUG 1994**

ACTING  
Title

15 AUG 1994  
Date

**BRAC-96 CERTIFICATION**

Reference: SECNAVNOTE 1100, 08 Dec 93

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian who provide information for use in the BRAC-96 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief"

The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon a certification executed by a competent subordinate.

Each individual in your activity generating information for the BRAC-96 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated if necessary. You are directed to maintain those certifications at your activity for audit purposes. For purposes of this certification sheet, the commander of the activity will begin the certification process and each reporting senior in the Chain of Command reviewing the information will also sign this certification sheet. This sheet must remain attached to this package and be forwarded up the Chain of Command. Copies must be retained by each level in the Chain of Command for Audit purposes.

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

DATA BEING CERTIFIED                      Data Call 66  
(Enter Data Call # or piece of data being certified)

ACTIVITY COMMANDER

P. J. ROLOW, LCDR, USN  
NAME (please type of print)

  
Signature

ACTING COMMANDING OFFICER  
Title

21 JUL 94  
Date

NAVAL DIVING AND SALVAGE TRAINING CENTER  
350 SOUTH CRAG ROAD  
PANAMA CITY FL 32407-7016  
Activity

DATA CALL 66  
INSTALLATION RESOURCES

UIC: 43085

**Activity Information:**

Activity Name:	PERSUPPDET Panama City
UIC:	43085
Host Activity Name (if response is for a tenant activity):	Naval Coastal Systems Center Panama City
Host Activity UIC:	47628-61331

**General Instructions/Background.** A separate response to this data call must be completed for each Department of the Navy (DON) host, independent and tenant activity which separately budgets BOS costs (regardless of appropriation), and, is located in the United States, its territories or possessions.

**1. Base Operating Support (BOS) Cost Data.** Data is required which captures the total annual cost of operating and maintaining Department of the Navy (DON) shore installations. Information must reflect FY 1996 budget data supporting the FY 1996 NAVCOMPT Budget Submit. Two tables are provided. Table 1A identifies "Other than DBOF Overhead" BOS costs and Table 1B identifies "DBOF Overhead" BOS costs. These tables must be completed, as appropriate, for all DON host, independent or tenant activities which separately budget BOS costs (regardless of appropriation), and, are located in the United States, its territories or possessions. Responses for DBOF activities may need to include both Table 1A and 1B to ensure that all BOS costs, including those incurred by the activity in support of tenants, are identified. If both table 1A and 1B are submitted for a single DON activity, please ensure that no data is double counted (that is, included on both Table 1A and 1B). The following tables are designed to collect all BOS costs currently budgeted, regardless of appropriation, e.g., Operations and Maintenance, Research and Development, Military Personnel, etc. Data must reflect FY 1996 and should be reported in thousands of dollars.

**a. Table 1A - Base Operating Support Costs (Other Than DBOF Overhead).**

This Table should be completed to identify "Other Than DBOF Overhead" Costs. Display, in the format shown on the table, the O&M, R&D and MPN resources currently budgeted for BOS services. O&M cost data must be consistent with data provided on the BS-1 exhibit. Report only direct funding for the activity. Host activities should not include reimbursable support provided to tenants, since tenants will be separately reporting these costs. Military personnel costs should be included on the appropriate lines of the table. Please ensure that individual lines of the table do not include duplicate costs. Add additional

DATA CALL 66  
INSTALLATION RESOURCES

UIC: 43085

lines to the table (following line 2j., as necessary, to identify any additional cost elements not currently shown). Leave shaded areas of table blank.

<b>Table 1A - Base Operating Support Costs (Other Than DBOF Overhead)</b>			
<b>Activity Name: PERSUPPDET Panama City</b>			<b>UIC: 43085</b>
Category	FY 1996 BOS Costs (\$000)		
	Non-Labor	Labor	Total
<b>1. Real Property Maintenance Costs:</b>			
1a. Maintenance and Repair			
1b. Minor Construction			
<b>1c. Sub-total 1a. and 1b.</b>			
<b>2. Other Base Operating Support Costs:</b>			
2a. Utilities			
2b. Transportation			
2c. Environmental			
2d. Facility Leases			
2e. Morale, Welfare & Recreation			
2f. Bachelor Quarters			
2g. Child Care Centers			
2h. Family Service Centers			
2i. Administration	29	510	539
2j. Other (Specify)			
<b>2k. Sub-total 2a. through 2j:</b>	29	510	539
<b>3. Grand Total (sum of 1c. and 2k.):</b>	29	510	539

DATA CALL 66  
INSTALLATION RESOURCES

UIC: 43085

b. **Funding Source.** If data shown on Table 1A reflects more than one appropriation, then please provide a break out of the total shown for the "3. Grand-Total" line, by appropriation:

<u>Appropriation</u>	<u>Amount (\$000)</u>
O&MN	210
MPN	329

c. **Table 1B - Base Operating Support Costs (DBOF Overhead).** This Table should be submitted for all current DBOF activities. Costs reported should reflect BOS costs supporting the DBOF activity itself (usually included in the G&A cost of the activity). For DBOF activities which are tenants on another installation, total cost of BOS incurred by the tenant activity for itself should be shown on this table. It is recognized that differences exist among DBOF activity groups regarding the costing of base operating support: some groups reflect all such costs only in general and administrative (G&A), while others spread them between G&A and production overhead. Regardless of the costing process, all such costs should be included on Table 1B. The Minor Construction portion of the FY 1996 capital budget should be included on the appropriate line. Military personnel costs (at civilian equivalency rates) should also be included on the appropriate lines of the table. Please ensure that individual lines of the table do not include duplicate costs. Also ensure that there is no duplication between data provided on Table 1A. and 1B. These two tables must be mutually exclusive, since in those cases where both tables are submitted for an activity, the two tables will be added together to estimate total BOS costs at the activity. Add additional lines to the table (following line 21., as necessary, to identify any additional cost elements not currently shown). **Leave shaded areas of table blank.**

**Other Notes:** All costs of operating the five Major Range Test Facility Bases at DBOF activities (even if direct RDT&E funded) should be included on Table 1B. Weapon Stations should include underutilized plant capacity costs as a DBOF overhead "BOS expense" on Table 1B..

DATA CALL 66  
INSTALLATION RESOURCES

UIC: 43085

<b>Table 1B - Base Operating Support Costs (DBOF Overhead)</b>			
Activity Name: N/A; not a DBOF Activity			UIC: 43085
Category	FY 1996 Net Cost From UC/FUND-4 (\$000)		
	Non-Labor	Labor	Total
<b>1. Real Property Maintenance Costs:</b>			
1a. Real Property Maintenance (> \$15K)			
1b. Real Property Maintenance (< \$15K)			
1c. Minor Construction (Expensed)			
1d. Minor Construction (Capital Budget)			
<b>1e. Sub-total 1a. through 1d.</b>			
<b>2. Other Base Operating Support Costs:</b>			
2a. Command Office			
2b. ADP Support			
2c. Equipment Maintenance			
2d. Civilian Personnel Services			
2e. Accounting/Finance			
2f. Utilities			
2g. Environmental Compliance			
2h. Police and Fire			
2i. Safety			
2j. Supply and Storage Operations			
2k. Major Range Test Facility Base Costs			
2l. Other (Specify)			
<b>2m. Sub-total 2a. through 2l:</b>			
<b>3. Depreciation</b>			
<b>4. Grand Total (sum of 1e., 2m., and 3.) :</b>			

**DATA CALL 66  
INSTALLATION RESOURCES**

UIC: 43085

**2. Services/Supplies Cost Data.** The purpose of Table 2 is to provide information about projected FY 1996 costs for the purchase of services and supplies by the activity. (Note: Unlike Question 1 and Tables 1A and 1B, above, this question is not limited to overhead costs.) The source for this information, where possible, should be either the NAVCOMPT OP-32 Budget Exhibit for O&M activities or the NAVCOMPT UC/FUND-1/IF-4 exhibit for DBOF activities. Information must reflect FY 1996 budget data supporting the FY 1996 NAVCOMPT Budget Submit. Break out cost data by the major sub-headings identified on the OP-32 or UC/FUND-1/IF-4 exhibit, disregarding the sub-headings on the exhibit which apply to civilian and military salary costs and depreciation. Please note that while the OP-32 exhibit aggregates information by budget activity, this data call requests OP-32 data for the activity responding to the data call. Refer to NAVCOMPTINST 7102.2B of 23 April 1990, Subj: Guidance for the Preparation, Submission and Review of the Department of the Navy (DON) Budget Estimates (DON Budget Guidance Manual) with Changes 1 and 2 for more information on categories of costs identified. Any rows that do not apply to your activity may be left blank. However, totals reported should reflect all costs, exclusive of salary and depreciation.

<b>Table 2 - Services/Supplies Cost Data</b>	
<b>Activity Name: PERSUPPDET Panama City</b>	<b>UIC: 43085</b>
Cost Category	FY 1996 Projected Costs (\$000)
<b>Travel:</b>	1
<b>Material and Supplies (including equipment):</b>	23
<b>Industrial Fund Purchases (other DBOF purchases):</b>	0
<b>Transportation:</b>	0
<b>Other Purchases (Contract support, etc.):</b>	5
<b>Total:</b>	29

DATA CALL 66  
INSTALLATION RESOURCES

UIC: 43085

3. Contractor Workyears.

a. **On-Base Contract Workyear Table.** Provide a projected estimate of the number of contract workyears expected to be performed "on base" in support of the installation during FY 1996. Information should represent an annual estimate on a full-time equivalency basis. Several categories of contract support have been identified in the table below. While some of the categories are self-explanatory, please note that the category "mission support" entails management support, labor service and other mission support contracting efforts, e.g., aircraft maintenance, RDT&E support, technical services in support of aircraft and ships, etc.

<b>Table 3 - Contract Workyears</b>	
<b>Activity Name: PERSUPPDET Panama City</b>	<b>UIC: 43085</b>
Contract Type	FY 1996 Estimated Number of Workyears On-Base
Construction:	
Facilities Support:	
Mission Support:	
Procurement:	
Other:*	
<b>Total Workyears:</b>	<b>0</b>

\* **Note:** Provide a brief narrative description of the type(s) of contracts, if any, included under the "Other" category.

DATA CALL 66  
INSTALLATION RESOURCES

UIC: 43085

**b. Potential Disposition of On-Base Contract Workyears.** If the mission/functions of your activity were relocated to another site, what would be the anticipated disposition of the on-base contract workyears identified in Table 3.?

1) Estimated number of contract workyears which would be transferred to the receiving site (This number should reflect the number of jobs which would in the future be contracted for at the receiving site, not an estimate of the number of people who would move or an indication that work would necessarily be done by the same contractor(s)):

N/A; no contract workyears

2) Estimated number of workyears which would be eliminated:

N/A; no contract workyears

3) Estimated number of contract workyears which would remain in place (i.e., contract would remain in place in current location even if activity were relocated outside of the local area):

N/A; no contract workyears

**DATA CALL 66  
INSTALLATION RESOURCES**

UIC: 43085

**c. "Off-Base" Contract Workyear Data.** Are there any contract workyears located in the local community, but not on-base, which would either be eliminated or relocated if your activity were to be closed or relocated? If so, then provide the following information (ensure that numbers reported below do not double count numbers included in 3.a. and 3.b., above): No.

No. of Additional Contract Workyears Which Would Be Eliminated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
None	

No. of Additional Contract Workyears Which Would Be Relocated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
None	

PSA JACKSONVILLE UIC N68585  
DATA CALL SIXTY-SIX

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

\_\_\_\_\_  
NAME (Please type or print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

\_\_\_\_\_  
NAME (Please type or print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

RADM H. W. GEHMAN, JR.

NAME (Please type or print)

H.W. Gehman Jr.

Signature

15 AUG 1994

Acting

Title Commander in Chief  
U.S. Atlantic Fleet

\_\_\_\_\_  
Date

\_\_\_\_\_  
Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

W.A. EARNER

NAME (Please type or print)

W.A. Earner

Signature

21, 1994

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian, who provide information for use in the BRAC-95 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief."

The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

Each individual in your activity generating information for the BRAC-95 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated as necessary. You are directed to maintain those certifications at your activity for audit purposes. For purposes of this certification sheet, the commander of the activity will begin the certification process and each reporting senior in the Chain of Command reviewing the information will also sign this certification sheet. This sheet must remain attached to this package and be forwarded up the Chain of Command. Copies must be retained by each level in the Chain of Command for audit purposes.

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

D. V. VAN SAUN  
NAME: (Please type or print)

*Doris V Van Saun*  
Signature

Commanding Officer, Acting  
Title

9/2/94  
Date

Personnel Support Activity, Jacksonville  
Activity

## DATA CALL 63 FAMILY HOUSING DATA

Information on Family Housing is required for use in BRAC-95 return on investment calculations.

Installation Name:	NSWC Panama City
Unit Identification Code (UIC):	N61331
Major Claimant:	NAVSEA

Percentage Of Military Families Living on-Base:	19
Number of Vacant Officer Housing Units:	0
Number of Vacant Enlisted Housing Units:	0
Fy 1996 Family Housing Budget (\$000):	\$243
Total Number of Officer Housing Units:	4
Total Number of Enlisted Housing Units:	9

NOTE: Closure of this UIC may not result in closure of all housing units.

Note: All data should reflect figures as of the beginning of FY 1996. If major DON installations share a family housing complex, figures should reflect an estimate of the installation's prorated share of the family housing complex.

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

J. E. BUFFINGTON, RADM, CEC, USN  
NAME (Please type or print)

COMMANDER  
Title

NAVAL FACILITIES ENGINEERING COMMAND  
Activity

  
Signature

7/20/94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

W. A. EARNER  
NAME (Please type or print)

Title

  
Signature

7/25/94  
Date





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200

Complete  
Revision

DATA CALL #12

"LAB" JOINT CROSS-SERVICE GROUP GUIDANCE PACKAGE

4: 41

COASTAL SYSTEMS STATION

DAHLGREN DIVISION

NAVAL SURFACE WARFARE CENTER

31 March 1994

FOR OFFICIAL USE ONLY

Submission for  
UIC **N61331**

**"LAB" JOINT CROSS-SERVICE GROUP GUIDANCE PACKAGE**

Section I: Taskings

- 1.1 Guidelines
- 1.2 Standards
- 1.3 Assumptions
- 1.4 Measures of Merit
- 1.5 Activities
- 1.6 Common Support Functions

Section II: Capacity of DOD Components

- 2.1 Workload
- 2.2 Excess Capacity

Section III: Capability of Activities to Perform Common Support Functions

- 3.0 Mission
- 3.1 Location
- 3.2 Personnel
- 3.3 Workload
- 3.4 Facilities & Equipment
- 3.5 Expansion Potential

Section IV: Appendices

- A. Macro Process/Schedule
- B. List of Activities
- C. Common Support Functions

**COASTAL SYSTEMS STATION  
DAHLGREN DIVISION  
NAVAL SURFACE WARFARE CENTER**

PAGE 1  
31 March 1994  
**FOR OFFICIAL USE ONLY**

Submission for  
UIC **N61331**

**SECTION I: TASKING**

In accordance with the Deputy Secretary of Defense memorandum dated 7 Jan 94, the Laboratory Joint Cross-Service Group (LJCSG) with DOD components should, where operationally and cost effective, strive to: retain in only one Service militarily unique capabilities used by two or more Services; consolidate workload across the Service to reduce capacity; and assign operational units from more than one Service to a single base. Specifically, the purpose of the LJCSG is:

- Determine common support functions and bases to be addressed by LJCSG
- Establish guidelines, standards, assumptions, measures of merit, data elements and milestone schedules for DOD Component conduct of cross-service analysis of common support functions
- Review excess capacity analysis
- Develop closure or realignment alternatives
- Analyze cross-service trade-offs

The following information identifies to the Services common support functions and data element requirements necessary to support the cross-service analysis of these common support functions.

**1.1 Guidelines**

Because the DOD components are organized differently, "Lab" activities are considered to be those involved in the following life cycle efforts: Science and technology, and/or engineering development, and/or in-service engineering.

Service missions and force structure will be as stipulated in the FY1995-2000 Defense Planning Guidance and Interim Force Structure Plan.

The Military Departments will use the projected funding in the FY95 President's Budget Submission (Future Years Defense Plan -- FYDP) and an estimate of funds that will be received from outside the military department for execution.

If "lab" excess capacity exists, the Military Departments will start to reduce it where operationally and cost effective through a combination of downsizing in place within the departments, internal service consolidation, and cross service alternatives.

The Military Departments will gather, exchange, and analyze data collected per this guidance call for Common Support Functions (Appendix C) at "lab" activities (Appendix B) in accordance with the milestones and schedule dates identified in Appendix A.

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Cross-service alternatives will result in an aggregate reduction in the overall "lab" infrastructure across the Military Departments -- personnel/funding/facilities and equipment.

Common cross-service Measures of Merit will be consistently applied for all cross-service alternatives.

Integration of weapon systems/components into operational forces will remain with the individual Military Departments responsible for those forces.

**1.2 Standards**

Evaluation of cross-service alternatives will be consistent with PL 101-510 (as amended) and the eight BRAC criteria. Only certified data will be used.

The COBRA cost model will be used to calculate estimated costs, estimated savings, and Return on Investment (ROI) of alternatives leading to proposed closures and realignments. Common inputs will be used for Military COBRA runs incorporating cross-service alternatives.

Military value analysis will be conducted by the Military Departments IAW Title 10, USC responsibilities.

**1.3 Assumptions**

"Lab" Common Support Functions and activities identified herein represent the major opportunities for developing cross-service alternatives. The Military Departments are not precluded from proposing other cross-service alternatives to reduce excess capacity as they assess the full complement of "lab" functions.

Previous BRAC decisions will be factored into cross-service alternatives.

"Lab" capacity will be based on budgeted workyears. A workyear is considered to be 2080 hours adjusted for time not on the job (e.g. sick leave, annual leave, etc.)

**1.4 Measures of Merit**

The following Measures of Merit represent the outcome from the DOD component final realignment and closure recommendations that are supported by the capabilities data which will be gathered by activity and common support function in Section III of this guidance.

- Reduction of "lab" infrastructure
- Return on investment (COBRA)

PAGE 3

31 March 1994

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- Military value (BRAC criteria 1-4) -- the composite assessment of the quality of the remaining "lab" infrastructure

### **1.5 Activities**

The Military Departments will collect capacity data for each "lab" activity identified in Appendix B. The "lab" activities were selected by considering all individual aggregates of personnel and facilities located at one base, under the same commander, performing predominantly science and technology (S&T), engineering development, and/or in-service engineering work. Small subelements of these "lab" activities were included with the activity. Larger subelements were broken out and defined as separate activities. The list of activities was then narrowed down to the list in Appendix B based on a joint Military Department assessment of common support functions with cross-service potential.

### **1.6 Common Support Functions**

The common support functions (CSFs) were selected as shown in Appendix C based on a joint Military Department assessment of commonality and cross-servicing potential. Common support functions which were already consolidated and being cross serviced were not included.

Common Support Functions are divided into two categories: product and pervasive. Product functions include all S&T, engineering development, and in-service engineering efforts associated with a product from all funding sources. Pervasive functions only include those efforts that are S&T funded, i.e. Technology Base (6.1)/Exploratory Development (6.2)/Advanced Development (6.3).

