

CAPACITY ANALYSIS:  
DATA CALL #4 WORK SHEET FOR  
TECHNICAL CENTER or LABORATORY: Indian Head Division Det.  
Yorktown, VA

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**TAB A:** Ship Berthing Capacity

**TAB B:** Operational Airfield Capacity

**TAB C:** Depot Level Maintenance Capacity

**TAB D:** Ordnance Storage Capacity

\*\*\*\*\*If any responses are classified, attach a separate classified annex.  
\*\*\*\*\*  
7 April 1994

**1. Historical and Projected Workload.** Use Tables 1.1, 1.2, 1.3 & 1.4 below to provide historical and currently projected workload data for your activity in terms of funding and workyears. Assume previous BRAC closures and realignments are implemented on schedule. Dollar amounts should be in then-year dollars. Workyears should be separated for in-house government efforts and on-site contractor work.

a. Use Table 1.1 to provide data on your site.

b. Use Table 1.2 to provide data on your Detachments that did not receive this Data Call directly. Compile the information from all of these Detachments into one table. Attach a list of the titles & UIC's of the Detachments included in the table.

c. For FY's 1993 thru 1997 provide a breakout of the "Total Funds Budgeted" line showing the appropriation and amounts of funding budgeted from your major customers. Major resource Sponsors are defined as, but not limited to, all systems commands, ONR, SSPO, CNO, FLT CINCs, Other DON, Other DOD by Department, Other Federal Government, All other. Use Table 1.3 to report this breakout for your site. Use Table 1.4 to report this breakout for your compiled Detachments that did not receive this Data Call directly. Provide separate tables for FY's 1993 thru 1997.

Use the following definitions when providing data for the tables below:

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

In-House government efforts or In-House workyears: Includes both military and civil servant employees

On-Site Contractor workyears: Actual or estimated workyears performed by support contractors with workyears defined consistent with the definition used in the President's budget.

On-site Contractors: Those contractors that occupy space directly on the site on nearly a full time basis.

Total Funds Budgeted: The funds used as inputs to the President's Budget.

Civilian Personnel On-Board: Full Time Permanent employees (FTP).

**Table 1.1 Historical and Projected Workload for Indian Head Division Det. Yorktown  
(UIC N47652)**

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	3657	N/A	0	58.69	58.58	0
87	3630	N/A	0	56.74	50.50	0
88	3818 <sup>1</sup>	1413.90 <sup>2</sup>	0	61.33 <sup>1</sup>	50.80 <sup>3</sup>	0
89	4890	4822.87	89.88	50.00	51.80	0
90	4211	4387.50	0	51.10	53.50	0
91	3776	5772.9	0	53.50	51.80	0
92	4259	5178.98	25.75	59.10	50.30	0
93	4333	4928.90	15.00	45.80	48.20	0
94	5783			48.44		
95	10457			55.20		
96	7249			49.86		
97	5869			43.89		

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<sup>1</sup> These figures based on budget submissions made to WPNSTA Yorktown prior to move to Naval Ordnance Station, Indian Head, MD.

<sup>2</sup> This figure is based on actual funds received by NOS Indian Head and does not include funds received by WPNSTA Yorktown, VA which was unavailable.

<sup>3</sup> This figure is a total of data collected from WPNSTA Yorktown and NOS Indian Head, MD.

**Table 1.1 Historical and Projected Workload for Indian Head Division Det. Yorktown  
(UIC N47652)**

<b>Fiscal Year</b>	<b>Total Funds Budgeted (\$K)</b>	<b>Total Funds Received w/o Direct Cite (\$K)</b>	<b>Direct Cite Funds Received (\$K)</b>	<b>Budgeted Wkys</b>	<b>Actual In-House Wkys</b>	<b>Actual Onsite Contract Wkys</b>
86	3657	N/A	0	58.69	58.58	0
87	3630	N/A	0	56.74	50.50	0
88	3818 <sup>1</sup>	1431.90 <sup>2</sup>	0	61.33 <sup>1</sup>	50.80 <sup>3</sup>	0
89	4890	4822.87	89.88	50.00	51.80	0
90	4211	4387.50	0	51.10	53.50	0
91	3776	5772.9	0	53.50	51.80	0
92	4259	5178.98	25.75	59.10	50.30	0
93	4333	4928.90	15.00	45.80	48.20	0
94	5783			48.44		
95	9580			51.08		
96	6650			47.05		
97	5246			41.38		

<sup>1</sup> These figures based on budget submissions made to WPNSTA Yorktown prior to move to Naval Ordnance Station, Indian Head, MD.

