

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. The Crew Systems Facility is a Detachment of NAWCADWAR that is being re-aligned to Patuxent River under BRAC-91. As a detachment, it does not have unique mission statement by itself.

The current mission of NAWCADWAR that will be realigned to Patuxent River under BRAC 91 is "To be the principal Navy research, development, test and evaluation center for aircraft, airborne antisubmarine warfare, aircraft systems (less aircraft-launched weapon systems)." OPNAVNOTE 5450, Ser 09B22/1U510503 of 23 Dec 1991.

Under BRAC-91, the Naval Air Warfare Center Aircraft Division, Warminster is being realigned to become part of the Naval Air Warfare Center at Patuxent River, MD and is scheduled to be relocated in the 1995/96 timeframe. This submission addresses Crew Systems Facility which is scheduled to stay behind as the Warminster Detachment.

AIRCREW SYSTEMS

- Design, Develop, Acquire and Support all Naval Aircrew, Life Support, Escape and Survival systems
 - Environmental protective clothing
 - Anti-exposure Gear
 - G-Suits
 - Helmet Oxygen systems
 - Laser Eye Protection
 - Night Vision Devices
 - All Life protection/Survival Equipment (except man-rated parachutes)
 - Life Vests
 - Rafts
 - Survival gear, etc.
 - Operate the World's largest, most sophisticated human centrifuge as a Dynamic Flight Simulator (Unique in Free World)
 - Fully equipped, outside world view Pilots cockpit
 - Continuous motion control
 - Rapidly Changing G-field simulation
 - Operate Only man-rated ejection system evaluation Tower
 - Used by USN and USAF

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

None

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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.

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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.

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.

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Table 4.1, General Support Resources for all Detachments (Activity: **CREW SYSTEMS FACILITY DETACHMENT AT WARMINSTER PA**) (UIC:N62269)

Function	Space allocated (Gross SQFT)	Work Years	Civilian Personnel onboard	Contract Work Years	Military Personnel Onboard	
					Off	Enl
ADMINISTRATION						
Command (CO/ XO/ TD/etc.)	300					
Comptroller	200	1	1			
Admin	200					
Human Resources						
OPERATIONS SUPPORT						
Supply Management	200					
Consolidated Computational Computer Support						
Information Systems and Communications						
Safety/OSH/Environmental						
INFRASTRUCTURE						
Physical Security						
Public Works/Staff Civil Engr						
Fire Protection						
Medical/Dental						
Military Support						
Air/Waterfront Operations						
Other						
TECHNICAL STAFF						
Technical Operations	74200	24	24	5	1	4
Totals	75100	25	25	5	1	4

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Table 4.2, General Support Resources for all Detachments (Activity: **CREW SYSTEMS FACILITY DETACHMENT AT WARMINSTER PA**) (UIC:**N62269**)

NOT APPLICABLE, THERE ARE NO DETACHMENTS OF THIS ACTIVITY

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

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Table 4.3, Previous BRAC Impact to General Support Resources for (Activity: **CREW SYSTEMS FACILITY DETACHMENT AT WARMINSTER PA**) (UIC:N62269)

NOT APPLICABLE, THIS DATA CALL REFLECTS IMPLEMENTATION OF BRAC '91

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

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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: NAWCADPAX - CREW SYSTEMS FACILITY DETACHEMNT, WARMINSTER PA) (UIC: N62269)

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						
High School					1	1
B.A./B.S		7			4	11
M.A./M.S		5	1	1	1	8
Ph.D./M.D.		3	1			4
Total		15	2	1	6	24

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Table 5.2, Technical Staff Education Level for all Detachments (Parent Activity: **CREW SYSTEMS FACILITY DETACHEMNT, WARMINSTER PA**) (UIC: **N62269**)

NOT APPLICABLE, THERE ARE NO DETACHMENTS OF THIS ACTIVITY

Highest Degree Attained	Years of Government and/or Military Service					
	Less than 3 Years	3-10 Years	11-15 Years	16-20 Years	More than 20 Years	Total
Grade School						
High School						
B.A./B.S						
M.A./M.S						
Ph.D./M.D.						
Total						

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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: **CREW SYSTEMS FACILITY DETACHEMNT, WARMINSTER PA**) (UIC: **N62269**)

Academic field	Number
Physics	2
Chemistry	
Biology	
Mathematics/Statistics/ Operations Research	1
Engineering	8
Medical	
Dental	
Computer Science	
Social Science	
Other Science	1
Non-Science	
Total	12

Table 5.4, Technical Staff Academic Fields for all Detachments (Parent Activity: **CREW SYSTEMS FACILITY DETACHEMNT, WARMINSTER PA**) (UIC: **N62269**)

NOT APPLICABLE, THERE ARE NO DETACHMENTS OF THIS ACTIVITY

Academic field	Number
Physics	
Chemistry	
Biology	
Mathematics/Statistics/ Operations Research	
Engineering	
Medical	
Dental	
Computer Science	
Social Science	
Other Science	
Non-Science	
Total	

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

The Philadelphia area, rich in academic excellence, provides an outstanding base for hiring highly qualified personnel. In fact, early relationships developed with graduate faculty and students have provided this site with research area specific personnel and a lasting record of outstanding relationships with local universities. The key to this outstanding record is proximity and complimentary strengths in facilities and 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.

CREW SYSTEM FACILITIES DETACHMENT PAPERS

Shender, B.S., "Pressure Breathing for G (PBG), Seat-back Angle (SBA), and Cognitive Task (CT) Loading Effects on Cerebral Perfusion." *Aviat. Space Environ. Med.*, 62:448, 1991.

Shender, B.S., "The New Zealand White Rabbit as a Model to Simulate the Effects of Acceleration and Altitude Stress on the Vasodynamics of the Brain." *Aviat. Space Environ. Med.*, 61:472, 1990.

Whitley, Phillip E., "Integrated Protective Systems for Operational Acceleration (Gz) Induced Loss of Consciousness." *IEEE Engineering in Medicine and Biology Magazine*, Vol. 1, 1991.

Whitley, Phillip E., "Evaluation of Advanced Life Support Suit Concepts for G Protection." *AVIAT. SPACE ENVIRON. MED.* 63(5):400, May, 1992.

Shender, BS., "Evaluation of the Texas human thermal model during simulated cold water immersion." *Aviat. Space Environ. Med.*, 64:432, 1993.

Whinnery JE., Shender, BS., "The Opticgravic nerve: eye level anatomic relationships within the central nervous system. *Aviat. Space Environ. Med.*, 1993; 64,952-54.

Forster, EM., Cammarota, JP., Whinnery, LE., "G-LOC recovery with and without G-suit inflation." *AVIAT. SPACE ENVIRON. MED.* 1994; 65:249-253.

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- * Shender, B.S., "The New Zealand White Rabbit as a Model to Simulate the Effects of Acceleration and Altitude Stress on the Vasodynamics of the Brain." Aviat. Space Environ. Med., 61:472, 1990.
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- * Cammarota, Joseph P., "Symptoms of +Gz Induced Incapacitation During Simulated Aerial Combat", 61st Annual Scientific Meeting of the Aerospace Medical Association, May 1991.
- * Shender, B.S., "Pressure Breathing for G (PBG), Set-Back Angle (SBA), and Cognitive Task (CT) Loading Effects on Cerebral Perfusion." Aviat. Space Environ. Med., 62:448, 1991.
- * Whinnery, J.E. and Forrester E.M., "The Rate of Change of Acceleration Stress: Logical Definitions." Aviation, Space, and Environmental Medicine, in press.

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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.

BOOKS AND/OR BOOK CHAPTERS SINCE 1 JANUARY 1990

- * Cammarota, J., CRC Handbook of Biomedical Engineering, "Fractals sending Chaos and complexity in Biomedical Engineering". (in press)
- * Cammarota, J., Critical Reviews in Biomedical Engineering, "Complexity in Biomedical systems." (in press).
- * Morrison, JG and Gluckman, JP (1994). Definitions and Prospective Guidelines for the Application of Adaptive Automation. In: Mouloua, M & Parasuramen, R. (Eds.), Human Performance in Automated Systems: Current Research and Trends. Lawrence Erlbaum Associates Publishers, Hillsdale, NJ, 256263.
- * Glenn, F, Barba, C., Wherry, RJ, Morrison, J, Hitchcock, E, & Gluckman, JP (1994) Adaptive Automation Effects on Flight Management Task Performance. In: Mouloua, M & Parasuramen, R. (Eds.), Human Performance in Automated Systems: Current Research and Trends. Lawrence Erlbaum Associates Publishers, Hillsdale, NJ, 256263.

f. Identify any Nobel laureates employed at this activity.

None

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

NON-GOVERNMENTAL AWARDS FOR RESEARCH OF TECHNICAL EXCELLENCE SINCE 1 JANUARY 1990

Jeffrey Morrison Ph.D.

George Briggs, Dissertation Award, for original research exhibiting creative application of scientific inquiry in the area of engineering Psychology, from the America Psychological Association Division of Applied Experiment Psychologists (division 21) and The New Mexico State University, 21 August 1993.

Estrella Forster

Certificate of Commendation-Young Investigators Award, Aerospace Medical Association, May 1991.

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- * Calvert, JF and Kiefer, DA, Application of Centrifuge Based Dynamic Flight Simulation to Enhanced Manerverability RDT&E. AGARD Flight Mechanics Panel Symposium, Oct, 1993.

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.

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Certificate of Commendation-Young Investigators Award, Aerospace Medical Association, May 1991.

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James Whinnery Ph.D., MD

Who's Who in Science and Engineering 1991.

Naval Air Development Center Veterans Board Award for Service in Operation Desert Storm, 1991.

American Men and Women of Science, 1992.

Alliance of Air National Guard Flight Surgeons; Science Achievement Award, 1992 Minuteman Award of the National Guard Bureau, 1993

Alliance of Air National Guard Flight Surgeon; Board of Directors Award (for career contributions), 1993

Joseph Cammarota, Ph.D.

Research and Development Innovation Award; Aerospace Medical Association Ground Test and Simulation Research Award; AIAA

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

**GOVERNMENTAL AWARDS FOR RESEARCH ON TECHNICAL EXCELLENCE
GIVEN
SINCE 1 JANUARY 1990**

Joseph Cammarota, Ph.D. 1990

Air Vehicle and Crew Technology Department Outstanding Scientific and Engineering Award, for research in the area of Adaptive Automation Technology, for NAWC-AD Warminster

Jeffrey Morrison, Ph.D. 1993

Air Vehicle and Crew Technology Department Outstanding Scientific and Engineering Award, for research in the area of Adaptive Automation Technology, for NAWC-AD Warminster.

James E. Whinnery

Commanding Officer and Technical Directors Award for Outstanding Scientific Achievement, Naval Air Development Center, 1990.

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

None.

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

None.

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

None.

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

None.

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

One.

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

\$0.

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.

Major end item prototypes in production and/or are currently in use by U.S. Armed Forces or by industry.

Navy Combat Edge System - enhanced version of earlier pressure breathing for G Protection systems for use specifically in F/A-18 and F-14 aircraft. Foreign countries that will be using this technology are Finland, Switzerland, and Japan. System can be used in F-16's.

Ref: Covington-Thorpe, M. An Operationsl Flight Demonstration of the Navy Combat Edge System in the F/A-18 Aircraft. NAWCADWAR -94111-60. Submitted for Publication in the SAFE Journal.

F/A-18 FMS Program Documents for Finland (Switzerland and Japan are proposed)

Dynamic Flight Simulation - Algorithm technology to use a dual gimbelled centrifuge as a flight simulator. This laboratory has led the way, possessing the only device of its kind. The U.S. companies, Environmental Techtonics and EMRO as well as the French company Latecour all use slight variation of this technology.

Ref: Kiefer, DA and Cammarota, JP, Centrifuge-Based Flight Simulation, International Simulation Technology Conference AIMTec '92 Proceedings, Nov 1992.

Calvert, JF and Kiefer, DA, Application of Centrifuge Based Dynamic Flight Simulation to Enhanced Manerverability RDT&E. AGARD Flight Mechanics Panel Symposium, Oct, 1993.

Navy Training Centrifuge (CFET) Proposals from Environmental Techtonics, EMRO and Latecour.

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Anti-G straining Maneuver training device - this device is a feed back training device to allow pilots to asses and correct their anti-G steering maneuver. Developed by special request from AIRLANT during Desert Storm to serve as a carrier training system, this device is now used throughout Navy squadrons. The countries of Finland and Canada have expressed interest in this device.

Ref: Cammarota, Joseph P., "Enhancements for Aircrew High-G Centrifuge Training Programs", 61st Annual Scientific Meeting of the Aerospace Medical Association, May 1991.

Aviation Space Environ. Med. 62 (5): 471; 1991.

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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.

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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.

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. There is no MILCON.

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

N/A. There is no MILCON.

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

N/A. There is no MILCON.

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

N/A. There is no MILCON.

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

N/A. There is no MILCON.

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

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

Laboratory Facilities Consolidation P-181.

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

General Mission Support, Crew Equipment and Life Support, Aircraft 10.6.2.

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

All installed equipment will be the property of the NRAD detachment of NCCOSC, Warminster and should be included in their response to this data call. Confirmation of inclusion of this equipment in the NRAD response was received 8/12/94 from Mr. S. Fink, NRAD.

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

15,552 sq.ft.

(5) CWE & planned BOD.

CWE = \$4.95M

BOD = Nov 96

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.

Approximately four miles to NAS Willow Grove, PA.

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?

N/A, there are no certified magazines.

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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. ?

Yes. The Dynamic Flight Simulator (DFS) was planned in this area of Pennsylvania because of the large deposit of bedrock at this specific site. This sturdy, stable foundation is required because of the capabilities and design of the DFS. The main motor of the DFS is bolted directly into this bedrock and the arm of the centrifuge is attached directly to the shaft of the motor. DFS is capable of G onset rates and G levels equivalent to current and some projected tactical aircraft. To achieve this feat, tremendous torques are generated about the motor shaft and the motor attachment points. A firm foundation in bedrock is absolutely required for such a high performance device to operate.

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

Many of our current and future academic relationships are founded with universities in this area. The University of Pennsylvania and Drexel University are the primary players. Industry users come in from the major aircraft companies such as General Dynamics (past), McDonnell Douglas, Northrop and Grumman Aerospace. These users, commercial and academic, were attracted to the device for its capabilities and also to the staff for their expertise in this area of research. The location fosters the academic relationships due to proximities and complimentary capabilities. Because the device's high performance and capability is tied to this site (see 8.a.), commercial users utilize the device for the realistic and appropriate challenge the device can give their ideas, designs, and products.

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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.

The centrifuge facilities consists of two suites of computers, the centrifuge control suite and the flight simulation suite. The centrifuge control computer suite is used strictly for driving the centrifuge.

The flight simulation suite has recently been updated as a result of CPP funding. Several Silicon Graphics (SG) Incorporated computers have been purchased and received. These include an Onyx with Reality Engine 2 Graphics system, three (3) Indigo 2 Extreme Desktop computers and three (3) Indy SC Desktop Computers. These will be used during flight simulation projects as a Visual System for the out-the-window graphics as well as to drive various heads-down displays. They will be networked via a real-time Ethernet. Plans also include an interface to the Distributed Interactive Simulation (DIS) network for wargaming simulations.

Additionally a non-real-time network will be installed to interface with Pax River for administrative information.

10. **Mobilization Responsibility and Capability.**

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

N/A, there is no mobilization responsibility officially assigned to this detachment.

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

N/A there is no mobilization responsibility officially assigned to this detachment.

(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?

N/A, there is no mobilization responsibility officially assigned to this detachment.

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(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.

N/A, there is no mobilization responsibility officially assigned to this detachment.

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

No, but there are no responsibilities assigned.

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

N/A, there is no mobilization responsibility officially assigned to this detachment.

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

No, but there are no responsibilities assigned.

(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, but there are no responsibilities assigned.

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

N/A, there is no mobilization responsibility officially assigned to this detachment.

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

No.

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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.

N/A, this activity is not considered a range and is enclosed within a building.

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QUALITY OF LIFE

In 1996, we will become ta 4.5 acre tenant on a 45 acre footprint. Some of the following amenities will be within the footprint, the others are available at NAS Willow Grove, PA.

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+	1	1		
Officer	3	5	5		
Officer	1 or 2	----	----		
Enlisted	4+	50	50		
Enlisted	3	149	149		
Enlisted	1 or 2	----	----		
Mobile Homes		----	----		
Mobile Home lots		----	----		

(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: **N/A**

What makes it inadequate? **N/A**

What use is being made of the facility? **N/A**

What is the cost to upgrade the facility to substandard? **N/A**

What other use could be made of the facility and at what cost? **N/A**

Current improvement plans and programmed funding: **N/A**

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

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

Pay Grade	Number of Bedrooms	Number on List ¹	Average Wait
O-6/7/8/9	1		
	2		
	3		
	4+		
O-4/5	1		
	2		
	3		
	4+		
O-1/2/3/CWO	1		
	2		
	3	10	6 to 12 months
	4+		
E7-E9	1		
	2		
	3	5	3 to 6 months
	4+		
E1-E6	1		
	2		
	3	25	3 to 6 months
	4+		

¹As of 31 March 1994.

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(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	Cost
2	Vacancy rate low
3	Proximity to base
4	Safety, security
5	Less 3 and 4 bedroom housing on market

Lower grades have harder market conditions-lower VHA

(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	99%
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?

No.

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(b) **BEQ: The BEQ will not be available.**

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

Type of Quarters	Utilization Rate
Adequate	N/A
Substandard	N/A
Inadequate	N/A

(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?

N/A THE BEQ WILL NOT BE AVAILABLE.

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

N/A.

AOB = (# Geographic Bachelors x average number of days in barracks) / 365.

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

N/A. UNKNOWN WHO MILITARY ARE THAT WILL BE ASSIGNED TO THIS DETACHMENT WHEN IT STANDS UP IN FY96.

Reason for Separation from Family	Number of GB	Percent of GB	Comments
Family Commitments (children in school, financial, etc.)			
Spouse Employment (non-military)			
Other			
TOTAL		100	

(5) How many geographic bachelors do not live on base?

UNKNOWN WHO MILITARY ARE THAT WILL BE ASSIGNED TO THIS DETACHMENT WHEN IT STANDS UP IN FY96.

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(c) **BOQ: THERE IS NO BOQ AT WARMINSTER.**

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

N/A, THERE IS NO BOQ AT WARMINSTER

Type of Quarters	Utilization Rate
Adequate	N/A
Substandard	N/A
Inadequate	N/A

(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?

N/A, THERE IS NO BOQ AT WARMINSTER.

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

N/A, THERE IS NO BOQ AT WARMINSTER.

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(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.

Facility Type, Bldg. # & CCN	Total No. of Beds	Total No. of Rooms	Adequate		Substandard		Inadequate	
			Beds	Sq Ft	Beds	Sq Ft	Beds	Sq Ft
E-1 - E-4	24	12	2 per room	220	0	0	0	0
E-5 - E-6	20	20	1 per room	220	0	0	0	0
E-7 - E9	1	2	*1 per 2 rooms	440	0	0	0	0
CWO & up	8	16	*1 per 2 rooms	440	0	0	0	0

*** Rooms are adequate. Both rooms are connected together with private bath.**

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

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(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.

N/A- CURRENT BEQ WILL BE TURNED OVER TO NAS WILLOW GROVE, PA.

Facility Type, Bldg. # & CCN	Total No. of Beds	Total No. of Rooms	Adequate		Substandard		Inadequate	
			Beds	Sq Ft	Beds	Sq Ft	Beds	Sq Ft

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

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

N/A. MESSING FACILITIES NOT AVAILABLE.

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

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

N/A, NO MESSING FACILITIES ARE PROJECTED TO BE ASSIGNED.

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

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

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13. **MWR Facilities.** For on-base MWR facilities¹ 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 Warminster, Pa. **DISTANCE** 0
Additional facilities available at NAS Willow Grove, Pa.

Facility	Unit of Measure	Total	Profitable (Y,N,N/A)
Auto Hobby	Indoor Bays	0	N/A
	Outdoor Bays	0	N/A
Arts/Crafts	SF	0	N/A
Wood Hobby	SF	0	N/A
Bowling	Lanes	0	N/A
Enlisted Club	SF	2000	N
Officer's Club	SF	0	N/A
Library	SF	0	N/A
Library	Books	0	N/A
Theater	Seats	0	N/A
ITT	SF	0	N/A
Museum/Memorial	SF	0	N/A
Pool (indoor)	Lanes	0	N/A
Pool (outdoor)	Lanes	3	N
Beach	LF	0	N/A
Swimming Ponds	Each	0	N/A
Tennis CT	Each	2	N/A

¹Spaces designed for a particular use. A single building might contain several facilities, each of which should be listed separately.

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Facility	Unit of Measure	Total	Profitable (Y,N,N/A)
Volleyball CT (outdoor)	Each	2	N/A
Basketball CT (outdoor)	Each	1	N/A
Racquetball CT	Each	1	N/A
Golf Course	Holes	0	N/A
Driving Range	Tee Boxes	0	N/A
Gymnasium	SF	0	N/A
Fitness Center	SF	1500	N
Marina	Berths	0	N/A
Stables	Stalls	0	N/A
Softball Fld	Each	3	N/A
Football Fld	Each	1	N/A
Soccer Fld	Each	0	N/A
Youth Center	SF	2000	N

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

N/A. There is no library.

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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. **THERE IS NO ON BASE CHILD CARE PROVIDED.**

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:

Facility type/code: **N/A**

What makes it inadequate? **N/A**

What use is being made of the facility? **N/A**

What is the cost to upgrade the facility to substandard? **N/A**

What other use could be made of the facility and at what cost? **N/A**

Current improvement plans and programmed funding: **N/A**

Has this facility condition resulted in C3 or C4 designation on your BASEREP? **N/A**

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.

"Family Child Care program" NAS Willow Grove and NAWC, resource and referral guide and file of civilian providers in the area.

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).

The Small Wonder Child Development Center at NAS Willow Grove (15 minutes) is NAVY owned and run and accredited by the National Academy of Early Childhood programs. In addition to normal working hours they are also open 3 drill Saturdays per month.

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PREDECISIONAL INFORMATION

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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	1500
Gas Station	SF	0
Auto Repair	SF	0
Auto Parts Store	SF	0
Commissary	SF	0
Mini-Mart	SF	0
Package Store	SF	0
Fast Food Restaurants	Each	0
Bank/Credit Union	Each	1000
Family Service Center	SF	0
Laundromat	SF	0
Dry Cleaners	Each	0
ARC	PN	0
Chapel	PN	0
FSC Classrm/Auditorium	PN	0

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

City	Distance (Miles)
Philadelphia	25 MILES
New York	100 MILES
Washington, DC	150 MILES

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16. Standard Rate VHA Data for Cost of Living:

Paygrade	With Dependents	Without Dependents
E1	247.69	138.58
E2	247.69	155.76
E3	243.15	179.16
E4	244.26	170.47
E5	287.83	200.96
E6	338.36	230.33
E7	352.10	244.59
E8	415.41	314.05
E9	375.93	285.41
W1	411.13	312.23
W2	385.95	302.71
W3	392.06	318.70
W4	404.02	358.22
O1E	367.72	272.96
O2E	364.94	290.96
O3E	414.74	350.87
O1	340.00	250.54
O2	331.00	258.72
O3	398.31	335.35
O4	390.27	339.38
O5	378.55	313.06
O6	353.98	292.99
O7	286.39	232.69

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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	-----	430	90
Apartment (1-2 Bedroom)	700	560	125
Apartment (3+ Bedroom)	950	700	150
Single Family Home (3 Bedroom)	1200	750	150
Single Family Home (4+ Bedroom)	1300	850	200
Town House (2 Bedroom)	950	700	135
Town House (3+ Bedroom)	1200	750	150
Condominium (2 Bedroom)	850	650	125
Condominium (3+ Bedroom)	----	850	150

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

Type Rental	Percent Occupancy Rate
Efficiency	94.5
Apartment (1-2 Bedroom)	93.5
Apartment (3+ Bedroom)	97.4
Single Family Home (3 Bedroom)	95
Single Family Home (4+ Bedroom)	95
Town House (2 Bedroom)	95
Town House (3+ Bedroom)	95
Condominium (2 Bedroom)	95
Condominium (3+ Bedroom)	95

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

Type of Home	Median Cost
Single Family Home (3 Bedroom)	137,400
Single Family Home (4+ Bedroom)	153,700
Town House (2 Bedroom)	110,000
Town House (3+ Bedroom)	130,000
Condominium (2 Bedroom)	75,000
Condominium (3+ Bedroom)	-----

(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	238	1019	297
February	238	1019	297
March	238	1019	297
April	238	1019	297
May	238	1019	297
June	238	1019	297
July	238	1019	297
August	238	1019	297
September	238	1019	297
October	238	1019	297
November	238	1019	297
December	238	1019	297

Figures represent an average number of homes available in Bucks County only. Average homes in Philadelphia, Montgomery and other neighboring counties were not included. However 40% of the current workforce reside outside Bucks County.