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**SECTION II: CAPACITY OF DOD COMPONENTS**

2.1 **Workload.** Use the following table to describe historic and projected workload at each activity in terms of funding and workyears. Assume previous BRAC closures and realignments are implemented on schedule. Projected funding will be derived from FY95 President's Budget Submission (Then year dollars). Past fiscal year data shall begin with FY86 or at the inception of the activity as it existed on 1 Oct 93. (BRAC Criteria I & IV)

Information Required	Fiscal Years											
	86	87	88	89	90	91	92	93	94	95	96	97
Total Funds Programmed (\$M)	88.8	106.5	113.3	120.2	123.8	161.8	148.0	161.1	153.4	178.1	173.3	169.9
Total Actual Funds (\$M)	96.6	84.1	104.9	122.9	154.4	181.3	180.2	185.6				
Programmed Workyears	1210	1207	1300	1333	1246	1242	1300	1211	1245	1352	1250	1156
Actual Workyears	1211	1214	1286	1348	1380	1358	1342	1291				

- Budgeted workyears are the selected indicator of the "lab" infrastructure's capacity at an aggregate level for each Military Department. They include both workyears funded directly by the Military Department and the workyears funded from organizations outside the Military Department.

Workyears = government personnel and on-site FFRDCs and SETAs

2.2 **Excess "Lab" Capacity -- Measured at the DOD Component Level**

- Excess "Lab" Capacity = Sum of the Peak Workyears - Sum of the Projected Workyears
  - Peak at each activity = Highest value between FY86 (or since inception of organization) and FY93
  - Projected at each activity = Estimated at FY97

**SECTION III: CAPABILITY OF ACTIVITIES TO PERFORM COMMON SUPPORT FUNCTIONS (CSEs):** Provide the information described for each common support function listed in Appendix C in which you are actively engaged.

**3.0 Mission:** Describe the major capabilities at your activity contributing to the common support function in bulletized format. Describe any relationship and interconnectivity with other functions (common or otherwise) in support of the overall activity mission.

**A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.**

### **3.1 Location**

**3.1.1 Geographic/Climatological Features:** Describe any geographic/climatological features in and around your activity that are relevant to each CSF. Indicate and justify those that are required versus those that just serve to enhance accomplishing the mission of the activity. For example, clear air at high altitude that increases quality of atmospheric, ground-based laser experiments in support of the weapons CSF. (BRAC Criteria I)

**A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.**

**3.1.2 Licenses & permits:** Describe and list the licenses or permits (e.g., environmental, safety, etc.) that your activity currently holds and justify why they are required to allow tests, experiments, or other special capabilities at your location for each CSF. For example, permit to store and use high explosives. (BRAC Criteria I)

**A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.**

**3.1.3 Environmental constraints:** Describe and list the environmental or land use constraints present at your activity which limit or restrict your current scope for each CSF, i.e., would not allow increased "volume" or "spectrum" for the CSF. Example -- Volume: frequency of a type of experiment. Example -- Spectrum: Current permit to detonate high explosives will not allow detonation or storage of increased quantity of explosives without legal waiver (state law) or relocation of surrounding (non-govt) buildings. (BRAC Criteria II)

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A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.

**3.1.4 Special Support Infrastructure:** List and describe the importance of any mission related special support infrastructure (e.g. utilities) present at your location for your activity. (BRAC Criteria I)

A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.

**3.1.5. Proximity to Mission-Related organizations:** List and describe the importance and impact of not having nearby organizations which facilitate accomplishing or performing your mission -- e.g. operational units, FFRDCs, universities/colleges, other government organizations, and commercial activities. Restrict your response to the top five. Complete the following: (BRAC Criteria I)

A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.

Common Support Functions	Name	Type of Organization	Distance	Workyears Performed by Your Activity	Workyears Funded by Your Activity

**3.2 Personnel:**

**3.2.1 Total Personnel:** What is the total number of government (military and civilian), on-site federally funded research and development center (FFRDC), and on-site system engineering technical assistance (SETA) personnel engaged in science and technology (S&T), engineering development and in-service engineering activities as of end FY93? For individuals that predominantly work in CSFs, involved in more than one CSF, account for those individuals in the CSF that represents the preponderance of their effort. (BRAC Criteria I)

A thorough review of the common support functions listed in Appendix C has

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been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.

Types of personnel	Number of Personnel			
	Government		On-Site FFRDC	On-Site SETA
	Civilian	Military		
Technical				
Management (Supv)				
Other				

**3.2.2 Education:** What is the number of government personnel actively engaged in S&T, engineering development and in-service engineering activities by highest degree and type of position? Provide the data in the following table: (BRAC Criteria I)

A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.

Type of Degree/ Diploma	Number of Government Personnel by Type of Position		
	Technical	Management (Supv)	Other
High School or Less			
Associates			
Bachelor			
Masters			
Doctorate (include Med/Vet/etc.)			

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**3.2.3 Experience:** What is the experience level of government personnel? Fill in the number of government personnel in the appropriate boxes of the following table. (BRAC Criteria I)

A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.

Type of Position	Years of Government and/or Military Service				
	Less than 3 years	3-10 years	11-15 years	16-20 years	More than 20 years
Technical					182
Management (Supv)					64
Total					246

**3.2.4 Accomplishments During FY91-93:** For government personnel answer the following questions.

A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.

**3.2.4.1** How many patents were awarded and patent disclosures (only count disclosures with issued disclosure numbers) were made? (BRAC Criteria I)

A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.

CSF	Disclosures	Awarded	Patent Titles (List)
Total			

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**3.2.4.2 How many papers were published in peer reviewed journals? (BRAC Criteria I)**

**A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.**

CSF	Number Published	Paper Titles (List)
<b>TOTAL</b>		

**3.3 Workload**

**3.3.1 FY93 Workload**

**3.3.1.1 Work Year and Lifecycle:** Identify the number of actual workyears executed for each applicable CSF in FY93 for each of the following: government civilian; military; on-site FFRDCs; and on-site SETAs. (BRAC Criteria I)

**A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.**

"LAB"	Fiscal Year 1993 Actual			
	Civilian	Military	FFRDC	SETA
Science & Technology				
Engineering Development				
In-Service Engineering				

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**3.3.1.2 Engineering Development By ACAT:** For each Common Support Function (e.g. airborne C4I) at each activity engaged in engineering development, provide:

- For each ACAT IC, ID, and II program (as defined in DODI 5000.2):
  - The name of the program
  - A brief program description
- For each ACAT III and IV programs:
  - The number of such programs
  - A list of program names
- For each program not an ACAT I, II, III, IV:
  - The number of such programs
  - A list of program names
- For the purpose of this question, any program between Milestone I and IV and containing demonstration and validation (Dem/Val 6.4)/Engineering and Manufacturing Development (EMD 6.5) funds in the FY95 PBS is considered to be engaged in engineering development (BRAC Criteria I).

**A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.**

Engineering Development	Name or Number	Workyears (FY93 Actual)	FY93 Funds Received (Obligation Authority)	Narrative
ACAT IC	(Name)			(Description)
ACAT ID	(Name)			(Description)
ACAT II	(Name)			(Description)
ACAT III/IV	(Number)			(List)
Other	(Number)			(List)

**3.3.1.3 In-Service Engineering:** For each Common Support Function at each activity engaged in in-service engineering, list the in-service engineering efforts, the FY93 funds (from all sources) obligated for these efforts, the FY93 workyears for these efforts, and the weapon system(s) supported by these efforts. In-service engineering consists of all engineering support of fielded and/or out of production systems and includes efforts to

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improve cost, throughput, and schedule to support customer requirements as well as mods and upgrades for reliability, maintainability, and performance enhancements. (BRAC Criteria I)

**A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.**

Common Support Functions	In-Service Engineering Efforts (List)	FY93 Actual		Weapon System(s) Supported
		Funds Received (Obligation Authority)	Workyears	

**3.3.2 Projected Funding**

**3.3.2.1 Direct Funding:** For each applicable CSF, identify direct mission funding by appropriation from FY94 to FY97. Use FY95 PBS for FY95-FY97. (BRAC Criteria I)

**A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.**

CSF	FY94	FY95	FY96	FY97

**3.3.2.2 Other Obligation Authority:** For each applicable CSF, identify reimbursable and direct-cite funding (other obligation authority expected) from FY94 to FY97. Funding allocation must be traceable to FY95 PBS. (BRAC Criteria I)

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A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.

CSF	FY94	FY95	FY96	FY97

**3.4 Facilities and Equipment**

**3.4.1 Major Equipment and Facilities:** Describe major facilities and equipment necessary to support each Common Support Function (include SCIFs). If the facilities and equipment are shared with other functions, identify those functions and the percentage of total time used by each of the functions. Provide labeled photographs that picture the breadth and scope of the equipment and facilities described. If it is unique to DOD, to the Federal Government, or to the US, describe why it is unique. Insert the replacement cost. For this exercise, Replacement cost = (Initial cost + capital investment) multiplied by the inflation factor for the original year of construction. (BRAC Criteria II)

A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.

Common Support Function	Major Facility or Equipment Description	Unique To			Replacement Cost (\$K)
		DOD	Federal Gov't	U. S.	

**3.5 Expansion Potential**

**3.5.1 Laboratory Facilities:** Use facilities records as of fourth-quarter FY93 in answering the following (in sq ft) for each CSF: (BRAC Criteria II)

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**A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.**

Common Support Function	Facility or Equipment Description	Type of Space*	Space Capacity (KSF)		
			Current	Used	Excess

\* Administrative, Technical, Storage, Utility

**3.5.1.1** Describe the capacity of your activity to absorb additional similar workyears categorized in the same common support function with minor facility modification. If major modification is required, describe to what extent the facilities would have to be modified. (Use FY97 workyears as your requirement) (BRAC Criteria III)

**A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.**

**3.5.1.2** If there is capacity to absorb additional workyears, how many additional workyears can be supported? (BRAC Criteria III)

**A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.**

**3.5.1.3** For 3.5.1.1 and 3.5.1.2 (above) describe the impact of military construction programs or other alteration projects programmed in the FY95 PBS. (BRAC Criteria II)

**A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.**

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**3.5.2 Land Use:** Provide number of buildable acres for additional laboratory/administrative support construction at your installation. (BRAC Criteria II)

**A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.**

**3.5.3 Utilities:** Provide an estimate of your installation's capability to expand or procure additional utility services (electric, gas, water). Estimates should be provided in appropriate units -- e.g. KWH of electricity. (BRAC Criteria II)

**A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.**

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**SECTION IV: APPENDICES**

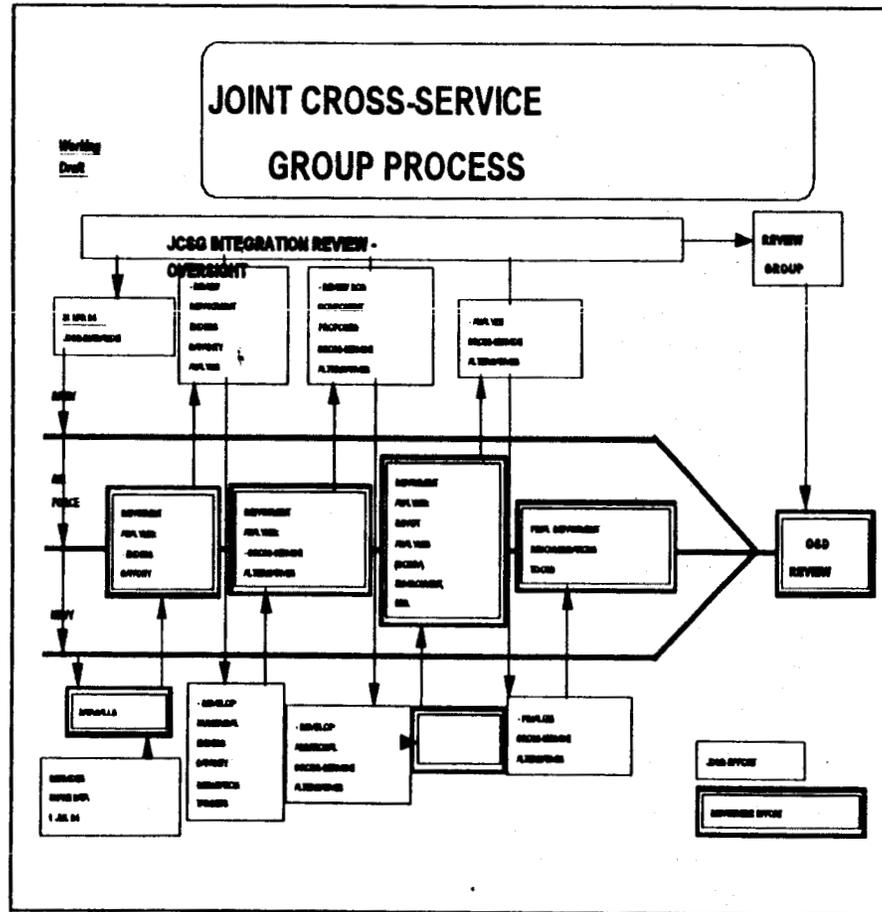
- A. Macro Process/Schedule
- B. List of Activities
- C. Common Support Functions

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APPENDIX A



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**APPENDIX B**

**LIST OF ACTIVITIES**

**AIR FORCE**

1. Armstrong Lab, Brooks AFB
2. Armstrong Lab, Tyndall AFB
3. Armstrong Lab, Wright-Patterson AFB
4. Armstrong Lab, Williams AFB
5. Human Systems Center, Brooks AFB
6. Wright Lab, Wright-Patterson AFB
7. Wright Lab, Eglin AFB
8. Aeronautical Systems Center, Wright-Patterson AFB
9. Aeronautical Systems Center, Eglin AFB
10. Oklahoma City Air Logistics Center, Tinker AFB (In-service engineering)
11. Ogden Air Logistics Center, Hill AFB (In-service engineering)
12. San Antonio Air Logistics Center, Kelly AFB (In-service engineering)
13. Sacramento Air Logistics Center, McClellan AFB (In-service engineering)
14. Warner-Robins Air Logistics Center, Robins AFB (In-service engineering)
15. Phillips Lab, Kirtland AFB
16. Phillips Lab, Hanscom AFB
17. Phillips Lab, Edwards AFB
18. Space & Missile Center, Los Angeles AFB
19. Space & Missile Center, Norton AFB
20. Sacramento Air Logistics Center, Peterson AFB
21. Rome Lab, Griffiss AFB
22. Rome Lab, Hanscom AFB
23. Electronic Systems Center, Hanscom AFB
24. Sacramento Air Logistics Center, Peterson AFB (In-service engineering)

**ARMY**

1. Army Research Lab (ARL), Adelphi, MD
2. ARL, Aberdeen Proving Grounds (APG), MD
3. ARL, White Sands Missile Range, NM
4. ARL, NASA Langley, VA
5. ARL, NASA Lewis, OH
6. Natick Research, Development and Engineering Center, Natick, MA
7. Aviation Research, Development and Engineering Center, St Louis, MO
8. Aviation Troop Command, Aeroflight Dynamics Directorate, Moffitt Field, CA

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9. Aviation Troop Command, Aviation Applied Technology Directorate, Fort Eustis, VA
10. Edgewood Research, Development and Engineering Center, Aberdeen Proving Ground, MD
11. Communications Electronics Command Research, Development and Engineering Center,  
Ft Mammoth, NJ
12. Communication Electronics Command Research, Development and Engineering Center -  
Night Vision EO Directorate, Ft Belvoir, VA
13. Missile Research, Development and Engineering Center, Redstone Arsenal, AL
14. Armaments Research, Development and Engineering Center, Picatinny Arsenal, NJ
15. Armaments Research, Development and Engineering Center, Benet Labs, Watervliet  
Arsenal, NY
16. Tank-Automotive Command Research, Development and Engineering Center, Warren, MI
17. USA Research Institute of Infectious Diseases, Ft Detrick, MD
18. Walter Reed Army Institute of Research, Washington D.C.
19. USA Institute of Surgical Research, Ft Sam Houston, TX
20. USA Aeromedical Research Lab, Ft Rucker, AL
21. Medical Research Institute of Chemical Defense Aberdeen Proving Grounds, MD
22. USA Research Institute of Environmental Medicine, Natick, MA
23. Construction Engineering Research Laboratory, Champaign, IL
24. Cold Regions Research and Engineering Lab, Hanover, NH
25. Topographic Engineering Center, Alexandria, VA
26. Waterways Experiment Station, Vicksburg, MS
27. USA Research Institute for Behavioral & Social Sciences, Alexandria, VA
28. Simulation, Training and Instrumentation Command (STRICOM), Orlando, FL

**NAVY**

1. Naval Air Warfare Center, Weapons Division, China Lake
2. Naval Air Warfare Center, Weapons Division, Point Mugu
3. Naval Air Warfare Center, Aircraft Division, Patuxent River
4. Naval Air Warfare Center, Aircraft Division, Indianapolis
5. Naval Air Warfare Center, Aircraft Division, Lakehurst
6. Naval Research Lab, Washington D.C.
7. Naval Research Lab Detachment, Bay St Louis
8. Naval Surface Warfare Center, Carderock Division, Bethesda
9. Naval Surface Warfare Center, Carderock Detachment, Annapolis
10. Naval Surface Warfare Center, Crane Division
11. Naval Surface Warfare Center, Crane Detachment, Louisville
12. Naval Surface Warfare Center, Dahlgren Division
13. Naval Surface Warfare Center, Dahlgren Detachment, Panama City
14. Naval Surface Warfare Center, Indian Head Division
15. Naval Surface Warfare Center, Port Hueneme Division

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16. Naval Command, Control, and Ocean Surveillance Center, RDT&E Division, San Diego
17. Naval Command, Control, and Ocean Surveillance Center, In-Service Engineering, West Coast Division, San Diego
18. Naval Command, Control, and Ocean Surveillance Center, In-Service Engineering Division, Charleston
19. Naval Aerospace Medical Research Center, Pensacola
20. Naval Biodynamics Lab, New Orleans
21. Naval Dental Research Lab, Great Lakes
22. Naval Health Research Center, San Diego
23. Naval Medical Research Institute, Bethesda
24. Naval Undersea Warfare Center, Keyport Division, WA
25. Naval Surface Warfare Center, Carderock, Philadelphia Detachment
26. Naval Undersea Warfare Center, Newport, RI
27. Naval Undersea Warfare Center (Newport), New London, CT
28. Naval Personnel Research and Development Center, San Diego, CA

**DEPARTMENT OF DEFENSE**

1. Armed Forces Radiobiology Research Institute (AFRRI), Bethesda, MD

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APPENDIX C

COMMON SUPPORT FUNCTIONS  
(DEFINITIONS LISTED FOLLOWING PAGES)

Product Functions

1. Air Vehicles
  - Fixed
    - Structure
    - Propulsion
    - Avionics
    - Flight Subsystems
  - Rotary
    - Structure
    - Propulsion
    - Avionics
    - Flight Subsystems
2. Weapons
  - ICBMs/SLBMs
  - Conventional Missiles/Rockets
  - Cruise Missiles
  - Guided Projectiles
  - Bombs
  - Guns and Ammunition
  - Directed Energy
  - Chemical/Biological
3. Space Systems
  - Launch Vehicles
  - Satellites
  - Ground Control Systems
4. C4I Systems
  - Airborne C4I
  - Fixed Ground-Based C4I
  - Ground Mobile C4I

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**Pervasive Functions**

1. Electronic Devices
2. Environmental Sciences
3. Infectious Diseases
4. Human Systems
5. Manpower and Personnel
6. Training Systems
7. Environmental Quality
8. Advanced Materials

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**DEFINITIONS**

**COMMON SUPPORT FUNCTIONS**

**Product Functions**

**1. Air Vehicles.** Air vehicles are broken out into common support functions for fixed wing and rotary wing. Includes but not limited to all science and technology, demonstration and validation, engineering development, and production activities which support employment and in-service engineering of air vehicles. Included are all air vehicles including their application as UAV's and targets.