<sup>2</sup> This figure is based on actual funds received by NOS Indian Head and does not include funds received by WPNSTA Yorktown, VA which was unavailable.

<sup>3</sup> This figure is a total of data collected from WPNSTA Yorktown and NOS Indian Head, MD.

**NOT APPLICABLE**

**Table 1.2 Historical and Projected Workload for Detachments of Indian Head Divison Det. Yorktown  
(UIC N47652)**

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

**TABLE 1.3 FY 1993 BREAKOUT OF FUNDS BUDGETED for Indian Head Division Det. Yorktown  
FUNDING IN \$K (UIC N47652 \_\_\_\_\_)**

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 <sup>1</sup> Navy	All Other
NAVSEA			269						432		11	3588		11	
NAVAIR							30					267		86	
OTHER NAVY														2090	
MARINES															
ARMY															100
AIR FORCE								20							
NFP															23

<sup>1</sup> Most of this funding comes to us as DBOF or BOFIN. The original appropriation for most of this funding is RDT&E, 6.3 and 6.4

**TABLE 1.3 FY 1994 BREAKOUT OF FUNDS BUDGETED for Indian Head Division Det. Yorktown  
 FUNDING IN \$K (UIC N47652)**

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
NAVSEA				309					228		15	3079			
NAVAIR					10							198			
OTHER NAVY		50	214	505	110				60			1037		26	143
MARINES															
ARMY															102
AIR FORCE															
NFP															101
OG															

**TABLE 1.3 FY 1995 BREAKOUT OF FUNDS BUDGETED for Indian Head Division Det. Yorktown  
(UIC N47652)**

**FUNDING IN \$K**

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
NAVSEA				475					360		42	4478		200	
NAVAIR					146							162			
OTHER NAVY		600	535	934	534				61			1083		65	140
MARINES															15
ARMY															
AIR FORCE															
NFP															625
OG															

**TABLE 1.3 FY 1996 BREAKOUT OF FUNDS BUDGETED for Indian Head Division Det. Yorktown**  
**(UIC N47652 )**

**FUNDING IN \$K**

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	SC N	Other Navy	All Other
NAVSEA				425	115				335		17	1754			
NAVAIR					95							274			
OTHER NAVY		600	374	757	221				128			1097		47	414
MARINES															14
ARMY															
AIR FORCE															
NFP															583
OG															

**TABLE 1.3 FY 1997 BREAKOUT OF FUNDS BUDGETED for Indian Head Division Det. Yorktown**  
**FUNDING IN \$K** (UIC N47652)

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
NAVSEA				450	289				358		19	841			35
NAVAIR					71							177			
OTHER NAVY		600	376	316	306				59			1219		51	199
MARINES															15
ARMY															
AIR FORCE															
NFP															488
OG															

**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.

**NOT APPLICABLE**

**Table 2.1 Main Site Class 2 Assets of \_\_\_\_\_ (UIC \_\_\_\_\_)**

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				
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				
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					
<b>Totals</b>					

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



Table 2.3 Class 2 Space Utilized/Leased by Indian Head Division Det. Yorktown (UIC N47652)

Building type	NAVFAC (P-80) category code	GF/BA (KSF)			
		Adequate	Sub-standard	In-adequate	Total
Operational & Training	100				
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	52.954	15.953 <sup>1</sup>		68.907
Electrical Equip. labs	317				
Propulsion labs	318				
Miscellaneous labs	319	2.102	36		2.138
Underwater Equip. labs	320				
Technical Services labs	321				
Supply Facilities	400	6.836			6.836
Hospital & other Medical	500				
Administrative Facilities	600				
Housing & Community	700				
Utilities & Grounds	800	1.982			1.982
Other					
<b>Totals</b>		<b>63.874</b>	<b>15.989</b>		<b>79.863</b>

<sup>1</sup>These facilities are listed as substandard due to a lack of sprinkler systems. Estimated cost to install sprinkler systems to cover all substandard facilities is \$5.68/ft. or \$90,613. These facilities are currently covered by waivers.