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(e) Describe the principle housing cost drivers in your local area.

CURRENTLY, THE PRINCIPAL HOUSE COST DRIVERS ARE DESIRABILITY OF TOWNSHIP OR BOROUGH, SCHOOL DISTRICT, AND PREVAILING LOAN RATES.

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

N/A. The Crew System Facility has no sea intensive ratings.

Rating	Number Sea Billets in the Local Area	Number of Shore billets in the Local Area

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)
Warminster	23.3	2	5
Perkasie	10.0	23	40
Doylestown	6.7%	10	20
Holland	6.7%	7	15
Chalfont	6.7%	13	25

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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.

Site is located near major metropolitan area (Bucks and Montgomery counties). Excellent choices exist for a quality education from PRE K through 12th grade, with special education, handicapped, emotionally disturbed and gifted programs available. Vocational/technical schools are also available. Some families prefer private or parochial schools for their children. The average tuition is about \$8,400.00 per student for private secondary schools and \$5,400.00 per student for private elementary schools. The tuition for high school students in the Archdiocese of Philadelphia Catholic parochial schools is \$2,425.00 per student. The Archdiocese operates 28 schools in Bucks County and 52 schools in Montgomery County. There are a similiar amount of private schools. There are numerous public school districts, a representative listing follows:

Institution	Type	Grade Level(s)	Special Education Available	Annual Enrollment Cost per Student	1993 Avg SAT/ACT Score	% HS Grad to Higher Educ	Source of Info
Centennial school district	public	K to 12	handicapped/ gifted	0	418 V 468 M	64%	housing referral guide
Council Rock school district	public	K to 12	special ed/ gifted	0	453 V 512 M	73%	housing referral guide
Wissahickon school district	public	K to 12	special ed/ gifted	0	443 V 499 M	76%	housing referral guide
Pennsbury school district	public	K to 12	handicapped/ gifted	0	428 V 488 M	77%	housing referral guide

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Institution	Type	Grade Level(s)	Special Education Available	Annual Enrollment Cost per Student	1993 Avg SAT/ACT Score	% HS Grad to Higher Educ	Source of Info
Central Bucks school district	public	K to 12	special ed/ gifted	0	479 V 513 M	75%	housing referral guide
Cheltenham school district	public	K to 12	handicapped/ gifted/ special ed	0	458 V 517 M	80%	housing referral guide
Jenkintown school district	public	K to 12	handicapped/ gifted	0	NOT AVAILA BL	82%	housing referral guide
Lower Moreland Township school district	public	K to 12	handicapped/ gifted	0	455 V 525 M	93%	housing referral guide

Institution	Type	Grade Level(s)	Special Education Available	Annual Enrollment Cost per Student	1993 Avg SAT/ACT Score	% HS Grad to Higher Educ	Source of Info
Abington school district	public	K to 12	handicapped/gi fted/ special ed	0	455 V 514 M	71%	housing referral guide
Hatboro-Horsham school district	public	K to 12	handicapped/gi fted/ special ed	0	468 V 512 M	70%	housing referral guide
North Penn school district	public	K to 12	gifted	0	453 V 490 M	64%	housing referral guide

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(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.

Site is located near a major metropolitan area that has the highest concentration of college students of any location in the U.S. (including Boston), numerous educational opportunities. The public school system offer adult evening classes for both high and vocational/technical. A representative list of public schools can be found in (a). Within the commuting distance there are 35 to 40 institutions of higher learning encompassing community colleges, junior colleges, technical institutes, medical colleges and graduate programs. A representative listing follows:

Institution	Type Classes	Program Type(s)				
		Adult High School	Vocational/ Technical	Undergraduate		Graduate
				Courses only	Degree Program	
Public School Districts	Day					
	Night	YES	YES			
Bucks County Community College	Day				YES	
	Night				YES	
Delaware Valley College of Science and Agriculture	Day				YES	YES
	Night				YES	YES
Drexel University	Day				YES	YES
	Night				YES	YES

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Institution	Type Classes	Program Type(s)				
		Adult High School	Vocational/ Technical	Undergraduate		Graduate
				Courses only	Degree Program	
LaSalle University	Day				YES	YES
	Night				YES	YES
Lehigh	Day				YES	YES
	Night				YES	YES
Montgomery County Community College	Day				YES	
	Night				YES	
Penn State University Ogantz and Great Valley Campus	Day				YES	YES
	Night				YES	YES

Institution	Type Classes	Program Type(s)				
		Adult High School	Vocational/ Technical	Undergraduate		Graduate
				Courses only	Degree Program	
University of Pennsylvania	Day				YES	YES
	Night				YES	YES
Princeton	Day				YES	YES
	Night				YES	YES
Saint Joseph's	Day				YES	YES
	Night				YES	YES
Swarthmore	Day				YES	
	Night				YES	

Institution	Type Classes	Program Type(s)				
		Adult High School	Vocational/ Technical	Undergraduate		Graduate

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		Adult High School	Vocational/ Technical	Undergraduate		Graduate
				Courses only	Degree Program	
Temple University	Day				YES	YES
	Night				YES	YES
Villanova University	Day				YES	YES
	Night				YES	YES
West Chester University	Day				YES	YES
	Night				YES	YES
Ursinus University	Day				YES	YES
	Night				YES	YES

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(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. **There are no training facilities at Warminster and no colleges participate on site.**

Institution	Type Classes	Program Type(s)				
		Adult High School	Vocational/ Technical	Undergraduate		Graduate
				Courses only	Degree Program	
Drexel University	Day					
	Night					
	Correspondence					
Penn State University	Day					
	Night					
	Correspondence					
Bucks County Community College	Day					
	Night					
	Correspondence					
Wilkes University	Day					
	Night					
	Correspondence					
National Technology University	Day					

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21. Spousal Employment Opportunities.

Provide the following data on spousal employment opportunities.

UNKNOWN. THE MILITARY WHO WILL BE ATTACHED TO THE SITE AT STAND UP HAVE NOT BEEN IDENTIFIED. 4

Skill Level	Number of Military Spouses Serviced by Family Service Center Spouse Employment Assistance			Local Community Unemployment Rate
	1991	1992	1993	
Professional				
Manufacturing				
Clerical				
Service				
Other				

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.

Champus Medical plan and Delta Dental programs are both available to military, and local doctors and dentists accept them.

b. Do your military dependents 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.

Champus Medical plan and Delta Dental programs are both available to military dependants, and local doctors and dentists accept them.

** The data presented in Table 21 represent the best estimate of the existing information. This site is located in the Family Service Center at Kees Mill. There are not any separate statistics for NAWC and the data they are requested and felt that these would be representative of the actual numbers.*

*** The unemployment rate for June 1994 was 7.3%. This number could not be further broken into the above categories.*

*RE: AIC-115
1/10/95*

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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)	4	7	4
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	4	7	4
2. Blackmarket (6C)	0	0	0
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)	0	0	0
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)	0	0	1
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	1
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	0	0	0

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Crime Definitions	FY 1991	FY 1992	FY 1993
5. Customs (6M)	0	0	0
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)	174	217	141
Base Personnel - military	0	0	1
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	174	217	140
7. Larceny - Ordnance (6R)	0	0	0
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)	31	25	34
Base Personnel - military	5	6	8
Base Personnel - civilian	26	19	26
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	0	0	0

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Crime Definitions	FY 1991	FY 1992	FY 1993
9. Larceny - Personal (6T)	251	189	211
Base Personnel - military	15	20	8
Base Personnel - civilian	20	11	5
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	216	158	198
10. Wrongful Destruction (6U)	250	206	199
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	250	206	199
11. Larceny - Vehicle (6V)	85	124	63
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	85	124	63
12. Bomb Threat (7B)	0	0	0
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

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Crime Definitions	FY 1991	FY 1992	FY 1993
13. Extortion (7E)	0	0	0
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)	129	101	113
Base Personnel - military	2	1	1
Base Personnel - civilian	10	9	3
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	117	91	109
15. Death (7H)	23	23	22
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	23	23	22
16. Kidnapping (7K)	0	0	0
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

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Crime Definitions	FY 1991	FY 1992	FY 1993
18. Narcotics (7N)	28	109	108
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	28	109	108
19. Perjury (7P)	0	0	0
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)	13	9	10
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	13	9	10
21. Traffic Accident (7T)	437	413	384
Base Personnel - military	3	4	3
Base Personnel - civilian	30	25	8
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	404	384	373

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Crime Definitions	FY 1991	FY 1992	FY 1993
22. Sex Abuse - Child (8B)	5	3	2
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	5	3	2
23. Indecent Assault (8D)	12	23	25
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	12	23	25
24. Rape (8F)	12	11	13
Base Personnel - military	0	0	0
Base Personnel - civilian	0	0	0
Off Base Personnel - military	0	0	0
Off Base Personnel - civilian	12	11	13
25. Sodomy (8G)	0	0	0
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

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NAWCAD WARMINSTER DETACHMENT
1993
CRIME RATE PER 100,000

Control #: 001

Date sent: 8 September 1994

To: CAPT Doug Cook
Fax: (703) 604-1859

Activity: NAVAIR
Voice: (703) 604-1857

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 #23.
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.

LT Christina May
(703) 681-0481

NOTE: This information is needed urgently. Request you respond with clarification comments (below) or corrected page(s) within 24 hours after receipt at 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: Violent Crime Rate for Bucks County: 183; Property Crime Rate for Bucks County: 2,446.5; and Drug Crime Rate for Bucks County: 159.1.

Chris Kirk
Name

024
Code

(215) 441-1092
Commercial Phone #

9/16/94
Date

Data Call 5 UIC: 62269
Page 1 of 1
Control # 001

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A. ...

FOR OFFICIAL USE ONLY - BRAC '95 WORKING PAPERS
NAWCAD WARMINSTER-OPEN WATER FACILITY
1993
CRIME RATE PER 100,000

Control #: 001

Date sent: 8 September 1994

To: CAPT Doug Cook
Fax: (703) 604-1859

Activity: NAVAIR
Voice: (703) 604-1857

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 #23.
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.

LT Christina May
(703) 681-0481

NOTE: This information is needed urgently. Request you respond with clarification comments (below) or corrected page(s) within 24 hours after receipt at 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: Violent Crime Rate for Montgomery County: 231.6; Property Crime Rate for Montgomery County: 2,629.5; and Drug Crime Rate for Montgomery County: 208.5.

Chris Kirk
Name

024
Code

(215) 441-1092
Commercial Phone #

9/16/94
Date

Data Call 5 UIC: 62269
Page 1 of 1
Control # 001

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Enclosure (2)

Personal

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TAB A

TECHNICAL OPERATIONS

FUNCTIONAL SUPPORT AREA - LIFE CYCLE WORK AREA FORM

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PREDECISIONAL INFORMATION

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TECHNICAL FUNCTIONS
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM

Technical Center Site	Crew Systems Facility Detachment, Warminster PA
Functional Support Area	10. General Mission Support 10.6.2 Crew Equipment and Life Support Aircraft
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.

.84 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) 47.0

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) 53.0

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.

* Military Biomedical support and Project Personnel are **not** included, only DFS staff of FY93. This is a subset of the FY96 detachment.

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TECHNICAL FUNCTIONS
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM

Technical Center Site	Crew Systems Facility Detachment, Warminster PA
Functional Support Area	10. General Mission Support 10.6.2 Crew Equipment and Life Support, A/C
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.

3.12 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) 174.7

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) 225.3

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.

* Military Biomedical support and Project Personnel are **not** included, only DFS staff of FY93. This is a subset of the FY96 detachment.

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TECHNICAL FUNCTIONS
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM

Technical Center Site	Crew Systems Facility Detachment, Warminster PA
Functional Support Area	10. General Mission Support 10.6.2 Crew Equipment and Life Support, A/C
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.

4.92 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) 275.5

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) 354.5

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.

* Military Biomedical support and Project Personnel are **not** included, only DFS staff of FY93. This is a subset of the FY96 detachment.

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TECHNICAL FUNCTIONS
FUNCTIONAL SUPPORT AREA/LIFE CYCLE WORK AREA FORM

Technical Center Site	Crew Systems Facility Detachment, Warminster PA
Functional Support Area	10. General Mission Support 10.6.2 Crew Equipment and Life Support, A/c
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.

3.12 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) 174.7

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) 225.3

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.

* Military Biomedical support and Project Personnel are **not** included, only DFS staff of FY93. This is a subset of the FY96 detachment.

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TAB B
SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

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FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	Crew Systems Facility Detachment, Warminster PA
Facility/Equipment Nomenclature or Title	Human Centrifuge/Dynamic Flight Simulator

1. State the Primary purpose(s) of the facility/equipment. The Human Centrifuge located at the NAWCADWAR is the largest and most capable man-rated centrifuge in the world. It has a 50-foot arm, a 16,000 horsepower direct-drive motor, and is able to reach a maximum of 40 G's with a 1000 pound payload. Between 1.5 G and 15 G's, the centrifuge can produce an average g-onset rate of 10 G/second with an maximum instantaneous G-onset of 13 G/second. The crewstation for the centrifuge is enclosed in a 10-foot spherical gondola mounted in a high speed dual-gimbal system. The movable gimbal system enables multi-directional G forces (Gx, Gy, Gz) to be applied on the pilot/subject and is responsive enough to permit closed-loop pilot control. This feature has enabled the development of a unique real-time sustained-G flight simulation capability known as the Dynamic Flight Simulator (DFS).

The DFS consists of a full-scale aircraft cockpit with active instruments and controls which is mounted inside the centrifuge gondola along with a computer generated outside visual scene. The control system for the DFS incorporates a high fidelity 6 degree-of-freedom aircraft model which drives the cockpit instruments and displays as well as the centrifuge motion system. The DFS has been used successfully for manned testing of new crew equipment, advanced cockpit configurations, and to assess the performance of current and future high performance aircraft designs. The facility is a unique national asset which enables human performance testing in a realistic, high-G-flight environment, with the safety and repeatability of a ground-based laboratory.

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 considered to be immovable. A detachment of operator/maintenance personnel will be retained at Warminster to support the facility.

3. Provide the replacement value of the facility /equipment. Report the facility /equipment costs separate from any building and utilities that may be integral to the facility/equipment.

Replacement value of the equipment: Centrifuge, computers, cockpits \$50M
 Replacement value of the building only: \$3M (10,000 sq. ft x \$300/sq. ft.)

4. Provide the gross weight and cube of the facility/equipment. The movement of this facility would entail moving the centrifuge arm, gondola, and motor; the cockpits, computers, and mechanical support equipment; and the generators and electrical powerhouse and control equipment. This equipment weighs approximately 500,000 pounds and would occupy 50,000 cubic feet. To move or replicate the main motor foundation would require 1,253,000 pounds of concrete. Note: these numbers represent a "best guess" since a formal A&E estimate was not obtained.

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5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power. The DFS requires a maximum of 20,000 amps, 600 VDC power. This power is generated by a dedicated powerhouse which draws electricity from the local power grid. A 13.8 KV transformer with substation supplies the powerhouse generators.

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.) The DFS is anchored into bedrock at the Warminster site. Approximately 8,700 cu ft (1,253,000 pounds) of concrete form the foundation. The centrifuge chamber is completely shielded with copper plates.

7. State any environmental control requirements for the facility/equipment (i.e. temperature, humidity, air scrubbing) The facility requires an independent, redundant environmental control system separate from the building HVAC for the computer room and control center.

8. Indicate if this facility 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 extremely difficult to relocate primarily because of the requirement for a bedrock foundation. The main centrifuge motor generates over 1,000,000 foot-pounds of torque requiring a substantial concrete foundation within the bedrock. Less than 20% of the U.S. has this type of stable geological structure. It may be possible to replicate a similar capability with a smaller centrifuge but the physiological measurement accuracy would be impaired. If the facility is lost to the Navy, other centrifuges (government, foreign, or commercial) could be utilized but only for less sophisticated types of tests. There is no way to replace the DFS capabilities for flight dynamics, flying qualities and pilot performance evaluations in high risk test scenarios.

9. Indicate how and when the facility /equipment was transported and or constructed at this site. This facility was located at the Warminster site after an extensive survey of available U.S. Navy installations. No other potential site had bedrock supporting it. A contract was awarded in 1946 for the construction of the centrifuge building, centrifuge device and electrical powerhouse. The contract was completed in 1950 and the facility was official dedicated in 1952. The DFS underwent upgrades in 1960-62 (new arm, gondola, analog computer control, building annex) and 1980-84 (visual display, F-14 cockpit, digital computer control).

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. Acceleration Research, human performance/medical evaluations, G-Tolerance Improvement training for TACAIR aircrewmembers, crew systems RDT&E, out-of-control flight/spin simulation, thrust vectored aircraft simulation, full environment mission simulation.

11. Provide the historical utilization average for the past five years fiscal years (1989-1993) define the unit of measure used. Historical utilization is 67% of available days. Remaining 33% of time is used for maintenance, repairs and upgrades. (Assumes 260 days available per year.)

12. Provide the projected utilization data out to FY 1997. Utilization of the centrifuge motion base should remain at 67% or higher through 1997. An on-going computer upgrade will allow multiple cockpits to be operated simultaneously which will effectively double the utilization in a fixed base mode. New programs including Female Pilot Accommodation, Cockpit Performance Metrics, and Full Mission Environment Simulation will be possible with the improved computer capability.

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13. What is the approximate number of personnel used to operate the facility/equipment? BRAC 91 identified a requirement of 30 people (including medical support) to operate the facility.

14. What is the approximate number of people needed to maintain the equipment.? Five people are sufficient to keep the facility in a "ready to operate" status but this number is inadequate to operate or upgrade the device. Thirty people are used when the facility is operating at "full" capacity. This assumes that several projects are on-going in various stages of planning, installation, operation and documentation.

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.
Attached.

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TAB C
RANGE RESOURCES
RANGE CAPABILITY FORM

**THE CREW SYSTEMS FACILITY DETACHMENT IS NOT A RANGE. THIS
TAB IS NOT APPLICABLE.**

DATA CALL 5
BRAC-95 CERTIFICATION

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

RAYMOND A. DUDDERAR
NAME (Please type or print)

RD Dudderar
Signature

ACTING COMMANDER
Title

8/16/94
Date

NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION PATUXENT RIVER, MD
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)

WILLIAM E. NEWMAN
NAME (Please type or print)

WE Newman
Signature

COMMANDER
Title

8/18/94
Date

NAVAL AIR 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

WILLIAM C. BOWES
NAME (Please type or print)

W C Bowes
Signature

COMMANDER
Title

15 AUG 94
Date
29 AUG 94

NAVAL AIR SYSTEMS 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)

W A Earner
Signature

Title

8/30/94
Date



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
PATUXENT RIVER, MARYLAND 20670-5304

5400
Ser AD07/1066

AUG 15 1994

From: Commander, Naval Air Warfare Center Aircraft Division,
Patuxent River, MD 20670-5304
To: Commander, Naval Air Warfare Center, 1421 Jefferson Davis
Highway, Arlington, VA 22243-6000
Subj: RELEASE OF BASE REALIGNMENT AND CLOSURE DATA CALL IN THE
ABSENCE OF THE COMMANDER

1. During the period from 0900, 15 August 1994 until 1800, 17 August 1994, I will be on temporary additional duty.
2. Captain Raymond A. Dudderar, USN, will be Acting Commander. In my absence, he is authorized to release the completed Base Realignment and Closure Data Call, and provide the certification for the data call.
3. My point of contact at Division Headquarters is Mr. Stuart B. Simon, Code AD07. He can be reached at commercial (301) 826-1122 or DSN 326-1122.


BARTON D. STRONG

Distribution:
CONAWCAD Indianapolis
CONAVAIRENGSTA Lakehurst
CONAWCAD Warminster
CONAWCAD Trenton
CONAWCTSD Orlando
COMNAWCAD Patuxent River
NAWCAD Patuxent River (CT00)
NAWCAD Indianapolis (Code 01)
NAVAIRENGSTA Lakehurst (Code 71)
NAWCAD Warminster (Code 01A1)
NAWCAD Trenton (Code 07B)
NAWCTSD Orlando (Code 503)
CONAS, Patuxent River

BRAC-95 CERTIFICATION

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

Karrie Ciavattone
NAME (Please type or print)

BRAC 95 Coordinator
Title

AIR-09B
Division

BRAC Program Office
Department

Naval Air Systems Command
Activity

Pen & Ink Changes

Karrie Ciavattone
Signature

24 Aug 94
Date



DEPARTMENT OF THE NAVY

NAVAL AIR WARFARE CENTER
AIRCRAFT DIVISION WARMINSTER
P.O. BOX 5152
WARMINSTER, PA 18974 0591

5400
Code 00
5 Aug 94

From: Commanding Officer, Naval Air Warfare Center Aircraft Division Warminster
To: Commander, Naval Air Warfare Center Aircraft Division, Patuxent River, MD

Subj: RELEASE OF BASE REALIGNMENT AND CLOSURE DATA CALL IN THE
ABSENCE OF THE COMMANDING OFFICER

1. During the period from 0800, 8 August 1994 until 1630, 19 August 1994, I will be on leave.
2. Captain David A. Ersek, USN, will be Acting Commanding Officer. In my absence, he is authorized to release the completed Base Realignment and Closure Data Call, and provide the certification for the data call.
3. My point of contact at Warminster is Mr. Thomas J. Shopple (Code 01A). He can be reached at DSN 441-2037 or commercial (215) 441-2037.

A handwritten signature in black ink, appearing to read "William L. McCracken".

WILLIAM L. MCCRACKEN

DATA CALL #5 OWF DETACHMENT
BRAC-95 CERTIFICATION

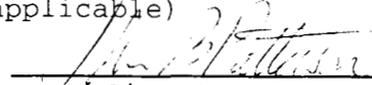
167 UIC 62269

Crime Rate

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

CAPTAIN JOHN B. PATTERSON
NAME (Please type or print)


Signature

ACTING COMMANDER
Title

SEP 1994
Date

NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION PATUXENT RIVER, MD
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)

L. L. LUNDBERG
NAME (Please type or print)


Signature

ACTING COMMANDER
Title

9/14/94
Date

NAVAL AIR 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

WILLIAM C. BOWES
NAME (Please type or print)


Signature

COMMANDER
Title

20 Sep 94
Date

NAVAL AIR SYSTEMS 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)


Signature

Title

9/23/94
Date



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER
NAVAL AIR WARFARE CENTER HEADQUARTERS
1421 JEFFERSON DAVIS HWY
ARLINGTON VA 22243

IN REPLY REFER TO

1000
Ser NAWC-21C/

SEP 16 1994

From: Commander, Naval Air Warfare Center
To: Distribution

Subj: RELEASE OF BASE REALIGNMENT AND CLOSURE DATA CALL IN
THE ABSENCE OF THE COMMANDER

1. During the period 19-21 September I will be on travel.
2. Mr. Lewis L. Lundberg, Technical Director, Naval Air Warfare Center, is designated as acting as Acting Commander during this period. As such, he is authorized to release completed Base Realignment and Closure Data Calls and to provide certification for the data calls.