- Structures. Includes but not limited to all air vehicles structure technology, engineering and production efforts. Include technology and engineering practices which advance structural design and analysis; advanced structural concepts and fabrication techniques; and structural integrity.

- Propulsion. Includes but not limited to all technology, engineering and production efforts associated with air vehicle propulsion such as turbine engine, rotorcraft power drive, and hypersonic propulsion components. Such components include compressors, inlets and nozzles, turbines, mechanical systems and control, gears, bearings, shafts, and clutches. In addition, include associated subsystems activities such as turborocket, turboramjet and rotorcraft transmissions; and supporting technical and engineering disciplines.

- Avionics. Includes but not limited to all technology, engineering and production efforts associated with the air platform's integrated avionics system. The avionics suite includes but is not limited to weapon delivery systems, electronic warfare, navigation, communications, radar, electro-optic sensors, signal/data processing and associated software system and support. Includes efforts associated with developing the integrated avionics system (i.e. optimizing functional partitioning, distribution and integration of avionics/related functions).

- Flight Subsystems. Includes but not limited to all technology, engineering and production efforts for air vehicle support systems such as landing gear; transparent crew enclosures; egress systems; mechanical equipment integrity; electrical component integrity; subsystem integration; and aircraft power, pressurization, and temperature control systems.

**2. Weapons.** Includes but not limited to all science and technology, demonstration and validation, engineering development, and production activities which support employment and in-service engineering of ICBMs/SLBMs, conventional missiles and rockets, cruise missiles, guided projectiles, bombs, guns and ammunition, directed energy and chemical/biological munitions. Include with each weapon as appropriate, all related technology, engineering and

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production activities such as fusing/safe and arm, missile propulsion, warheads and explosives, and guidance and control.

**3. Space.** Includes but not limited to all science and technology, demonstration and validation, engineering development, and production activities which support employment and in-service engineering of launch vehicles, satellites and associated ground control systems (satellite control only; ground systems for telemetry of data included in C4I). Include under satellites, all technology, engineering and production activities associated with space communications and space-based surveillance (and associated sensors) and space-based C4I.

**4. C4I.** Includes but not limited to all science and technology, demonstration and validation, engineering development, and production activities which support employment and in-service engineering of airborne, fixed ground-based and mobile ground based C4I systems. Include all technology, engineering and production activities associated with communications networks, radios and links, distributed information systems, data fusion, decision aids, and associated computer architectures.

**Pervasive Functions (6.1, 6.2, and 6.3)**

**1. Electronic Devices.** Includes but not limited to all science and technology activities supporting development of semiconductor and superconductor materials for optoelectronic, acoustic and microwave devices. Include all associated electronic materials/device fabrication and processing.

**2. Environmental Sciences.** Includes but not limited to all science and technology activities to improve measurement, characterization and modeling of the earth atmosphere and space environment. Examples include global prediction systems, space effects, and celestial backgrounds/astronomical reference sources.

**3. Infectious Diseases.** Includes but not limited to all science and technology activities which preserve manpower and performance by the prevention and treatment of militarily important infectious diseases that occur naturally worldwide.

**4. Human Systems.** Includes but not limited to all science and technology activities to enable, protect, sustain and enhance human effectiveness in DOD operations. The focus of this pervasive, multi-disciplinary area is the human and therefore impacts all DOD systems and operations. This area includes: (1) human performance definition, assessment, and aiding; (2) physiologic bioeffects of toxic hazards, ionizing and non-ionizing radiation, biodynamic (bio-mechanical) stress, and extreme environments; (3) military operational medicine; and (4) generic, human-centered design standards/methodologies for crew station subsystems, information management and display, and life support.

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**5. Manpower and Personnel.** Includes but not limited to all science and technology activities which support four broad areas: (1) selection and classification of DOD personnel (including pilots); (2) identification of operational tasks performed and requirements for skills, knowledge, and aptitudes; (3) matching the right people with the jobs they are best suited for according to the needs of DOD, (4) and developing techniques for measuring and enhancing the productivity of the operational force.

**6. Training Systems.** Includes but not limited to all science and technology which support training of personnel, including training strategies, devices and simulators, and computer aided intelligent tutoring systems.

**7. Environmental Quality.** Includes but not limited to all science and technology activities which support the development of technologies to reduce the environmental costs of DOD operations while ensuring mission accomplishment is not jeopardized by adverse environmental impacts. Specifically, this area encompasses technologies to: (1) identify and cleanup sites contaminated with hazardous materials as a result of DOD operations (cleanup); (2) ensure DOD compliance with current and anticipated local, national, and international environmental laws and treaties (compliance); (3) minimize DOD use of hazardous materials and reduce DOD hazardous waste generation (pollution prevention); and (4) provide for protection of natural resources under DOD stewardship (conservation).

**8. Advanced Materials.** Includes but not limited to all science and technology activities related to structural, high temperature, electromagnetic protection, electronic, magnetic, optical, and biomolecular materials. Note: excludes materials areas which were included in DDR&E decision of 18 Mar 94 related to the Army's Materials Research Facility at Aberdeen Proving Ground and the Navy's Materials Facility at Carderock.

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**Resubmission of Data Call #12, Naval Surface Warfare Center, Dahlgren Division,  
Coastal Systems Station**

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

N. S. SCOTT, CAPT. USN  
NAME (Please type or print)

COMMANDER  
Title

NAVAL SURFACE WARFARE CENTER  
DAHLGREN DIVISION

Activity

  
Signature

13 June 94  
Date

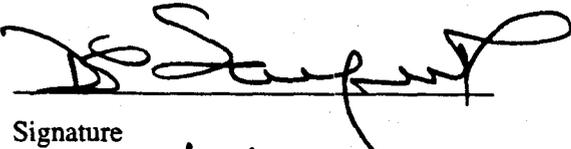
I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

RADM (SEL) D. P. SARGENT, JR.  
NAME (Please type or print)

COMMANDER  
Title

NAVAL SURFACE WARFARE CENTER  
Activity

  
Signature

6/14/94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

G. D. BERNER  
NAME (Please type or print)

Commander  
Title  
Naval Surface Warfare Center Coastal Systems Command

Activity

  
Signature

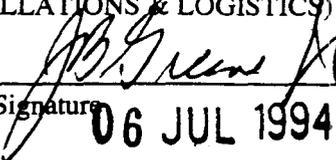
7-1-94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

**DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)**

J. B. GREENE, JR.  
NAME (Please type or print)

ACTING  
Title

  
Signature

06 JUL 1994  
Date

BRAC-95 CERTIFICATION

DATA CALL #12  
PANAMA CITY

Reference: SECNAVNOTE 11000 of 08 December 1993

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian, who provide information for use in the BRAC-95 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief."

The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

Each individual in your activity generating information for the BRAC-95 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated as necessary. You are directed to maintain those certifications at your activity for audit purposes. For purposes of this certification sheet, the commander of the activity will begin the certification process and each reporting senior in the Chain of Command reviewing the information will also sign this certification sheet. This sheet must remain attached to this package and be forwarded up the Chain of Command. Copies must be retained by each level in the Chain of Command for audit purposes.

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

CAPT D. C. STEERE

\_\_\_\_\_  
NAME (Please type or print)

  
\_\_\_\_\_  
Signature

Commanding Officer

\_\_\_\_\_  
Title

13 June 94  
\_\_\_\_\_  
Date

Coastal Systems Station, Dahlgren Division

\_\_\_\_\_  
Activity



BRAC-95 CERTIFICATION

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

**MICHAEL D. THORNTON**

NAME (Please type or print)

CDR, CEC, USN

Title



Signature



Date

MILCON PROGRAMMING DIVISION

Division

NAVAL FACILITIES ENGINEERING COMMAND

Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

J. E. BUFFINGTON, RADM, CEC, USN  
NAME (Please type or print)

COMMANDER  
Title

NAVAL FACILITIES ENGINEERING COMMAND  
Activity

  
Signature

12/9/94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

W. A. EARNER

NAME (Please type or print)

Title

  
Signature

12/17/94  
Date



I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

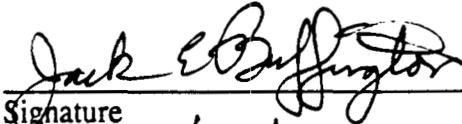
J. E. BUFFINGTON, RADM, CEC, USN  
NAME (Please type or print)

COMMANDER

Title

NAVAL FACILITIES ENGINEERING COMMAND

Activity

  
Signature  
7/13/94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

W. A. EARNER

NAME (Please type or print)

Title

  
Signature  
2/18/94  
Date

BRAC-95 CERTIFICATION

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MARK E. DONALDSON  
NAME (Please type or print)

  
Signature

CDR, CEC, USN  
Title

12 July 1994  
Date

MILCON PROGRAMMING DIVISION  
Division

FACILITIES PROGRAMMING AND CONSTRUCTION DIRECTORATE  
Department

NAVAL FACILITIES ENGINEERING COMMAND  
Activity

Enclosure (1)

BRAC DATA CALL NUMBER 64  
CONSTRUCTION COST AVOIDANCE

Information on cost avoidance which could be realized as the result of cancellation of on-going or programmed construction projects is provided in Tables 1 (MILCON) and 2 (FAMILY HOUSING). These tables list MILCON/FAMILY HOUSING projects which fall within the following categories:

1. all programmed construction projects included in the FY1996 - 2001 MILCON/FAMILY HOUSING Project List,
2. all programmed projects from FY1995 or earlier for which cost avoidance could still be obtained if the project were to be canceled by 1 OCT 1995, and,
3. all programmed BRAC MILCON/FAMILY HOUSING projects for which cost avoidance could still be obtained if the project were to be canceled by 1 OCT 1995.

Projects listed in Tables 1 and 2 with potential cost avoidance were determined as meeting any one of the following criteria:

Projects with projected Work in Place (WIP) less than 75% of the Current Working Estimate (CWE) as of 1 OCT 1995 .

Projects with projected completion dates or Beneficial Occupancy Dates subsequent to 31 March 1996.

Projects with projected CWE amount greater than \$15M.

The estimated cost avoidance for projects terminated after construction award would be approximately one-half of the CWE for the remaining work. Close-out, claims and other termination costs can consume the other half.



I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

J. E. BUFFINGTON, RADM, CEC, USN  
NAME (Please type or print)

COMMANDER  
Title

Jack E Buffington  
Signature  
7/13/94  
Date

NAVAL FACILITIES ENGINEERING COMMAND  
Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

**W. A. EARNER**

\_\_\_\_\_  
NAME (Please type or print)

\_\_\_\_\_  
Title

W A Earner  
Signature  
7/18/94  
Date

BRAC-95 CERTIFICATION

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MARK E. DONALDSON  
NAME (Please type or print)

CDR, CEC, USN  
Title

MILCON PROGRAMMING DIVISION  
Division

FACILITIES PROGRAMMING AND CONSTRUCTION DIRECTORATE  
Department

NAVAL FACILITIES ENGINEERING COMMAND  
Activity

  
Signature

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**"LAB" JOINT CROSS-SERVICE GROUP GUIDANCE PACKAGE**

Section I: Taskings

- 1.1 Guidelines
- 1.2 Standards
- 1.3 Assumptions
- 1.4 Measures of Merit
- 1.5 Activities
- 1.6 Common Support Functions

*See Revised DC*

Section II: Capacity of DOD Components

- 2.1 Workload
- 2.2 Excess Capacity

Section III: Capability of Activities to Perform Common Support Functions

- 3.0 Mission
- 3.1 Location
- 3.2 Personnel
- 3.3 Workload
- 3.4 Facilities & Equipment
- 3.5 Expansion Potential

Section IV: Appendices

- A. Macro Process/Schedule
- B. List of Activities
- C. Common Support Functions

**COASTAL SYSTEMS STATION  
DAHLGREN DIVISION  
NAVAL SURFACE WARFARE CENTER**

**SECTION I: TASKING**

In accordance with the Deputy Secretary of Defense memorandum dated 7 Jan 94, the Laboratory Joint Cross-Service Group (LJCSG) with DOD components should, where operationally and cost effective, strive to: retain in only one Service militarily unique capabilities used by two or more Services; consolidate workload across the Service to reduce capacity; and assign operational units from more than one Service to a single base. Specifically, the purpose of the LJCSG is:

- Determine common support functions and bases to be addressed by LJCSG
- Establish guidelines, standards, assumptions, measures of merit, data elements and milestone schedules for DOD Component conduct of cross-service analysis of common support functions
- Review excess capacity analysis
- Develop closure or realignment alternatives
- Analyze cross-service trade-offs

The following information identifies to the Services common support functions and data element requirements necessary to support the cross-service analysis of these common support functions.

**1.1 Guidelines**

Because the DOD components are organized differently, "Lab" activities are considered to be those involved in the following life cycle efforts: Science and technology, and/or engineering development, and/or in-service engineering.

Service missions and force structure will be as stipulated in the FY1995-2000 Defense Planning Guidance and Interim Force Structure Plan.

The Military Departments will use the projected funding in the FY95 President's Budget Submission (Future Years Defense Plan -- FYDP) and an estimate of funds that will be received from outside the military department for execution.

If "lab" excess capacity exists, the Military Departments will start to reduce it where operationally and cost effective through a combination of downsizing in place within the departments, internal service consolidation, and cross service alternatives.

The Military Departments will gather, exchange, and analyze data collected per this guidance call for Common Support Functions (Appendix C) at "lab" activities (Appendix B) in accordance with the milestones and schedule dates identified in Appendix A.

Cross-service alternatives will result in an aggregate reduction in the overall "lab" infrastructure across the Military Departments -- personnel/funding/facilities and equipment.

Common cross-service Measures of Merit will be consistently applied for all cross-service alternatives.

Integration of weapon systems/components into operational forces will remain with the individual Military Departments responsible for those forces.

## **1.2 Standards**

Evaluation of cross-service alternatives will be consistent with PL 101-510 (as amended) and the eight BRAC criteria. Only certified data will be used.

The COBRA cost model will be used to calculate estimated costs, estimated savings, and Return on Investment (ROI) of alternatives leading to proposed closures and realignments. Common inputs will be used for Military COBRA runs incorporating cross-service alternatives.

Military value analysis will be conducted by the Military Departments IAW Title 10, USC responsibilities.

## **1.3 Assumptions**

"Lab" Common Support Functions and activities identified herein represent the major opportunities for developing cross-service alternatives. The Military Departments are not precluded from proposing other cross-service alternatives to reduce excess capacity as they assess the full complement of "lab" functions.

Previous BRAC decisions will be factored into cross-service alternatives.

"Lab" capacity will be based on budgeted workyears. A workyear is considered to be 2080 hours adjusted for time not on the job (e.g. sick leave, annual leave, etc.)

## **1.4 Measures of Merit**

The following Measures of Merit represent the outcome from the DOD component final realignment and closure recommendations that are supported by the capabilities data which will be gathered by activity and common support function in Section III of this guidance.

- Reduction of "lab" infrastructure
- Return on investment (COBRA)
- Military value (BRAC criteria 1-4) -- the composite assessment of the quality of the remaining "lab" infrastructure

### **1.5 Activities**

The Military Departments will collect capacity data for each "lab" activity identified in Appendix B. The "lab" activities were selected by considering all individual aggregates of personnel and facilities located at one base, under the same commander, performing predominantly science and technology (S&T), engineering development, and/or in-service engineering work. Small subelements of these "lab" activities were included with the activity. Larger subelements were broken out and defined as separate activities. The list of activities was then narrowed down to the list in Appendix B based on a joint Military Department assessment of common support functions with cross-service potential.

Not Applicable.

### **1.6 Common Support Functions**

The common support functions (CSFs) were selected as shown in Appendix C based on a joint Military Department assessment of commonality and cross-servicing potential. Common support functions which were already consolidated and being cross serviced were not included.

Common Support Functions are divided into two categories: product and pervasive. Product functions include all S&T, engineering development, and in-service engineering efforts associated with a product from all funding sources. Pervasive functions only include those efforts that are S&T funded, i.e. Technology Base (6.1)/Exploratory Development (6.2)/Advanced Development (6.3).

**SECTION II: CAPACITY OF DOD COMPONENTS**

2.1 **Workload.** Use the following table to describe historic and projected workload at each activity in terms of funding and workyears. Assume previous BRAC closures and realignments are implemented on schedule. Projected funding will be derived from FY95 President's Budget Submission (Then year dollars). Past fiscal year data shall begin with FY86 or at the inception of the activity as it existed on 1 Oct 93. (BRAC Criteria I & IV)

Information Required	Fiscal Years											
	86	87	88	89	90	91	92	93	94	95	96	97
Total Funds Programmed (\$M)	88.8	106.5	113.3	120.2	123.8	161.8	148.0	161.1	153.4	178.1	173.3	169.9
Total Actual Funds (\$M)	96.6	84.1	104.9	122.9	154.4	181.3	180.2	185.6				
Programmed Workyears	1210	1207	1300	1333	1246	1242	1300	1211	1245	1352	1250	1156
Actual Workyears	1211	1214	1286	1348	1380	1358	1342	1291				

- Budgeted workyears are the selected indicator of the "lab" infrastructure's capacity at an aggregate level for each Military Department. They include both workyears funded directly by the Military Department and the workyears funded from organizations outside the Military Department.

Workyears = government personnel and on-site FFRDCs and SETAs

**2.2 Excess "Lab" Capacity -- Measured at the DOD Component Level**

- Excess "Lab" Capacity = Sum of the Peak Workyears - Sum of the Projected Workyears
  - Peak at each activity = Highest value between FY86 (or since inception of organization) and FY93
  - Projected at each activity = Estimated at FY97

**SECTION III: CAPABILITY OF ACTIVITIES TO PERFORM COMMON SUPPORT FUNCTIONS (CSFs):** Provide the information described for each common support function listed in Appendix C in which you are actively engaged.

**3.0 Mission:** Describe the major capabilities at your activity contributing to the common support function in bulletized format. Describe any relationship and interconnectivity with other functions (common or otherwise) in support of the overall activity mission.

A thorough review of the common support functions listed in Appendix C has been made. The Naval Surface Warfare Center, Dahlgren Division, Coastal Systems Station is not actively engaged in the common support functions listed.

### **3.1 Location**

**3.1.1 Geographic/Climatological Features:** Describe any geographic/climatological features in and around your activity that are relevant to each CSF. Indicate and justify those that are required versus those that just serve to enhance accomplishing the mission of the activity. For example, clear air at high altitude that increases quality of atmospheric, ground-based laser experiments in support of the weapons CSF. (BRAC Criteria I)

Not Applicable.

**3.1.2 Licenses & permits:** Describe and list the licenses or permits (e.g., environmental, safety, etc.) that your activity currently holds and justify why they are required to allow tests, experiments, or other special capabilities at your location for each CSF. For example, permit to store and use high explosives. (BRAC Criteria I)

Not Applicable.

**3.1.3 Environmental constraints:** Describe and list the environmental or land use constraints present at your activity which limit or restrict your current scope for each CSF, i.e., would not allow increased "volume" or "spectrum" for the CSF. Example -- Volume: frequency of a type of experiment. Example -- Spectrum: Current permit to detonate high explosives will not allow detonation or storage of increased quantity of explosives without legal waiver (state law) or relocation of surrounding (non-govt) buildings. (BRAC Criteria II)

Not Applicable.

**3.1.4 Special Support Infrastructure:** List and describe the importance of any mission related special support infrastructure (e.g. utilities) present at your location for your activity. (BRAC Criteria I)

Not Applicable.