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.

NOT APPLICABLE

Table 2.4 Class 2 Assets of \_\_\_\_\_ Occupied by Detachments

Building type	NAVFAC (P-80) category code	GF/BA (KSF)			
		Adequate	Sub-standard	In-adequate	Total
Operational & Training	100				
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					
<b>Totals</b>					

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



NOT APPLICABLE

Table 2.6 Class 2 Space Utilized/Leased by Detachments of \_\_\_\_\_ (UIC \_\_\_\_\_)

Building type	NAVFAC (P-80) category code	GF/BA (KSF)			
		Adequate	Sub-standard	In-adequate	Total-adequateTotal
Operational & Training	100				
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					
<b>Totals</b>					

**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.

The Naval Weapons Station, Yorktown is the Class 2 property plant account holder of the facilities used by the Yorktown Detachment. There is negligible space available for expansion in these facilities as they are all used in connection with the Detachment's mission. However, usage of equipment in these facilities could be expanded.

The Naval Weapons Station, Yorktown owns additional explosive operating facilities which are no longer in use. These facilities could possibly be used for expanded functions and/or efforts if agreed to by the Naval Weapons Station, Yorktown.

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. \_\_\_\_\_  
\_\_\_\_\_ SQFT.

c. Use Table 3.1 below to indicate the constrained growth opportunities for accepting expanded or new roles. Constrained growth is defined as growth limited to buildings and structures currently on your Class 2 plant account. Add numbered notes to highlight and explain opportunities that require remediation or waiver of a restriction or encumbrance as part of the expansion. Provide lettered notes to clearly identify each opportunity with the title & UIC of the site it refers to. The "Current NFA (KSF)" column total should match the quantity provided in question #3.a. above. Annotate those opportunities that were used to obtain the answer to question #3.b. above. Report space once, do not use the same space for different expansion opportunities. Include in this table space that will become available once planned downsizing (separate from BRAC realignments) has been completed, provide the estimated completion date of the downsizing effort.

d. Use Table 3.2 below to indicate additional unconstrained growth opportunities for accepting expanded or new roles. Unconstrained growth allows for construction of new facilities on existing buildable Class 1 property. The only constraint being that the land must currently be on your plant account holdings as of 31 March 1994 and free of existing land use constraints. Limit new buildings to three stories. Add numbered notes to highlight and explain additional opportunities that would require remediation or waiver of a land use constraint as part of the expansion. Provide lettered notes to clearly identify each opportunity with the title & UIC of the site it refers to. Do not include space that has been reported in Table 3.1.



**Table 3.2 Unconstrained Class 2 Space Available for Expansion at  
NOT APPLICABLE (UIC \_\_\_\_\_ )**

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		
<b>Totals</b>					

**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).

Please refer to the Naval Weapons Station, Yorktown response to this data call. Any land that might be available for expansion of the Yorktown Detachment would have to come from the NWS Yorktown.

b. Are there any constraints such as parking, utilities, legal restrictions that limit the potential for using Undeveloped land for expansion?

c. Explain the radio frequency constraints/opportunities within your Class 1 holdings.

NOT APPLICABLE

Site Location: \_\_\_\_\_

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

d. Of the total Unrestricted Acres reported above, how much of it has existing roads and/or utilities that could support expansion efforts? \_\_\_\_\_ Acres. Explain.

**5. Base Infrastructure Capacity.** Provide base infrastructure data as of 31 March 1994. Provide numbered notes to explain imminent changes, additions & deletions driven by previous BRAC realignments, MILCON (including BRAC related MILCON) & Special Projects that are currently programmed in the FYDP. Give the project number & title, cost, short description, quantity of additional square footage, award date, estimated/actual construction start date and estimated BOD.

a. Utilize Table 5.1 below to provide information on your activity's base infrastructure capacity and load. Do not report this information if you are a tenant activity.