W. E. Newman
W. E. NEWMAN

Distribution:
COMNAVAIRWARCENWPNDIV
COMNAVAIRWARCENACDIV
NAVAIRWARTRASYS DIV



UIC 62269

DATA CALL #5 OWF DETACHMENT

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

CAPTAIN WILLIAM L. MCCRACKEN

NAME (Please type or print)
COMMANDING OFFICER

Title
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION WARMINSTER

Activity



Signature 134

Date



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER
NAVAL AIR WARFARE CENTER HEADQUARTERS
1421 JEFFERSON DAVIS HWY
ARLINGTON VA 22243

IN REPLY REFER TO

1000
Ser NAWC-21C/

SEP 16 1991

From: Commander, Naval Air Warfare Center
To: Distribution

Subj: RELEASE OF BASE REALIGNMENT AND CLOSURE DATA CALL IN
THE ABSENCE OF THE COMMANDER

1. During the period 19-21 September I will be on travel.
2. Mr. Lewis L. Lundberg, Technical Director, Naval Air Warfare Center, is designated as acting as Acting Commander during this period. As such, he is authorized to release completed Base Realignment and Closure Data Calls and to provide certification for the data calls.

W. E. Newman
W. E. NEWMAN

Distribution:
COMNAVAIRWARCENWPNDIV
COMNAVAIRWARCENACDIV
NAVAIRWARTRASYS DIV



UIC 62669

DATA CALL #5 WARMINSTER DETACHMENT
BRAC-95 CERTIFICATION

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.

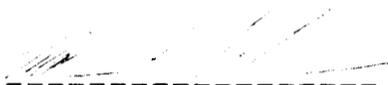
I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

CAPTAIN WILLIAM L. MCCracken
NAME (Please type or print)

COMMANDING OFFICER
Title

NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION WARMINSTER
Activity

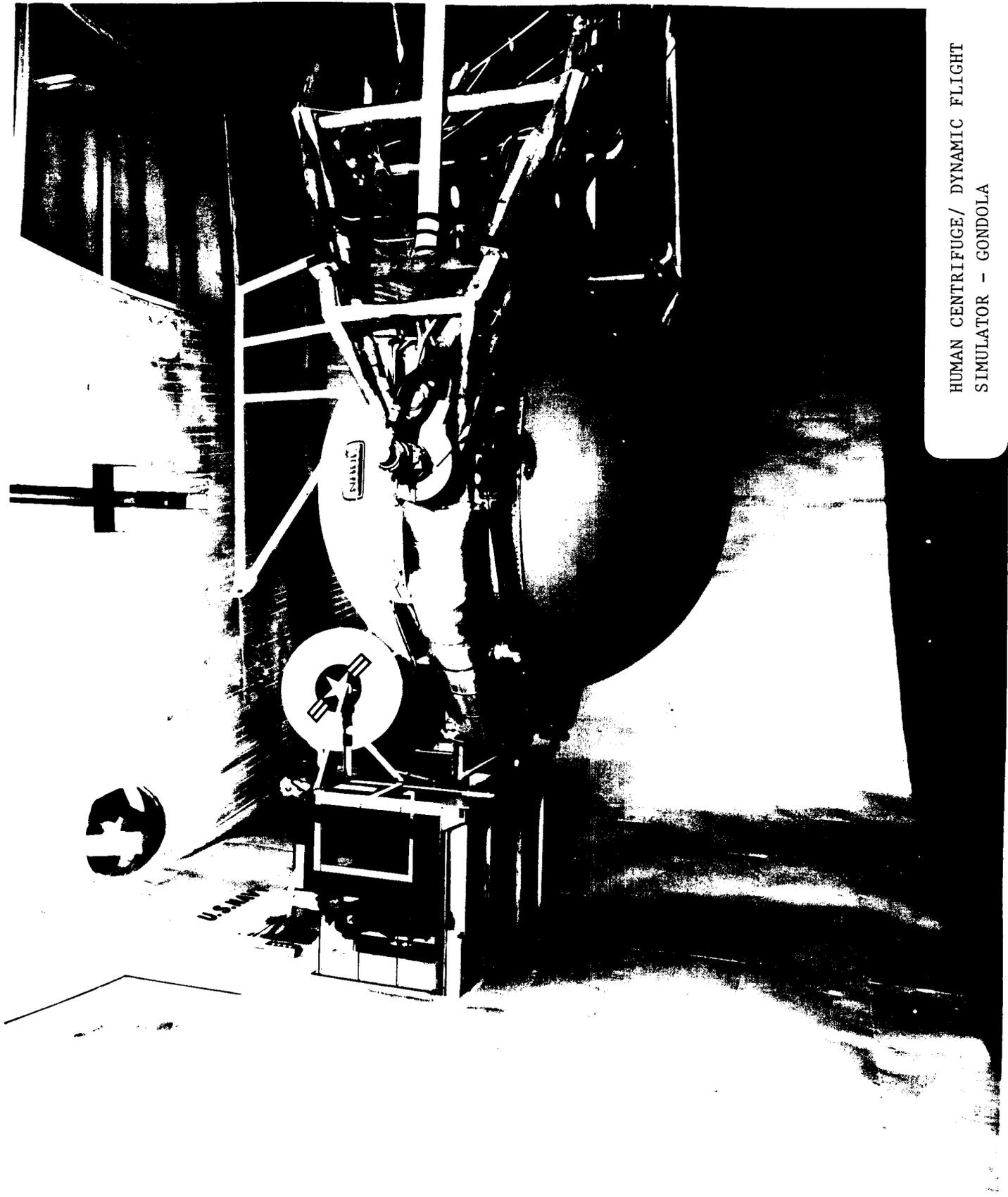

Signature
SI 1994
Date



HUMAN CENTRIFUGE/DYNAMIC FLIGHT
SIMULATOR - OUTSIDE VIEW



HUMAN CENTRIFUGE - DYNAMIC FLIGHT
SIMULATOR



HUMAN CENTRIFUGE/ DYNAMIC FLIGHT
SIMULATOR - GONDOLA

**CAPACITY ANALYSIS:
DATA CALL #4 WORK SHEET FOR
TECHNICAL CENTER or LABORATORY:**

**CREW SYSTEMS FACILITY DETACHMENT
WARMINSTER, PA**

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TAB D:	Ordnance Storage Capacity	

*****If any responses are classified, attach a separate classified annex.*****

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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).

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**Table 1.1 Historical and Projected Workload for CREW SYSTEMS FACILITY
DETACHMENT of NAWCAD Patuxent River (UIC: N62269)**

Fiscal Year	Total Funds Budgeted (\$K)	Total Funds Received w/o Direct Cite (\$K)	Direct Cite Funds Received (\$K)	Budgeted Wkys	Actual In-House Wkys	Actual Onsite Contract Wkys
86	N/A	N/A	N/A	N/A	N/A	N/A
87	N/A	N/A	N/A	N/A	N/A	N/A
88	721	721	0	8	8	4
89	2324	2324	0	12	12	4
90	831	771	0	8	8	4
91	1662	1662	0	14	14	5
92	1281	1281	0	11	11	5
93	1530	1530	0	12	12	5
94	1600					
95	1600					
96	3500					
97	3500					

(1) This DBOF site receives funding from projects and is not specifically identified as a line item in the Presidential Budget. This site operates under the Crew Systems Cost Center and short falls are recovered from profits of other Crew Systems Facilities.

(2) No data is available for FY86 or FY87.

(3) FY96 and FY97 amounts reflect expected business when detachment is formed and remainder of Warminster site is realigned to Patuxent River.

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Table 1.2 Historical and Projected Workload for Detachments of **CREW SYSTEMS FACILITY DETACHMENT of NAWCAD Patuxent River (UIC: N62269)**

NOT APPLICABLE, THERE ARE NO DETACHMENTS

Fiscal Year	Total Funds Budgeted (\$K)	Total Funds Received w/o Direct Cite (\$K)	Direct Cite Funds Received (\$K)	Budgeted Wkys	Actual In-House Wkys	Actual Onsite Contract Wkys
86	N/A	N/A	N/A	N/A	N/A	N/A
87	N/A	N/A	N/A	N/A	N/A	N/A
88	N/A	N/A	N/A	N/A	N/A	N/A
89	N/A	N/A	N/A	N/A	N/A	N/A
90	N/A	N/A	N/A	N/A	N/A	N/A
91	N/A	N/A	N/A	N/A	N/A	N/A
92	N/A	N/A	N/A	N/A	N/A	N/A
93	N/A	N/A	N/A	N/A	N/A	N/A
94	N/A	N/A	N/A	N/A	N/A	N/A
95	N/A	N/A	N/A	N/A	N/A	N/A
96	N/A	N/A	N/A	N/A	N/A	N/A
97	N/A	N/A	N/A	N/A	N/A	N/A

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TABLE 1.3 FY 1993 BREAKOUT OF FUNDS BUDGETED for CREW SYSTEMS FACILITY DETACHMENT of NAWCAD Patuxent River (UIC: N62269)

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
ONR		400													
NAVAIR				630	400										
AIRLANT									100						

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TABLE 1.3 FY 1994 BREAKOUT OF FUNDS BUDGETED for CREW SYSTEMS FACILITY DETACHMENT of
NAWCAD Patuxent River (UIC: N62269)

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
ONR		400												
NAVAIR				650	450									
AIRLANT								100						

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TABLE 1.3 FY 1995 BREAKOUT OF FUNDS BUDGETED for CREW SYSTEMS FACILITY DETACHMENT of NAWCAD Patuxent River (UIC: N62269)

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
ONR		500													
NAVAIR				550	450										
AIRLANT									100						

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TABLE 1.3 FY 1997 BREAKOUT OF FUNDS BUDGETED for CREW SYSTEMS FACILITY DETACHMENT of NAWCAD Patuxent River (UIC: N62269)

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
ONR	2000													
NAVAIR				1000	400									
AIRLANT									100					

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TABLE 1.4 FY 199_ BREAKOUT OF FUNDS BUDGETED for CREW SYSTEMS FACILITY DETACHMENT of NAWCAD Patuxent River (UIC: N62269)

NOT APPLICABLE, THIS SITE IS REPORTING DIRECTLY IN RESPONSE TO DISTRIBUTION ON THIS DATA CALL. IT HAS NO DETACHMENTS

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
N/A														
N/A														
N/A														
N/A														
N/A														
N/A														
N/A														
N/A														
N/A														
N/A														

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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.

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**Table 2.1 Main Site Class 2 Assets of CREW SYSTEMS FACILITY
DETACHMENT of NAWCAD Patuxent River (UIC: N62269)**

Building type	NAVFAC (P-80) category code	Gross Floor/Building Area (KSF)			
		Adequate	Sub-standard	In-adequate	Total
Operational & Training	100				
Maintenance & Production	200				
Science labs	310	48.1			48.1
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, & Toxics labs	316				
Electrical Equip. labs	317				
Propulsion labs	318				
Miscellaneous labs	319	16.0			16.0
Underwater Equip. labs	320				
Technical Services labs	321	6.0			6.0
Supply Facilities	400				
Hospital & other Medical	500				
Administrative Facilities	600				
Housing & Community	700				
Utilities & Grounds	800				
Other		5.0			5.0
Totals		75.1			75.1

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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:

- (1) FACILITY TYPE/CODE: N/A
- (2) WHAT MAKES IT INADEQUATE? N/A
- (3) WHAT USE IS BEING MADE OF THE FACILITY? N/A
- (4) WHAT IS THE COST TO UPGRADE THE FACILITY TO SUBSTANDARD?
N/A
- (5) WHAT OTHER USE COULD BE MADE OF THE FACILITY AND AT WHAT
COST? N/A
- (6) CURRENT IMPROVEMENT PLANS AND PROGRAMMED FUNDING:
N/A
- (7) HAS THIS FACILITY CONDITION RESULTED IN C3 OR C4
DESIGNATION ON YOUR BASEREP? N/A

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Table 2.2 Main Site Class 2 Space of **CREW SYSTEMS FACILITY DETACHMENT**
of **NAWCAD Patuxent River (UIC: N62269)** Assigned to Tenants

NOT APPLICABLE, THERE ARE NO TENANTS

TENANT		NAVFAC (P-80) Category Code	GF/BA Assigned (KSF)
Name	UIC		
N/A			
		Total:	

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**Table 2.3 Class 2 Space Utilized/Leased by CREW SYSTEMS FACILITY
DETACHMENT of NAWCAD Patuxent River (UIC: N62269)**

NOT APPLICABLE, THERE IS NO SPACE LEASED OR UTILIZED BY THE ABOVE ACTIVITY

Building type	NAVFAC (P-80) category code	GF/BA (KSF)			
		Adequate	Sub-standard	In-adequate	Total
Operational & Training	100	N/A			
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				
Hospital & other Medical	500				
Administrative Facilities	600				
Housing & Community	700				
Utilities & Grounds	800				
Other					
Totals					

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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.

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Table 2.4 Class 2 Assets of **CREW SYSTEMS FACILITY DETACHMENT of NAWCAD Patuxent River (UIC: N62269)** Occupied by Detachments of **CREW SYSTEMS FACILITY DETACHMENT**

THERE ARE NO DETACHMENTS OF THE CREW SYSTEMS FACILITY

Building type	NAVFAC (P-80) category code	GF/BA (KSF)			
		Adequate	Sub-standard	In-adequate	Total
Operational & Training	100	N/A			
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				
Hospital & other Medical	500				
Administrative Facilities	600				
Housing & Community	700				
Utilities & Grounds	800				
Other					
Totals					

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:

- (1) FACILITY TYPE/CODE: N/A
- (2) WHAT MAKES IT INADEQUATE? N/A
- (3) WHAT USE IS BEING MADE OF THE FACILITY? N/A
- (4) WHAT IS THE COST TO UPGRADE THE FACILITY TO SUBSTANDARD? N/A
- (5) WHAT OTHER USE COULD BE MADE OF THE FACILITY AND AT WHAT COST? N/A
- (6) CURRENT IMPROVEMENT PLANS AND PROGRAMMED FUNDING: N/A
- (7) HAS THIS FACILITY CONDITION RESULTED IN C3 OR C4 DESIGNATION ON YOUR BASEREP? N/A

UIC 62269
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PREDECISIONAL INFORMATION

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Table 2.6 Class 2 Space Utilized/Leased by Detachments of CREW SYSTEMS FACILITY DETACHMENT of NAWCAD Patuxent River (UIC: N62269)

NOT APPLICABLE, THERE IS NO SPACE UTILIZED OR LEASED BY DETACHMENTS OF THE CREW SYSTEMS FACILITY

Building type	NAVFAC (P-80) category code	GF/BA (KSF)			
		Adequate	Sub-standard	In-adequate	Total
Operational & Training	100	N/A			
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				
Hospital & other Medical	500				
Administrative Facilities	600				
Housing & Community	700				
Utilities & Grounds	800				
Other					
Totals					

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3. Class 2 Space Available for Expansion. An activity's expansion capability is a function of its 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. 0 SQFT. **BEGINNING IN FY96, THIS FACILITY WILL BE A TENANT AT THE NRAD DETACHMENT OF NCCOSC, WARMINSTER PA. THERE WILL BE NO SPACE AVAILABLE FOR EXPANSION.**

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. 0 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.

UIC 62269

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PREDECISIONAL INFORMATION

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Table 3.1 Constrained Class 2 Space Available for Expansion at **CREW SYSTEMS FACILITY DETACHMENT, WARMINSTER PA** (UIC: **N62269**)

NOT APPLICABLE, SEE NOTE BELOW TABLE

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		
N/A					
Totals					

BEGINNING IN FY96, THIS FACILITY WILL BE A TENANT AT THE NRAD DETACHMENT OF NCCOSC, WARMINSTER PA. THERE WILL BE NO SPACE AVAILABLE FOR EXPANSION.

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Table 3.2 Unconstrained Class 2 Space Available for Expansion at **CREW SYSTEMS FACILITY DETACHMENT, WARMINSTER** (UIC: N62269)

NOT APPLICABLE, SEE NOTE BELOW TABLE

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		
N/A					
Totals					

BEGINNING IN FY96, THIS FACILITY WILL BE A TENANT AT THE NRAD DETACHMENT OF NCCOSC, WARMINSTER PA. THERE WILL BE NO SPACE AVAILABLE FOR EXPANSION.

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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?

AS A RESULT OF BRAC 91, THE CREW SYSTEMS FACILITY WILL BECOME A TENANT OF THE NRAD DETACHMENT OF NCCOSC. THE MAIN BASE WILL BE REALIGNED TO PATUXENT RIVER AND ONLY THE ESSENTIAL SPACE NEEDED TO ACCOMODATE THE EXISTING FACILITY WILL REMAIN IN THE FOOTPRINT.

c. Explain the radio frequency constraints/opportunities within your Class 1 holdings.
THERE ARE NO RADIO FREQUENCY CONSTRAINTS/OPPORTUNITIES KNOWN TO EXIST WITH THIS FACILITY.

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Table 4.1 Class 1 Resources of **CREW SYSTEMS FACILITY, WARMINSTER PA**
 (UIC: **62269**) Site Location: **WARMINSTER, PA**

Land Use	Total Acres	Developed Acreage	Available for Development	
			Restricted	Unrestricted
Maintenance				
Operational				
Training				
R & D	4.5	4.5		
Supply & Storage				
Admin				
Housing				
Recreational				
Navy Forestry Program				
Navy Agricultural Outlease Program				
Hunting/Fishing Programs				
Other				
Total:	4.5	4.5		

d. Of the total Unrestricted Acres reported above, how much of it has existing roads and/or utilities that could support expansion efforts? 0 Acres. Explain. **THERE ARE NO ACRES IDENTIFIED AS AVAILABLE FOR EXPANSION, RESTRICTED OR OTHERWISE.**

AS A RESULT OF BRAC 91, THE CREW SYSTEMS FACILITY WILL BECOME A TENANT OF THE NRAD DETACHMENT OF NCCOSC. THE MAIN BASE WILL BE REALIGNED TO PATUXENT RIVER AND ONLY THE ESSENTIAL SPACE NEEDED TO ACCOMODATE THE EXISTING FACILITY WILL REMAIN IN THE FOOTPRINT.

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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.

N/A. AS A RESULT OF BRAC 91, THE CREW SYSTEMS FACILITY WILL BECOME A TENANT OF THE NRAD DETACHMENT OF NCCOSC. THIS DATA CALL HAS BEEN PREPARED ON THE BASIS OF THE CREW SYSTEMS FACILITY DETACHMENT AS A TENANT OF NRAD, WARMINSTER.

Table 5.1 Base Infrastructure Capacity & Load **CREW SYSTEMS FACILITY, WARMINSTER PA** (UIC: **62269**)

	On Base Capacity	Off base long term contract	Normal Steady State Load	Peak Demand
Electrical Supply (KWH)	10,000	N/A	1,200	4,500
Natural Gas (CFH)	N/A	N/A	N/A	N/A
Sewage (GPD)	1,000,000	N/A	1,500	2,000
Potable Water (GPD)	200,000	N/A	1,500	2,000
Steam (PSI & lbm/Hr)	100 & 80,000	N/A	20 & 2,500	3,000 lbm/hr
Long Term Parking	50	N/A		
Short Term Parking	N/A			

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.

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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 CREW SYSTEMS FACILITY, WARMINSTER PA (UIC: 62269)

Fiscal Year	MRP (\$M)	CPV (\$M)	ACE (\$M)
1985	.1	2.7	4.7
1986	0	2.8	5.7
1987	.6	2.9	5.7
1988	1.0	3.0	5.8
1989	.5	3.2	6.1
1990	.2	3.3	6.1
1991	.3	3.4	6.2
1992	.3	3.6	7.3
1993	.4	3.7	7.3
1994	.1	3.9	8.4
1995	.1	4.1	8.4
1996	.9	4.2	8.5
1997	.4	4.4	8.5

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c. Training Facilities:

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.

N/A, THERE ARE NO FORMAL SCHOOLS APPROVED RESIDENT AT THIS ACTIVITY

Type of Training Facility/CCN	School	Type of Training	FY 1993 Requirements			FY 2001 Requirements		
			A	B	C	A	B	C
N/A								

- 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

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.

N/A, THERE ARE NO FORMAL TRAINING FACILITIES AT RESIDENT AT THIS ACTIVITY.

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Type Training Facility/CCN	Total Number	Design Capacity (PN) ¹	Capacity (Student HRS/YR)
N/A			

Describe how the Student HRS/YR value in the preceding table was derived. **N/A. THERE ARE NO FORMAL SCHOOLS OR CLASSROOMS RESIDENT AT THIS ACTIVITY.**

¹ 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.

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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.

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TAB A
SHIP BERTHING CAPACITY

Note: Question numbers in []'s are for internal BSAT purposes.

**THIS TAB DOES NOT APPLY TO THE CREW SYSTEMS FACILITY
DETACHMENT, WARMINSTER PA**

FOR OFFICIAL USE ONLY

TAB B

OPERATIONAL AIRFIELD CAPACITY

Note: Question numbers in []'s are for internal BSAT purposes.

**THIS TAB DOES NOT APPLY TO THE CREW SYSTEMS FACILITY
DETACHMENT, WARMINSTER PA**

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TAB C

DEPOT LEVEL MAINTENANCE CAPACITY

**THIS TAB DOES NOT APPLY TO THE CREW SYSTEMS FACILITY
DETACHMENT, WARMINSTER PA**

**UIC 62269
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PREDECISIONAL INFORMATION
3 2**

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TAB D

ORDNANCE STORAGE CAPACITY

**THIS TAB DOES NOT APPLY TO THE CREW SYSTEMS FACILITY
DETACHMENT, WARMINSTER PA**

DATA CALL 4
BRAC-95 CERTIFICATION

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.
NEXT ECHELON LEVEL (if applicable)

RAYMOND A. DUDDERAR
NAME (Please type or print)

RADudderar
Signature

ACTING COMMANDER
Title

8/16/94
Date

NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION PATUXENT RIVER, MD
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)

WILLIAM E. NEWMAN
NAME (Please type or print)

WENewman
Signature

COMMANDER
Title

8/18/94
Date

NAVAL AIR 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

WILLIAM C. BOWES
NAME (Please type or print)

WCBowes
Signature

COMMANDER
Title

19 AUG 94
Date

NAVAL AIR SYSTEMS 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

W. A. EARNER
NAME (Please type or print)

WAEarners
Signature

Title

8/25/94
Date



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
PATUXENT RIVER, MARYLAND 20670-5304

5400
Ser AD07/1066

AUG 15 1994

From: Commander, Naval Air Warfare Center Aircraft Division,
Patuxent River, MD 20670-5304
To: Commander, Naval Air Warfare Center, 1421 Jefferson Davis
Highway, Arlington, VA 22243-6000
Subj: RELEASE OF BASE REALIGNMENT AND CLOSURE DATA CALL IN THE
ABSENCE OF THE COMMANDER

1. During the period from 0900, 15 August 1994 until 1800, 17 August 1994, I will be on temporary additional duty.
2. Captain Raymond A. Dudderar, USN, will be Acting Commander. In my absence, he is authorized to release the completed Base Realignment and Closure Data Call, and provide the certification for the data call.
3. My point of contact at Division Headquarters is Mr. Stuart B. Simon, Code AD07. He can be reached at commercial (301) 826-1122 or DSN 326-1122.