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**3.1.5. Proximity to Mission-Related organizations:** List and describe the importance and impact of not having nearby organizations which facilitate accomplishing or performing your mission -- e.g. operational units, FFRDCs, universities/colleges, other government organizations, and commercial activities. Restrict your response to the top five. Complete the following: (BRAC Criteria I)

Not Applicable.

Common Support Functions	Name	Type of Organization	Distance	Workyears Performed by Your Activity	Workyears Funded by Your Activity

**3.2 Personnel:**

**3.2.1 Total Personnel:** What is the total number of government (military and civilian), on-site federally funded research and development center (FFRDC), and on-site system engineering technical assistance (SETA) personnel engaged in science and technology (S&T), engineering development and in-service engineering activities as of end FY93? For individuals that predominantly work in CSFs, involved in more than one CSF, account for those individuals in the CSF that represents the preponderance of their effort. (BRAC Criteria I)

Not Applicable.

Types of personnel	Number of Personnel			
	Government		On-Site FFRDC	On-Site SETA
	Civilian	Military		
Technical				
Management (Supv)				
Other				

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**3.2.2 Education:** What is the number of government personnel actively engaged in S&T, engineering development and in-service engineering activities by highest degree and type of position? Provide the data in the following table: (BRAC Criteria I)

Not Applicable.

Type of Degree/ Diploma	Number of Government Personnel by Type of Position		
	Technical	Management (Supv)	Other
High School or Less			
Associates			
<b>Bachelor</b>			
<b>Masters</b>			
<b>Doctorate (include Med/Vet/etc.)</b>			

**3.2.3 Experience:** What is the experience level of government personnel? Fill in the number of government personnel in the appropriate boxes of the following table. (BRAC Criteria I)

Not Applicable.

Type of Position	Years of Government and/or Military Service				
	Less than 3 years	3-10 years	11-15 years	16-20 years	More than 20 years
<b>Technical</b>					182
<b>Management (Supv)</b>					64
<b>Total</b>					246

**3.2.4 Accomplishments During FY91-93:** For government personnel answer the following questions.

Not Applicable.

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**3.2.4.1** How many patents were awarded and patent disclosures (only count disclosures with issued disclosure numbers) were made? (BRAC Criteria I)

Not Applicable.

CSF	Disclosures	Awarded	Patent Titles (List)
Total			

**3.2.4.2** How many papers were published in peer reviewed journals? (BRAC Criteria I)

Not Applicable.

CSF	Number Published	Paper Titles (List)
TOTAL		

**3.3 Workload**

**3.3.1 FY93 Workload**

**3.3.1.1 Work Year and Lifecycle:** Identify the number of actual workyears executed for each applicable CSF in FY93 for each of the following: government civilian; military; on-site FFRDCs; and on-site SETAs. (BRAC Criteria I)

Not Applicable.

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"LAB"	Fiscal Year 1993 Actual			
	Civilian	Military	FFRDC	SETA
Science & Technology				
Engineering Development				
In-Service Engineering				

**3.3.1.2 Engineering Development By ACAT:** For each Common Support Function (e.g. airborne C4I) at each activity engaged in engineering development, provide:

- For each ACAT IC, ID, and II program (as defined in DODI 5000.2):
  - The name of the program
  - A brief program description
- For each ACAT III and IV programs:
  - The number of such programs
  - A list of program names
- For each program not an ACAT I, II, III, IV:
  - The number of such programs
  - A list of program names
- For the purpose of this question, any program between Milestone I and IV and containing demonstration and validation (Dem/Val 6.4)/Engineering and Manufacturing Development (EMD 6.5) funds in the FY95 PBS is considered to be engaged in engineering development (BRAC Criteria I).

Not Applicable.

Engineering Development	Name or Number	Workyears (FY93 Actual)	FY93 Funds Received (Obligation Authority)	Narrative
ACAT IC	(Name)			(Description)
ACAT ID	(Name)			(Description)
ACAT II	(Name)			(Description)
ACAT III/IV	(Number)			(List)
Other	(Number)			(List)

**3.3.1.3 In-Service Engineering:** For each Common Support Function at each activity engaged in in-service engineering, list the in-service engineering efforts, the FY93 funds (from all sources) obligated for these efforts, the FY93 workyears for these efforts, and the weapon system(s) supported by these efforts. In-service engineering consists of all engineering support of fielded and/or out of production systems and includes efforts to improve cost, throughput, and schedule to support customer requirements as well as mods and upgrades for reliability, maintainability, and performance enhancements. (BRAC Criteria I)

Not Applicable.

Common Support Functions	In-Service Engineering Efforts (List)	FY93 Actual		Weapon System(s) Supported
		Funds Received (Obligation Authority)	Workyears	

**3.3.2 Projected Funding**

**3.3.2.1 Direct Funding:** For each applicable CSF, identify direct mission funding by appropriation from FY94 to FY97. Use FY95 PBS for FY95-FY97. (BRAC Criteria I)

Not Applicable.

CSF	FY94	FY95	FY96	FY97

**3.3.2.2 Other Obligation Authority:** For each applicable CSF, identify reimbursable and direct-cite funding (other obligation authority expected) from FY94 to FY97. Funding allocation must be traceable to FY95 PBS. (BRAC Criteria I)

Not Applicable.

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CSF	FY94	FY95	FY96	FY97

**3.4 Facilities and Equipment**

**3.4.1 Major Equipment and Facilities:** Describe major facilities and equipment necessary to support each Common Support Function (include SCIFs). If the facilities and equipment are shared with other functions, identify those functions and the percentage of total time used by each of the functions. Provide labeled photographs that picture the breadth and scope of the equipment and facilities described. If it is unique to DOD, to the Federal Government, or to the US, describe why it is unique. Insert the replacement cost. For this exercise, Replacement cost = (Initial cost + capital investment) multiplied by the inflation factor for the original year of construction. (BRAC Criteria II)

Not Applicable.

Common Support Function	Major Facility or Equipment Description	Unique To			Replacement Cost (\$K)
		DOD	Federal Gov't	U. S.	

**3.5 Expansion Potential**

**3.5.1 Laboratory Facilities:** Use facilities records as of fourth-quarter FY93 in answering the following (in sq ft) for each CSF: (BRAC Criteria II)

Not Applicable.

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Common Support Function	Facility or Equipment Description	Type of Space*	Space Capacity (KSF)		
			Current	Used	Excess

\* Administrative, Technical, Storage, Utility

**3.5.1.1** Describe the capacity of your activity to absorb additional similar workyears categorized in the same common support function with minor facility modification. If major modification is required, describe to what extent the facilities would have to be modified. (Use FY97 workyears as your requirement) (BRAC Criteria III)

Not Applicable.

**3.5.1.2** If there is capacity to absorb additional workyears, how many additional workyears can be supported? (BRAC Criteria III)

Not Applicable.

**3.5.1.3** For 3.5.1.1 and 3.5.1.2 (above) describe the impact of military construction programs or other alteration projects programmed in the FY95 PBS. (BRAC Criteria II)

Not Applicable.

**3.5.2 Land Use:** Provide number of buildable acres for additional laboratory/administrative support construction at your installation. (BRAC Criteria II)

Not Applicable.

**3.5.3 Utilities:** Provide an estimate of your installation's capability to expand or procure additional utility services (electric, gas, water). Estimates should be provided in appropriate units -- e.g. KWH of electricity. (BRAC Criteria II)

Not Applicable.

SECTION IV: APPENDICES

- A. Macro Process/Schedule
- B. List of Activities
- C. Common Support Functions



**APPENDIX B**

**LIST OF ACTIVITIES**

**AIR FORCE**

1. Armstrong Lab, Brooks AFB
2. Armstrong Lab, Tyndall AFB
3. Armstrong Lab, Wright-Patterson AFB
4. Armstrong Lab, Williams AFB
5. Human Systems Center, Brooks AFB
6. Wright Lab, Wright-Patterson AFB
7. Wright Lab, Eglin AFB
8. Aeronautical Systems Center, Wright-Patterson AFB
9. Aeronautical Systems Center, Eglin AFB
10. Oklahoma City Air Logistics Center, Tinker AFB (In-service engineering)
11. Ogden Air Logistics Center, Hill AFB (In-service engineering)
12. San Antonio Air Logistics Center, Kelly AFB (In-service engineering)
13. Sacramento Air Logistics Center, McClellan AFB (In-service engineering)
14. Warner-Robins Air Logistics Center, Robins AFB (In-service engineering)
15. Phillips Lab, Kirtland AFB
16. Phillips Lab, Hanscom AFB
17. Phillips Lab, Edwards AFB
18. Space & Missile Center, Los Angeles AFB
19. Space & Missile Center, Norton AFB
20. Sacramento Air Logistics Center, Peterson AFB
21. Rome Lab, Griffiss AFB
22. Rome Lab, Hanscom AFB
23. Electronic Systems Center, Hanscom AFB
24. Sacramento Air Logistics Center, Peterson AFB (In-service engineering)

**ARMY**

1. Army Research Lab (ARL), Adelphi, MD
2. ARL, Aberdeen Proving Grounds (APG), MD
3. ARL, White Sands Missile Range, NM
4. ARL, NASA Langley, VA
5. ARL, NASA Lewis, OH
6. Natick Research, Development and Engineering Center, Natick, MA
7. Aviation Research, Development and Engineering Center, St Louis, MO
8. Aviation Troop Command, Aeroflight Dynamics Directorate, Moffitt Field, CA
9. Aviation Troop Command, Aviation Applied Technology Directorate, Fort Eustis, VA
10. Edgewood Research, Development and Engineering Center, Aberdeen Proving Ground, MD

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11. Communications Electronics Command Research, Development and Engineering Center, Ft Mammoth, NJ
12. Communication Electronics Command Research, Development and Engineering Center - Night Vision EO Directorate, Ft Belvoir, VA
13. Missile Research, Development and Engineering Center, Redstone Arsenal, AL
14. Armaments Research, Development and Engineering Center, Picatinny Arsenal, NJ
15. Armaments Research, Development and Engineering Center, Benet Labs, Watervliet Arsenal, NY
16. Tank-Automotive Command Research, Development and Engineering Center, Warren, MI
17. USA Research Institute of Infectious Diseases, Ft Detrick, MD
18. Walter Reed Army Institute of Research, Washington D.C.
19. USA Institute of Surgical Research, Ft Sam Houston, TX
20. USA Aeromedical Research Lab, Ft Rucker, AL
21. Medical Research Institute of Chemical Defense Aberdeen Proving Grounds, MD
22. USA Research Institute of Environmental Medicine, Natick, MA
23. Construction Engineering Research Laboratory, Champaign, IL
24. Cold Regions Research and Engineering Lab, Hanover, NH
25. Topographic Engineering Center, Alexandria, VA
26. Waterways Experiment Station, Vicksburg, MS
27. USA Research Institute for Behavioral & Social Sciences, Alexandria, VA
28. Simulation, Training and Instrumentation Command (STRICOM), Orlando, FL

NAVY

1. Naval Air Warfare Center, Weapons Division, China Lake
2. Naval Air Warfare Center, Weapons Division, Point Mugu
3. Naval Air Warfare Center, Aircraft Division, Patuxent River
4. Naval Air Warfare Center, Aircraft Division, Indianapolis
5. Naval Air Warfare Center, Aircraft Division, Lakehurst
6. Naval Research Lab, Washington D.C.
7. Naval Research Lab Detachment, Bay St Louis
8. Naval Surface Warfare Center, Carderock Division, Bethesda
9. Naval Surface Warfare Center, Carderock Detachment, Annapolis
10. Naval Surface Warfare Center, Crane Division
11. Naval Surface Warfare Center, Crane Detachment, Louisville
12. Naval Surface Warfare Center, Dahlgren Division
13. Naval Surface Warfare Center, Dahlgren Detachment, Panama City
14. Naval Surface Warfare Center, Indian Head Division
15. Naval Surface Warfare Center, Port Hueneme Division
16. Naval Command, Control, and Ocean Surveillance Center, RDT&E Division, San Diego
17. Naval Command, Control, and Ocean Surveillance Center, In-Service Engineering, West Coast Division, San Diego
18. Naval Command, Control, and Ocean Surveillance Center, In-Service Engineering Division, Charleston

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19. Naval Aerospace Medical Research Center, Pensacola
20. Naval Biodynamics Lab, New Orleans
21. Naval Dental Research Lab, Great Lakes
22. Naval Health Research Center, San Diego
23. Naval Medical Research Institute, Bethesda
24. Naval Undersea Warfare Center, Keyport Division, WA
25. Naval Surface Warfare Center, Carderock, Philadelphia Detachment
26. Naval Undersea Warfare Center, Newport, RI
27. Naval Undersea Warfare Center (Newport), New London, CT
28. Naval Personnel Research and Development Center, San Diego, CA

**DEPARTMENT OF DEFENSE**

1. Armed Forces Radiobiology Research Institute (AFRRI), Bethesda, MD

**APPENDIX C**

**COMMON SUPPORT FUNCTIONS**  
**(DEFINITIONS LISTED FOLLOWING PAGES)**

**Product Functions**

1. Air Vehicles
  - Fixed
    - Structure
    - Propulsion
    - Avionics
    - Flight Subsystems
  - Rotary
    - Structure
    - Propulsion
    - Avionics
    - Flight Subsystems
2. Weapons
  - ICBMs/SLBMs
  - Conventional Missiles/Rockets
  - Cruise Missiles
  - Guided Projectiles
  - Bombs
  - Guns and Ammunition
  - Directed Energy
  - Chemical/Biological
3. Space Systems
  - Launch Vehicles
  - Satellites
  - Ground Control Systems
4. C4I Systems
  - Airborne C4I
  - Fixed Ground-Based C4I
  - Ground Mobile C4I

**Pervasive Functions**

1. Electronic Devices
2. Environmental Sciences
3. Infectious Diseases
4. Human Systems
5. Manpower and Personnel
6. Training Systems
7. Environmental Quality
8. Advanced Materials

**DEFINITIONS**

**COMMON SUPPORT FUNCTIONS**

**Product Functions**

**1. Air Vehicles.** Air vehicles are broken out into common support functions for fixed wing and rotary wing. Includes but not limited to all science and technology, demonstration and validation, engineering development, and production activities which support employment and in-service engineering of air vehicles. Included are all air vehicles including their application as UAV's and targets.

- Structures. Includes but not limited to all air vehicles structure technology, engineering and production efforts. Include technology and engineering practices which advance structural design and analysis; advanced structural concepts and fabrication techniques; and structural integrity.

- Propulsion. Includes but not limited to all technology, engineering and production efforts associated with air vehicle propulsion such as turbine engine, rotorcraft power drive, and hypersonic propulsion components. Such components include compressors, inlets and nozzles, turbines, mechanical systems and control, gears, bearings, shafts, and clutches. In addition, include associated subsystems activities such as turborocket, turboramjet and rotorcraft transmissions; and supporting technical and engineering disciplines.

- Avionics. Includes but not limited to all technology, engineering and production efforts associated with the air platform's integrated avionics system. The avionics suite includes but is not limited to weapon delivery systems, electronic warfare, navigation, communications, radar, electro-optic sensors, signal/data processing and associated software system and support. Includes efforts associated with developing the integrated avionics system (i.e. optimizing functional partitioning, distribution and integration of avionics/related functions).

- Flight Subsystems. Includes but not limited to all technology, engineering and production efforts for air vehicle support systems such as landing gear; transparent crew enclosures; egress systems; mechanical equipment integrity; electrical component integrity; subsystem integration; and aircraft power, pressurization, and temperature control systems.

**2. Weapons.** Includes but not limited to all science and technology, demonstration and validation, engineering development, and production activities which support employment and in-service engineering of ICBMs/SLBMs, conventional missiles and rockets, cruise missiles, guided projectiles, bombs, guns and ammunition, directed energy and chemical/biological munitions. Include with each weapon as appropriate, all related technology, engineering and production activities such as fusing/safe and arm, missile propulsion, warheads and explosives, and guidance and control.

**3. Space.** Includes but not limited to all science and technology, demonstration and validation, engineering development, and production activities which support employment and in-service engineering of launch vehicles, satellites and associated ground control systems (satellite control only; ground systems for telemetry of data included in C4I). Include under satellites, all technology, engineering and production activities associated with space communications and space-based surveillance (and associated sensors) and space-based C4I.

**4. C4I.** Includes but not limited to all science and technology, demonstration and validation, engineering development, and production activities which support employment and in-service engineering of airborne, fixed ground-based and mobile ground based C4I systems. Include all technology, engineering and production activities associated with communications networks, radios and links, distributed information systems, data fusion, decision aids, and associated computer architectures.

**Pervasive Functions (6.1, 6.2, and 6.3)**

**1. Electronic Devices.** Includes but not limited to all science and technology activities supporting development of semiconductor and superconductor materials for optoelectronic, acoustic and microwave devices. Include all associated electronic materials/device fabrication and processing.

**2. Environmental Sciences.** Includes but not limited to all science and technology activities to improve measurement, characterization and modeling of the earth atmosphere and space environment. Examples include global prediction systems, space effects, and celestial backgrounds/astronomical reference sources.

**3. Infectious Diseases.** Includes but not limited to all science and technology activities which preserve manpower and performance by the prevention and treatment of militarily important infectious diseases that occur naturally worldwide.

**4. Human Systems.** Includes but not limited to all science and technology activities to enable, protect, sustain and enhance human effectiveness in DOD operations. The focus of this pervasive, multi-disciplinary area is the human and therefore impacts all DOD systems and operations. This area includes: (1) human performance definition, assessment, and aiding; (2) physiologic bioeffects of toxic hazards, ionizing and non-ionizing radiation, biodynamic (bio-mechanical) stress, and extreme environments; (3) military operational medicine; and (4) generic, human-centered design standards/methodologies for crew station subsystems, information management and display, and life support.

**5. Manpower and Personnel.** Includes but not limited to all science and technology activities which support four broad areas: (1) selection and classification of DOD personnel (including pilots); (2) identification of operational tasks performed and requirements for skills, knowledge, and aptitudes; (3) matching the right people with the jobs they are best suited for according to the needs of DOD, (4) and developing techniques for measuring and enhancing the productivity of the operational force.

**6. Training Systems.** Includes but not limited to all science and technology which support training of personnel, including training strategies, devices and simulators, and computer aided intelligent tutoring systems.

**7. Environmental Quality.** Includes but not limited to all science and technology activities which support the development of technologies to reduce the environmental costs of DOD operations while ensuring mission accomplishment is not jeopardized by adverse environmental impacts. Specifically, this area encompasses technologies to: (1) identify and cleanup sites contaminated with hazardous materials as a result of DOD operations (cleanup); (2) ensure DOD compliance with current and anticipated local, national, and international environmental laws and treaties (compliance); (3) minimize DOD use of hazardous materials and reduce DOD hazardous waste

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generation (pollution prevention); and (4) provide for protection of natural resources under DOD stewardship (conservation).

**8. Advanced Materials.** Includes but not limited to all science and technology activities related to structural, high temperature, electromagnetic protection, electronic, magnetic, optical, and biomolecular materials. Note: excludes materials areas which were included in DDR&E decision of 18 Mar 94 related to the Army's Materials Research Facility at Aberdeen Proving Ground and the Navy's Materials Facility at Carderock.

BRAC-95 CERTIFICATION

Data Call: 12

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian, who provide information for use in the BRAC-95 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief."

The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

Each individual in your activity generating information for the BRAC-95 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated as necessary. You are directed to maintain those certifications at your activity for audit purposes. For purposes of this certification sheet, the commander of the activity will begin the certification process and each reporting senior in the Chain of Command reviewing the information will also sign this certification sheet. This sheet must remain attached to this package and be forwarded up the Chain of Command. Copies must be retained by each level in the Chain of Command for audit purposes.