**Table 5.1 Base Infrastructure Capacity & Load**

	<b>On Base Capacity</b>	<b>Off base long term contract</b>	<b>Normal Steady State Load</b>	<b>Peak Demand</b>
<b>Electrical Supply (KWH)</b>				
<b>Natural Gas (CFH)</b>				
<b>Sewage (GPD)</b>				
<b>Potable Water (GPD)</b>				
<b>Steam (PSI &amp; lbm/Hr)</b>				
<b>Long Term Parking</b>				
<b>Short Term Parking</b>				

b. Maintenance, Repair & Equipment Expenditure Data: Use Table 5.2 below to provide data on facilities and equipment expenditures at your activity. Project expenditures to FY 1997. Do not include data on Detachments who have received this Data Call directly. Do not report this information if you are a tenant activity. The following definitions apply:

Maintenance of Real Property (MRP) Dollars: MRP is a budgetary term used to gather the expenses or budget requirements for facility work including recurring maintenance, major repairs & minor construction (non-MILCON) inclusive of all Major Claimant funded Special Projects. It is the amount of funds spent on or budgeted for maintenance and repair of real property assets to maintain the facility in satisfactory operating condition. For purposes of this Data Call MRP includes all M1/R1 and M2/R2 expenditures.

Current Plant Value (CPV) of Class 2 Real Property: The hypothetical dollar amount to replace a Class 2 facility in kind with today's dollars. Example: the cost today to replace a wood frame barracks with a wood frame barracks.

Acquisition Cost of Equipment (ACE): The total cumulative acquisition cost of all "personal property" equipment maintained at your activity which includes the cost of installed equipment directly related to mission execution, such as lab test equipment. Class 2 installed capital equipment that is an integral part of the facility will not be reported as ACE.

**Table 5.2 Maintenance, Repair & Equipment Expenditure Data  
for Indian Head Division Det. Yorktown (UIC: N47652)**

Fiscal Year	MRP (\$M)	CPV (\$M)	ACE (\$M)
1985			
1986			
1987			
1988			
1989			
1990			
1991			
1992			
1993			
1994			
1995			
1996			
1997			

c. Training Facilities:

(1) By facility Category Code Number (CCN), provide the usage requirements for each course of instruction required for all formal schools on your installation. A formal school is a programmed course of instruction for military and/or civilian personnel that has been formally approved by an authorized authority (ie: Service Schools Command, Weapons Training Battalion, Human Resources Office). Do not include requirements for maintaining unit readiness, GMT, sexual harassment, etc. Include all applicable 171-xx, 179-xx CCN's.

Type of Training Facility/CCN	School	Type of Training	FY 1993			FY 2001 Requirements		
			A	B	C	A	B	C
NONE								

A = STUDENTS PER YEAR

B = NUMBER OF HOURS EACH STUDENT SPENDS IN THIS TRAINING FACILITY FOR THE TYPE OF TRAINING RECEIVED

C = A x B

(2) By Category Code Number (CCN), complete the following table for all training facilities aboard the installation. Include all 171-xx and 179-xx CCN's.

**For example:** in the category 171-10, a type of training facility is academic instruction classroom. If you have 10 classrooms with a capacity of 25 students per room, the design capacity would be 250. If these classrooms are available 8 hours a day for 300 days a year, the capacity in student hours per year would be 600,000.

	Total	Design Capacity	Capacity
NONE			

(3) Describe how the Student HRS/YR value in the preceding table was derived.

Not Applicable

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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.

**6. Ship Berthing Capacity.** If your activity has the capacity to berth ships fill out the data sheets provided at TAB A. N/A

**7. Operational Airfield Capacity.** If your activity owns and operates an operational airfield fill out the data sheets provided at TAB B. N/A

**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. N/A

**9. Ordnance Storage Capacity.** If your activity has the capability to store or maintain weapons and ordnance fill out the data sheets provided at TAB D.

**TAB A**

**SHIP BERTHING CAPACITY**

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

The questions in Tab A do not apply to Indian Head Division Detachment Yorktown, VA

**TAB B**

**OPERATIONAL AIRFIELD CAPACITY**

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

The questions in Tab B do not apply to Indian Head Division Detachment Yorktown, VA

**TAB C**

**DEPOT LEVEL MAINTENANCE CAPACITY**

The questions in Tab C do not apply to Indian Head Division Detachment Yorktown, VA

**TAB D**  
**ORDNANCE STORAGE CAPACITY**

## ORDNANCE STORAGE CAPACITY

Please answer the following questions if your activity performs any stowage or maintenance on any of the following ordnance commodities types:

### ORDNANCE COMMODITY TYPES

Mines	Expendables	LOE: Rockets
Torpedoes	INERT	LOE: Bombs
Air Launched	CADS/PADS	LOE: Gun Ammo (20mm-16")
Threat	Strategic Nuclear	LOE: Small Arms(up to 50 cal.)
Surface Launched	Tactical Nuclear	LOE: Pyro/Demo
Threat		Grenades/Mortars/Projectiles
Other Threat		

#### 1. Ordnance Stowage and Support

1.1 Provide present and predicted inventories (coordinate with inventory control manager) and maximum rated capability of all stowage facilities at each weapons storage location controlled by this activity. In predicting the out year facility utilization, distribute overall ordnance compliment to the most likely configuration. The maximum rated capability is also an out year projection taking into account any known or programmed upgrades that may increase current stowage capacity. When listing stowage facilities, group by location (e.g. main base, outlying field, special area).

**TAB D**

**Page 1 of 6**

**UIC: N47652**

**Table 1.1: Total Facility Ordnance Stowage Summary**

Facility Number	PRESENT INVENTORY		PREDICTED INVENTORY		MAXIMUM RATED	
	TONS *	SQ FT	TONS *	SQ FT	TONS *	SQ FT
142	52,400	700	50,000	600	200,000	1000
*144	2,500	48	40,000	500	250,000	1000
147	44,000	750	50,000	600	150,000	1000
242	79,000	1600	80,000	1600	500,000	2000
1366	64,000	1200	64,000	1200	500,000	2000
F3	6,700	300	6,000	300	70,000	500
F4	9,200	320	8,000	320	70,000	500
**652	516	48	500	48	4,000	140
653	270	96	200	64	4,000	140
654	160	32	160	32	4,000	140
655	1,350	128	1,400	130	4,000	140
525	22	12	22	12	50	16
PM1	24	12	24	12	50	16
PM2	16	12	24	12	50	16

\* Inventory is by N.E.W which is in pounds not tons. Not for All Up Round Storage.

\*\* Hazardous Explosive Waste Less Than 90-day Storage Site

**1.2** For each Stowage facility identified in question 1.1 above, identify the type of facility (specify if "igloo", "box", etc.). Identify the type of ordnance commodity (from the list above) which are currently stowed in that facility and all other ordnance types which, given existing restrictions, could be physically accommodated in that stowage facility. Specify below if such additional accommodation would require a modification of the facility (e.g. enhanced environmental controls, ESQD waiver).

- Identify the reason(s) for which this ordnance is stored at your facility from the following list: own activity use (training); own activity use (operational stock); Receipt/Segregation/ Stowage/Issue (RSSI); transshipment/awaiting issue; deep stow (war reserve); deep stow (awaiting Demil); other. Explain each "other" entry in the space provided, including ordnance stowed which is not a DON asset.

Table 1.2: Total Facility Ordnance Stowage Summary

Facility Number/Type	Currently	Reason for Stowage	Commodity
142/ARCH-UNMOD	Bulk Expl	Support Expl	Any 1.1D
144/ARCH-UNMOD	Mines	Support R&D	Any 1.1D
147/ARCH-UNMOD	Bulk Expl	Support Expl	Any 1.1D
242/ARCH-(STD)	Mines, Gun Ammo,	Support R&D Test	Any 1.1D
1366/ARCH-(STD)	Bulk Expl	Support Expl	Any 1.1D
F3/ARCH-FUZE/DET	Bulk Expl	Support Expl	Any 1.1D
F4/ARCH-FUZE/DET	Bulk Expl	Support Expl	Any 1.1D
652/SPEC EARTH COV	Expl Waste	Holding for	Expl Waste
653/SPEC EARTH COV	Fuzes, Detonators	Support Test	Any 1.1B
654/SPEC EARTH COV	Bulk Expl	Support Canine	Any 1.1C
654/SPEC EARTH COV	Bulk Expl	Support Expl	Any 1.1D
525/EARTH COVERED	Lab Samples	Historical Samples	1.1D
PM1/PORTABLE	Lab Samples	Experimental Exp.	1.1D
PM2/PORTABLE	Lab Samples	Experimental Exp.	1.1D

Additional comments:

**NOTE:** The Indian Head Detachment is an R&D activity. We maintain a stock of bulk explosives to support our explosive formulation development and developmental ordnance loading programs. We also store ordnance for demil, special testing, limited production, and surveillance. We do not provide typical commodity storage for fleet issue ordnance.