BARTON D. STRONG

Distribution:
CONAWCAD Indianapolis
CONAVAIRENGSTA Lakehurst
CONAWCAD Warminster
CONAWCAD Trenton
CONAWCTSD Orlando
COMNAWCAD Patuxent River
NAWCAD Patuxent River (CT00)
NAWCAD Indianapolis (Code 01)
NAVAIRENGSTA Lakehurst (Code 71)
NAWCAD Warminster (Code 01A1)
NAWCAD Trenton (Code 07B)
NAWCTSD Orlando (Code 503)
CONAS, Patuxent River

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

DAVID A. ERSEK
NAME (Please type or print)
CAPT, USN, ACTING COMMANDING OFFICER
Title
NAVAIRWARCENACDIVWAR
Activity

[Signature]
Signature
AUG 16 1994
Date



DEPARTMENT OF THE NAVY

NAVAL AIR WARFARE CENTER
AIRCRAFT DIVISION WARMINSTER
P.O. BOX 5152
WARMINSTER, PA 18974-0591

5400
Code 00
5 Aug 94

From: Commanding Officer, Naval Air Warfare Center Aircraft Division Warminster
To: Commander, Naval Air Warfare Center Aircraft Division, Patuxent River, MD

Subj: RELEASE OF BASE REALIGNMENT AND CLOSURE DATA CALL IN THE
ABSENCE OF THE COMMANDING OFFICER

1. During the period from 0800, 8 August 1994 until 1630, 19 August 1994, I will be on leave.
2. Captain David A. Ersek, USN, will be Acting Commanding Officer. In my absence, he is authorized to release the completed Base Realignment and Closure Data Call, and provide the certification for the data call.
3. My point of contact at Warminster is Mr. Thomas J. Shopple (Code 01A). He can be reached at DSN 441-2037 or commercial (215) 441-2037.

WILLIAM L. MCCRACKEN

Document Separator

DATA CALL 66
INSTALLATION RESOURCES

Activity Information:

Activity Name:	DYNAMIC FLIGHT SIMULATOR, WARMINSTER DETACHMENT, NAWCAD
UIC:	62269
Host Activity Name (if response is for a tenant activity):	NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION, WARMINSTER
Host Activity UIC:	62269

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**

Table 1A - Base Operating Support Costs (Other Than DBOF Overhead)			
Activity Name: DYNAMIC FLIGHT SIMULATOR WARMINSTER DETACHMENT, NAWCAD		UIC: 62269	
Category	FY 1996 BOS Costs (\$000)		
	Non-Labor	Labor	Total
1. Real Property Maintenance Costs:			
1a. Maintenance and Repair	42	8	50
1b. Minor Construction**	0	0	0
1c. Sub-total 1a. and 1b.	42	8	50
2. Other Base Operating Support Costs:			
2a. Utilities	68	0	68
2b. Transportation	0	0	0
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	0	0	0
2j. Other (Specify)	142	50	192 *
2k. Sub-total 2a. through 2j:	210	50	260
3. Grand Total (sum of 1c. and 2k.):	252	58	310

*** OTHER COSTS REFLECT JANITORIAL, TRASH PICK UP, PEST CONTROL, MILITARY ADMIN TRAVEL, AND HOUSE MOVES.**

**** Warminster has no use for Minor Construction funding, full 50K in Maintenance and Repair as shown above. This is consistent with BS-1 Exhibit.**

**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>
----------------------	-----------------------

N/A

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**

Table 1B - Base Operating Support Costs (DBOF Overhead)			
Activity Name: DYNAMIC FLIGHT SIMULATOR WARMINSTER DETACHMENT, NAWCAD		UIC: 62269	
Category	FY 1996 Net Cost From UC/FUND-4 (\$000)		
	Non-Labor	Labor	Total
1. Real Property Maintenance Costs:			
1a. Real Property Maintenance (>\$15K)	80	0	80
1b. Real Property Maintenance (<\$15K)	150	76	226
1c. Minor Construction (Expensed)	0	0	0
1d. Minor Construction (Capital Budget)	0	0	0
1c. Sub-total 1a. through 1d.	230	76	306
2. Other Base Operating Support Costs:			
2a. Command Office	80	310	390
2b. ADP Support	0	0	0
2c. Equipment Maintenance	30	0	30
2d. Civilian Personnel Services	90	40	130
2e. Accounting/Finance	30	0	30
2f. Utilities	205	0	205
2g. Environmental Compliance	0	0	0
2h. Police and Fire	0	0	0
2i. Safety	5	50	55
2j. Supply and Storage Operations	80	90	170
2k. Major Range Test Facility Base Costs	0	0	0
2l. Other (Specify)	0	0	0
2m. Sub-total 2a. through 2l:	520	490	1010
3. Depreciation	32	0	32
4. Grand Total (sum of 1c., 2m., and 3.):	782	566	1348

**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.

Table 2 - Services/Supplies Cost Data	
Activity Name: DYNAMIC FLIGHT SIMULATOR WARMINSTER DETACHMENT, NAWCAD	UIC: 62269
Cost Category	FY 1996 Projected Costs (\$000)
Travel:	70
Material and Supplies (including equipment):	131
Industrial Fund Purchases (other DBOF purchases):	80
Transportation:	20
Other Purchases (Contract support, etc.):	1660
Total:	1961

**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: DYNAMIC FLIGHT SIMULATOR WARMINSTER DETACHMENT, NAWCAD	UIC: 62269
Contract Type	FY 1996 Estimated Number of Workyears On-Base
Construction:	
Facilities Support:	
Mission Support:	5
Procurement:	
Other:*	
Total Workyears:	5

* **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)):

**ALL WORK YEARS WOULD BE RELOCATED TO CONTINUE IN THE
ROLL OF MISSION SUPPORT.**

2) Estimated number of workyears which would be eliminated:

NONE

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):

NONE

**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.)
2	SCHEDULING & COORDINATION, SOFTWARE DEVELOPMENT

No. of Additional Contract Workyears Which Would Be Relocated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
2	SCHEDULING & COORDINATION, SOFTWARE DEVELOPMENT

NAWCAD
DFS, WARMINSTER

DATA CALL 66
BRAC-95 CERTIFICATION

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

BARTON D. STRONG
NAME (Please type or print)

Barton D. Strong
Signature

COMMANDER
Title

11 July 1994
Date

NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION PATUXENT RIVER, MD
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)

W. E. NEWMAN, RADM, USN
NAME (Please type or print)

WE Newman
Signature

COMMANDER
Title

7/18/94 (WEN)
Date
8/24/94

NAVAL AIR 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

W. C. BOWES, VADM, USN
NAME (Please type or print)

W. C. Bowes
Signature

COMMANDER
Title

24 AUG 94
Date

NAVAL AIR SYSTEMS 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)

W. A. Earner
Signature

Title

7/1/94
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

WILLIAM L. MCCRACKEN
NAME (Please type or print)


Signature

COMMANDING OFFICER
Title
NAVAL AIR WARFARE CENTER
AIRCRAFT DIVISION WARMINSTER
Activity

JUL 11 1994
Date

Document Separator

Activity: 62269

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	Naval Air Warfare Center, Aircraft Division, Warminster (at Patuxent River)*
Acronym(s) used in correspondence	NAVAIRWARCENACDIV Warminster
Commonly accepted short title(s)	NAWCADWAR; NAWCADPAX

***Under BRAC-91, the Naval Air Warfare Center Aircraft Division, Warminster is being realigned to become part of the Naval Air Warfare Center at Patuxent River, MD and is scheduled to be relocated in the 1995/96 timeframe. This submission addresses the personnel, missions and facilities anticipated to be relocated under that realignment, and provides information on the current and future missions of NAWCADWAR personnel.**

- Complete Mailing Address

**Commander, Naval Air Warfare Center Aircraft Division, Patuxent River MD
20670-5304**

- PLAD

NAVAIRWARCENACDIV Patuxent River MD

- PRIMARY UIC: 62269* (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): 47624 PURPOSE: Military Admin
49861 Air Operations - Willow Grove

2. PLANT ACCOUNT HOLDER:

- Yes No * (check one)

Currently yes, but at Patuxent River will not be a Plant Account Holder

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 ** No (check one)

**** Being Subsumed at Patuxent River**

• **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 (check one)

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
Deep Water Test Facility	Oreland PA	00421

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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 Air Warfare Center Aircraft Division Det, Key West	00421	Key West FLA	Naval Air Station, Key West, FLA	00213
Naval Air Warfare Center Aircraft Division Det, Warminster PA	00421	Warminster, PA	NCCOSC R&D Division, Warminster PA	49281

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.

Under BRAC 91 the prior Naval Air Development Center, UIC 62269, located at Warminster PA was realigned with the mission functions relocated to Patuxent River MD. This included all functions except a Navigation and Communications Department which was realigned under the Naval Command & Control and Ocean Surveillance Center (NCCOSC) to remain as a smaller base at Warminster PA. A small detachment of the Naval Air Warfare Center was to remain at Warminster to operate the Dynamic Flight Simulator facility in support of Patuxent River Operations. The realignment to Patuxent River included 1,656 Civilian and 143 Military billets and the Aircraft Systems Development functions.

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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).

Under BRAC-91, the Naval Air Warfare Center Aircraft Division, Warminster is being realigned to become part of the Naval Air Warfare Center at Patuxent River, MD and is scheduled to be relocated in the 1995/96 timeframe. This submission addresses the personnel, missions and facilities anticipated to be relocated under that realignment.

Current Missions

- **Air USW Systems and Sendors**
- **Aircraft-installed Reconnaissance and Surveillance Systems**
- **Air Vehicle Systems, Materials and Processes**
- **Tactical Aircraft Systems (Pre-Deployment) and Sensors**
- **Aircrew Systems and Human Factors**
- **Management and Execution of the Majority of the Naval Aviation Technology Base Programs.**

Projected Missions for FY 2001

The personnel, missions and facilities addressed in this submission will be integrated into the overall Naval Air Warfare Center Aircraft Division organization at Patuxent River well in advance of the year 2001. The projected mission for the entire complex is therefore shown in the Patuxent River baseline response, except for a small detachment remaining at Warminster. The mission of the Warminster detachment follows:

- **Maintains and operates the world's largest man-rated centrifuge and related biomedical and engineering support facilities needed to conduct testing on**
 - **human subjects and related escape equipment to determine their performance under the dynamic conditions encountered in high performance aircraft.**
 - **notional configurations related to proposed aircraft.**
 - **cockpit designs.**
- **Conducts pilot training to maximize the individual's ability to function efficiently.**

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

Unique mission capabilities will expand in the 1995 timeframe due to BRAC 91 to include:

° **AIRBORNE UNDERSEA WARFARE**

- Navy's Lead for Development and Major Update of Air ASW Systems and Sensors
- Research & Development for new air ASW Sensor/system Integration- Unique collocation of Sensor Development/Software/Aircraft Integration expertise
- Conducts Software Support Activity for all Air ASW System Platforms with unique high fidelity Laboratory assets
- Conduct governmental engineering and acquisition activities for major ASW System and Sensor Developments
 - P-3, S-3, H-60
 - ASW Mission Planning Systems
 - Sonobuoys
- Develop Acoustic ASW System Software
- Develop acoustic algorithms & processing software
- Develop sensor simulation software for Platform tests

° **SENSORS AND MISSION AVIONICS**

- Develop Undersea technology concepts and systems compatible with unique airborne ASW mission requirements
- Conduct all Navy airborne ASW Acoustic Sensor and Signal Processor R&D and Developmental T&E
- Develop Navy unique RF Sensor performance specifications
- Develop RF technology to address AAW, AEW, ASW, non-cooperative target identification
- Develop Radar, antennas, radomes and signature control
- Conduct airborne environmental & performance measurements

° **RECONNAISSANCE AND SURVEILLANCE**

- Perform R&D, Developmental T&E, Acquisition and Fleet Support for all Navy Airborne Reconnaissance and Surveillance Systems
- Conduct in-house Development of Navy airborne concepts and systems
- Infrared Search and Track (IRST)
- Airborne Reconnaissance systems
 - F-14 Tactical Airborne RECCE POD Systems
 - F-18 Conformal Pallet
 - Expendable Unmanned Aerial Vehicle Real-time RECCE
 - Tactical Optical Surveillance System (TOSS & NATO TOSS)
 - Provide expertise and In-house engineering for Definition, specification and evaluation of:

- IRST, Advanced Reconnaissance sensors and Optics
- RECCE and Surveillance Systems enhancement and Upgrades
- On-call Support and Fleet Training
- Operate Navy Unique Large Aperture collimator

° AIR VEHICLES

- Conduct research, development and acquisition support for Air Vehicles materials and processes
- Prototype and evaluate advanced high risk aircraft subsystems
 - Electrical
 - Hydraulic
 - Flight Control
 - Aerial Refueling Stores
- Research and Develop, prototype and limited production of aircraft materials
 - Aircraft Paints
 - avionics coolants
 - lubricants
 - cleaners
 - composite repair processes
 - protective coatings
 - signature reduction systems
- Track and analyze the fatigue life of all Navy tactical aircraft in fleet to insure flight safety
- Develop Navy and Threat aircraft mission performance estimates for use in NATOPS Manuals and intelligence estimates
- Analyze, model, compute and prepare Navy aircraft Flight Dynamics
 - Prepare flying quality specifications
 - Prepare Design Handbooks
 - Provide Crew-carried performance charts
 - Develop aircraft mission planning data

° TACTICAL AIRCRAFT SYSTEMS

- Formulate new system concepts/designs
- Prepare system specifications
- Conduct engineering & acquisition activities for major development (e.g. F/A-18E/F, A-X)
- Develop and Update TACAIR support systems
 - mission planning systems
 - tactical simulations for development & training
 - imagery and identification systems
 - electronic warfare decoys/expendables
- Conduct system engineering (Tri-service) for all Unmanned Aerial Vehicle's (UAV's)

- Assure transfer of new technology into in-service platforms, e.g.:
 - F-14 Infrared Search & Track
 - F-14 Heads Up Display
 - F-14 and F-18 Reconnaissance systems
 - High speed fiber optic busses

° AIRCREW SYSTEMS

- Design, Develop, Acquire and Support all Naval Aircrew, Life Support, Escape and Survival systems
 - Environmental protective clothing
 - Anti-exposure Gear
 - G-Suits
 - Helmet Oxygen systems
 - Laser Eye Protection
 - Night Vision Devices
 - All Life protection/Survival Equipment (except man-rated parachutes)
 - Life Vests
 - Rafts
 - Survival gear, etc.
 - Operate the World's largest, most sophisticated human centrifuge as a Dynamic Flight Simulator (Unique in Free World)
 - Fully equipped, outside world view Pilots cockpit
 - Continuous motion control
 - Rapidly Changing G-field simulation
 - Operate Only man-rated ejection system evaluation Tower
 - Used by USN and USAF

° TECHNOLOGY BASE

- Perform the majority of the in-house Naval Aviation technology base work
 - Air Vehicles (manned and unmanned)
 - Airborne Materials (structural and non-structural)
 - Airborne Electronic Warfare (expendables)
 - Aircrew Systems and human factors
 - Airborne Surveillance (micro-wave and electro-optics)
 - Air USW Surveillance (acoustics, non-acoustics & signal processing)
 - Propulsion

Activity: 62269

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.)

	<u>On Board Count as of 01 January 1994</u>		
	Officers	Enlisted	Civilian
(Appropriated)			
• Reporting Command	56	93	1862 FTE
• Tenants (total)	6	0	0

	<u>Authorized Positions as of 30 September 1994</u>		
	Officers	Enlisted	Civilian
(Appropriated)			
• Reporting Command	45	116 (1)	1934 FTE (2)
• Tenants (total)	****		

****Officer positions are 4 Canadian, 1 Australian, and 1 U.K. personnel as liaison or project support functions that would be relocated with the mission.

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/OIC			
CAPT William McCracken	(215) 441-2235	(215) 441-1955	(215) 672-4649
• Duty Officer			[N/A]
Warminster Duty Officer	(215) 441-2259	(215) 441-7652	
• Directorate of Corporate Planning			
Stuart B. Simon	(215) 441-2237	(215) 441-2846	(215) 345-9295
• Associate Technical Director			
Thomas J. Shopple	(215) 441-2037	(215) 441-2846	(215) 794-5128

(1) Reflects latest information contined in the Oct 93 FYDP with Oct 93 N912 changes.

(2) Original Budget of 1661 excludes BRAC 91 transfers to Patuxent River. BRAC budget has since been modified to reflect 1934.

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.)

There are currently a number of tenants on the Warminster property that are not being reported since the basis of this submission is the BRAC 91 realignment to Patuxent River.

° Tenants residing on main complex (shore commands)

Tenant Command Name	UIC	Officer	Enlisted	Civilian
N/A				

° 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
Foreign Officers identified in Question	00421	Patuxent River MD	6	0	0
10					

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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.)
None. All will be shown in Patuxent River Base response.		

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.

All Maps and photos will be provided as part of the base Patuxent River response. This activity is scheduled to occupy predominantly a north and south engineering complex at Patuxent River that is currently being constructed as a MILCON project.

- 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, 8"x 11".)
- Air Installations Compatible Use Zones (AICUZ) Map. (Provide 12 copies.)

BRAC-95 CERTIFICATION

UIC DATA CALL #1

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.

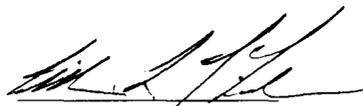
ACTIVITY COMMANDER

WILLIAM L. MCCRACKEN

NAME (Please type or print)
COMMANDING OFFICER

Title
NAVAIRWARCENACDIVWAR

Activity



Signature

28 Jan 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)

BARTON D. STRONG
NAME (Please type or print)

Barton D. Strong
Signature

Commander
Title

22 Feb '94
Date

Naval Air Warfare Center Aircraft Divisin, Patuxent River, MD
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)

G. H. STROHSAHL
NAME (Please type or print)

G. H. Strohsahl
Signature

Commander
Title

23 Feb 94
Date

Naval Air Warfare Center Headquarters
Activity

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

W. C. BOWES
NAME (Please type or print)

W. C. Bowes
Signature

Commander
Title

28 Feb 94
Date

Naval Air Systems 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)

S. F. Loftus
NAME (Please type or print)
U.S. Navy
Deputy Chief of Naval
Operations (Logistics)
Title

S. F. Loftus
Signature

3-11-94
Date

Document Separator

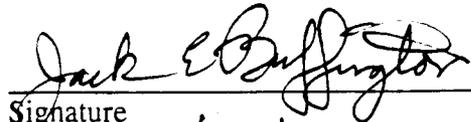
I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

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
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)

ME Donaldson
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.

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BRAC-95 CERTIFICATION

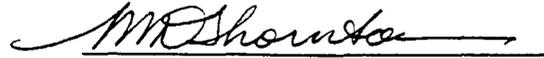
I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MICHAEL D. THORNTON
NAME (Please type or print)

CDR, CEC, USN
Title

MILCON PROGRAMMING DIVISION
Division

NAVAL FACILITIES ENGINEERING COMMAND
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

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

Document Separator

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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.

Activity Name:	NAWC AIRCRAFT DIVISION/NCCOSC R&D DETACHMENT - WARMINSTER, PA
UIC:	N62269
Major Claimant:	NAWC AIRCRAFT DIVISION - NAVAIR NCCOSC R&D DETACHMENT - SPAWAR

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.

UIC: N62269
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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.

NOTE: As a result of BRAC-91 decisions, NAWCAD Warminster was realigned to Patuxent River, MD, with a small research and development detachment remaining at Warminster. This detachment, a Crew Systems Facility, is currently functioning as an integral part of the NAWC-AD Warminster organization and not as a free-standing detachment. The major facility around which the detachment is focused is the Dynamic Flight Simulator (DFS), a large man rated centrifuge which is not a moveable facility. Because of this the data presented for the years preceding FY96 are estimates of what the group and facilities would have been from a business and personnel standpoint had they existed as an independent organization. For the years following FY96, the information related to the Crew Systems Facility is planning information applicable to the detachment following the move of the main body of NAWCAD Warminster to NAWCAD Patuxent River, MD.

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.

UIC: N62269
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**DATA CALL 65
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

Average Appropriated Fund Civilian Salary Rate:	\$56,863
--	-----------------

NCCOSC - \$57,184 (278 EMPLOYEES)
 DFS - \$53,288 (25 EMPLOYEES)
 AVG. - \$56,863 (AVG)

Source of Data (1.a. Salary Rate): DCPDS DATA BASE AND ESTIMATES OF FUTURE PAY ACTIONS.

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			
BUCKS	PA	5	170	57	8 ML	17 MIN
MONTGOMERY	PA	0	51	17	11 MI	23 MIN
OTHER	N/A	0	82	26	VARIOUS	VARIOUS

303 = 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:

NO CIVILIAN EMPLOYEES LIVE IN GOVERNMENT HOUSING.

**UIC: N62269
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**DATA CALL 65
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA**

Source of Data (1.b. 1) & 2) Residence Data): DCPDS & CPDE 04A, MILITARY ADMINISTRATION

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)
PHILADELPHIA	PHILADELPHIA	8
ALLENTOWN	LEHIGH	32
READING	BERKS	42
CAMDEN	CAMDEN	15
TRENTON	MERCER	16

Source of Data (1.c. Metro Areas): TED ANDERER, NAVSES PHILA, PHILADELPHIA REGION SITE COORDINATOR & LOCAL MAPS

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d. Age of Civilian Workforce. Complete the following table, identifying the age of the activity's civil service workforce.

Age Category	Number of Employees	Percentage of Employees
16 - 19 Years	0	0
20 - 24 Years	8	2.6
25 - 34 Years	78	25.8
35 - 44 Years	80	26.4
45 - 54 Years	83	27.4
55 - 64 Years	48	15.8
65 or Older	6	2.0
TOTAL	303	100 %

Source of Data (I.d.) Age Data):DCPDS

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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.

Last School Year Completed	Number of Employees	Percentage of Employees
8th Grade or less	0	0
9th through 11th Grade	0	0
12th Grade or High School Equivalency	39	12.9
1-3 Years of College	17	5.6
4 Years of College (Bachelors Degree)	128	42.2
5 or More Years of College (Graduate Work)	119	39.3
TOTAL	303	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").