I certify the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

D. C. STEERE  
NAME (Please type or print)

  
\_\_\_\_\_  
Signature

COMMANDING OFFICER  
Title

6 May 94  
\_\_\_\_\_  
Date

NAVAL SURFACE WARFARE CENTER  
DAHLGREN DIVISION  
COASTAL SYSTEMS STATION  
Activity

NSWC DAHLGREN, PANAMA City  
DATA CALL #12

JL  
SEA 09  
5/13/94

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

N. S. SCOTT, CAPT. USN

NAME (Please type or print)

COMMANDER

Title

NAVAL SURFACE WARFARE CENTER

DAHLGREN DIVISION

Activity

  
Signature

10 May 94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

RADM (SEL) D. P. SARGENT, JR.

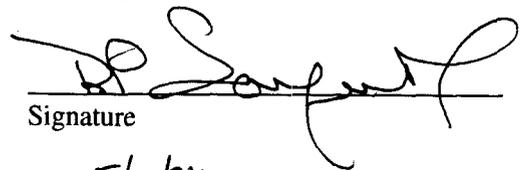
NAME (Please type or print)

COMMANDER

Title

NAVAL SURFACE WARFARE CENTER

Activity

  
Signature

5/11/94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

**G. R. STERNER**

NAME (Please type or print)

**Commander**  
**Naval Sea Systems Command**

Activity

  
Signature

5-13-94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

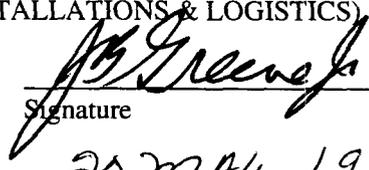
DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

J. B. Greene, Jr.

NAME (Please type or print)

Acting

Title

  
Signature

20 MAY 1994  
Date

200

**ENVIRONMENTAL DATA CALL:  
DATA CALL TO BE SUBMITTED TO  
ALL NAVY/MARINE CORPS HOST ACTIVITIES**

**COASTAL SYSTEMS STATION  
DAHLGREN DIVISION  
NAVAL SURFACE WARFARE CENTER**

**20 APRIL 1994**

Data Call 33  
UIC N61331

**BRAC 1995 ENVIRONMENTAL DATA CALL:  
All Navy/Marine Corps Host Activities**

**INDEX**

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## ENVIRONMENTAL DATA CALL

Responses to the following questions provide data that will allow an assessment of the potential environmental impact associated with the closure or realignment of a Navy shore activity. This criterion consists of:

- Endangered/Threatened Species and Biological Habitat
- Woodlands
- Cultural Resources
- Environmental Facilities
- Air Pollution
- Environmental Compliance
- Installation Restoration
- Land/Air/Water Use

As part of the answers to these questions, a *source citation* (e.g., 1993 base loading, 1993 base-wide Endangered Species Survey, 1993 letter from USFWS, 1993 Base Master Plan, 1993 Permit Application, 1993 PA/SI, etc.) must be included. It is probable that, at some point in the future, you will be asked to provide additional information detailing specifics of individual characteristics. In anticipation of this request, supporting documentation (e.g., maps, reports, letters, etc.) regarding answers to these questions should be retained. Information needed to answer these questions is available from the cognizant EFD Planning and Real Estate Divisions, and Environment, Safety, and Health Divisions; and from the activity Public Works Department, and activity Health Monitoring and Safety Offices.

For purposes of the questions associated with land use at your base is *defined as land* (acreage owned, withdrawn, leased, and controlled through easements); *air* (space controlled through agreements with the FAA, e.g., MOAs); *and water* (navigation channels and waters along a base shoreline) *under the control of the Navy*.

Provide a list of the tenant activities with UICs that are covered in this response.

<b>Tenant Command Name</b>	<b>UIC</b>	<b>Tenant Command Name</b>	<b>UIC</b>
<b>Defense Finance and Accounting Service Cleveland Center</b>	<b>XBH</b>	<b>Naval Diving Salvage Training Center</b>	<b>0610A 42113 45783 46718 49651</b>
<b>DoN, Defense Printing Service</b>	<b>48923</b>	<b>Navy Experimental Diving Unit</b>	<b>0463A</b>
<b>Explosive Ordnance Disposal Mobile Unit SIX DET</b>	<b>30712</b>	<b>Naval Hospital Pensacola, Branch Clinic</b>	<b>41430</b>
<b>Naval Criminal Investigative Service</b>	<b>67556</b>	<b>Resident Officer in Charge of Construction</b>	<b>61331</b>
<b>Personnel Support Activity Detachment</b>	<b>43085</b>		

**1. ENDANGERED/THREATENED SPECIES AND BIOLOGICAL HABITAT**

**1a.** For federal or state listed endangered, threatened, or category 1 plant and/or animal species on your base, complete the following table. Critical/sensitive habitats for these species are designated by the U. S. Fish and Wildlife Service (USFWS). A species is present on your base if some part of its life-cycle occurs on Navy controlled property (e.g., nesting, feeding, loafing). Important Habitat refers to that number of acres of habitat that is important to some life cycle stage of the threatened/endangered species that is not formally designated.

<b>SPECIES (plant or animal)</b>	<b>Designation (Threatened/ Endangered)</b>	<b>Federal/ State</b>	<b>Critical / Designated Habitat (Acres)</b>	<b>Important Habitat (acres)</b>
<i>example: Haliaeetus leucocephalus - bald eagle</i>	<i>threatened</i>	<i>Federal</i>	<i>25</i>	<i>0</i>
<b>Least Tern</b>	<b>Threatened</b>	<b>State</b>	<b>130</b>	<b>0</b>
<b>American Alligator</b>	<b>Threatened due to similarity of appearance</b>	<b>Federal</b>	<b>0</b>	<b>0</b>

Source Citation: **Natural Resources Plan**

**1b.**

Have your base operations or development plans been constrained due to: - USFWS or National Marine Fisheries Service (NMFS)? - State required modifications or constraints? If so, identify below the impact of the constraints including any restrictions on land use.	<b>NO</b>
Are there any requirements resulting from species not residing on base, but which migrate or are present nearby? If so, summarize the impact of such constraints.	<b>NO</b>

1c. If the area of the habitat and the associated species have not been identified on base maps provided in Data Call 1, submit this information on an updated version of Data Call 1 map.

1d.

Have any efforts been made to relocate any species and/or conduct any mitigation with regards to critical habitats or endangered/threatened species? Explain what has been done and why.	NO
--	----

1e.

Will any state or local laws and/or regulations applying to endangered/threatened species which have been enacted or promulgated but not yet effected, constrain base operations or development plans beyond those already identified? Explain.	NO
---	----

## 2. WETLANDS

**Note:** Jurisdictional wetlands are those areas that meet the wetland definitional criteria detailed in the Corps of Engineers (COE) Wetland Delineation Manual, 1987, Technical Report Y-87-1, U.S. Army Engineer Waterway Experiment Station, Vicksburg, MS or officially adapted state definitions.

2a.

Does your base possess federal jurisdictional wetlands?	YES
Has a wetlands survey in accordance with established standards been conducted for your base?	YES
When was the survey conducted or when will it be conducted? <u>In progress</u>	
What percent of the base has been surveyed?	100%
What is the total acreage of jurisdictional wetlands present on your base?	14.25

Source Citation: **Survey Accomplished by Southern Division of the Naval Facilities Engineering Command**

2b. If the area of the wetlands has not been identified on base maps provided in Data Call 1, submit this on an updated version of Data Call 1 map.

2c. Has the EPA, COE or a state wetland regulatory agency required you to modify or constrain base operations or development plans in any way in order to accommodate a jurisdictional wetland? NO If YES, summarize the results of such modifications or constraints.

**3. CULTURAL RESOURCES**

3a.

Has a survey been conducted to determine historic sites, structures, districts or archaeological resources which are listed, or determined eligible for listing, on the National Register of Historic Places? If so, list the sites below.	<b>YES</b>
--	------------

**NONE**

3b.

Has the President's Advisory Council on Historic Preservation or the cognizant State Historic Preservation Officer required you to mitigate or constrain base operations or development plans in any way in order to accommodate a National Register cultural resource? If YES, list the results of such modifications or constraints below.	<b>NO</b>
--	-----------

3c.

Are there any on base areas identified as sacred areas or burial sites by Native Americans or others? List below.	<b>YES</b>
---	------------

- (1) **8BY1 - Midden**
- (2) **8BY3 - Burial Mound and Midden**
- (3) **8BY4 - Midden**
- (4) **8BY58 - Midden**
- (5) **8BY71 - Midden**

**4. ENVIRONMENTAL FACILITIES**

**Notes:** If your facility is permitted for less than maximum capacity, state the maximum capacity and explain below the associated table why it is not permitted for maximum capacity. Under "Permit Status" state when the permit expires, and whether the facility is operating under a waiver. For permit violations, limit the list to the last 5 years.

4a.

Does your base have an operating landfill? .....					NO
ID/Location of Landfill	Permitted Capacity (CYD)		Maximum Capacity (CYD)	Contents <sup>1</sup>	Permit Status
	TOTAL	Remaining			

<sup>1</sup> Contents (e.g. building demolition, asbestos, sanitary debris, etc)

Are there any current or programmed projects to correct deficiencies or improve the facility.

N/A

4b. If there are any non-Navy users of the landfill, describe the user and conditions/agreements.

N/A

4c.

Does your base have any disposal, recycling, or incineration facilities for solid waste?					NO
Facility/Type of Operation	Permitted Capacity	Ave Daily Throughput	Maximum Capacity	Permit Status	Comments

List any permit violations and projects to correct deficiencies or improve the facility.

4d.

Does your base own/operate a Domestic Wastewater Treatment Plant (WWTP) ?					YES
ID/Location of WWTP	Permitted Capacity	Ave Daily Discharge Rate	Maximum Capacity	Permit Status	Level of Treatment/Year Built
1003F16842 CSS, Panama City, FL	.200 MGD	.104 MGD	.200 MGD	Extended til Aug 14, 1994	Secondary / 1956

List permit violations and discuss any projects to correct deficiencies.

**Exceeding copper and silver water quality standards. An Industrial waste water management Plans scheduled to be completed 2nd Qtr FY 95 should identify the problem and make recommendations for corrective action (i.e., change work processes, addition of treatment equipment, or connect to municipality.)**

**4e.** If you do not have a domestic WWTP, describe the average discharge rate of your base to the local sanitary sewer authority, discharge limits set by the sanitary sewer authority (flow and pollutants) and whether the base is in compliance with their permit. Discuss recurring discharge violations.

N/A

**4f.**

Does your base operate an Industrial Waste Treatment Plant (IWTP)?					NO
ID/Location of IWTP	Type of Treatment	Permitted Capacity	Ave Daily Discharge Rate	Maximum Capacity	Permit Status

List any permit violations and projects to correct deficiencies or improve the facility.

**4g.** Are there other waste treatment flows not accounted for in the previous tables? Estimate capacity and describe the system.

No

**4h.**

Does your base operate drinking Water Treatment Plants (WTP)?				NO	
ID/Location of WTP	Operating (GPD)		Method of Treatment	Maximum Capacity	Permit Status
	Permitted Capacity	Daily Rate			

List permit violations and projects/actions to correct deficiencies or improve the facility.

4i. If you do not operate a WTP, what is the source of the base potable water supply. State terms and limits on capacity in the agreement/contract, if applicable.

**Main Station and beach sites are supplied water from Panama City Beach water system. (Bay County Water Treatment Facility.)**

**There are no capacity limits or restrictions in the agreement.**

4j.

Does the presence of contaminants or lack of supply of water constrain base operations. Explain.	<b>NO</b>
--	-----------

4k.

Other than those described above does your base hold any NPDES or stormwater permits? If YES, describe permit conditions.	<b>YES</b>
If NO, why not and provide explanation of plan to achieve permitted status.	

**CSS has been included in a group (NPDES) application, #1256, for stormwater associated with industrial activities. Final multi-sector general permit expected to be issued Fall 1994. The stormwater NPDES pollution prevention plan is scheduled to be completed by February 1995. The Florida Department of Environmental Protection (FDEP) requires stormwater treatment design for any new construction project. FDEP approved General permits or exemption designs are obtained prior to new construction.**

4l.

Does your base have bilge water discharge problem?	<b>NO</b>
Do you have a bilge water treatment facility?	<b>YES</b>

Explain: **Oil/Water separator system is used to treat bilge water with treated water being discharged to out domestic wastewater treatment facility. All bilge wastewater is screened for chlorinated hydrocarbons before pumping to oil/water separator.**

4m.

Will any state or local laws and/or regulations applying to Environmental Facilities, which have been enacted or promulgated but not yet effected, constrain base operations or development plans beyond those already identified? Explain.	<b>NO</b>
---	-----------

4n. What expansion capacity is possible with these Environmental Facilities? Will any

expansions/upgrades as a result of BRACON or projects programmed through the Presidents budget through FY1997 result in additional capacity? Explain.

**Possibly capable of additional wastewater treatment capacity. We are capable of hazardous waste storage capacity. None are planned, programmed, or budgeted through FY 1997.**

40. Do capacity limitations on any of the facilities discussed in question 4 pose a present or future limitation on base operations? Explain. **No.**

**5. AIR POLLUTION**

5a.

<p>What is the name of the Air Quality Control Areas (AQCA's) in which the base is located?  <u>Mobile - Pensacola - Panama City - Southern Mississippi</u></p>
<p>Is the installation or any of its OLFs or non-contiguous base properties located in different AQCA's? <u>NO</u>. List site, location and name of AQCA.</p>

5b. For each parcel in a separate AQCA fill in the following table. Identify with and "X" whether the status of each regulated pollutant is: attainment/nonattainment/maintenance. For those areas which are in non-attainment, state whether they are: Marginal, Moderate, Serious, Severe, or Extreme. State target attainment year.

Site: Coastal Systems Station AQCA: Mobile - Pensacola, Panama City, So. Mississippi

Pollutant	Attainment	Non-Attainment	Maintenance	Target Attainment Year <sup>1</sup>	Comments <sup>2</sup>
CO	x				
Ozone	x				
PM-10	x				
SO <sub>2</sub>	x				
NO <sub>2</sub>	x				
Pb	x				

<sup>1</sup> Based on national standard for Non-Attainment areas or SIP for Maintenance areas.

<sup>2</sup> Indicate if attainment is dependent upon BRACON, MILCON or Special Projects. Also indicate if the project is currently programmed within the Presidents FY1997 budget.

5c. For your base, identify the baseline level of emissions, established in accordance with the Clean Air Act. Baseline information is assumed to be 1990 data or other year as specified.

Determine the total level of emissions (tons/yr) for CO, NOx, VOC, PM10 for the general sources listed. For all data provide a list of the sources and show your calculations. Use known emissions data, or emissions derived from use of state methodologies, or identify other sources used. "Other Mobile" sources include such items as ground support equipment.

<b>Emission Sources (Tons/Year)</b>					
<b>Pollutant</b>	<b>Permitted Stationary</b>	<b>Personal Automobiles</b>	<b>Aircraft Emissions</b>	<b>Other Mobile</b>	<b>Total</b>
<b>CO</b>	Not Applicable	5.0	Not Available	Not Available	5.0
<b>NOx</b>	Not Applicable	1.5	Not Available	Not Available	1.5
<b>VOC</b>	Not Applicable	0.6	Not Available	Not Available	0.6
<b>PM10</b>	Not Applicable	Not Available	Not Available	Not Available	Not Available

Source Document: Estimated 1990 Vehicle Traffic and 1982 Max Auto Emission Standards.

Calculations provided below:

**CALCULATIONS:**

1. **Based on 1665 POVs**  
 Average 2 miles/day on base  
 5 days/wk  
 52 wk/yr  
 = 865,800 miles/yr
  
2. **Based on Transportation Department data**  
 475,000 miles of on-base driving by government vehicles.
  
3. **Emission factors, from 1982 maximum auto emissions**  
 CO = 3.4 gram/mile  
 NOx = 1.0 gram/mile  
 VOC = .41 gram/mile
  
4. **Total Miles**  
 866,000 (POV)  
 475,000 (Govt)  
 1,341,000 vehicle miles
  
5. **CO = (1,341,000) (3.4 g/mile)(1 lb/454 g)(1 ton/2000 lb) = 5.0 tons**  
**NOx = (1,341,000) (1.0) (1/454) (1/2000) = 1.5 tons**  
**VOC = (1,341,000) (.41) (1/454) (1/2000) = 0.6 tons**

5d. For your base, determine the total FY1993 level of emissions (tons/yr) for CO, NOx, VOC, PM10 for the general sources listed. For all data provide a list of the sources and show your calculations. Use known emissions data, or emissions derived from use of state methodologies, or identify other sources used. "Other Mobile" sources include such items as ground support equipment.

Emissions Sources (Tons/Year)					
Pollutant	Permitted Stationary	Personal Automobiles	Aircraft Emissions	Other Mobile	Total
CO	Not Applicable	4.6	Not Available	Not Applicable	4.6
NOx	Not Applicable	1.35	Not Available	Not Applicable	1.35
VOC	Not Applicable	0.55	Not Available	Not Applicable	0.55
PM10	Not Applicable	Not Available	Not Available	Not Applicable	Not Available

Source Document: Estimated 1993 Vehicle Traffic and 1982 Max Auto Emission Stds.

Note: CSS' only permitted stationary source was the classified document incinerator which was permanently shut down on 15 November 1993.

Calculations provided below:

**CALCULATIONS:**

1. Based on 1,436 vehicles  
2 miles/day  
5 days/wk  
52 wks/yr  
= 747,000 miles for POV on base
2. Based on Transportation Department data  
  
482,000 miles of on-base driving by government vehicles
3. Emissions factors same as 1990 worksheet

Total miles:

747,000  
482,000  
1,229,000

4.  $CO = (1,229,000) (3.4 \text{ g/mile}) (1 \text{ lb}/454 \text{ g}) (1 \text{ ton}/2000 \text{ lb}) = 4.6 \text{ tons/yr}$   
 $NO_x = (1,229,000) (1.0) (1/454) (1/2000) = 1.35 \text{ tons/yr}$   
 $VOC = (1,229,000) (.41) (1/454) (1/2000) = 0.55 \text{ tons/yr}$

5e. Provide estimated increases/decreases in air emissions (Tons/Year of CO, NO<sub>x</sub>, VOC, PM<sub>10</sub>) expected within the next six years (1995-2001). Either from previous BRAC realignments and/or previously planned downsizing shown in the Presidents FY1997 budget. Explain.

**We do not anticipate significant increases or decreases in emissions of CO, NO<sub>x</sub>, VOC, or PM(10) in the next six years.**

5f. Are there any critical air quality regions (i.e. non-attainment areas, national parks, etc.) within 100 miles of the base?

**No.**

5g. Have any base operations/mission/functions (i.e.: training, R&D, ship movement, aircraft movement, military operations, support functions, vehicle trips per day, etc.) been restricted or delayed due to air quality considerations. Explain the reason for the restriction and the "fix" implemented or planned to correct.

**No, operations/missions/functions have been restricted or delayed due to air quality considerations.**

5h. Does your base have Emission Reduction Credits (ERCs) or is it subject to any emission offset requirements? If yes, provide details of the sources affected and conditions of the ERCs and offsets. Is there any potential for getting ERCs?

**No.**

## 6. ENVIRONMENTAL COMPLIANCE

- 6a. Identify compliance costs, currently known or estimated that are required for permits or other actions required to bring existing practices into compliance with appropriate regulations. Do not include Installation Restoration costs that are covered in Section 7 or recurring costs included in question 6c. For the last two columns provide the combined total for those two FY's.

Program	Survey Completed?	Costs in \$K to correct deficiencies					
		FY94	FY95	FY96	FY97	FY98-99	FY00-01
Air	6/94	20	30	50	50	75	75
Hazardous Waste	YES	0	0	0	0	0	0
Safe Drinking Water Act	YES	10	12	14	16	20	20
PCBs	YES	0	0	0	0	0	0
Other (non-PCB) Toxic Substance Control Act	YES	0	0	0	0	0	0
Lead Based Paint	YES	0	0	0	0	0	0
Radon	YES	0	0	0	0	0	0
Clean Water Act	YES	110	1250	50	50	50	50
Solid Waste	YES	0	0	0	0	0	0
Oil Pollution Act	YES	399	205	525	25	25	25
USTs	YES	220	100	50	0	0	0
Other	N/A	0	0	0	0	0	0
<b>Total</b>		<b>759</b>	<b>1597</b>	<b>689</b>	<b>141</b>	<b>170</b>	<b>170</b>

Provide a separate list of compliance projects in progress or required, with associated cost and estimated start/completion date.

**Air**                      **FY94 - 20K for air emissions study. FY 95 through FY01 -\$s programmed for compliance projects anticipated as outfall from air emissions study and CAA regulations.**

**Hazardous Waste**    **Program in compliance. Future compliance projects based on new/changing regulations are**

unknown at this time.

<b>Safe Drinking</b>	<b>FY94 through fy01 - \$s programmed for compliance Water Act projects anticipated under regulations from Safe Drinking Water Act.</b>
<b>Toxic Substance Control Act</b>	<b>Currently, the program is in compliance. Future compliance projects based on new/changing regulations are unknown at this time.</b>
<b>Lead Paint</b>	<b>See TSCA.</b>
<b>Radon</b>	<b>See TSCA.</b>
<b>Clean Water Act</b>	<b>FY94 - Stormwater Pollution Prevention Plan and industrial Waste Water Management Plan to be completed in FY94 at an estimated cost of 110K. FY95 - Upgrade to Waste Water Treatment Plant estimated to cost 1,100K. Spill Prevention Control and Countermeasures programmed are 100K. FY95 though FY01 - \$s programmed for various projects under Clean Water Act estimated to cost 50K each fiscal year.</b>
<b>Solid Waste</b>	<b>See TSCA. FY94 Solid Waste Management Plan</b>
<b>Oil Pollution Act</b>	<b>FY94 - Oily Waste Management Plan estimated to cost 9K. FY95 through FY01 - Pump and Treat Remediation Projects to clean up petroleum contaminated sites are estimated to cost the following: FY95 15K, FY96 and each year following 25K. FY95 - Upgrades to Oily Waste System estimated to cost 390K and to be completed in FY95 - The SP-5 System Remediation Assessment complete in FY95 and is estimated to cost 190K. FY96 - Clean up of JP-5 System complete in FY96 and is estimated to cost 400K.</b>
<b>Underground Storage Tanks</b>	<b>FY94 - Various tank removal, overfill, and containment projects are estimated to cost 220K and to be finished in FY94. FY95 &amp; FY96 - Other tank projects to be finished in FY95 and FY96 are estimated to cost the following: 100K in FY95 and 50K in FY96.</b>

6b.

Does your base have structures containing asbestos? YES What % of your base has been surveyed for asbestos? 100% Are additional surveys planned? NO What is the estimated cost to remediate asbestos (\$K) \$520K. Are asbestos survey costs based on encapsulation, removal or a combination of both? REMOVAL.

6c. Provide detailed cost of recurring operational (environmental) compliance costs, with funding source.

\$K

Funding Source	FY92	FY93	FY94	FY95	FY96	FY97	FY98-99	FY00-01
O&MN	0	0	0	0	0	0	0	0
HA	0	0	0	0	0	0	0	0
PA	0	0	0	0	0	0	0	0
Other (See tables below)	169.1	461.5	1681	995	1012	876	876	876
<b>TOTAL</b>	<b>169.1</b>	<b>461.5</b>	<b>1681</b>	<b>995</b>	<b>1012</b>	<b>876</b>	<b>876</b>	<b>876</b>

1992 DBOF in \$K

Program	Labor	Material	Contracts	Travel	Total
Hazardous Waste Program	3.2	3.9	42.9	0	50.0
Environmental Compliance	114.5	.2	0	2.9	117.6
Environmental Engineering	0	.7	.8	0	1.5

1993 DBOF in \$K

Program	Labor	Mat/Eg	Travel	Contract	Facility	Other
Hazardous Waste Program	46.229	88.012	0	73.046	.252	0
Environmental Compliance	142.076	.279	6.176	.030	0	.063
Environmental Support	4.214	.024	0	.075	.380	4.660
Clean Air Act	.115	0	0	0	0	0
Clean Water Act	.829	0	0	0	0	0
Underground Storage Tank	3.986	0	0	1.98	0	0
Safe Drinking Water Act	.058	0	0	0	0	0
Emergency Response	.041	7.660	0	.827	0	0
Petroleum Contamination	0	56.336	0	24.170	0	0
<b>Total</b>	<b>197.548</b>	<b>152.311</b>	<b>6.176</b>	<b>100.128</b>	<b>.632</b>	<b>4.723</b>

**FY94 through FY97 DBOF in \$K**

<b>Program</b>	<b>FY94</b>	<b>FY95</b>	<b>FY96</b>	<b>FY97</b>
Hazardous Waste Management & Disposal	1245	594	609	459
Air Pollution Abatement	110	58	79	81
Water Quality Management	49	40	43	47
Environmental Assessments	26	26	27	28
Compliance with Other Laws and Regulations	254	277	254	261
Technology Development	0	0	0	0
<b>TOTAL</b>	<b>1681</b>	<b>995</b>	<b>1012</b>	<b>876</b>

**6d.** Are there any compliance issues/requirements that have impacted operations and/or development plans at your base.

**None.**

**7. INSTALLATION RESTORATION**

**7a.**

Does your base have any sites that are contaminated with hazardous substances or petroleum products?	<b>YES</b>
Is your base an NPL site or proposed NPL site?	<b>NO</b>

**7b.** Provide the following information about your Installation Restoration (IR) program. Project list may be provided in separate table format. Note: List only projects eligible for funding under the Defense Environmental Restoration Account (DERA). Do not include UST compliance projects properly listed in section VI.

Site # or name	Type site <sup>1</sup>	Groundwater Contaminated?	Extends off base?	Drinking Water Source?	Cost to Complete (\$M)/Est. Compl. Date	Status <sup>2</sup> /Comments
<b>SWMU 1</b>	<b>RCRA</b>	<b>NO</b>	<b>NO</b>	<b>CITY</b>	<b>.5M/FY98</b>	<b>RI</b>
<b>SWMU 2</b>	<b>RCRA</b>	<b>NO</b>	<b>NO</b>	<b>CITY</b>	<b>4.0M/FY97</b>	<b>RI</b>
<b>SWMU 3</b>	<b>RCRA</b>	<b>NO</b>	<b>NO</b>	<b>CITY</b>	<b>.5M/FY98</b>	<b>RI</b>
<b>SWMU 5</b>	<b>RCRA</b>	<b>NO</b>	<b>NO</b>	<b>CITY</b>	<b>.5M/FY98</b>	<b>RI</b>
<b>SWMU 9</b>	<b>RCRA</b>	<b>YES</b>	<b>NO</b>	<b>CITY</b>	<b>2.9M/FY97</b>	<b>RI</b>
<b>SWMU 10</b>	<b>RCRA</b>	<b>YES</b>	<b>NO</b>	<b>CITY</b>	<b>.5M/FY98</b>	<b>RI</b>
<b>AOC 1</b>	<b>RCRA</b>	<b>YES</b>	<b>NO</b>	<b>CITY</b>	<b>1.5M/FY98</b>	<b>RI</b>
<b>AOC 2</b>	<b>RCRA</b>	<b>YES</b>	<b>NO</b>	<b>CITY</b>	<b>1.5M/FY98</b>	<b>RI</b>
<b>FAC 278</b>	<b>UST</b>	<b>YES</b>	<b>NO</b>	<b>CITY</b>	<b>.2M/FY96</b>	<b>Contamination Assessment Report (CAR)</b>

<sup>1</sup> Type site: CERCLA, RCRA corrective action (CA), UST or other (explain)

<sup>2</sup> Status = PA, SI, RI, RD, RA, long term monitoring, etc.

**7c.** Have any contamination sites been identified for which there is no recognized/accepted remediation process available? List.

**NO.**

**7d.**

Is there a groundwater treatment system in place?	<b>NO</b>
Is there a groundwater treatment system planned?	<b>YES</b>

State scope and expected length of pump and treat operation.

**To be determined by Petroleum Contamination Assessment Report and RCRA facility investigation report (Phase II) and corrective measures study.**

**7e.**

Has a RCRA Facilities Assessment been performed for your base?	YES
--	-----

7f. Does your base operate any conforming storage facilities for handling **hazardous materials**? If YES, describe facility, capacity, restrictions, and permit conditions.

**Yes. CSS has a total of 36 conforming storage facilities. Chemical laboratory (Bldg. 414) and supply issue (Bldg. 99) have a large storage capacity. Six hazardous material storage buildings (Nos. 77, 84, 416, 431, 455, and 459) have a medium storage capability. The remainder consist of temporary storage lockers located at various buildings throughout the station.**

**Restrictions placed upon these facilities include proper labeling, compatible storage; no smoking or eating; ventilation (both natural and mechanical); use of personal protective equipment; and "leak proofing" the large areas.**

7g. Does your base operate any conforming storage facilities for handling **hazardous waste**? If YES, describe facility, capacity, restrictions, and permit conditions.

**YES. Hazardous waste container storage facility with a maximum capacity of 3,300 gallons (60 55-gallon drums) stored as follows:**

**BAY 1: Caustic - These are D002. Capacity 8 55-gallon drums.**

**BAY 2: Halogenated Organics - These include the following waste: F001 and F002. Capacity 8 55-gallon drums.**

**BAY 3: Toxics - These include the following wastes: D006, D007, and D009. Capacity 8 55-gallon drums.**

**BAY 4: Non-Hazardous Industrial Wastes such as nickel plating waste, oily sludges, etc. Capacity 8 55-gallon drums.**

**BAY 5: Acids - Include oxidizer/corrosive wastes such as sodium persulfate. Capacity 8 55-gallon drums.**

**BAY 6: General Storage items (not covered under this RCRA Permit).**

**BAY 7: Ignitables - These include the following wastes: F003, F005, and D001 (may possess some additional hazardous characteristics such as D008). Capacity 12 55-gallon drums.**

7h. Is your base responsible for any non-appropriated fund facilities (exchange, gas station) that require cleanup? If so, describe facility/location and cleanup required/status.

**A Contamination Assessment Report for the former MWR marina underground gasoline storage tank was completed July 1993. Only long-term monitoring is being recommended.**

7i.

Do the results of any radiological surveys conducted indicate limitations on future land use? Explain below.	<b>NO</b>
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7j. Have any base operations or development plans been restricted due to Installation Restoration considerations?

**No mission critical operations or facilities have ever been curtailed due to IR constraints. Some few minor construction projects have been relocated or dropped because of IR sites. One non-critical road extension project is on indefinite hold pending IR studies.**

7k. List any other hazardous waste treatment or disposal facilities not included in question 7b. above. Include capacity, restrictions and permit conditions.

**None**

**8. LAND / AIR / WATER USE**

8a. List the acreage of each real estate component controlled or managed by your base (e.g., Main Base - 1,200 acres, Outlying Field - 200 acres, Remote Range - 1,000 acres, remote antenna site - 5 acres, Off-Base Housing Area - 25 acres).

<b>Parcel Descriptor</b>	<b>Acres</b>	<b>Location</b>
<b>Main Base</b>	<b>648 AC</b>	<b>Bay County, Florida</b>
<b>Beach Sites (4)</b>	<b>2.6 AC</b>	<b>Bay County, Florida</b>

**8b.** Provide the acreage of the land use categories listed in the table below:

LAND USE CATEGORY		ACRES
Total Developed: (administration, operational, housing, recreational, training, etc.)		<b>299.5 Acres</b>
Total Undeveloped (areas that are left in their natural state but are under specific environmental development constraints, i.e.: wetlands, endangered species, etc.)		<b>Wetlands: 17.4</b>
		<b>All Others: 3.5</b>
Total Undeveloped land considered to be without development constraints, but which may have operational/man caused constraints (i.e.: HERO, HERF, HERP, ESQD, AICUZ, etc.) TOTAL		<b>185.4</b>
Total Undeveloped land considered to be without development constraints		<b>144.7</b>
Total Off-base lands held for easements/lease for specific purposes		<b>461 Acres of submerged lands -- Gulf Test Range (Easement)</b>
Breakout of undeveloped, restricted areas. Some restricted areas may overlap:	ESQD	<b>189.3</b>
	HERF	<b>0</b>
	HERP	<b>0</b>
	HERO	<b>0</b>
	AICUZ	<b>0</b>
	Airfield Safety Criteria	<b>0</b>
	Other	<b>0</b>

**8c.** How many acres on your base (includes off base sites) are dedicated for training purposes (e.g., vehicular, earth moving, mobilization)? This does not include buildings or interior small arms ranges used for training purposes. 0

**8d.** What is the date of your last AICUZ update? 06 / 30 / 91 Are any waivers of airfield safety criteria in effect on your base? **No.** Summarize the conditions of the waivers below.

**8e.** List the off-base land use *types* (e.g, residential, industrial, agricultural) and *acreage* within Noise Zones 2 & 3 generated by your flight operations and whether it is compatible/incompatible with AICUZ guidelines on land use.

<b>Acreage/Location/ID</b>	<b>Zones 2 or 3</b>	<b>Land Use</b>	<b>Compatible/ Incompatible</b>
None			

**8f.** List the navigational channels and berthing areas controlled by your base which require maintenance dredging? Include the frequency, volume, current project depth, and costs of the maintenance requirement.

<b>Navigational Channels/ Berthing Areas</b>	<b>Location / Description</b>	<b>Maintenance Dredging Requirement</b>			
		<b>Frequency</b>	<b>Volume (MCY)</b>	<b>Current Project Depth (FT)</b>	<b>Cost (\$M)</b>
<b>Alligator Bayou</b>	<b>General Purpose Berthing</b>	<b>25 years</b>	<b>60,000 CY</b>	<b>22'</b>	<b>.35M</b>
<b>Small Boat</b>	<b>MWR Marina</b>	<b>10 years</b>	<b>3,000 CY</b>	<b>6'</b>	<b>0.02M</b>

**8g.** Summarize planned projects through FY 1997 requiring **new channel or berthing area** dredged depths, include location, volume and depth.

**None**

**8h.**

Are there available <b>designated dredge disposal areas</b> for maintenance dredging material? List location, remaining capacity, and future limitations.	<b>South of Alligator Bayou 100,000 CY</b>
Are there available <b>designated dredge disposal areas</b> for new dredge material? List location, remaining capacity, and future limitations.	<b>No</b>
Are the dredged materials considered contaminated? List known contaminants.	<b>No</b>

**8i.** List any requirements or constraints resulting from consistency with **State Coastal Zone Management Plans**.

**None**

**8j.** Describe any **non-point source pollution problems affecting water quality** ,e.g.: coastal erosion.

**None**

**8k.**

If the base has a cooperative agreement with the US Fish and Wildlife Service and/or the State Fish and Game Department for conducting a hunting and fishing program, does the agreement or these resources constrain either current or future operations or activities? Explain the nature and extent of restrictions.	<b>NO</b>
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**8l.** List any other areas on your base which are indicated as protected or preserved habitat other than threatened/endangered species that have been listed in Section 1. List the species, whether or not treated, and the acres protected/preserved.

**None**

**9. WRAPUP**

**9a.** Are there **existing or potential environmental showstoppers** that have affected or will affect the accomplishment of the installation mission that have not been covered in the previous 8 questions?

**No**

**9b.** Are there any **other environmental permits** required for base operations, include any relating to industrial operations.

**There are two Florida Department of Environmental Protection permits:**

**(1) Operation of Gulf Test Range.**

**(2) Operation of Explosive Test Pond**

**9c.** Describe any **other environmental or encroachment restrictions** on base property not covered in the previous 8 sections.

**None**

**9d.** List any **future/proposed laws/regulations or any proposed laws/regulations** which will constrain base operations or development plans in any way. Explain.

**None**



BRAC-95 CERTIFICATION

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian, who provide information for use in the BRAC-95 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief."

The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

Each individual in your activity generating information for the BRAC-95 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated as necessary. You are directed to maintain those certifications at your activity for audit purposes. For purposes of this certification sheet, the commander of the activity will begin the certification process and each reporting senior in the Chain of Command reviewing the information will also sign this certification sheet. This sheet must remain attached to this package and be forwarded up the Chain of Command. Copies must be retained by each level in the Chain of Command for audit purposes.

I certify the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

CAPT D. C. STEERE  
NAME (Please type of print)  
Commanding Officer  
Title  
Coastal Systems Station  
Activity

  
Signature  
24 May 94  
Date

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

N. S. SCOTT, CAPT. USN  
NAME (Please type or print)

[Signature]  
Signature

COMMANDER  
Title

26 May 94  
Date

NAVAL SURFACE WARFARE CENTER

DAHLGREN DIVISION

Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

RADM (SEL) D. P. SARGENT, JR.  
NAME (Please type or print)

[Signature]  
Signature

COMMANDER  
Title

6/3/94  
Date

NAVAL SURFACE WARFARE CENTER

Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

G. R. STERNER  
NAME (Please type or print)

[Signature]  
Signature

Commander  
Title Naval Sea Systems Command

6/7/94  
Date

Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

P. W. DRENNON  
NAME (Please type or print)

[Signature]  
Signature

ACTING  
Title

6/24/94  
Date

Activity

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I certify the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

CAPT D. C. STEERE  
NAME (Please type of print)  
Commanding Officer  
Title  
Coastal Systems Station  
Activity

  
\_\_\_\_\_  
Signature  
24 May 94  
\_\_\_\_\_  
Date

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**DATA CALL 65  
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**Activity Identification:** Please complete the following table, identifying the activity for which this response is being submitted.

<b>Activity Name:</b>	<b>Coastal Systems Station Dahlgren Division</b>
<b>UIC:</b>	<b>61331</b>
<b>Major Claimant:</b>	<b>Naval Sea Systems Command</b>

**General Instructions/Background:**

Information requested in this data call is required for use by the Base Structure Evaluation Committee (BSEC), in concert with information from other data calls, to analyze both the impact that potential closure or realignment actions would have on a local community and the impact that relocations of personnel would have on communities surrounding receiving activities. In addition to Cost of Base Realignment Actions (COBRA) analyses which incorporate standard Department of the Navy (DON) average cost factors, the BSEC will also be conducting more sophisticated economic and community infrastructure analyses requiring more precise, activity-specific data. For example, activity-specific salary rates are required to reflect differences in salary costs for activities with large concentrations of scientists and engineers and to address geographic differences in wage grade salary rates. Questions relating to "Community Infrastructure" are required to assist the BSEC in evaluating the ability of a community to absorb additional employees and functions as the result of relocation from a closing or realigning DON activity.