Degree	Number of Civilian Employees
Terminal Occupation Program - Certificate of Completion, Diploma or Equivalent (for areas such as technicians, craftsmen, artisans, skilled operators, etc.)	5
Associate Degree	8
Bachelor Degree	148
Masters Degree	89
Doctorate	9

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Source of Data (1.e.1) and 2) Education Level Data:

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
1. Agriculture, Forestry & Fishing	01-09		
2. Construction (includes facility maintenance and repair)	15-17		
3. Manufacturing (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		
Sub-Total 3a. through 3e.	20-39		
4. Transportation/Communications/Utilities	40-49		
4a. Railroad Transportation	40		

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4b. Motor Freight Transportation & Warehousing (includes supply services)	42		
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		
4f. Communications	48		
4g. Utilities	49		
Sub-Total 4a. through 4g.	40-49		
5. Services	70-89		
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		
5d. Automotive Repair and Services	75		
5e. Other Misc. Repair Services	76		
5f. Motion Pictures	78		
5g. Amusement and Recreation Services	79		
5h. Health Services	80		
5i. Legal Services	81		
5j. Educational Services	82		
5k. Social Services	83		
5l. Museums	84		
5m. Engineering, Accounting, Research & Related Services (includes RDT&E, ISE, etc.)	87	303	100
5n. Other Misc. Services	89		

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Sub-Total 5a. through 5n.:	70-89		
6. Public Administration	91-97		
6a. Executive and General Government, Except Finance	91		
6b. Justice, Public Order & Safety (includes police, firefighting and emergency management)	92		
6c. Public Finance	93		
6d. Environmental Quality and Housing Programs	95		
Sub-Total 6a. through 6d.			
TOTAL		303	100 %

Source of Data (1.f.) Classification By Industry Data):DCPDS

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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
1. Executive, Administrative and Management	18	5.9
2. Professional Specialty		
2a. Engineers	227	74.9
2b. Architects and Surveyors		
2c. Computer, Mathematical & Operations Research	17	5.6
2d. Life Scientists	1	.3
2e. Physical Scientists	1	.3
2f. Lawyers and Judges		
2g. Social Scientists & Urban Planners		
2h. Social & Recreation Workers		
2i. Religious Workers		
2j. Teachers, Librarians & Counselors		
2k. Health Diagnosing Practitioners (Doctors)		
2l. Health Assessment & Treating(Nurses, Therapists, Pharmacists, Nutritionists, etc.)		
2m. Communications		
2n. Visual Arts		
Sub-Total 2a. through 2n.:	246	81.2

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3. Technicians and Related Support		
3a. Health Technologists and Technicians		
3b. Other Technologists	26	8.5
Sub-Total 3a. and 3b.:	26	8.5
4. Administrative Support & Clerical	13	4.3
5. Services		
5a. Protective Services (includes guards, firefighters, police)		
5b. Food Preparation & Service		
5c. Dental/Medical Assistants/Aides		
5d. Personal Service & Building & Grounds Services (includes janitorial, grounds maintenance, child care workers)		
Sub-Total 5a. through 5d.		
6. Agricultural, Forestry & Fishing		
7. Mechanics, Installers and Repairers		
8. Construction Trades		
9. Production Occupations		
10. Transportation & Material Moving		
11. Handlers, Equipment Cleaners, Helpers and Laborers (not included elsewhere)		
TOTAL	303	100 %

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Source of Data (1.g.) Classification By Occupation Data):DCPDS & NAWC,NRAD HRO'S

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.

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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:	80%
2. Percentage of Military Spouses Who Work Outside of the Home:	60%
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:	33.5%
3d. Employed "Off-Base" - Other Than Federal Employment	66.5%

Source of Data (1.h.) Spouse Employment Data):CODE 04, CDR. RICHARD SHULL, CODE 602, NAWCADWAR
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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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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.

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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):CODE 01C, DEPUTY HEAD OF TRANSITION TEAM

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

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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.

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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):CODE 01C, DEPUTY HEAD OF TRANSITION TEAM

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: **VACANCY RATE IS 5%**

Units for Sale: **UNKNOWN**

Source of Data (3.a. Off-Base Housing: BUCKS COUNTY PLANNING COMMISSION/OFFICE OF ECONOMIC DEVELOPMENT - PER FAMILY HOUSING DIVISION HEAD, CODE 8302

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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	Midle	H i g h	Current	Max. Capacity	Current	Max. Ratio	
BENSALEM	BUCKS	6	3	1	8000	8700	16:1	17:1	NO
BRISTOL BORO	BUCKS	1	1	0	1420	1800	18:1	24:1	NO
BRISTOL TOWNCHIP	BUCKS	9	2	1	7800	7800	16:1	16:1	NO
CENTENNIAL	BUCKS	6	2	1	6360	8000	17:1	17:1	NO
CENTRAL BUCKS	BUCKS	10	4	2	10000	N/A	16:1	N/A	NO
COUNCIL FOCK	BUCKS	9	3	1	10600	14000	16:1	16:1	NO
MORRISVILLE BORO	BUCKS	3	0.5	0	1100	1800	15:1	17:1	NO
NESHAMINY	BUCKS	9	3	1	9742	9742	16:1	16:1	NO
NEWHOPE/XOLEBURY	BUCKS	1		1	811	811	17:1	17:1	NO
PAILSADES	BUCKS	4	1	1	2161	3000	16:1	16:1	NO
PENNRIDGE	BUCKS	5	3	2	6275	N/A	15:1	N/A	NO
PENNSBURY	BUCKS	9	3	2	10000	10000	15:1	15:1	NO
QUAKERTOWN	BUCKS	6	2	1	4608	4608	25:12 5	25:1	NO
ABINGTON	MONTGOMERY	7	1	1	6281	N/A	16:1	N/A	NO
CHELTENHAM	MONTGOMERY	4	2	1	4200	4700	13:1	13:1	NO
COLONIAL	MONTGOMERY	5	1	1	4028	N/A	14:1	N/A	NO
HATBORO/HORSHAM	MONTGOMERY	5	1	1	3760	5000	16:1	N/A	NO
JENKINTOWN	MONTGOMERY	1	1	1	512	N/A	12:1	N/A	NO
LOWER MERION	MONTGOMERY	5	2	2	5422	7925	12:1	N/A	NO
LOWR MORELAND	MONTGOMERY	2		1	1450	N/A	N/A	N/A	NO
METHACTON	MONTGOMERY	N/A	N/A	N / A	N/A	N/A	N/A	N/A	NO
NORRISTOWN	MONTGOMERY	7	3	2	6200	N/A	14:1	N/A	NO
NORTH PENN	MONTGOMERY	11	3	1	11000	N/A	15:1	27:1	NO
PERKIOMENT	MONTGOMERY	2	1	1	2685	2685	22:1	22:1	NO
POTTSGROVE	MONTGOMERY	5	1	1	3000	N/A	17:1	N/A	NO
SOUDERTON	MONTGOMERY	6	2	1	5203	7800	16:1	20:1	NO
SPRINGFIELD	MONTGOMERY	2	1	1	1793	N/A	14:1	N/A	NO
SPRING-FORD	MONTGOMERY	5	1	1	3900	N/A	17:1	N/A	NO
UPPER DUBLIN	MONTGOMERY	3	1	1	3645	N/A	17:1	N/A	NO
UPPER MORELAND	MONTGOMERY	2	1	1	2981	N/A	15:1	N/A	NO
UPPER MERION	MONTGOMERY	4	1	1	3200	4400	13:1	14:1	NO
UPPER PERKIOMEN	MONTGOMERY	2	1	1	3400	3600	19:1	26:1	NO
WISSAHICKON	MONTGOMERY	4	1	1	3723	N/A	14:1	N/A	NO

NOTE: N/A (NOT APPLICABLE) INDICATES DISTRICT DOES NOT HAVE MAXIMUM PUPIL TO TEACHER RATIO.

*** 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):TED ANDERER, NAVSES PHILA, PHILADELPHIA REGION SITE COORDINATOR

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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): FAMILY HOUSING OFFICE, CODE 8302

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 :

**BUCKS COUNTY COMMUNITY COLLEGE
MONTGOMERY COUNTY COMMUNITY COLLEGE
BEAVER COLLEGE
GWYNEDD MERCY COLLEGE
PENN STATE UNIVERSITY (OGONTZ CAMPUS)
DELAWARE VALLEY COLLEGE OF SCIENCE AND TECHNOLOGY
EASTERN COLLEGE**

Source of Data (3.b.3) Colleges): LOCAL PHONE BOOKS

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:

**LOWER BUCKS AREA VOCATIONAL SCHOOL
MIDDLE BUCKS AREA VOCATIONAL SCHOOL
UPPER BUCKS AREA VOCATIONAL SCHOOL
EASTERN MONTGOMERY COUNTY VOCATIONAL SCHOOL
NORTHERN MONTGOMERY COUNTY VOCATIONAL SCHOOL
CHI INSTITUTE
COMPUTER LEARNING CENTER
LYONS TECHNICAL INSTITUTE
ORLEANS TECHNICAL INSTITUTE
PENNCO TECH**

Source of Data (3.b.4) Vo-tech Training): LOCAL PHONE BOOKS

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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>	—
Subway:	—	<u>X</u>
Ferry:	—	<u>X</u>

**Source of Data (3.c.1) Transportation): CODE 01C, DEPUTY HEAD OF TRANSITION
PLANNING TEAM**

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.

PHILADELPHIA 30TH STREET STATION - 18 MILES

**Source of Data (3.c.2) Transportation): CODE 01C, DEPUTY HEAD OF TRANSITION
PLANNING TEAM**

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.

PHILADELPHIA INTERNATIONAL AIRPORT - 25 MILES

**Source of Data (3.c.3) Transportation): CODE 01C, DEPUTY HEAD OF TRANSITION
PLANNING TEAM**

4) How many carriers are available at this airport?

NINE

Source of Data (3.c.4) Transportation): SATO TRANSPORTATION OFFICE

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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 (I-95) IS LOCATED
APPROXIMATELY 10 MILES TO THE EAST**

Source of Data (3.c.5) Transportation): NADC MASTER PLAN-FEB 1991 SECTION V

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.)

**ACCESS TO THE BASE IS VIA STATE RTS. 332 & 132. BOTH
ARE HEAVILY TRAVELED DURING PEAK PERIODS. THERE
ARE FOUR GATES OPEN DURING PEAK RUSH HOURS.**

b) Do access roads transit residential neighborhoods?

NO

c) Are there any easements that preclude expansion of the access road system?

N/A

d) Are there any man-made barriers that inhibit traffic flow (e.g., draw bridges, etc.)?

NO

**Source of Data (3.c.6) Transportation): CODE 01C, DEPUTY HEAD OF
TRANSITION PLANNING TEAM**

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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.

YES, THE CENTER HAS MUTUAL AID AGREEMENTS WITH SEVERAL LOCAL COMMUNITIES INCLUDING WARMINSTER, IVYLAND, HATBORO, WARWICK, NORTHAMPTON AND SOUTHAMPTON. THE BUCKS COUNTY HAZARD RESPONSE TEAM PROVIDES RESPONSE FOR HAZMAT INCIDENTS.

Source of Data (3.d. Fire/Hazmat): CAPT. MYERS, NAWCADWAR FIRE DEPARTMENT

- e. **Police Protection.**

1) What is the level of legislative jurisdiction held by the installation?

PROPRIETORIAL (LOCAL AUTHORITIES HAVE JURISDICTION)

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.

N/A

3) Does the activity have a specific written agreement with local law enforcement concerning the provision of local police protection?

NO. RELATIONSHIP BASED ON LONG-STANDING MUTUAL CONSENT TO PROVIDE REQUIRED ASSISTANCE.

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.

N/A

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.

N/A

Source of Data (3.e. 1) - 5) - Police): CLINT HERBERT, CODE 044

**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.

ELECTRICAL AND NATURAL GAS ARE PROVIDED BY THE LOCAL UTILITY, PECO ENERGY CORPORATION AS PART OF AN AREA WIDE PUBLIC UTILITIES CONTRACT.

SANITARY SEWER SERVICE IS PROVIDED BY THE WARMINSTER MUNICIPAL AUTHORITY.

SOLID WASTE REMOVAL IS ACCOMPLISHED THROUGH A FACILITIES SERVICE CONTRACT WITH A LOCAL WASTE HAULER.

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.

THE CENTER WAS SUBJECT TO POTENTIAL DISRUPTIONS TO UTILITY SERVICE DURING THE SUMMER OF FY93. THE BASE CLOSED VOLUNTARILY FOR ONE DAY IN THE INTEREST OF ENERGY CONSERVATION BUT NOT SIGNIFICANT IMPACT TO WAS FELT ON CENTER OPERATIONS.

Source of Data (3.f. 1) - 3) Utilities):CODE 01C, DEPUTY HEAD OF TRANSITION PLANNING TEAM
--

**UIC: N62269
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**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. PRUDENTIAL INSURANCE CO.	INSURANCE SERVICES	7675
2. MARTIN MARIETTA CORP.	MANAGEMENT/DATA SYSTEMS	5545
3. MERCK & CO., INC.	HUMAN & ANIMAL HEALTH PRODUCTS	5000
4. SMITH KLINE BEECHAM PHARMACEUTICAL R&D	HEALTH CARE PRODUCTS & CLINICAL RESEARCH	4450
5. MAIN LINE HEALTH CO. HEADQUARTERS	HEALTH CARE SERVICES	3850
6. RHONE-POULENC RORER, INC	HUMAN PHARMACEUTICALS	3000
7. UNISYS CORPORATION HEADQUARTERS	COMPUTER & NETWORK INFO SYSTEMS	2600
8. ABINGTON MEMORIAL HOSPITAL	HOSPITAL HEALTH CARE	2477
9. FORD ELECTRONICS AND REFRIGERATION	ELECTRONIC DEVICES FOR AUTO INDUSTRY	2300
10. GENUARDI SUPERMARKETS	RETAIL SUPERMARKET	2003

Source of Data (4. Business Profile): MONTGOMERY COUNTY DEPARTMENT OF COMMERCE AND ECONOMIC PLANNING & BUCKS COUNTY INDUSTRIAL DEVELOPMENT CORPORATION

**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: **SACRED HEART HOSPITAL 870 JOBS**
STANLEY G. FLAGG & CO. 500 JOBS
ALFRED ANGELO 300 JOBS
RICHARDSON & VICKS 365 JOBS
NAVAL AIR WARFARE CENTER AIRCRAFT
DIVISION WARMINSTER (PLANNED
RELOCATION OF 1656 EMPLOYEES TO
PATUXENT RIVER, MD)

b. Introduction of New Businesses/Technologies:
RHONE POULENC RORER 2000 JOBS
STERLING DRUG CO. 2000 JOBS
PHILA NEWSPAPER FAC. 1200 JOBS
PROVIDENCE CORPORATE CENTER
SMITH KLINE BEECHAM CORP HQ
WETHERILL ASSOCIATES

c. Natural Disasters: **NONE**

d. Overall Economic Trends:

UNEMPLOYMENT REMAIN BELOW FEDERAL AND STATE AVERAGES
(MONTGOMERY COUNTY) - NO RESPONSE FROM BUCKS COUNTY ON
THIS ISSUE

Source of Data (5. Other Socio/Econ): MONTGOMERY COUNTY DEPARTMENT OF COMMERCE AND ECONOMIC PLANNING & BUCKS COUNTY INDUSTRIAL DEVELOPMENT CORPORATION

6. Other. Identify any contributions of your activity to the local community not discussed elsewhere in this response. **NONE**

Source of Data (6. Other): NRAD BRAC COORDINATOR & ASSOCIATE EXECUTIVE DIRECTOR OF NAWCAD, WARMINSTER
--

DATA CALL 65
BRAC-95 CERTIFICATION

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

BARTON D. STRONG
NAME (Please type or print)

Barton D. Strong
Signature

COMMANDER
Title

13 July 1994
Date

NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION PATUXENT RIVER, MD
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)

WILLIAM E. NEWMAN
NAME (Please type or print)

W E Newman
Signature

COMMANDER
Title

7/18/94 8/18/94
Date
WEN

NAVAL AIR 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

WILLIAM C. BOWES
NAME (Please type or print)

W C Bowes
Signature

COMMANDER
Title

19 AUG 94
Date

NAVAL AIR SYSTEMS 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 FARNER
NAME (Please type or print)

W A Farners
Signature

Title

8/29/94
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

WILLIAM L. MCCrackEN
NAME (Please type or print)

COMMANDING OFFICER
Title
NAVAL AIR WARFARE CENTER
AIRCRAFT DIVISION WARMINSTER
Activity



Signature

11 Jul '94
Date

Document Separator

DATA CALL 63
FAMILY HOUSING DATA

164

Information on Family Housing is required for use in BRAC-95 return on investment calculations.

Installation Name:	NAWCAD Warminster PA
Unit Identification Code (UIC):	62269
Major Claimant:	NAVAIR

Percentage of Military Families Living On-Base:	22%
Number of Vacant Officer Housing Units:	0
Number of Vacant Enlisted Housing Units:	0
FY 1996 Family Housing Budget (\$000):	0
Total Number of Officer Housing Units:	5
Total Number of Enlisted Housing Units:	22

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.

Enclosure (1)

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)

Jack Buffington
Signature

COMMANDER
Title

7/20/94
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

7/25/94
Date

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

W.A. Waters, CAPT, CEC, USN
NAME (Please type of print)

Commanding Officer
Title

NORTHNAVFACENCOM
Activity


Signature

7/7/94
Date

Document Separator

NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
WARMINSTER

ENVIRONMENTAL DATA CALL: #33
DATA CALL TO BE SUBMITTED TO
ALL NAVY/MARINE CORPS HOST ACTIVITIES

1 JUNE 1994

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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
- 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 tenant activities with UICs that are covered in this response.

WARMINSTER PA

The responses contained herein are based on the following assumptions:

1. The realignment of the Naval Air Warfare Center Aircraft Division Warminster, as dictated by BRAC 91, is complete. NAWCADWAR has relocated to Patuxent River, MD.
2. Property excessed as a result of BRAC 91 has been turned over to the local re-use committee or is in caretaker status under Northern Division, Naval Facilities Engineering Command.
3. NRaD is the host command.
4. The following tenant activities are covered in this response:

Tenant	UIC
NAWCAD Detachment	N00421

Note:

Many of the conclusions contained in the following responses have been drawn from studies completed for the entire base property "formerly" occupied by NAWCADWAR. Thus the source document would have to be reviewed in detail to validate the statements.

Also the relocation of NAWCADWAR to Patuxent River, MD and the subsequent transfer of the host activity to NRaD requires significant changes to the utility plant(s) that supply power and heat to the remaining facilities. These changes are not yet designed so it is impossible even to estimate the environmental impact/effect of the new utility configuration.

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.

S P E C I E S (plant or animal)	Designation (Threatened /Endangered)	Federal/ State	Critical/ Designated Habitat (Acres)	Important Habitat (acres)
NONE				

Source Citation: Natural Resources Management Plan (August 1991)

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.	NO
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.	NO

1c. If the area of the habitat and the associated species have not been identified on base map 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
--	----

Not applicable

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
---	----

Not applicable

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?	NO
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? 07/91	07/91
What percent of the base has been surveyed?	100%
What is the total acreage of jurisdictional wetlands present on your base?	0 Acres

Source Citation: Natural Resources Management Plan (August 1991)

Note: There are some wetlands present in the Shenandoah Woods Family Housing area. The Family Housing area will be transferred to NAS Willow Grove and is not included in these figures.

Note: Additional wetlands surveys are being planned by Northern Division NAVFACENCOM during FY94 and FY95.

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.	NO
--	-----------

3b.

YES/NO

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
--	-----------

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 ¹	Permit Status
	Total	Remaining			

¹ Contents (e.g. building demolition, asbestos, sanitary debris, etc)

Are there any current or programmed projects to correct deficiencies or improve the facility.

4b. If there are any non-Navy users of the landfill, describe the user and conditions/agreements.

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
PA0022420 Outfall 001	750000 GPD	70000 GPD	1.2M GPD	Current	Secondary/1940

List permit violations and discuss any projects to correct deficiencies.

The Navy Sewage Treatment Plant (STP) at Warminster periodically exceeds discharge standards for ammonia and total nitrogen. To correct this problem, a portion of the current wastewater flowing to the plant (20000 GPD) will be sent to the local Public Owned Treatment Plant (POTW) (Warminster Municipal Authority) through a force main pipeline recently constructed. The remaining wastewater will be treated by the secondary plant. By the time the NAWCAD Warminster relocates to Patuxent River, the daily flow will be less than 20000 GPD and the entire amount will be sent to the POTW. The current STP will be closed.

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.

See 4d.

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4f.

Does your base operate an Industrial Waste Treatment Plant (IWTP)?					YES
ID/Location of IWTP	Type of Treatment	Permitted Capacity	Ave Daily Discharge Rate	Maximum Capacity	Permit Status
PA0022420 Outfall 001	Precipitation	750000 GPD	40000 GPD	120000 GPD	Current

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.

Utility system reconfigurations are being designed for the smaller base footprint to be retained by NRAD. One possibility for potable water supply would be to tie into the local municipal system. That decision has not been made as of this date. Currently potable water is supplied by a series of wells. Chlorine is added to the water at each well head. NAWCADWAR holds PA Water Supply permit #0989512 but this will be turned over to the re-use group or to the NAVFAC Caretaker office upon realignment.

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.

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4j.

Does the presence of contaminants or lack of supply of water constrain base operations. Explain.	NO
--	----

It is anticipated that the utility system reconfiguration will provide adequate water supply for the NRAD facilities and their tenants.

4k.

Other than those described above does your base hold any NPDES or stormwater permits? If YES, describe permit conditions.	YES
If NO, why not and provide explanation of plan to achieve permitted status.	

A group stormwater application is currently held by NAWCADWAR. This group application was submitted by Northern Division NAVFACENGCOM for all Navy activities in this region. An individual permit application is being filled out for the NAWCADWAR base. Upon realignment, the permit (if issued) will be transferred to NRAD.

4l.

YES/NO

Does your base have bilge water discharge problem?	NO
Do you have a bilge water treatment facility?	NO

Explain: Not applicable.

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.

Not applicable.

4o. Do capacity limitations on any of the facilities discussed in question 4 pose a present or future limitation on base operations? Explain.

No.

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5. AIR POLLUTION

5a.

What is the name of the Air Quality Control Areas (AQCA) in which the base is located? SOUTHEAST AIR BASIN
Is the installation or any of its OLFs or non-contiguous base properties located in different AQCA's? NO . List site, location and name of AQCA.

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: **NRaD Warminster**

AQCA: **Southeast Air Basin**

Pollutant	Attainment	Non-Attainment	Maintenance	Target Attainment Year ¹	Comments ²
CO	X				
Ozon		X		2005	Severe
PM-10	X				Unclassified
SO₂	X				
NO₂		X		2005	Severe
Pb	X				

¹ Based on national standard for Non-Attainment areas or SIP for Maintenance areas.

² 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	0.088	N/A*	N/A	N/A	0.088
NOx	1.621	N/A	N/A	N/A	1.621
VOC	0.343	N/A	N/A	N/A	0.343
PM10	0.299	N/A	N/A	N/A	0.299

Source Document: Engineering Emissions Study (CY92)

* INFORMATION NOT AVAILABLE

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	0.326	N/A*	N/A	N/A	0.326
NOx	1.497	N/A	N/A	N/A	1.497
VOC	0.342	N/A	N/A	N/A	0.342
PM10	0.326	N/A	N/A	N/A	0.326

Source Document: Engineering Emissions Study w/local calculations

* INFORMATION NOT AVAILABLE

5e. Provide estimated increases/decreases in air emissions (Tons/Year of CO, NOx, 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.

Due to the significant changes in the utility system configurations anticipated with the NRaD footprint, it is impossible to estimate it at this time.

5f. Are there any critical air quality regions (i.e. non-attainment areas, national parks, etc.) within 100 miles of the base?

Warminster is within a severe non-attainment area (Southeast Air Basin) for ozone. National Parks and Historic Sites include:

Delaware National Scenic River
 Delaware Water Gap National Recreation Area
 Edgar Allen Poe National Historic Site
 Eisenhower National Historic Site
 Gettysburg National Military Park
 Hopewell Furnace National Historic Site
 Independence National Historic Park
 Thaddeus Kosciuszko National Memorial
 Upper Delaware Scenic and Recreational River
 Valley Forge National Historic Park.

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?

NAWCADWAR may be able to sell or trade the ERC's depending on decisions to be made by Pennsylvania Department of Environmental Resources. Potential sources on the NAWCADWAR property are the incinerator, generators, boilers, underground and above ground storage tanks, paint spray booths and cabinets.

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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 6. 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	Yes	0	0	0	0	0	0
Hazardous Waste	Yes	0	0	0	0	0	0
Safe Drinking Water Act	Yes	0	0	0	0	0	0
PCBs	Yes	0	0	0	0	0	0
Other (non-PCB) Toxic Substance Control Act	N/A*	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	0	0	0	0	0	0
Solid Waste	Yes	0	0	0	0	0	0
Oil Pollution Act	N/A*	0	0	0	0	0	0
USTs	Yes	0	0	0	0	0	0
Other	N/A*	0	0	0	0	0	0
Total		0	0	0	0	0	0

Provide a separate list of compliance projects in progress or required, with associated cost and estimated start/completion date.