Due to the varied nature of potential sources which could be used to respond to the questions contained in this data call, a block appears after each question, requesting the identification of the source of data used to respond to the question. To complete this block, identify the source of the data provided, including the appropriate references for source documents, names and organizational titles of individuals providing information, etc. Completion of this "Source of Data" block is critical since some of the information requested may be available from a non-DoD source such as a published document from the local chamber of commerce, school board, etc. Certification of data obtained from a non-DoD source is then limited to certifying that the information contained in the data call response is an accurate and complete representation of the information obtained from the source. Records must be retained by the certifying official to clearly document the source of any non-DoD information submitted for this data call.

**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**General Instructions/Background (Continued):**

The following notes are provided to further define terms and methodologies used in this data call. Please ensure that responses consistently follow this guidance:

**Note 1:** Throughout this data call, the term "activity" is used to refer to the DON installation that is the addressee for the data call.

**Note 2:** Periodically throughout this data call, questions will include the statement that the response should refer to the "area defined in response to question 1.b., (page 3)". Recognizing that in some large metropolitan areas employee residences may be scattered among many counties or states, the scope of the "area defined" may be limited to the sum of:

- those counties that contain government (DoD) housing units (as identified in 1.b.2)), and,
- those counties closest to the activity which, in the aggregate, include the residences of 80% or more of the activity's employees.

**Note 3:** Responses to questions referring to "civilians" in this data call should reflect federal civil service appropriated fund employees.

**1. Workforce Data**

a. **Average Federal Civilian Salary Rate.** Provide the projected FY 1996 average gross annual appropriated fund civil service salary rate for the activity identified as the addressee in this data call. This rate should include all cash payments to employees, and exclude non-cash personnel benefits such as employer retirement contributions, payments to former employees, etc.

<b>Average Appropriated Fund Civilian Salary Rate:</b>	<b>46,921*</b>
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\*BRAC community questions include CSS as host command and the following tenants: Naval Diving and Salvage Training Center; Navy Experimental Diving Unit; Personnel Support Activity Detachment; Naval Hospital-Pensacola Branch Clinic; Naval Regional Dental Center Branch Dental Clinic; Resident Officer-in-Charge of Construction; and Defense Finance and Accounting Service Cleveland-Panama City. Also, the BRAC community questions include Yorktown, VA, and White Oak, MD Detachments (being relocated to CSS in FY94-95.)

<b>Source of Data (1.a. Salary Rate):</b> FY 96/97 Biennial Budget Submission
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**DATA CALL 65**  
**ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**b. Location of Residence.** Complete the following table to identify where employees live. Data should reflect current workforce.

**1) Residency Table.** Identify residency data, by county, for both military and civilian (civil service) employees working at the installation (including, for example, operational units that are homeported or stationed at the installation). For each county listed, also provide the estimated average distance from the activity, in miles, of employee residences and the estimated average length of time to commute one-way to work. For the purposes of displaying data in the table, any county(s) in which 1% or fewer of the activity's employees reside may be consolidated as a single line entry in the table, titled "Other".

County of Residence	State	No. of Employees Residing in County		Percentage of Total Employees	Average Distance From Base (Miles)	Average Duration of Commute (Minutes)
		Military	Civilian			
Bay	FL	420	1526	98.2	5	15
Other (less than 1%)	FL	6	30	1.8	55	65

= 100%

As discussed in Note 2 on Page 2, subsequent questions in the data call refer to the "area defined in response to question 1.b., (page 3)". In responding to these questions, the scope of the "area defined" may be limited to the sum of: a) those counties that contain government (DoD) housing units (as identified below), and, b) those counties closest to the activity which, in the aggregate, include the residences of 80% or more of the activity's employees.

**2) Location of Government (DoD) Housing.** If some employees of the base live in government housing, identify the county(s) where government housing is located:

**Bay County, Florida**

**DATA CALL 65  
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

**Source of Data (1.b. 1) & 2) Residence Data): Base Housing**

**c. Nearest Metropolitan Area(s).** Identify all major metropolitan area(s) (i.e., population concentrations of 100,000 or more people) which are within 50 miles of the installation. If no major metropolitan area is within 50 miles of the base, then identify the nearest major metropolitan area(s) (100,000 or more people) and its distance(s) from the base.

City	County	Distance from base (miles)
Panama City, FL	Bay	0*

\* CSS is located within the Panama City, FL metropolitan area.

**Source of Data (1.c. Metro Areas): Statistical Abstract of the U.S. - 1991; U.S. Department of Commerce; Economics & Statistics Administration; Bureau of Census**

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d. **Age of Civilian Workforce.** Complete the following table, identifying the age of the activity's civil service workforce.

<b>Age Category</b>	<b>Number of Employees</b>	<b>Percentage of Employees</b>
<b>16 - 19 Years</b>	3	0.2
<b>20 - 24 Years</b>	34	2.2
<b>25 - 34 Years</b>	341	21.9
<b>35 - 44 Years</b>	472	30.3
<b>45 - 54 Years</b>	496	31.9
<b>55 - 64 Years</b>	197	12.7
<b>65 or Older</b>	13	0.8
<b>TOTAL</b>	1556	100 %

<b>Source of Data (1.d.) Age Data: DCPDS Data Base 5/31/94</b>
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**e. Education Level of Civilian Workforce**

**1) Education Level Table.** Complete the following table, identifying the education level of the activity's **civil service** workforce.

<b>Last School Year Completed</b>	<b>Number of Employees</b>	<b>Percentage of Employees</b>
<b>8th Grade or less</b>	1	
<b>9th through 11th Grade</b>	22	1.4
<b>12th Grade or High School Equivalency</b>	448	28.8
<b>1-3 Years of College</b>	222	14.3
<b>4 Years of College (Bachelors Degree)</b>	590	37.9
<b>5 or More Years of College (Graduate Work)</b>	273	17.6
<b>TOTAL</b>	1556	100 %

**2) Degrees Achieved.** Complete the following table for the activity's **civil service** workforce. Identify the number of employees with each of the following degrees, etc. To avoid double counting, only identify the highest degree obtained by a worker (e.g., if an employee has both a Master's Degree and a Doctorate, only include the employee under the category "Doctorate").

<b>Degree</b>	<b>Number of Civilian Employees</b>
Terminal Occupation Program - Certificate of Completion, Diploma or Equivalent (for areas such as technicians, craftsmen, artisans, skilled operators, etc.)	1
Associate Degree	79
Bachelor Degree	590
Masters Degree	221
Doctorate	53

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**Source of Data (1.e.1) and 2) Education Level Data): DCPDS Data Base 5/31/94**

f. **Civilian Employment By Industry.** Complete the following table to identify by "industry" the type of work performed by civil service employees at the activity. The intent of this table is to attempt to stratify the activity civilian workforce using the same categories of industries used to identify private sector employment. Employees should be categorized based on their primary duties. Additional information on categorization of private sector employment by industry can be found in the Office of Management and Budget Standard Industrial Classification (SIC) Manual. However, you do not need to obtain a copy of this publication to provide the data requested in this table.

Note the following specific guidance regarding the "Industry Type" codes in the first column of the table: Even though categories listed may not perfectly match the type of work performed by civilian employees, please attempt to assign each civilian employee to one of the "Industry Types" identified in the table. However, only use the Category 6, "Public Administration" sub-categories when none of the other categories apply. Retain supporting data used to construct this table at the activity-level, in case questions arise or additional information is required at some future time. **Leave shaded areas blank.**

Industry	SIC Codes	No. of Civilians	% of Civilians
<b>1. Agriculture, Forestry &amp; Fishing</b>	01-09		
<b>2. Construction</b> (includes facility maintenance and repair)	15-17	19	1.2
<b>3. Manufacturing</b> (includes Intermediate and Depot level maintenance)	20-39		
3a. Fabricated Metal Products (include ordnance, ammo, etc.)	34		
3b. Aircraft (includes engines and missiles)	3721 et al		
3c. Ships	3731		
3d. Other Transportation (includes ground vehicles)	various		
3e. Other Manufacturing not included in 3a. through 3d.	various		
<b>Sub-Total 3a. through 3e.</b>	20-39		

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Industry	SIC Codes	No. of Civilians	% of Civilians
<b>4. Transportation/Communications/Utilities</b>	<b>40-49</b>		
4a. Railroad Transportation	40		
4b. Motor Freight Transportation & Warehousing (includes supply services)	42	28	1.8
4c. Water Transportation (includes organizational level maintenance)	44		
4d. Air Transportation (includes organizational level maintenance)	45		
4e. Other Transportation Services (includes organizational level maintenance)	47	10	0.6
4f. Communications	48		
4g. Utilities	49	17	1.1
<b>Sub-Total 4a. through 4g.</b>	<b>40-49</b>	<b>55</b>	<b>3.5</b>
<b>5. Services</b>	<b>70-89</b>		
5a. Lodging Services	70		
5b. Personal Services (includes laundry and funeral services)	72		
5c. Business Services (includes mail, security guards, pest control, photography, janitorial and ADP services)	73	59	3.8
5d. Automotive Repair and Services	75	3	0.2
5e. Other Misc. Repair Services	76		
5f. Motion Pictures	78		
5g. Amusement and Recreation Services	79		
5h. Health Services	80	2	0.1
5i. Legal Services	81	4	0.3

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Industry	SIC Codes	No. of Civilians	% of Civilians
5j. Educational Services	82	7	0.4
5k. Social Services	83	13	0.8
5l. Museums	84		
5m. Engineering, Accounting, Research & Related Services (includes RDT&E, ISE, etc.)	87	1206	77.5
5n. Other Misc. Services	89	15	1.0
<b>Sub-Total 5a. through 5n.:</b>	<b>70-89</b>	<b>1309</b>	<b>84.1</b>
<b>6. Public Administration</b>	<b>91-97</b>		
6a. Executive and General Government, Except Finance	91	137	8.8
6b. Justice, Public Order & Safety (includes police, firefighting and emergency management)	92	33	2.2
6c. Public Finance	93	0	0.0
6d. Environmental Quality and Housing Programs	95	3	0.2
<b>Sub-Total 6a. through 6d.</b>		<b>173</b>	<b>11.2</b>
<b>TOTAL</b>		<b>1556</b>	<b>100 %</b>

**Source of Data (1.f.) Classification By Industry Data): DCPDS Data Base 5/31/94**

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**g. Civilian Employment by Occupation.** Complete the following table to identify the types of "occupations" performed by civil service employees at the activity. Employees should be categorized based on their primary duties. Additional information on categorization of employment by occupation can be found in the Department of Labor Occupational Outlook Handbook. However, you do not need to obtain a copy of this publication to provide the data requested in this table.

Note the following specific guidance regarding the "Occupation Type" codes in the first column of the table: Even though categories listed may not perfectly match the type of work performed by civilian employees, please attempt to assign each civilian employee to one of the "Occupation Types" identified in the table. Refer to the descriptions immediately following this table for more information on the various occupational categories. Retain supporting data used to construct this table at the activity-level, in case questions arise or additional information is required at some future time. **Leave shaded areas blank.**

Occupation	Number of Civilian Employees	Percent of Civilian Employees
<b>1. Executive, Administrative and Management</b>	271	17.4
<b>2. Professional Specialty</b>		
2a. Engineers	595	38.2
2b. Architects and Surveyors		
2c. Computer, Mathematical & Operations Research	76	4.9
2d. Life Scientists		
2e. Physical Scientists	75	4.8
2f. Lawyers and Judges	2	0.1
2g. Social Scientists & Urban Planners		
2h. Social & Recreation Workers	5	0.3
2i. Religious Workers		
2j. Teachers, Librarians & Counselors	6	0.4
2k. Health Diagnosing Practitioners (Doctors)		
2l. Health Assessment & Treating(Nurses, Therapists, Pharmacists, Nutritionists, etc.)	1	0.1

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Occupation	Number of Civilian Employees	Percent of Civilian Employees
2m. Communications		
2n. Visual Arts	4	0.3
<b>Sub-Total 2a. through 2m.:</b>	764	49.1
<b>3. Technicians and Related Support</b>		
3a. Health Technologists and Technicians	0	
3b. Other Technologists	126	8.1
<b>Sub-Total 3a. and 3b.:</b>	126	8.1
<b>4. Administrative Support &amp; Clerical</b>	220	14.1
<b>5. Services</b>		
5a. Protective Services (includes guards, firefighters, police)	30	1.9
5b. Food Preparation & Service		
5c. Dental/Medical Assistants/Aides	1	0.1
5d. Personal Service & Building & Grounds Services (includes janitorial, grounds maintenance, child care workers)		
<b>Sub-Total 5a. through 5d.</b>	31	2.0
<b>6. Agricultural, Forestry &amp; Fishing</b>		
<b>7. Mechanics, Installers and Repairers</b>	29	1.9
<b>8. Construction Trades</b>	53	3.4
<b>9. Production Occupations</b>	19	1.2
<b>10. Transportation &amp; Material Moving</b>	17	1.1
<b>11. Handlers, Equipment Cleaners, Helpers and Laborers (not included elsewhere)</b>	26	1.7
<b>TOTAL</b>	1556	100 %

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<b>Source of Data (1.g.) Classification By Occupation Data): DCPDS Data Base</b> <b>5/31/94</b>
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**Description of Occupational Categories used in Table 1.g.** The following list identifies public and private sector occupations included in each of the major occupational categories used in the table. Refer to these examples as a guide in determining where to allocate **appropriated fund civil service jobs** at the activity.

1. **Executive, Administrative and Management.** Accountants and auditors; administrative services managers; budget analysts; construction and building inspectors; construction contractors and managers; cost estimators; education administrators; employment interviewers; engineering, science and data processing managers; financial managers; general managers and top executives; chief executives and legislators; health services managers; hotel managers and assistants; industrial production managers; inspectors and compliance officers, except construction; management analysts and consultants; marketing, advertising and public relations managers; personnel, training and labor relations specialists and managers; property and real estate managers; purchasing agents and managers; restaurant and food service managers; underwriters; wholesale and retail buyers and merchandise managers.
2. **Professional Specialty.** Use sub-headings provided.
3. **Technicians and Related Support.** Health Technologists and Technicians sub-category - self-explanatory. Other Technologists sub-category includes aircraft pilots; air traffic controllers; broadcast technicians; computer programmers; drafters; engineering technicians; library technicians; paralegals; science technicians; numerical control tool programmers.
4. **Administrative Support & Clerical.** Adjusters, investigators and collectors; bank tellers; clerical supervisors and managers; computer and peripheral equipment operators; credit clerks and authorizers; general office clerks; information clerks; mail clerks and messengers; material recording, scheduling, dispatching and distributing; postal clerks and mail carriers; records clerks; secretaries; stenographers and court reporters; teacher aides; telephone, telegraph and teletype operators; typists, word processors and data entry keyers.
5. **Services.** Use sub-headings provided.
6. **Agricultural, Forestry & Fishing.** Self explanatory.
7. **Mechanics, Installers and Repairers.** Aircraft mechanics and engine specialists; automotive body repairers; automotive mechanics; diesel mechanics; electronic equipment repairers; elevator installers and repairers; farm equipment mechanics; general maintenance mechanics; heating, air conditioning and refrigeration technicians; home appliance and power tool repairers, industrial machinery repairers; line installers and cable splicers; millwrights; mobile heavy equipment mechanics; motorcycle, boat and small engine mechanics; musical instrument repairers and tuners; vending machine servicers and repairers.
8. **Construction Trades.** Bricklayers and stonemasons; carpenters; carpet installers; concrete masons and terrazzo workers; drywall workers and lathers; electricians; glaziers; highway maintenance; insulation workers; painters and paperhangers; plasterers; plumbers and pipefitters; roofers; sheet metal workers; structural and reinforcing ironworkers; tilesetters.
9. **Production Occupations.** Assemblers; food processing occupations; inspectors, testers and graders; metalworking and plastics-working occupations; plant and systems operators, printing occupations; textile, apparel and furnishings occupations; woodworking occupations; miscellaneous production operations.
10. **Transportation & Material Moving.** Busdrivers; material moving equipment operators; rail transportation occupations; truckdrivers; water transportation occupations.

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- 11. Handlers, Equipment Cleaners, Helpers and Laborers** (not included elsewhere). Entry level jobs not requiring significant training.

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**h. Employment of Military Spouses.** Complete the following table to provide estimated information concerning military spouses who are also employed in the area defined in response to question 1.b., above. **Do not fill in shaded area.**

1. Percentage of Military Employees Who Are Married:	70.0
2. Percentage of Military Spouses Who Work Outside of the Home:	50.0
3. Break out of Spouses' Location of Employment (Total of rows 3a. through 3d. should equal 100% and reflect the number of spouses used in the calculation of the "Percentage of Spouses Who Work Outside of the Home".	
3a. Employed "On-Base" - Appropriated Fund:	0.7
3b. Employed "On-Base" - Non-Appropriated Fund:	2.7
3c. Employed "Off-Base" - Federal Employment:	2.7
3d. Employed "Off-Base" - Other Than Federal Employment	93.9

<b>Source of Data (1.h.) Spouse Employment Data): Personal Interviews</b>
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**2. Infrastructure Data.** For each element of community infrastructure identified in the two tables below, rate the community's ability to accommodate the relocation of additional functions and personnel to your activity. Please complete each of the three columns listed in the table, reflecting the impact of various levels of increase (20%, 50% and 100%) in the number of personnel working at the activity (and their associated families). In ranking each category, use one of the following three ratings:

- A - Growth can be accommodated with little or no adverse impact to existing community infrastructure and at little or no additional expense.
- B - Growth can be accommodated, but will require some investment to improve and/or expand existing community infrastructure.
- C - Growth either cannot be accommodated due to physical/environmental limitations or would require substantial investment in community infrastructure improvements.

**Table 2.a., "Local Communities":** This first table refers to the local community (i.e., the community in which the base is located) and its ability to meet the increased requirements of the installation.

**Table 2.b., "Economic Region":** This second table asks for an assessment of the infrastructure of the economic region (those counties identified in response to question 1.b., (page 3) - taken in the aggregate) and its ability to meet the needs of additional employees and their families moving into the area.

**For both tables, annotate with an asterisk (\*) any categories which are wholly supported on-base, i.e., are not provided by the local community. These categories should also receive an A-B-C rating. Answers for these "wholly supported on-base" categories should refer to base infrastructure rather than community infrastructure.**

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ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

a. Table A: Ability of the local community to meet the expanded needs of the base.

1) Using the A - B - C rating system described above, complete the table below.

Category	20% Increase	50% Increase	100% Increase
Off-Base Housing	A	A	B
Schools - Public	A	B	B
Schools - Private	A	A	B
Public Transportation - Roadways	A	B	B
Public Transportation - Buses/Subways <sup>1</sup>	N/A	N/A	N/A
Public Transportation - Rail <sup>2</sup> (40 miles away)	A	A	A
Fire Protection	A	A	B
Police	A	A	B
Health Care Facilities	A	A	A
Utilities:			
Water Supply	A	A	A
Water Distribution	A	B	B
Energy Supply	A	A	A
Energy Distribution	A	A	A
Wastewater Collection	B	B	B
Wastewater Treatment	B	B	B
Storm Water Collection	B	B	B
Solid Waste Collection and Disposal	A	B	B
Hazardous/Toxic Waste Disposal	*		
Recreational Activities	A	A	A

Remember to mark with an asterisk any categories which are wholly supported on-base.

<sup>1</sup> Not available in Bay County; <sup>2</sup> 40 miles in Chipley, FL.

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2) For each rating of "C" identified in the table on the preceding page, attach a brief narrative explanation of the types and magnitude of improvements required and/or the nature of any barriers that preclude expansion.

**Source of Data (2.a. 1) & 2) - Local Community Table): Bay County Chamber of Commerce**

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**b. Table B: Ability of the region described in the response to question 1.b. (page 3) (taken in the aggregate) to meet the needs of additional employees and their families relocating into the area.**

1) Using the A - B - C rating system described above, complete the table below.

Category	20% Increase	50% Increase	100% Increase
Off-Base Housing	A	A	B
Schools - Public	A	B	B
Schools - Private	A	A	B
Public Transportation - Roadways	A	B	B
Public Transportation - Buses/Subways <sup>1</sup>	N/A	N/A	N/A
Public Transportation - Rail <sup>2</sup> (40 miles away)	A	A	A
Fire Protection	A	A	B
Police	A	A	B
Health Care Facilities	A	A	A
Utilities:			
Water Supply	A	A	A
Water Distribution	A	B	B
Energy Supply	A	A	A
Energy Distribution	A	A	A
Wastewater Collection	B	B	B
Wastewater Treatment	B	B	B
Storm Water Collection	B	B	B
Solid Waste Collection and Disposal	A	B	B
Hazardous/Toxic Waste Disposal	*		
Recreation Facilities	A	A	A

Remember to mark with an asterisk any categories which are wholly supported on-base.

<sup>1</sup> Not available in Bay County; <sup>2</sup> 40 miles in Chipley, FL.

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2) For each rating of "C" identified in the table on the preceding page, attach a brief narrative explanation of the types and magnitude of improvements required and/or the nature of any barriers that preclude expansion.

**Source of Data (2.b. 1) & 2) - Regional Table): Bay County Chamber of Commerce**

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**3. Public Facilities Data:**

- a. **Off-Base Housing Availability.** For the counties identified in the response to question 1.b. (page 3), in the aggregate, estimate the current average vacancy rate for community housing. Use current data or information identified on the latest family housing market analysis. For each of the categories listed (rental units and units for sale), combine single family homes, condominiums, townhouses, mobile homes, etc., into a single rate:

Rental Units: **5.88% Condominium rate included and is annualized.**

Units for Sale: **14.5% (312) in vacancy status; 2,158 currently offered (57,000 households)**

<b>Source of Data (3.a. Off-Base Housing): Bay County Chamber of Commerce</b>
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**b. Education.**

1) Information is required on the current capacity and enrollment levels of school systems serving employees of the activity. Information should be keyed to the counties identified in the response to question 1.b. (page 3).

School District	County	Number of Schools			Enrollment		Pupil-to-Teacher Ratio		Does School District Serve Gov't Housing Units? *
		Elementary	Middle	High	Current	Max. Capacity	Current	Max. Ratio	
Bay	Bay	18	6	4	25,000	28,000	K-5 24:1	30:1	Yes
							6-8 21:1	30:1	Yes
							9-12 21:1	30:1	Yes

\* Answer "Yes" in this column if the school district in question enrolls students who reside in government housing.

**Source of Data (3.b.1) Education Table): Bay County Chamber of Commerce**

2) Are there any on-base "Section 6" Schools? If so, identify number of schools and current enrollment.

No.

**Source of Data (3.b.2) On-Base Schools):**

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3) For the counties identified in the response to question 1.b. (page 3), in the aggregate, list the names of undergraduate and graduate colleges and universities which offer certificates, Associate, Bachelor or Graduate degrees :

**Florida State University (FSU) Panama City campus; Gulf Coast Community College; University of West Florida; Embry-Riddle University (Tyndall AFB campus); and Troy State University. Through the Florida Engineering Education Delivery Systems (FEEDS) access to the Colleges of Engineering at the University of Florida, University of Central Florida, Florida Atlantic, Florida A&M University, Florida International, and FSU; and the National Technological University via satellite system on-site at CSS.**

**Source of Data (3.b.3) Colleges): CSS Training Office**

4) For the counties identified in the response to question 1.b. (page 3), in the aggregate, list the names and major curriculums of vocational/technical training schools:

**Gulf Coast Community College - various technologies leading to an Associate of Science**

**Thomas P. Haney, Vocational School - various skills and trades**

**Source of Data (3.b.4) Vo-tech Training): CSS Training Office**

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**c. Transportation.**

1) Is the activity served by public transportation?

	<u>Yes</u>	<u>No</u>
Bus:	_____	<u>X</u>
Rail:	<u>X</u>	<u>40 mi to railroad station</u>
Subway:	_____	<u>X</u>
Ferry:	_____	<u>X</u>

**Source of Data (3.c.1) Transportation): Bay County Chamber of Commerce**

2) Identify the location of the nearest passenger railroad station (long distance rail service, not commuter service within a city) and the distance from the activity to the station.

**Amtrak service is available in Chipley, FL, which is approximately 40 miles north of CSS.**

**Source of Data (3.c.2) Transportation): Bay County Chamber of Commerce**

3) Identify the name and location of the nearest commercial airport (with public carriers, e.g., USAIR, United, etc.) and the distance from the activity to the airport.

**Panama City - Bay County International Airport is located 7 miles from CSS.**

**Source of Data (3.c.3) Transportation): Bay County Chamber of Commerce**

4) How many carriers are available at this airport?

**Four carriers: Delta, ASA, NW Airlink and USAir**

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**Source of Data (3.c.4) Transportation): Bay County Chamber of Commerce**

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5) What is the Interstate route number and distance, in miles, from the activity to the nearest Interstate highway?

**Nearest interstate highway is I-10, approximately 40 miles from  
CSS.**

**Source of Data (3.c.5) Transportation): Bay County Chamber of Commerce**

6) Access to Base:

a) Describe the quality and capacity of the road systems providing access to the base, specifically during peak periods. (Include both information on the area surrounding the base and information on access to the base, e.g., numbers of gates, congestion problems, etc.)

**Adequate road system. US 98 is an E-W six-lane divided highway which forms northern boundary of CSS. Access to main gate is from this highway. Thomas Drive is a four-lane divided by turn lane, forms western boundary of CSS. Access to CSS. Some congestion during summer tourist season (minimal).**

b) Do access roads transit residential neighborhoods?

**No, commercial only.**

c) Are there any easements that preclude expansion of the access road system?

**No.**

d) Are there any man-made barriers that inhibit traffic flow (e.g., draw bridges, etc.)?

**No.**

**Source of Data (3.c.6) Transportation): Bay County Chamber of Commerce**

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- d. **Fire Protection/Hazardous Materials Incidents.** Does the activity have an agreement with the local community for fire protection or hazardous materials incidents? Explain the nature of the agreement and identify the provider of the service.

The CSS has its own Class A fire department, and has formal, signed agreements with two local fire departments. The first is a mutual aid fire fighting assistance agreement with the Panama City Fire Department for personnel and equipment augmentation. The second is a one-way agreement with the Thomas Drive Volunteer Fire Department for providing the Station with an aerial ladder device along with a trained operator in the event the equipment is needed.

**Hazardous Materials Incidents -** The U.S. Coast Guard (USCG) has an Interagency Agreement with the U.S. Navy for oil spill consultation, evaluations, planning, and operational services; specialized oil spill control and clean-up equipment; and USCG craft, vessels, and aircraft.

<p><b>Source of Data (3.d. Fire/Hazmat):</b> (1) "Mutual Aid Fire Fighting Assistance Agreement, between the City Manager of Panama City, FL, and the Commanding Officer, Naval Coastal Systems Center," 10 Mar 93; (2) "Memorandum of Agreement between Naval Coastal Systems Center and Thomas Drive Volunteer Fire Department," 2 Apr 93; and (3) U.S. Coast Guard Interagency Agreement with the U.S. Navy</p>
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- e. **Police Protection.**

- 1) What is the level of legislative jurisdiction held by the installation?

**Legislative jurisdiction at the CSS is EXCLUSIVE in all areas of CSS, except for a small area of property assigned to the U.S. Coast Guard (USCG). The USCG area is designated as CONCURRENT.**

- 2) If there is more than one level of legislative jurisdiction for installation property, provide a brief narrative description of the areas covered by each level of legislative jurisdiction and whether there are separate agreements for local law enforcement protection.

**See e.1) above. Tenant complies with host Intra Service Support Agreement.**

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3) Does the activity have a specific written agreement with local law enforcement concerning the provision of local police protection?

Yes.

4) If agreements exist with more than one local law enforcement entity, provide a brief narrative description of whom the agreement is with and what services are covered.

**FEDERAL LAW ENFORCEMENT**

**Tyndall Air Force Base - Special Response Team (SRT), drug dogs, IG inspection support, mutual assistance, classified destruction (CSS operates), jail facilities for temporary holding.**

**CIVIL LAW ENFORCEMENT**

**Bay County Sheriff's Office - Special Response Team (SRT); crowd control/crowd control dogs, outside/inside gates; National Crime Information Center (NCIC)/Federal Crime Information Center (FCIC) & vehicle record checks; Breathalyzer test; drug dog teams; detention and release of offenders to county corrections; and notification of military/civilian employee arrests.**

**Panama City Police Department. SRT, use of firing range and notification of military/civilian employee arrests.**

**Lynn Haven Police Department. Drug dog teams and notification of military/civilian employee arrests.**

**Florida Highway Patrol. Training, notification of military/civilian employee arrests.**

**Panama City Port Authority. Notification of foreign flagged ships.**

5) If military law enforcement officials are routinely augmented by officials of other federal agencies (BLM, Forest Service, etc.), identify any written agreements covering such services and briefly describe the level of support received.

**Civil non-law enforcement. Northwest Florida Search & Rescue Association - Canine Division.**

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**Source of Data (3.e. 1) - 5) - Police): Various Police agreements; Jackson County -  
Cadaver Dog Support**

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f. **Utilities.**

- 1) Does the activity have an agreement with the local community for water, refuse disposal, power or any other utility requirements? Explain the nature of the agreement and identify the provider of the service.

**CSS has the following contracts for electricity, water, and natural gas: Electricity - Contract N62467-90-F-1803 with Gulf Power Company; Water - Contract N62467-69-C-0108 with the Bay County Water System for the CSS and tenants and with the City of Panama City Beach Water Department for the CSS's Gulf Test Range beach sites. Natural Gas - Contract N62467-89-F-1814 with West Florida Natural Gas Corporation. West Florida Natural Gas owns the distribution lines on the Station up to and including the shut-off valve at each building. All contracts are administered through Southern Division, Naval Facilities Engineering Command, Charleston, SC.**

**Solid Waste and Trash Removal - Solid Waste and Trash Removal Service are processed by a private contractor under contract number N62467-92-D-2802.**

- 2) Has the activity been subject to water rationing or interruption of delivery during the last five years? If so, identify time period during which rationing existed and the restrictions imposed. Were activity operations affected by these situations? If so, explain extent of impact.

**No.**

- 3) Has the activity been subject to any other significant disruptions in utility service, e.g., electrical "brown outs", "rolling black outs", etc., during the last five years? If so, identify time period(s) covered and extent/nature of restrictions/disruption. Were activity operations affected by these situations? If so, explain extent of impact.

**No.**

<b>Source of Data (3.f. 1) - 3) Utilities): CSS utilities contracts</b>
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4. **Business Profile.** List the top ten employers in the geographic area defined by your response to question 1.b. (page 3), taken in the aggregate, (include your activity, if appropriate):

<b>Employer</b>	<b>Product/Service</b>	<b>No. of Employees</b>
1. Tyndall AFB	U.S. Air Force	7,020
2. Bay District Schools	Public Schools	3,224
3. Coastal Systems Station	U.S. Navy	3,004
4. Bay Medical Center	Public Hospital	1,536
5. Bay County	County Government	691
6. Stone Container	Line Board Manufacturing	685
7. HCA Gulf Coast Hospital	Private Hospital	650
8. Hilton, Inc.	Resorts	610
9. Sallie Mae	Broker/Student Loans	605
10. City of Panama City	City Government	484

**Source of Data (4. Business Profile): Bay County Chamber of Commerce**

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5. **Other Socio-Economic Impacts.** For each of the following areas, describe other recent (past 5 years), on-going or projected economic impacts (both positive and negative) on the geographic region defined by your response to question 1.b. (page 3), in the aggregate:

a. Loss of Major Employers:

Several employers with 1000 to 25 workers were lost during the past five years in Bay County. They include:

**Tyndall AFB - 1000 members voluntarily or involuntarily separated.**

**Goody - 153 employees laid off.**

**Louisiana Plastics - 89 employees lost due to closure.**

**Stolt-Nielsen - 96 employees lost due to closure.**

**Meco Int. - 80 employees lost due to closure.**

**Ames - 80 employees lost due to closure.**

**Belk-Hudson - 80 employees laid off.**

**Berg Steel Pipe - 45 employees laid off.**

**Aladdin Brush - 35 employees lost due to closure.**

**Stone Container - 30 employees laid off. (NOTE: In 1994, the entire Stone Container plant was closed for several months idling all 685 workers.)**

In addition to these layoffs and plant closures, several small businesses employing between 25 to 30 people either permanently closed their doors or laid off employees. The total impact of the loss of these 1,787 plus jobs has had a severe effect on the local economy.

Despite the fact that new jobs created over the past five years have exceeded by a substantial margin the number of jobs lost, Bay County continues to suffer chronic unemployment and underemployment. This is due to in-migration. Because of our quality of life, Bay County's 20-60 age spectrum is the fastest growing segment of its population. More and more new jobs must be generated each year simply to keep unemployment rates from climbing higher.

b. Introduction of New Businesses/Technologies:

A business that has had a significant impact on the Bay County area has been the Student Loan Marketing Association (Sallie Mae). This loan servicing operation employs approximately 640 people and is expected to grow by another 200 to 250 new people in the very near future. They are located in a 133,000 square foot loan servicing center in one of Bay County's Industrial Parks. Sallie Mae is a Fortune 100 company and is the nation's largest administrator of student loans.

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**Other new businesses of note include Allied/Signal-Bendix, which conducts the roboticized manufacture of brake shoes; Grolier Telemarketing, Inc., which telemarkets educational literature for Dr. Seuss, Walt Disney, and Encyclopedia Americana; Eastern Industries, which assembles automobile parts for the aftermarket; Wellstream, Inc., one of two companies in the world that manufactures flexible underwater pipe for use in the offshore oil industry; General Marine, which manufactures pleasure craft; and a host of retail and tourist-related firms.**

**GCATT, the Gulf Coast Alliance for Technology Transfer, enables participating members and private sector firms to maximize resources needed for industrial problem solving and successful technology commercialization. GCATT is comprised of eleven federal laboratories/centers, four universities, and consortium of community colleges, which include Bay County's own Gulf Coast Community College. Their goal is to link government technology and test facility assets to meet industry's technology needs.**

**Many of the firms that are mentioned here either brought new technologies with them or were attracted by the local development of new technologies. These technologies include but are not limited to the sciences of telecommunications, robotics, CAD/CAM, computerization, and flexible underwater pipe. Tech-Net, an organization for information exchange among technologically oriented employers, was formed in January of 1993 and has developed a database containing technical skills and products available for purchase in Bay County. The database is located at the Bay County Small Business Incubator in the county.**

**There have been additions to some of Bay County's existing industry base in the areas of light manufacturing and warehousing. New retail businesses include a Target store; two Publix grocery stores; a Goody's family shopping store; a Super Delchamp grocery store and a Winn Dixie store, both of which are located on the beach area.**

**c. Natural Disasters:**

**None.**

**d. Overall Economic Trends:**

**Bay County's economy is heavily weighted to the public sector, with military and other government being the major employers. In addition to the Coastal Systems Station, the principals among these are Tyndall Air Force Base, the Bay School**

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District, Bay Medical Center, Bay County, the Bay County's Sheriff's Department, and Gulf Coast Community College.

The tourist industry is the largest segment of the private sector economy and the most rapidly growing. Other major elements are retail, construction, real estate, health care, services, and manufacturing.

Economic development has been inhibited somewhat until recently, due to Bay County's distance from interstate highways. But within the past several years, Bay County has made four-lane highway connection to the interstate highway system and has enjoyed a phenomenal expansion in commercial airline service, with introduction of jet service and four airlines.

With major strengths that include its labor force, employee training programs, advanced degree opportunities, unlimited fresh water supply, superior telecommunication systems, low start-up and operating costs for business, low real estate and housing costs, improved transportation facilities, climate, world-class resort facilities, high quality of life, and infrastructure designed to serve not only its permanent residents but its 3 million annual visitors as well, Bay County seems well positioned to absorb future growth.

<b>Source of Data (5. Other Socio/Econ):</b>
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6. Other. Identify any contributions of your activity to the local community not discussed elsewhere in this response.

The Coastal Systems Station is extremely proud of its relationship and membership in the Bay County community. The Station is equally proud of its people -- military, civilian, and contractor support personnel -- who share their time and talent to participate in a host of civic and community endeavors that help make Bay County a great place to live, work, learn, and play.

The Station recognizes one of our country's most valuable assets, the young people of Bay County, by sponsoring programs that encourage local high school students to pursue scientific and engineering careers, provide summer employment, and support high school dropout prevention. Student participation totals 48 individuals. These programs include: Science and Engineering Fair; Gerald G. Gould Science Award; Bay Partnership Program; Federal Junior Fellowship Program; and Federal Women's Program Outreach.

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**Mindful of its civic responsibilities, the Station participates in the annual Combined Federal Campaign, United Way, Navy Relief, and the Station's Employee Welfare Association sponsors an annual children's Christmas Party for underprivileged children. Fund goals are always exceeded.**

**Station personnel and their families represent a cross section of Bay County citizens; some were born here, most moved here, and some are newcomers. Our people are involved in a host of educational, social, fraternal, religious, charitable, scientific, and recreational activities that enhance the quality of life. Activities include: civic organizations; blood drives; walk-a-thons; engineering societies; scientific societies; professional business associations; educational advisors; speaker programs; church youth groups; religious elders and deacons; choir memberships; literacy campaigns; library support programs; fraternal organizations; charitable fund drives; athletic coaches and umpires; booster club members; scouting activities; local governments; mentor programs; music, art, and theater associations; and international relations.**

<b>Source of Data (6. Other): CSS 1992 Report to Community</b>
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I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.  
NEXT ECHELON LEVEL (if applicable)

N. S. SCOTT, CAPT, USN  
NAME (Please type or print)  
COMMANDER

[Signature]  
Signature

14 July 94  
Date

Title  
NAVAL SURFACE WARFARE CENTER, DAHLGREN DIVISION  
Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.  
NEXT ECHELON LEVEL (if applicable)

RADM (Sel) D. P. SARGENT, JR.  
NAME (Please type or print)  
COMMANDER

[Signature]  
Signature

7/19/94  
Date

Title  
NAVAL SURFACE WARFARE CENTER  
Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.  
MAJOR CLAIMANT LEVEL

C. R. STERNER  
NAME (Please type or print)

[Signature]  
Signature

7/25/94  
Date

Title  
[Faint text]  
Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.  
DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

W. A. EARNER  
NAME (Please type or print)

[Signature]  
Signature

8/4/94  
Date

Title

DATA CALL #65  
PANAMA CITY SITE

BRAC-95 CERTIFICATION

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian, who provide information for use in the BRAC-95 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief."

The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

Each individual in your activity generating information for the BRAC-95 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated as necessary. You are directed to maintain those certifications at your activity for audit purposes. For purposes of this certification sheet, the commander of the activity will begin the certification process and each reporting senior in the Chain of Command reviewing the information will also sign this certification sheet. This sheet must remain attached to this package and be forwarded up the Chain of Command. Copies must be retained by each level in the Chain of Command for audit purposes.

I certify the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

CAPT D. C. STEERE  
NAME (Please type of print)

Commanding Officer  
Title

Coastal Systems Station Dahlgren Division  
Activity

  
Signature  
8 July 94  
Date

DATA CALL #65  
PANAMA CITY SITE