Estimates based on facilities remaining after the NAWCADWAR relocation to Patuxent River, MD. Items with * are not applicable.

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) **\$270**. Are asbestos survey costs based on encapsulation, removal or a combination of both? **Removal**

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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
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 (DBOF)	\$77K	\$79K	\$89K	\$100K	\$92K	\$83K	\$166K	\$166K
TOTAL	\$77K	\$79K	\$89K	\$100K	\$92K	\$83K	\$166K	\$166K

These costs are based on a percentage of the current NAWC basewide costs. The percentage used is identical to that used in the current NAWC-NRaD host tenant agreement. It is not possible to allocate costs at this time for the facilities remaining after the NAWC relcoates. Outyear costs are assumed to be similar to current year costs.

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?	YES
Is your base an NPL site or proposed NPL site?	YES

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 ¹	Groundwater Contaminated?	Extends off base?	Drinking Water Source?	Cost to Complete (\$M) / Est. Compl. Date	Status ² / Comments
1	CERCLA	YES	YES	YES	\$1.227 / FY96	RD
2	CERCLA	YES	YES	YES	\$1.227 / FY96	RD
3	CERCLA	YES	YES	YES	\$1.292 / FY96	RD
5	CERCLA	YES	NO	YES	\$0.503 / FY96	RD
7	CERCLA	YES	NO	YES	\$0.491 / FY96	RD

¹ Type site: CERCLA, RCRA corrective action (CA), UST or other (explain)

² Status = PA, SI, RI, RD, RA, long term monitoring, etc.

The Record of Decision signed between the Navy and EPA in September 1993 requires long term monitoring (30 years). The estimated costs associated with this long term monitoring is:

Site 1: \$840K
 Site 2: \$840K
 Site 3: \$840K
 Site 5: \$580K
 Site 7: \$580K

7c. Have any contamination sites been identified for which there is no recognized/accepted remediation process available? List.

NO.

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7d.

Is there a groundwater treatment system in place?	NO
Is there a groundwater treatment system planned?	YES

State scope and expected length of pump and treat operation.

Pump and treat operation will address shallow groundwater contamination. Expected length of operation: 30 years.

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.

NO.

7g. Does your base operate any conforming storage facilities for handling **hazardous waste**? If YES, describe facility, capacity, restrictions, and permit conditions.

NO. If hazardous wastes are generated, it will fall under the Small Quantity Generator exclusion.

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.	NO
--	----

7j. Have any base operations or development plans been restricted due to Installation Restoration considerations?

NO.

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7k. List any other hazardous waste treatment or disposal facilities not included in question 7b above. Include capacity, restrictions and permit conditions.

Not applicable.

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
Main Base	30	Warminster, PA

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.)		30
Total Undeveloped (areas that are left in their natural state but are under specific environmental development constraints, i.e.: wetlands, endangered species, etc.)		Wetlands: None
		All Others:
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		None
Total Undeveloped land considered to be without development constraints		None
Total Off-base lands held for easements/lease for specific purposes		None
Breakout of undeveloped, restricted areas. Some restricted areas may overlap:	ESQD	None
	HERF	None
	HERP	None
	HERO	None
	AICUZ	None
	Airfield Safety Criteria	None
	Other	N/A

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 Acres.**

8d. What is the date of your last AICUZ update? **1983. (A Noise Survey was done in September 1989).** Are any waivers of airfield safety criteria in effect on your base? Y/N Summarize the conditions of the waivers below.

Waivers existed for the former NAWCADWAR runway (which will be excessed).

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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
N/A			

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)
N/A					

8g. Summarize planned projects through FY 1997 requiring **new channel or berthing area** dredged depths, include location, volume and depth.

N/A

8h.

Are there available designated dredge disposal areas for maintenance dredging material? List location, remaining capacity, and future limitations.	N/A
Are there available designated dredge disposal areas for new dredge material? List location, remaining capacity, and future limitations.	N/A
Are the dredged materials considered contaminated? List known contaminants.	N/A

8.i. List any requirements or constraints resulting from consistency with **State Coastal Zone Management Plans**.

N/A

8j. Describe any **non-point source pollution problems** affecting water quality ,e.g.: coastal erosion.

N/A

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.	NO
---	----

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 acre 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.

9d. List any **future/proposed laws/regulations or any proposed laws/regulations** which will constrain base operations or development plans in any way. Explain.

Pennsylvania may require additional testing or removals of tanks which are not now regulated.

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

WILLIAM L. MCCRACKEN
NAME (Please type or print)

COMMANDING OFFICER
Title

NAVAL AIR WAREFARE CENTER AIRCRAFT
DIVISION WARMINSTER
Activity


Signature

6-1-94
Date

DATA CALL 33
BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 8 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."

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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

BARTON D. STRONG
NAME (Please type or print)

Barton D. Strong
Signature

COMMANDER
Title

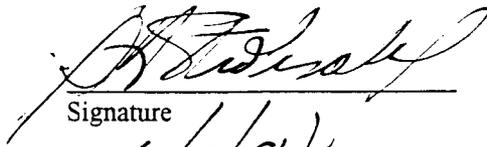
21 May 1994
Date

NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION PATUXENT RIVER, MD
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)

G. H. Strohsahl, RADM, USN
NAME (Please type or print)


Signature

Commander
Title

6/7/94
Date

Naval Air Warfare Center
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

W. C. Bowes, VADM, USN
NAME (please type or print)


Signature

Commander
Title

29 JUN 94
Date

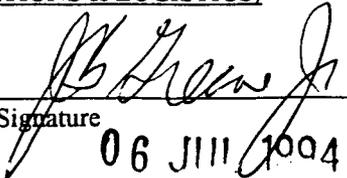
Naval Air Systems Command
Activity

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)

J. B. GREENE, JR.

NAME (Please type or print)
ACTING


Signature

Title

06 JUL 1994
Date

Department of Defense

1995 Base Realignment and Closure T&E Joint Cross-Service Group Data Guidance

March 31, 1994

T&E JOINT CROSS-SERVICE GROUP DATA GUIDANCE

SECTION 1: GUIDANCE, STANDARDS, AND ASSUMPTIONS

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Capabilities

1.1.B Guidance for Military Department Data Collection

1.1.C Guidance for Military Department Data Analysis

1.2 ASSUMPTIONS

1.3 FUNCTIONAL AREAS

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1.3.C Armaments/Weapons

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- SECTION 3: MEASURES OF MERIT (Cont'd)**
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 - 3.4.A Directed Energy**
 - 3.4.B Rocket/Missile/Bomb Systems**

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T&E JOINT CROSS-SERVICE GROUP

SECTION 1: GUIDANCE, STANDARDS, AND ASSUMPTIONS

The Military Departments will use the following information for data collection on each facility that has performed T&E and is still capable of performing T&E within the three functional areas of air vehicles, electronic combat, and armaments/weapons for any component (hardware or software), subsystem, system, or platform. Guidance is provided on conducting a cross-service analysis.

1.1 GUIDANCE

1.1.A Guidance for Identification of Test and Evaluation (T&E) Facilities/Capabilities

1.1.A.1 Scope

All DoD installations will be examined to identify facilities that have and are still capable of performing T&E within the three functional areas of air vehicles, electronic combat, and armaments/weapons.

All facilities (tenant and host on the installation) owned by DoD are within scope of this examination.

The Military Departments and Defense Agencies are responsible for submitting the data.

The scope of this examination will include T&E facilities that are funded from any funding source and appropriation (RDT&E, procurement, O&M, training, etc.).

The Naval Air Warfare Center Human Centrifuge/Dynamic Flight Simulator (DFS) supports the Air Vehicle functional area. It is, in the truest sense of the word, a multi-use facility and can perform both R&D and developmental T&E. In a typical year, the facility will conduct approximately 40% R&D, 40% T&E and 20% Other (training, FMS, etc.).

1.1.A.2 T&E Facilities/Capabilities

The definition of a T&E facility/capability to be used for purposes of data collection will be a set of DoD-owned or controlled property (air/land/sea space) or any collection of equipment, platforms, ADPE or instrumentation that can conduct a T&E operation and provide a deliverable T&E product.

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The T&E facility can support T&E of components through systems platforms or missions in the following functional areas: air, land, sea, space, C4I, armaments/weapons, electronic combat, nuclear effects, chem/bio, propulsion, environmental effects, guidance, and materials.

The T&E facilities will be grouped under one of the following test facility categories: modeling and simulation, measurement, integration laboratory, hardware-in-the-loop, installed systems, or open air (See Appendix A for definitions). It will typically consist of all of the following components: data collection sensors and instrumentation, data reception and storage, data processing, and data display and reporting.

The scope will include T&E operations from all funding sources (RDT&E, procurement, O&M, training, etc.).

Test Facility Category	NAWCADWAR Facility
Modeling and Simulation	Human Centrifuge/Dynamic Flight Simulator (DFS)

The DFS facility is unique in the world in its ability to recreate the G-Force environment associated with the flight maneuvers of high performance military aircraft (e.g.-F-18, F-14, F-16, F-15, F-22, etc.) No other simulator has the ability to generate multi-axis g-forces with the onset values (13 g's per second) which approximates today's aircraft capabilities.

The category under which this facility should be grouped is modeling and simulation. The facility is not only a unique centrifuge-based device, but a high fidelity flight simulator which is capable of producing high fidelity graphics using 6 degree-of-freedom aerodynamic models and 3-dimensional Defense Mapping Agency (DMA) data bases.

1.1.B Guidance for Military Department Data Collection

The Military Departments will use the T&E facility/capability definitions included within this data call package. In your descriptions of facility technical capabilities include programmed investments/upgrades in Military Department or Defense Agency 1995 Future Years Defense Plan (FY95 FYDP) in support of the President's Budget (PB95). When calculating capacity data, use the guidelines/definitions included in this package.

See Tab A for requested facility information.

Data will be collected on all facilities/capabilities that are within the scope defined in section 1.1.A. Data will be collected using Appendix A, Data Forms and Instructions

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1.1.C Guidance for Military Department Data Analysis

The Military Departments will use the 95 FYDP as the baseline to calculate costs and savings. Address closure/realignment opportunities at the functional T&E and facility levels. Retain essential technical capabilities for core competencies and technologies. Consider consolidation of subfunctions such as centralized maintenance of common platforms, instrumentation, data processing. Consider retention of difficult-to-replace essential geographic assets (e.g. airspace, ground/terrain, climates, seaports) without regard to "ownership". Recognize adaptability to future technologies. Do not consider environmental cleanup costs/difficulties for closure or downsizing a facility/capability.

1.2 ASSUMPTIONS

Cross-service analyses will use the following assumptions:

1.2.A T&E workload is not a direct function of force structure, but is related to the RDT&E budget and acquisition funding.

1.2.B The FYDP is considered certified data. Information from non-DoD activities will not be used as a basis for analyses.

1.2.C At least one test facility/capability will be required to address any technology in use or nearing maturation. Geographic assets (airspace, ground space, sea space, terrain, climate, physical security) must be adequate. Closure or realignments of laboratories, maintenance depots, and training activities could necessitate consolidation with T&E facilities/capabilities.

1.2.D Evaluation of developing technologies and systems will follow a process that involves a progression of test facilities/capabilities ranging from modeling and simulation, measurements, through hardware-in-the-loop, system integration laboratories, installed-systems, to open air/range testing.

1.2.E Potential for internetting facilities/capabilities can be considered in workload projections if investments to provide internetting capability are programmed.

1.2.F With regard to outsourcing, it will be assumed that work currently performed in-house will remain in-house and that work currently outsourced will remain outsourced.

1.2.G With regard to foreign military sales (FMS), it will be assumed that the FMS workload will continue at FY93 levels into the future (straight-lined).

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1.3 FUNCTIONAL AREAS

Three functional areas of T&E facilities/capabilities were selected for specific emphasis during cross-service analyses following analysis of the T&E Reliance study areas. These three areas -- air vehicles, electronic combat, and armament/weapons -- show the greatest potential for cross-service consolidation opportunities; others are predominately or nearly Military Department unique.

The DFS supports the Air Vehicle functional area. Testing involves the pilot-vehicle interaction during high g maneuvers in controlled (air combat, attack missions) or uncontrolled flight (stalls, departures, spins). Any type of crew systems equipment can be tested. This includes equipment that the pilot wears, touches or looks at. Examples of crew equipment that is worn includes helmets, g-suits, oxygen masks and regulators or other breathing apparatus. Equipment that the pilot touches includes stick and throttle assemblies, activation switches, etc. Equipment that the pilot looks at includes head-up and head-down cockpit displays, instruments and navigational aids.

DFS testing exposes the pilot to environmental stressors including g-forces, physical and mental workload. The pilot's performance is then measured using established criteria to determine quantifiable improvements from new equipment or procedures.

Test Facility Category	NAWCADWAR Facility	T&E Functional Area
Modeling and Simulation	Human Centrifuge/Dynamic Flight Simulator (DFS)	Air Vehicle

Over-arching measures of merit have been developed that are applicable to many T&E facilities/capabilities across the three functional areas. These measures generally relate to the overall demographics of the facility/capability at an installation and are important to evaluating a facility/capability for: overall condition; potential to support current or future contingency, mobilization and future missions; additional workload; and overall Mission Essentiality. Additional data specific to the three functional areas will also be collected. For the purpose of this data collection, the three functional areas are defined as follows:

1.3.A Air Vehicles

This functional area includes facilities involved in the testing of all air vehicles/subsystems/components whether fixed wing or rotary wing and test of major sub-systems (e.g., avionics, engines, and sensors). This includes flight testing and the testing involving pre- and post-flight preparation and processing of the air vehicle. Unmanned air vehicles and cruise missiles are included.

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1.3.B Electronic Combat (EC) Systems

This functional area includes facilities involved in the testing of stand-alone electronic combat systems and electronic combat subsystems that are normally integrated into other weapon systems. It includes the testing of systems or subsystems that have as their primary mission threat warning, testing of systems that provide countermeasures in the RF (radio frequency) spectrum against radars and other RF sensors, systems that provide countermeasures that are used against sensors in the electro-optical or infrared spectrum as well as testing of electronic and C3 countermeasures.

1.3.C Armaments / Weapons

This functional area includes facilities involved in the testing of the weapons portion of a weapon system. In those cases where the weapon system is composed almost exclusively of the weapon, it may include system-level and platform integration testing. In other cases, it addresses just the weapon subsystem (e.g., guidance and control, propulsion, warheads, and airframe), while the testing of the weapon system's vehicle is in another functional area.

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SECTION 2: CAPACITY & TECHNICAL RESOURCES

Use the forms and accompanying instructions in appendix A to provide answers for this section.

See Tab A for requested facility information.

2.1 WORKLOAD

Annual workload will be reported in units as follows: for open air ranges involving flight testing, report test hours and missions. For all other T&E facilities direct labor hours and test hours must be reported; if available, missions must be reported. If an estimation of test hours based on direct labor hours is necessary, refer to the instructions for Determination of Unconstrained Capacity on page 28.

2.1.A Historical Workload

-2.1.A.1 What amount of workload have you performed each year from FY86-93? Use the Historical Workload Form provided in Appendix A of this package.

	FY86	FY87	FY88	FY89	FY90	FY91	FY92	FY93	FY94
Total Work Years	N/A	N/A	8	12	8	14	11	12	14
T&E Work Years	N/A	N/A	3.2	4.8	3.2	5.6	.44	.48	5.6

FY86& FY87 workload information is not available. This facility existed as a subset of another cost center and as such this information could not be determined.

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2.1.B Forecasted Workload

-2.1.B.1 Identify all appropriations (by program element) that generated a requirement for testing or test support, or are expected to generate a requirement for testing/test support in your Military Department (by functional areas of air vehicles, electronic combat (EC), armament/weapons, and other test) for FY92, FY93, and each year in the FY95 FYDP. The Military Departments will provide total funding amounts appropriated for all PEs identified in each functional area shown above.

Functional Area	Appropriation	FY92 Total \$K	FY93 Total \$K	FY94 Total \$K	FY95 Total \$K	FY96 Total \$K	FY97 Total \$K	FY98 Total \$K	FY99 Total \$K
Air Vehicle	6.1 R&D	0	0	0	0	2000	2000	2000	2000
	6.2 R&D	400	400	400	500	0	0	0	0
	6.4 R&D	630	630	650	550	1000	1000	1000	1000
	6.5 R&D	400	400	450	450	400	400	400	400
	OMN	100							

-2.1.B.2 What amount of test work was performed at your facility (in workyears by functional areas of air vehicles, electronic combat, armament/weapons, other tests, and other) in FY92 & FY93?

100% Air Vehicle FY92 .44 wyrs. FY93 .48 wyrs.

-2.2.A Unconstrained capacity is the maximum capacity of this facility, assuming manpower and consumable supplies (excluding utilities) are unlimited, but allowing for expected downtime (maintenance, weather, darkness (daylight), holidays, etc.). Provide your response by filling out the Determination of Unconstrained Capacity Form in accordance with the instructions in Appendix A.

See Tab A for requested facility Information

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-2.2.B Is this capacity limited by the physical characteristics of the facility itself, safety or health considerations, commercial utility availability, etc?

There does exist a limitation on the use of adjoining space to increase the size of the structure. This detachment will become a tenant of the NRAD detachment of NCCOSC in FY96. Any addition in capacity would be the result of additional equipment resulting in the capability for simultaneous testing and mission work.

2.3 TECHNICAL RESOURCES

-2.3.A Does the facility have a specified war-time or contingency role established in approved war plans? Yes/no.

No

-2.3.B Does the facility provide a T&E product or service, without which irreparable harm would be imposed on the test mission of the host installation?

The T&E function is a portion of the workload on the facility. Without it there would be more time available for other kinds of work.

-2.3.B.1 On the test mission of any other activity?

No

-2.3.B.2 On any other mission deemed critical to the operational effectiveness of the armed forces of the United States?

The DFS provides a unique capability not found anywhere else in the world. No other centrifuge based device can fully replicate the performance characteristics of today's aircraft.

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SECTION 3: MEASURES OF MERIT

This section relates the measures of merit and the required data to the four criteria that have been established for Military Value. The four military value (MV) criteria are:

- CRITERION 1: The current and future mission requirements and the impact on operational readiness of the Department of Defense's total force.
- CRITERION 2: The availability and condition of land, facilities and associated airspace at both the existing and potential receiving locations.
- CRITERION 3: The ability to accommodate contingency, mobilization, and future total force requirements at both the existing and potential receiving locations.
- CRITERION 4: The cost and manpower implications.

3.1 OVER-ARCHING MEASURES OF MERIT

The over-arching measures of merit are listed with accompanying questions (or data requirements) intended to elicit standard information upon which the cross-service analyses can be based, and on which the Joint Cross-Service Groups can base their reviews of the Military Department analyses. Additional specific measures of merit are shown under individual functional areas. The numbers in parentheses () before each measure of merit indicate the BRAC selection criteria for military value.

3.1.A. Interconnectivity (MV I) - Measure of Merit: *Extent of linkage of this facility with other facilities and assessment of single-node failure potential.*

-3.1.A.1 What percentage of total test workload in FY93 involved the real-time or near real time exchange of data or control with another facility? List the facilities you interconnect to for test and identify how many are simultaneous activities. Identify these as to whether they are internal and external to the site.

There have been discussions concerning a link with the Manned Flight Simulator (MFS) at NAWCADPAX. Currently the DFS is self-contained.

-3.1.A.2 If your facility were to be closed, would there be an impact on other facilities to which you are connected? Yes/no. If yes, explain.

No

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3.1.B Facility Condition (MV II) - Measure of merit: *Current and planned status of the T&E facilities for supporting assigned test missions.*

Fill out the Facility Condition Form in Appendix A in accordance with the instructions.

See Tab A

3.1.C Environmental and Encroachment Carrying Capacity (MV II) - Measure of Merit: *Extent of current and future potential environmental and encroachment impacts on air, land, and sea space for testing.*

None, the DFS is a self-contained indoor facility that has no environmental and encroachment impacts on air, land or sea space.

- **3.1.C.1** Do you have limiting (current or future) environmental and/or encroachment characteristics associated with the installation/facility?
Yes/no. If yes, explain.

None, the DFS is a self-contained indoor facility that has no environmental and encroachment impacts on air, land or sea space.

- **3.1.C.2** How much could workload be increased before this limit would be reached? Express your answer as a percentage of your current workload.

None, the DFS is a self-contained indoor facility that has no environmental and encroachment impacts on air, land or sea space.

- **3.1.C.3** Do you currently operate under temporary permits of an environmental nature, or voluntary agreements (including treaties) of any sort that deal with the environment? If so, when do they expire? Please describe.

No

- **3.1.C.4** What is the total population within a 50 mile radius? 100 mile radius? 150 mile radius? 200 mile radius?

Population: 50 Mile radius is 2,000,000
100 Mile radius is 12,000,000
150 Mile radius is 20,000,000
200 Mile radius is 30,000,000

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- **3.1.C.5** Identify the commercial air/land/sea traffic routes, public use of air/land/sea space, and frequency of use for each that affects or could affect mission accomplishment in your air, land, or sea space.

None, the DFS is a self-contained indoor facility that has no environmental and encroachment impacts on air, land or sea space.

- **3.1.C.5.A** How many test missions per year are canceled due to commercial or public use?

None

- **3.1.C.6** What is the number of test missions that have been canceled due to encroachment in each of the last two years?

None

3.1.D Specialized Test Support Facilities and Targets (MV I) - Measure of Merit: *Extent to which specialized test support facilities and targets are available.*

The DFS is a self-contained indoor facility and does not require additional specialized support facilities or targets.

-**3.1.D.1** Do you have specialized facilities are required to support you in conducting your test operations at your facility (e.g. Aerial delivery load build-up facilities; parachute drying towers/packing facilities; paratroop support facilities; specialized fuel storage and delivery systems; mission planning facilities; corrosion control, painting, washing facilities; and specialized maintenance facilities such as avionics intermediate shops)? Yes/no. If yes, please describe.

No

-**3.1.D.2** Are specialized targets required to support this facility? Yes/no. If yes, explain.

No

-**3.1.D.2.A** Have the specialized targets been validated? Yes/no. If yes, by whom?

Not Applicable

3.1.E Expandability (MV III) - Measure of Merit: *Extent to which an installation/facility is able to expand to accommodate additional workload or new missions.*

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-3.1.E.1 Other than the expandability inherent in unconstrained capacity, discussed earlier, are there any special aspects of this facility that enhance its ability to expand output within each T&E functional area? Yes/no. If yes, explain.

Yes. Linking to the MFS at PAX would increase test capabilities. Additional computer resources to drive multiple aircraft cockpits in real-time would increase capacity.

-3.1.E.1.A Can you accept new T&E workload different from what you are currently performing? Yes/no. If yes, identify by T&E functional area and test type.

No

-3.1.E.2 Are airspace, land, and water areas--adjacent to areas under DoD control--available and/or suited for physical expansion to support new missions or increased footprints? Yes/no. If yes, please explain.

Yes. There are 4.5 acres in the current footprint.

-3.1.E.3 Is the facility equipped to support secure operations? Yes/no. If yes, to what level of classification (Confidential, Secret, Top Secret, Special Access Required)?

Not presently but can be made secure to SECRET level.

-3.1.E.4 Are there any capital improvements underway or programmed in the 95 FYDP, that would change your capacity/capability? Yes/no. If yes, explain.

Yes. Additional computer capacity is planned for FY95.

3.1.F Uniqueness (MV I) - Measure of Merit: *Extent to which the facility is one-of-a kind.*

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-3.1.F.1 Is this a one-of-a-kind facility within the DoD? Yes/no. If yes, describe.

Yes. The DFS is a national asset. It has been in operation for 40 years and still has no equal in the world. The DFS out performs all other centrifuge devices, such as the Dynamic Environment Simulator (DES) at Wright-Patterson, AFB and the centrifuges at Brooks AFB, Holloman AFB and NAS LeMoore as well as those in other countries. All these centrifuges are acceleration application devices, and none are capable of the high G-onset rate (10-15 G/sec) and multi-axis G capability so significant in evaluating pilot performance in F/A-18, F-14, F-15, F-16, F-22, or future generations of military and civilian aircraft. The DFS is the only flight simulator in the world capable of duplicating the flight dynamics and flying qualities of the aforementioned aircraft and realistically imparting the cockpit dynamics of Navy X-31, NASA F/A-18 HARV and other high angle of attack or thrust vectored aircraft.

-3.1.F.1.A Within the US Government? Yes/no. If yes, describe.

Yes. See above.

-3.1.F.1.B Within the US? Yes/no. If yes, describe.

Yes. See above.

-3.1.F.2 Are you currently providing support to DoD users outside your Military Department? Yes/no. If yes, indicate percentage of total workload in FY92 and FY93 by Military Department.

No

3.1.G Available Air, Land, and Sea Space (MV II) - Measure of Merit: *Extent to which controlled test ranges satisfy weapon system test requirements.*

-3.1.G.1 How many square miles of air, land, and sea space are available to support test operations?

Not Applicable, the DFS is a self-contained facility that has no dependence on air, land or sea space.

-3.1.G.2 Who owns and or controls the land under the restricted airspace you use?

There is no airspace associated with this facility.

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-3.1.G.3 How much of this is Restricted Airspace, and what altitude limits are associated with the restricted areas?

Not Applicable, the DFS is a self-contained facility that has no dependence on air, land or sea space.

-3.1.G.4 Do you have special use airspace other than supersonic airspace? Yes/no. If yes, for what types of test (e.g. terrain following radar)? Dimensions? Will it support simultaneous users? Yes/no.

No

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-3.1.G.5 Is the airspace over land or water? List the number of square miles over each.

Not Applicable, the DFS is a self-contained facility that has no dependence on air, land or sea space.

-3.1.G.6 Identify known or projected airspace problems that may prevent accomplishing your mission.

None

-3.1.G.7 What is the maximum straight line segment in your airspace in nautical miles?

Not Applicable, the DFS is a self-contained facility that has no dependence on air, land or sea space.

-3.1.G.8 What public airspace have you used for overflight of weapons systems in the past? What was the nature of those tests? Do you anticipate being able to use that same public airspace for similar tests in the future? Yes/no.

No

3.1.H Geographic/Climatological Features (MV II) - Measure of Merit: *Extent to which types of climatic/geographic conditions represent world-wide operational conditions.*

This is a self-contained indoor facility that is not dependent on climatic/geographic conditions other than operator access under extreme weather condition (e.g. snowstorms).

-3.1.H.1 Describe the topography and ground cover/vegetation within your test airspace (include nap-of-the-earth capability). Identify all of the following that apply: mountains, forest/jungle, cultivated lowland, swamp/riverine, desert, and sea. State the area of each in square miles.

Not Applicable, the DFS is a self-contained facility that has no dependence on air, land or sea space.

-3.1.H.2 Are there features of the local geology or soil conditions that enhance or inhibit any types of test?

Bedrock within 6 feet of the topsoil is essential to support the foundation of this centrifuge.

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-3.1.H.3 Did you have to go to other geographical locations to satisfy test requirements? Yes/no and explain. If yes, provide as a percent of overall workload per year for the past 8 years.

No

-3.1.H.4 What is the number of days per year the average temperature is below 32 degrees F? Between 32 and 95 degrees? Above 95 degrees?

**60 days below 32 degrees
275 days between 32-95 degrees
30 days above 95 degrees**

-3.1.H.5 What is the number of days per year the average relative humidity is below 30%? Between 30 and 80%? Above 80%?

**30 days below 30%
300 days between 30-80%
35 days above 80%**

-3.1.H.6 What is the number of test missions per year (1985 - 1993) canceled due to weather?

1-2 Snow days per year

This is a self-contained indoor facility that is not dependent on climatic/geographic conditions other than operator access under extreme weather condition (e.g. snowstorms).

-3.1.H.7 What is the number of test days per year (1985 - 1993) canceled due to weather?

1-2 Snow days per year

This is a self-contained indoor facility that is not dependent on climatic/geographic conditions other than operator access under extreme weather condition (e.g. snowstorms).

-3.1.H.8 What is the number of days per year the visibility is less than 1 mile? Between 1 and 3 miles? Greater than 3 miles?

Not Applicable, the DFS is a self-contained facility that has no dependence on air, land or sea space.

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-3.1.H.9 What is the average number of flying days available per year for flight test? Provide historical average from the past eight years.

Not Applicable, the DFS is a self-contained facility that has no dependence on air, land or sea space.

-3.1.H.10 What percentage of the time are your test operations restricted due to weather?

0.5%

This is a self-contained indoor facility that is not dependent on climatic/geographic conditions other than operator access under extreme weather condition (e.g. snowstorms).

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3.2 AIR VEHICLES

This functional area includes facilities involved in the testing of all air vehicles/subsystems/components whether fixed wing or rotary wing and test of major subsystems (e.g., avionics, engines, and sensors). This includes flight testing and the testing involving pre- and post-flight preparation and processing of the air vehicle. Unmanned air vehicles and cruise missiles are included.

3.2.A Supersonic Airspace (MV II) - Measure of Merit: *Extent of range size to support weapon system requirements.*

DFS is a self-contained indoor facility.

-3.2.A.1 Do supersonic corridors or areas exist? Yes/no.

No

-3.2.A.2 Where are they located relative to your airfield?

Not Applicable. DFS is a self-contained indoor facility.

-3.2.A.3 At what altitude (upper and lower altitude)?

Not Applicable, DFS is a self-contained indoor facility.

-3.2.A.4 Over land or water? What size and shape (length and width)?

Not Applicable, DFS is a self-contained indoor facility.

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-3.2.A.5 Are there restrictions you must observe to use this space? Yes/no. If yes, explain.

No

-3.2.A.6 What is the maximum number of simultaneous users?

Not Applicable, DFS is a self-contained indoor facility.

-3.2.B Airfield and Facility Characteristics (MV II) - Measure of Merit: *Extent of air vehicle infrastructure to support T&E operations.*

-3.2.B.1 Provide a brief description of your airfield and support facilities, to include the following: number and azimuth of runways, elevation, runway length (excluding overrun), overrun length, terminal and/or landing aids, arresting cable (yes/no, type), ramp area (in square feet), construction material (runway and ramps), load capability, and hangar space.

DFS is a self-contained indoor facility.

-3.2.B.2 How close and how many emergency runways or airfields are in your area of operation?

DFS is a self-contained indoor facility.

-3.2.B.3 Where is your airfield situated relative to working areas (airspace) for supporting test operations?

DFS is a self-contained indoor facility.

-3.2.B.4 What makes your airfield unique or at least suited for supporting test operations?
DFS is a self-contained indoor facility.

-3.2.B.5 Is there a size, weight, maintenance or mission limitation that would affect test operations? If so, describe the limitation(s).

DFS is a self-contained indoor facility.

-3.2.B.6 Including hangers and ramp space, how many fighter size aircraft could you support? Large multi-engine aircraft? Rotary wing? UAV? Cruise missiles?

Not Applicable, DFS is a self-contained indoor facility.

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-3.2.C Test Operations (MV II) - Measure of Merit: *Extent of T&E operations that the airspace can accommodate.*

Not Applicable. No airspace is associated with this facility. It is a self-contained indoor facility.

-3.2.C.1 What types of air vehicle testing (fixed wing, rotary wing, unmanned vehicles, and cruise missiles) can be supported? (e.g. performance, handling qualities, fatigue life, static, wheels and brakes, physical integration with external stores or avionics).

Not Applicable. No airspace is associated with this facility. It is a self-contained indoor facility.

-3.2.C.2 Do ground support facilities exist for pre-flight checkout or rehearsal of test missions?

Not Applicable. No airspace is associated with this facility. It is a self-contained indoor facility.

-3.2.C.3 What kinds, numbers of aircraft and mix can be supported (manned and unmanned)?

Not Applicable. No airspace is associated with this facility. It is a self-contained indoor facility.

-3.2.C.4 Does UAV and or rotary wing operations pose any limitation on other types of missions? If yes, explain.

Not Applicable. No airspace is associated with this facility. It is a self-contained indoor facility.

-3.2.C.5 What sorts of missions (e.g. air-to-air, air-to-ground and refueling) can be flown within local airspace?

Not Applicable. No airspace is associated with this facility. It is a self-contained indoor facility.

-3.2.C.6 What is the maximum number of simultaneous missions you can support that require telemetry?

Not Applicable. No airspace is associated with this facility. It is a self-contained indoor facility.

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-3.2.C.7 What is the largest number of simultaneous test missions you have supported in your airspace?

Not Applicable. No airspace is associated with this facility. It is a self-contained indoor facility.

-3.2.C.8 Identify the number, types, and owners of aircraft at your installation.

There are no aircraft associated with this facility.

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3.3 ELECTRONIC COMBAT

This functional area includes facilities involved in the testing of stand-alone electronic combat systems and electronic combat subsystems that are normally integrated into other weapon systems. It includes the testing of systems or subsystems that have as their primary mission threat warning, testing of systems that provide countermeasures in the RF (radio frequency) spectrum against radars and other RF sensors, systems that provide countermeasures that are used against sensors in the electro-optical or infrared spectrum as well as testing of electronic and C3 countermeasures.

3.3.A Threat Environment (MV I) - Measure of Merit: *Extent to which the capability satisfies weapon system requirements.*

Not Applicable. This facility does no Electronic Combat Work.

-3.3.A.1 What is the number of threats simulated?

Not Applicable. This facility does no Electronic Combat Work.

-3.3.A.2 How many simultaneous threats can be simulated? What type (e.g. AI, AAA, SAM)? What is maximum signal density? Average density? What power level? What band? Radiated or injected?

Not Applicable. This facility does no Electronic Combat Work.

-3.3.A.3 Are the threat software models and simulators (software/hardware) validated? Yes/no. If yes, by whom?

No. This facility does no Electronic Combat Work.

-3.3.A.4 Do you conduct open loop testing? Reactive? Closed loop? Yes/no for each.

No. This facility does no Electronic Combat Work.

-3.3.A.5 What is the threat representation (fidelity) and density?

Not Applicable. This facility does no Electronic Combat Work.

-3.3.A.6 Are you capable of simulating land threats? Sea threats? Combined land/sea threats? Yes/no. If yes, describe.

No. This facility does no Electronic Combat Work.

-3.3.A.7 What geographic dispersion can be simulated?

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-3.3.A.7.A Threat lay down? **Not Applicable. This facility does no Electronic Combat Work.**

-3.3.A.7.B Representative distance? **Not Applicable. This facility does no Electronic Combat Work.**

-3.3.A.8 Are the threats moveable (i.e.dynamic) within a test scenario? relocatable to new scenarios? yes/no

No. This facility does no Electronic Combat Work.

-3.3.A.9 Is the facility interlinked with off-site threats? Yes/no. If yes, how are you linked?

No. This facility does no Electronic Combat Work.

-3.3.A.10 Is there a limit on simultaneous users? Yes/no. If no, explain.

No. This facility does no Electronic Combat Work.

3.3.B Test Article Support (MV II) - Measure of Merit: *Extent to which test support satisfies weapon system test requirements.*

Not Applicable. This facility does not perform test support for weapon system test requirements.

-3.3.B.1 Is there a size, weight, or other limitation on test operations the facility can support? Yes/no. If so, identify the limits and measures to remove them.

No. This facility does not perform test support for weapon system test requirements.

-3.3.B.2 What is the number of simultaneous countermeasures that can be evaluated?

Not Applicable. This facility does not perform test support for weapon system test requirements.

-3.3.B.3 What range of spectra can be tested and evaluated?

Not Applicable. This facility does not perform test support for weapon system test requirements.

-3.3.B.4 What are the available spectra?

Not Applicable. This facility does not perform test support for weapon system test requirements.

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-3.3.B.5 Do you have a scene generation capability? Yes/no. If yes, describe.

No. This facility does not perform test support for weapon system test requirements.

3.4 ARMAMENTS / WEAPONS

This functional area includes facilities involved in the testing of the weapons portion of a weapon system. In those cases where the weapon system is composed almost exclusively of the weapon, it may include system-level and platform integration testing. In other cases, it addresses just the weapon subsystem (e.g., guidance and control, propulsion, warheads, and airframe), while the testing of the weapon system's vehicle is in another functional area.

3.4.A Directed Energy (MV II) - Measure of Merit: *Extent to which the facility satisfies directed energy weapon system test requirements.*

This includes testing of all types of directed energy weapons.

Not Applicable. This facility does not support directed energy weapons testing.

-3.4.A.1 Do you currently test directed energy weapon systems? Yes/no.

No. This facility does not support directed energy weapons testing.

If yes, explain. Describe the power source(s) you have available. What is your maximum downrange distance?

Not Applicable. This facility does not support directed energy weapons testing.

3.4.B Rocket / Missile / Bomb Systems (MV II) - Measure of Merit: *Extent capability satisfies weapon system test requirements.*

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This includes the testing of all types of rocket, missile, and bomb systems at the system/subsystem/component level, both stand alone and integrated into the launch platform. This includes testing of air-to-air, air-to-surface, and surface-to-air missiles.

Not applicable. This facility does not support weapon system test requirements for rocket/missile/bomb systems.

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-3.4.B.1 Ground Space

-3.4.B.1.A What is the area in square miles of the land and water space which you can use to conduct tests of live rocket, missile, or bomb systems?

Not applicable. This facility does not support weapon system test requirements for rocket/missile/bomb systems.

-3.4.B.1.B How many separate and distinct land and water test areas are available to conduct tests of live weapons? List them and the size of each in acres.

Not applicable. This facility does not support weapon system test requirements for rocket/missile/bomb systems.

-3.4.B.1.C What are the maximum ranges (nautical miles) you can test, by type weapon?

Not applicable. This facility does not support weapon system test requirements for rocket/missile/bomb systems.

3.4.B.2 Test Operations

-3.4.B.2.A For each of your land and water ranges, how many test missions were scheduled in FY92 and FY93 that were required to use safety footprints comparable to those required for the following types of weapons:

Not applicable. This facility does not support weapon system test requirements for rocket/missile/bomb systems.

- Unguided 2000 pound-class ballistic weapon
 - live?
 - inert?

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- Guided weapon (e.g., GBU-24 class)
 - live?
 - inert?
- Stand-off weapon (e.g., AGM-130 class)
 - live?
 - inert?
- Short-range missile (e.g., AIM-9)
 - below 5000 feet MSL
 - between 5000 and 20,000 feet MSL
 - above 20,000 feet MSL
- Long-range missile (e.g., AIM-120)
 - below 5000 feet MSL
 - between 5000 and 20,000 feet MSL
 - above 20,000 feet MSL

-3.4.B.2.B Were flight termination systems required? Yes/no. **No. This facility does not support weapon system test requirements for rocket/missile/bomb systems.**

-3.4.B.2.C If no missions were scheduled in a category, give the reason(s).

Not applicable. This facility does not support weapon system test requirements for rocket/missile/bomb systems.

-3.4.B.2.D Were any scheduled missions canceled before the mission, or terminated/aborted during the mission because of encroachments into the safety footprint? Yes/no. If yes, how many per year.
No. This facility does not support weapon system test requirements for rocket/missile/bomb systems.

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APPENDIX A - DATA FORMS AND INSTRUCTIONS

1. Form, General Information

Facility/Capability: Enter the descriptive title for the facility/capability. Avoid using acronyms and abbreviations unless the title defines the acronym. Example: Guided Weapons Evaluation Facility (GWEF).

Origin date: Enter today's date in the format MM/DD/YY.

Military Department: Allowable entries include "N" for Navy, "A" for Army, and "AF" for Air Force. If the facility/capability is managed by an "Other Government Agency" (e.g. ARPA, DNA, ACC) enter the appropriate Agency name.

Organization/Activity: Enter the name (with acronym) for the field activity. Example: White Sands Missile Range (WSMR).

Location: Enter the location where the facility/capability is physically located (installation, city or other common name).

Unit Identification Code (UIC): Enter the UIC.

T&E Functional Area: Enter the single area this facility/capability primarily supports: Air Vehicles, Armament/Weapons, Electronic Combat, or Other.

T&E Test Facility Category: Enter the facility category based on the following definitions:

(1) **Digital Models and Computer Simulations (DMS)**- Those models and simulations which either provide a simulated test environment or representations of systems, components, and platforms. DMSs are used throughout the development and test process, as analytical tools, as well as tools to drive or

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control electronic and other environmental stimuli provided, the test articles on Open Air Ranges (OARs), Installed Systems Test Facilities (ISTFs), Hardware in the Loop Test Facilities (HITLs), Integration Laboratories (ILs), and Measurement Facilities (MFs).

(2) Measurement Facilities (MF)- Those facilities used to provide a specialized test environment and/or data collection capability. MFs may be ground based laboratories or open air facilities (often located at or part of OARs).

(3) Integration Laboratories (IL)- Those facilities designed to support the integration and test of various systems and components that will be installed in a host platform. ILs are generally platform specific or unique. However, the simulated stimuli and data collection capabilities required by ILs are often common with those required by HITLS and ISTFs.

(4) Hardware-In-The-Loop (HITL)- Those facilities which provide capabilities to test systems or their components at various stages of development (e.g., brassboard, breadboard, prototype, preproduction, production). HITLs provide stimuli and data collection capabilities to permit test and evaluation of a system/component independent of the host platform.

(5) Installed Systems Test Facilities (ISTF)- Ground based test facilities (usually chambers) that allow test of systems and weapons as installed in the combat platform. ISTFs provide simulated test environments and stimuli and data collection capabilities for the test article(s).

(6) Open Air Ranges (OAR)- Those facilities which consist of controlled or restricted areas to support the test of platforms/systems in a real world, dynamic environment. They are instrumented with data collection, time-space-position information, positive control of test participants, and real or simulated targets and threats as appropriate.

Percentage Use: Enter percentage of time, based on hours, the facility is used to support each of the following (total must sum to 100%):

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(1) Test and Evaluation (T&E)- Any facility that is accountable to Military Department and/or OSD T&E management oversight. Operation and sustainment of these facilities are typically funded from 6.5 or procurement program elements. Facilities in this category were developed to support developmental and/or operational test and evaluation and focus on the evaluation of system safety, technical performance, environmental (climatic, electromagnetic, etc.) effects, sustainability and operational suitability, maturity of production processes, and compliance with system specifications and quality standards.

(2) Science & Technology (S&T)- Any facility that is accountable to Military Department and/or OSD S&T management oversight. Operation and sustainment of these facilities are typically funded from 6.1, 6.2, and 6.3a program elements. Facilities in this category were developed to support experimental studies leading to enhanced understanding of new phenomena for new military applications as well as efforts directed toward the solution of problems in the physical, behavioral, and social sciences.

(3) Developmental Engineering (DE)- Any facility that is accountable to Military Department and/or OSD Research, Development and Engineering or acquisition management oversight. Operation and sustainment of these facilities are typically funded from 6.3b through 6.4 or procurement program elements. Facilities in this category were developed to support proof-of-principle and engineering development of systems.

(4) In-Service Engineering (IE)- Any facility that is accountable to Military Department and/or OSD logistics management oversight. Operation and sustainment of these facilities are typically funded from 6.7 or Operations and Maintenance (O&M) program elements. Facilities in this category were developed to support the maintenance facilities. These facilities tend to be system peculiar capabilities to conduct checkouts of the system/subsystems after they have undergone a modification, upgrade or improvement.

(5) Training and Doctrine (T&D)- Any facility that is accountable to Military Department and/or OSD training and doctrine management oversight. Operation and sustainment of these facilities are typically funded from O&M program elements. Facilities in this category were developed to support the

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training and proficiency of operational forces and/or the development of new tactics, doctrine or force structure concepts.

(6) Other - Any work outside the above.

Breakout by T&E Functional Area: For each of the above categories (T&E, S&T, DE, IE, T&D, Other) enter percentage of time facility is used to support Air Vehicles, Armament/Weapons, Electronic Combat, or Other. Total of breakout areas must sum to top line percentage.

2. Form, Technical Information

Facility Description: Enter a brief description of the facility, including the mission statement.

Interconnectivity/Multi-Use of Facility: Describe any linking/interconnectivity with other T&E facilities. Include physical and/or data linkages (bandwidth, data rate, etc.). Describe any unique characteristics or multiple use of the resource (e.g., operating by rotating crew, availability of resource dependent on ..., equipment will be obsolete by ..., etc.)

Type Tests Supported: Enter specific types of tests accomplished by the Facility (e.g., electromagnetic compatibility, radar cross section, missile miss distance, air-to-air radar simulation, etc).

Summary of Technical Capabilities: Describe technical capabilities at your facility to include:

Instrumentation/Assets: Enter instrumentation and other assets (e.g., jammers, target generators, recording equipment, computer support equipment) associated with the resource.

Provide fact sheets, not to exceed two pages.

Keywords: Enter any keywords (spelled-out with acronyms) associated with

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functions and capabilities of the facility (e.g., electromagnetic interference/electromagnetic compatibility (EMI/EMC), anechoic chamber, radar cross section (RCS)).

3. Form, Additional Information

Additional Information Form. Enter facility name. Provide personnel numbers for FY93, FY94, and each year in the FY95 FYDP broken out according to officers, enlisted, civilians and contractors. Enter total area square footage of indoor space, test area square footage of indoor space used for T&E purposes, and list office space square footage separately. Tonnage of equipment is the weight of all equipment associated with this facility. Volume of equipment is the volume of all equipment associated with this facility. Annual maintenance cost is self explanatory. Moving costs are estimates for packing equipment at the losing site and reassembly, calibration, etc at the receiving site, not including transportation costs. Capital equipment investments are the current improvement and modernization funds as well as any programs funds earmarked for equipment purchase.

4. Form, Facility Condition

Facility/Capability: Enter the descriptive title for the facility/capability.

Age: Indicate the age of the facility/capability as of the date on the General Information Form.

Replacement Value: Enter the replacement value for the facility/capability. Indicate whether this includes the replacement cost for the equipment.

Maintenance and Repair Backlog: Enter the total dollar amount of the backlog for maintenance and repair items.

Date of Last Upgrade: Date of the last major upgrade to the facility.

Nature of Last Upgrade: Describe the purpose and capability increase from

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the last major upgrade. Indicate the date this upgrade became available for use.

Major Upgrades Programmed: Enter information on each of the major upgrades that are programmed. Indicate the total programmed amount and provide a summary description of the upgrade.

5. Form, Historical Workload

Use this form to report the workload performed at this facility each year from FY86-93.

Facility/Capability Title: Enter the descriptive title for the facility/capability. Avoid using acronyms and abbreviations unless the title defines the acronym. Example: Guided Weapons Evaluation Facility (GWEF).

T&E Functional Area: For each of these functional areas (Air Vehicles, Armament/Weapons, Electronic Combat, Other Test, and Other), enter direct labor hours, test hours, and/or missions for FY86 through FY93. For open air ranges involving flight testing, report test hours and missions. For all other T&E facilities direct labor hours and test hours must be reported; if available, missions must be reported. If an estimation of test hours based on direct labor hours is necessary, refer to the instructions for Determination of Unconstrained Capacity on page 28.

6. Form, Determination of Unconstrained Capacity

Annual Hours of Downtime, 1: If the facility were required to operate continuously for 24 hours a day, seven days a week, 52 weeks a year, determine the number of hours per day the facility can reasonably operate if it is not constrained by personnel strength? Consider your facilities, equipment, and instrumentation fixed at current levels.

1. Add up the total hours of downtime per year for maintenance, weather, darkness (daylight), holidays, etc. Enter in line 1.

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Average Downtime Per Day, 2: Divide line 1 by 365 to get the average downtime per day. Fill in at line 2.

Average Hours Available Per Day, 3: Subtract line 2 from 24 hours to get the average number of hours per day the facility is available for test. Fill in at line 3.

Analyze your historic workload mix to determine the average number and type of tests that have been run simultaneously at your facility. Determine the maximum number of tests that can be run simultaneously if there is no limit to personnel authorizations. Enter the following data from your analysis

Test Types, 4: Enter in column 4 the name of the type of test.

Tests at One Time, 5: List the number of each type of test that can be conducted simultaneously in column 5.

Workload Per Test

Per Facility Hour, 6: List the workload (reported in units as follows: For open air range flight testing, report workload in flight hours and numbers of missions. For all other test facility categories, including open air range other than flight testing, report workload in direct labor hours) represented by each hour the test is run. Do this at line 6.

From the historic workload analysis, determine the average workload per facility hour represented by the average or "typical" test. In the row titled "TYPICAL", in column 5, enter the number of these "typical" tests that can be run in addition to those already listed above. Enter the workload per "typical" test per facility hour in column 6. To estimate test hours from direct labor hours for the Historic Workload Form, divide the facility workload by this number (the number of direct labor hours per "typical" test per facility hour) and enter in the test hour block on the Historic Workload Form.

Workload Per

Facility Hour, 7: Multiply column 5 by column 6. Enter in column 7. Total column 7.

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Unconstrained

Capacity Per Day, 8: Multiply the total from column 7 by line 3 to get the unconstrained capacity per average day. Enter in line 8.

Annual

Unconstrained

Capacity, 9: Multiply line 8 by 365 to get the unconstrained capacity per year for the facility. Enter on line 9.

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Revised 8/15/94

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES /EQUIPMENT CAPABILITY FORM

Technical Center Site	NAWC AD WAR influx
Facility /Equipment Nomenclature or Title	Human Centrifuge/Dynamic Flight Simulator (DFS)

1. **State the Primary purpose(s) of the facility/equipment.** The Human Centrifuge located at the NAWCADWAR is the largest and most capable man-rated centrifuge in the world. It has a 50-foot arm, a 16,000 horsepower direct-drive motor, and is able to reach a maximum of 40 G's with a 1000 pound payload. Between 1.5 G and 15 G's, the centrifuge can produce an average g-onset rate of 10 G/second with an maximum instantaneous G-onset of 13 G/second. The crewstation for the centrifuge is enclosed in a 10-foot spherical gondola mounted in a high speed dual-gimbal system. The movable gimbal system enables multi-directional G forces (Gx, Gy, Gz) to be applied on the pilot/subject and is responsive enough to permit closed-loop pilot control. This feature has enabled the development of a unique real-time sustained-G flight simulation capability known as the Dynamic Flight Simulator (DFS).

The DFS consists of a full-scale aircraft cockpit with active instruments and controls which is mounted inside the centrifuge gondola along with a computer generated outside visual scene. The control system for the DFS incorporates a high fidelity 6 degree-of-freedom aircraft model which drives the cockpit instruments and displays as well as the centrifuge motion system. The DFS has been used successfully for manned testing of new crew equipment, advanced cockpit configurations, and to assess the performance of current and future high performance aircraft designs. The facility is a unique national asset which enables human performance testing in a realistic, high-G-flight environment, with the safety and repeatability of a ground-based laboratory.

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 considered to be immovable. A permanent staff of operator/maintenance personnel reside at Warminter to support the facility.

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3. Provide the replacement value of the facility /equipment. Report the facility /equipment costs separate from any building and utilities that may be integral to the facility/equipment.

Replacement value of the equipment: Centrifuge, computers, cockpits \$50M

Replacement value of the building only: \$3M (10,000 sq. ft x \$300/sq. ft.)

4. Provide the gross weight and cube of the facility/equipment.

The relocation of this facility would entail moving the centrifuge arm, gondola, and motor; the cockpits, computers, and mechanical support equipment; and the generators and electrical powerhouse and control equipment. This equipment weighs approximately 500,000 pounds and would occupy 50,000 cubic feet. To move or replicate the main motor foundation would require 1,253,000 pounds of concrete. Note: these numbers represent a "best guess" since a formal A&E estimate is not available.

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power. The DFS requires a maximum of 20,000 amps, 600 VDC power. This power is generated by a dedicated powerhouse which draws electricity from the local power grid. A 13.8 KV transformer with substation supplies the powerhouse generators.

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.) The DFS is anchored into bedrock at the Warminster site. Approximately 8,700 cu ft (1,253,000 pounds) of concrete form the foundation. The centrifuge chamber is completely shielded with copper plates.

7. State any environmental control requirements for the facility/equipment (i.e. temperature, humidity, air scrubbing) The facility requires an independent, redundant environmental control system separate from the building HVAC for the computer room and control center.

8. Indicate if this facility 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 extremely difficult to relocate primarily because of the requirement for a bedrock foundation. The main centrifuge motor generates over 1,000,000 foot-pounds of torque requiring a substantial concrete foundation within the bedrock. Less than 20% of the U.S. has this type of stable geological structure. It may be possible to replicate a similar capability with a smaller centrifuge but the physiological measurement accuracy would be impaired. If the facility is lost to the Navy, other centrifuges (government, foreign, or commercial) could be utilized but only for less sophisticated types of tests. There is no way to replace the DFS capabilities for flight dynamics, flying qualities and pilot performance evaluations in high risk test scenarios.

9. Indicate how and when the facility /equipment was transported and or constructed at this site. This facility was located at the Warminster site after an extensive survey of available U.S. Navy installations. No other potential site had bedrock supporting it. A

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contract was awarded in 1946 for the construction of the centrifuge building, centrifuge device and electrical powerhouse. The contract was completed in 1950 and the facility was official dedicated in 1952. The DFS underwent major upgrades in 1960-62 (new arm, gondola, analog computer control, building annex) and 1980-84 (visual display, F-14 cockpit, digital computer control).

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. Acceleration Research, human performance/medical evaluations, G-Tolerance Improvement training for TACAIR aircrewmembers, crew systems RDT&E, out-of-control flight/spin simulation, thrust vectored aircraft simulation, full environment mission simulation.

11. Provide the historical utilization average for the past five years fiscal years (1989-1993) define the unit of measure used. Historical utilization is 67% of available days. Remaining 33% of time is used for maintenance, repairs and upgrades. (Assumes 260 days available per year.)

12. Provide the projected utilization data out to FY 1997. Utilization of the centrifuge motion base should remain at 67% or higher through 1997. An on-going computer upgrade will allow multiple cockpits to be operated simultaneously which will effectively double the utilization in a fixed base mode. New programs including Female Pilot Accommodation, Cockpit Performance Metrics, and Full Mission Environment Simulation will be possible with the improved computer capability.

13. What is the approximate number of personnel used to operate the facility/equipment? 30 people (including medical support) are required to operate the facility.

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14. What is the approximate number of people needed to maintain the equipment.? Five people are sufficient to keep the facility in a "ready to operate" status but this number is inadequate to operate or upgrade the device. Thirty people are used when the facility is operating at "full" capacity. This assumes that several projects are on-going in various stages of planning, installation, operation and documentation.

15. Provide one 8 1/2 x 11 black and white photo of the facility/equipment.
Attached.

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GENERAL INFORMATION

Facility/Capability Title: **HUMAN CENTRIFUGE/DYNAMIC FLIGHT SIMULATOR** Origin Date: **1952**

Service: N	Organization/Activity: CREW SYSTEMS FACILITY DETACHMENT	Location: WARMINSTER , PA					
T&E Functional Area: AIR VEHICLES	UIC = 62269						
T&E Test Facility Category: MODELING AND SIMULATION							
	<u>T&E</u>	<u>S&T</u>	<u>D&E</u>	<u>IE</u>	<u>T&D</u>	<u>OTHER</u>	=100%
PERCENTAGE USE:	40		40			20	
BREAKOUT BY T&E FUNCTIONAL AREA (%)							
Air Vehicles:	40		40			20	100%
Armament/Weapons:							
EC:							
Other:							
Total in Breakout Must Equal "Percentage Use" On First Line							

TECHNICAL INFORMATION

Facility/Capability Title: **HUMAN CENTRIFUGE/DYNAMIC FLIGHT SIMULATOR**

Facility Description; Including mission statement: The DFS consists of a full-scale aircraft cockpit with active instruments and controls which is mounted inside the centrifuge gondola along with a computer generated outside visual scene. The control system for the DFS incorporates a high fidelity 6 degree-of-freedom aircraft model which drives the cockpit instruments and displays as well as the centrifuge motion system. The DFS has been used successfully for manned testing of new crew equipment, advanced cockpit configurations, and to assess the performance of current and future high performance aircraft designs. The facility is a unique national asset which enables human performance testing in a realistic, high-G-flight environment, with the safety and repeatability of a ground-based laboratory.

Interconnectivity/Multi-Use of T&E Facility: DFS is currently self contained but the possibility exists to link to the Manned Flight Simulator (MFS) at NAWCADPAX.

Type of Test Supported: Manned testing of new crew equipment, advanced cockpit configurations, and assessment of the performance of current and future high performance aircraft designs.

Summary of Technical Capabilities: The Human Centrifuge located at the NAWCADWAR is the largest and most capable man-rated centrifuge in the world. It has a 50-foot arm, a 16,000 horsepower direct-drive motor, and is able to reach a maximum of 40 G's with a 1000 pound payload. Between 1.5 G and 15 G's, the centrifuge can produce an average g-onset rate of 10 G/second with an maximum instantaneous G-onset of 13 G/second. The crewstation for the centrifuge is enclosed in a 10-foot spherical gondola mounted in a high speed dual-gimbal system. The movable gimbal system enables multi-directional G forces (Gx, Gy, Gz) to be applied on the pilot/subject and is responsive enough to permit closed-loop pilot control. This feature has enabled the development of a unique real-time sustained-G flight simulation capability known as the Dynamic Flight Simulator (DFS).

Keywords: G-Tolerance, Dynamic Crew Station, Real-time sustained-G flight simulation.

ADDITIONAL INFORMATION

Facility/Capability Title: Human Centrifuge/Dynamic Flight Simulator

PERSONNEL

	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Officer	1	1	1	1	1	1	1
Enlisted	4	4	4	4	4	4	4
Civilian	25	25	25	25	25	25	25
Contractor	5	5	5	5	5	5	5
Total	35	35	35	35	35	35	35

Total Square Footage: 75100 sq. ft.

Test Area Square Footage: 30000 sq.ft.

Office Space Square: 45,100 sq.ft.

Tonnage of Equipment: 250 tons

Volume of Equipment: 50000 cu ft.

Annual Maintenance Cost: approx. \$500K

Estimated Moving Cost: approx. \$3-4M

CAPITAL EQUIPMENT INVESTMENT

FY93	FY94	FY95	FY96	FY97	FY98	FY99
\$1,177K	\$1,116K	\$.428K	\$.450K	\$.450K	\$.450K	\$.450K

FACILITY CONDITION

FACILITY/CAPABILITY TITLE:

AGE: 42 yrs.

REPLACEMENT VALUE: \$18.4M approx \$10M structure, \$\$8.4 M equipment

MAINTENANCE AND REPAIR BACKLOG: none

DATE OF LAST UPGRADE: 12/93

NATURE OF LAST UPGRADE: **Generator Upgrade - The electrical Generator was reconditioned which provided power to the centrifuge motor. Also, constructed an f/a-18 simulated cockpit for the centrifuge gondola.**

MAJOR UPGRADES PROGRAMMED **None at this time**

1. UPGRADE TITLE:

TOTAL PROGRAMMED AMOUNT:
SUMMARY DESCRIPTION:

2. UPGRADE TITLE:

TOTAL PROGRAMMED AMOUNT:
SUMMARY DESCRIPTION:

HISTORICAL WORKLOAD

FACILITY/CAPABILITY TITLE:

		FISCAL YEAR							
T&E FUNCTIONAL AREA		86	87	88	89	90	91	92	93
AIR VEHICLES	DIRECT LABOR	14000	14000	14000	21000	14000	24500	19250	21000
	TEST HOURS	1393	1393	1393	1393	1393	1393	1393	1393
	MISSIONS	8	9	8	12	9	14	13	14
EC	DIRECT LABOR								
	TEST HOURS								
	MISSIONS								
ARMAMENT/WEAPONS	DIRECT LABOR								
	TEST HOURS								
	MISSIONS								
OTHER T&E	DIRECT LABOR								
	TEST HOURS								
	MISSIONS								
OTHER	DIRECT LABOR								
	TEST HOURS								
	MISSIONS								

DETERMINATION OF UNCONSTRAINED CAPACITY

FACILITY/CAPABILITY TITLE: **Human Centrifuge/Dynamic Flight Simulator**

ANNUAL HOURS OF DOWNTIME 1 **2190**
 AVERAGE DOWNTIME PER DAY (LINE 1 ÷ 365) 2 **6**
 AVERAGE HOURS AVAILABLE PER DAY (24 - LINE 2) 3 **18**

TEST TYPES 4	TESTS AT ONE TIME 5	WORKLOAD PER TEST PER FACILITY HOUR 6	WORKLOAD PER FACILITY HOUR 7	UNCONSTRAINED CAPACITY PER DAY (LINE 3 X TOTAL) 8
Centrifuge Spinning	1	1	1	36
Fixed Base Cockpit Simulation	1	1	1	ANNUAL UNCONSTRAINED CAPACITY 13,140
				9
<u>"TYPICAL"</u>				
		TOTAL		

100 Air CRB 8/24/14

DATA CALL 13
BRAC-95 CERTIFICATION

I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

NEXT ECHELON LEVEL (if applicable)

RAYMOND A. DUDDERAR
NAME (Please type or print)

R A Dudderar
Signature

ACTING COMMANDER
Title

8/16/94
Date

NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION PATUXENT RIVER, MD
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)

WILLIAM E. NEWMAN
NAME (Please type or print)

W E Newman
Signature

COMMANDER
Title

8/18/94
Date

NAVAL AIR 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

WILLIAM C. BOWES
NAME (Please type or print)

W C Bowes
Signature

COMMANDER
Title

29 AUG 94
Date

NAVAL AIR SYSTEMS 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)

W A Earner
Signature

Title

7/1/94
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

DAVID A. ERSEK
NAME (Please type or print)
CAPT, USN, ACTING COMMANDING OFFICER
Title
NAVAIRWARCENACDIVWAR
Activity


Signature
AUG 16 1994
Date



DEPARTMENT OF THE NAVY
NAVAL AIR WARFARE CENTER AIRCRAFT DIVISION
PATUXENT RIVER MARYLAND 20670 5304

5400
Ser AD07/1066

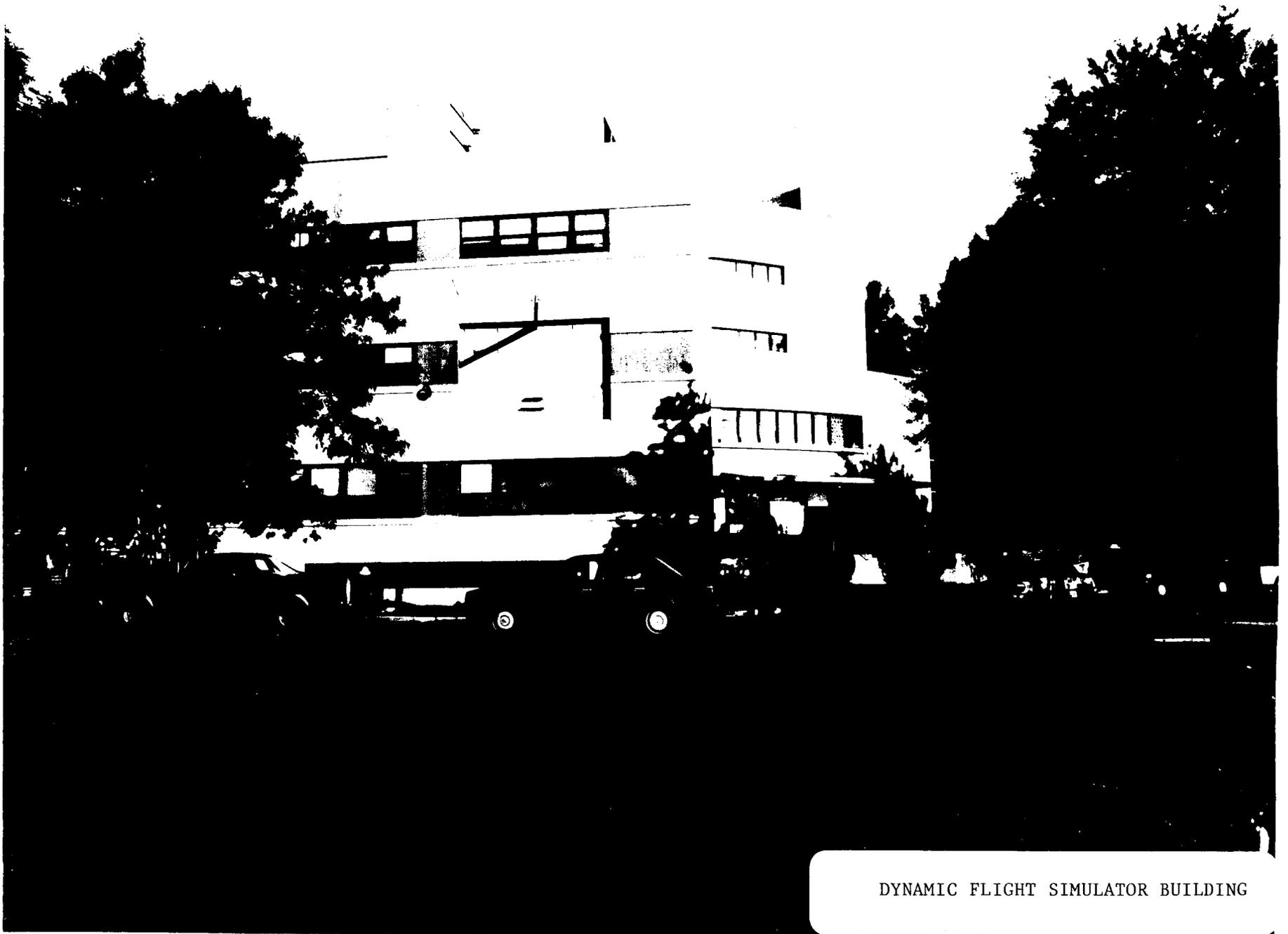
AUG 15 1994

From: Commander, Naval Air Warfare Center Aircraft Division,
Patuxent River, MD 20670-5304
To: Commander, Naval Air Warfare Center, 1421 Jefferson Davis
Highway, Arlington, VA 22243-6000
Subj: RELEASE OF BASE REALIGNMENT AND CLOSURE DATA CALL IN THE
ABSENCE OF THE COMMANDER

1. During the period from 0900, 15 August 1994 until 1800,
17 August 1994, I will be on temporary additional duty.
2. Captain Raymond A. Dudderar, USN, will be Acting Commander.
In my absence, he is authorized to release the completed Base
Realignment and Closure Data Call, and provide the certification
for the data call.
3. My point of contact at Division Headquarters is Mr. Stuart B.
Simon, Code AD07. He can be reached at commercial (301) 826-1122
or DSN 326-1122.


BARTON D. STRONG

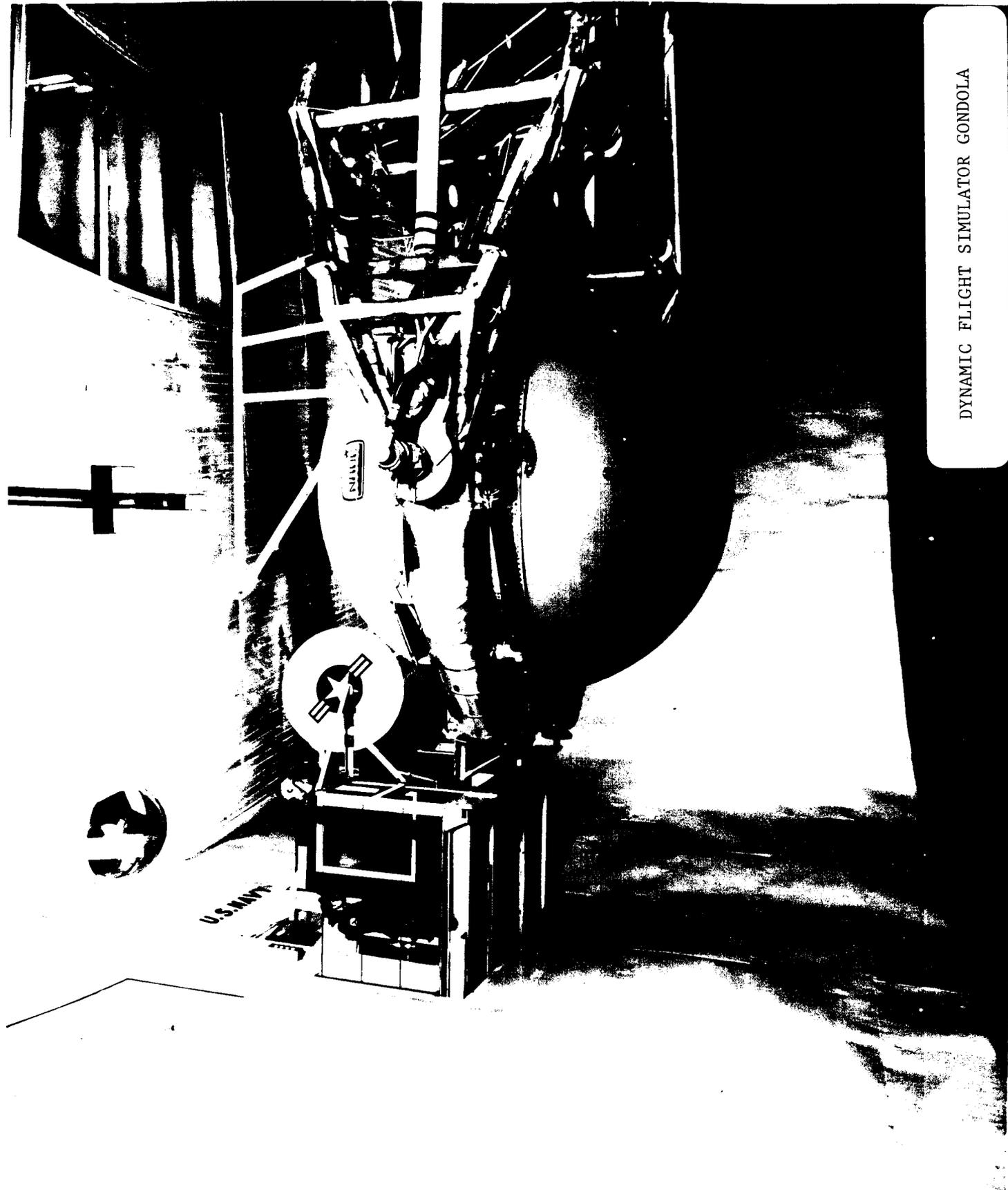
Distribution:
CONAWCAD Indianapolis
CONAVAIRENGSTA Lakehurst
CONAWCAD Warminster
CONAWCAD Trenton
CONAWCTSD Orlando
COMNAWCAD Patuxent River
NAWCAD Patuxent River (CT00)
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NAWCAD Trenton (Code 07B)
NAWCTSD Orlando (Code 503)
CONAS, Patuxent River



DYNAMIC FLIGHT SIMULATOR BUILDING



DYNAMIC FLIGHT SIMULATOR



DYNAMIC FLIGHT SIMULATOR GONDOLA

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MILITARY VALUE DATA CALL
TECHNICAL CENTERS

Category	NAWCAD
Technical Center Site	CREW SYSTEMS FACILITY DETACHMENT
Location/Address	WARMINSTER, PA

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