1.3 Identify the rated category, rated NEW and status of ESQD arc for each stowage facility listed above.

Table 1.3: Facility Rated Status

Facility Number / Type	Hazard Rating (1.1-1.4)	Rated NEW	ESQD Arc		
			Established	Waiver	Waiver
142	1.1	200,000	Y	N	
144	1.1	250,000	Y	N	
147	1.1	150,000	Y	N	
242	1.1	500,000	Y	N	
1366	1.1	500,000	Y	N	
F3	1.1	70,000	Y	N	
F4	1.1	70,000	Y	N	
652	1.1	4,000	Y	Y	9-30-95
653	1.1	4,000	Y	Y	9-30-95
654	1.1	4,000	Y	Y	9-30-95
655	1.1	4,000	Y	Y	9-30-95
525	1.1	50	Y	N	
PM1	1.1	50	Y	N	
PM2	1.1	50	Y	N	

1.4 Identify any restrictions which prevent maximum utilization of your facilities. If restrictions are based on facility conditions, specify reason, the cost to correct the deficiency, and identify any programmed projects that will correct the deficiency and/or increase your capability.

There are no restrictions which would prevent maximum utilization of our facilities.

1.5 Identify if your activity performs any of the following functions on any of the ordnance commodities previously listed. Technical support includes planning, financial, administrative, process engineering and SOP support. Within each related function identify each ordnance commodity type for which you provide these services and the total Direct Labor Man Hours (DLMHs) expended (FY 1994); identify only those DLMHs expended by personnel under your command.

THE DATA PROVIDED BELOW IS PROJECTED FOR FY 1994:

Table 1.5: **Related Ordnance Support**

	Performed?	Type of Commodity	DLMHs
Maintenance (specify level)	N		
Testing	N		
Manufacturing	Y	Pyro/Demo	2,514
Outload	N		
Technical Support <sup>1</sup>	Y	*See List Below	64,264

<sup>1</sup>We assume that technical support includes all of our research, development, production support and in-service engineering efforts.

**\*Mines**

Torpedoes

Air Launched Threat

Surface Launched Threat

Other Threat

INERT

LOE: Rockets

LOE: Bombs

LOE: Gun Ammo (20mm-16")

LOE: Pyro/Demo/Projectiles

**TAB D**

Page 6 of 6

UIC: N47652

NSWC IH, YORKTOWN  
DATA CALL #4

JL  
SEA OAK  
5/13/94

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

NEXT ECHELON LEVEL (if applicable)

CAPT. D. G. MAXWELL  
NAME (Please type or print)  
COMMANDER  
Title  
INDIAN HEAD DIVISION  
Activity

[Signature]  
Signature  
7 MAY 1994  
Date

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

NEXT ECHELON LEVEL (if applicable)

RADM(SEL) D. P. SARGENT, JR.  
NAME (Please type or print)  
COMMANDER  
Title  
NAVAL SURFACE WARFARE CENTER  
Activity

[Signature]  
Signature  
5/11/94  
Date

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

MAJOR CLAIMANT LEVEL

G. R. STERNER  
NAME (Please type or print)  
Commander  
Title  
Naval Sea Systems Command  
Activity

[Signature]  
Signature  
5-13-94  
Date

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

DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

J. B. Greene, Jr  
NAME (Please type or print)  
Acting  
Title

[Signature]  
Signature  
19 May 1994  
Date

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian, who provide information for use in the BRAC-95 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief."

The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

Each individual in your activity generating information for the BRAC-95 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated as necessary. You are directed to maintain those certifications at your activity for audit purposes. For purposes of this certification sheet, the commander of the activity will begin the certification process and each reporting senior in the Chain of Command reviewing the information will also sign this certification sheet. This sheet must remain attached to this package and be forwarded up the Chain of Command. Copies must be retained by each level in the Chain of Command for audit purposes.

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

ACTIVITY COMMANDER

JOHN A. ZEHMER  
NAME (Please type or print)  
Division Director  
Title  
IHDIV NSWC DET - Yorktown  
Activity

  
Signature  
6 May 94  
Date

BRAC DATA CALL #4  
CAPACITY ANALYSIS FOR  
IHDIV NSWC DETACHMENT - YORKTOWN

# Document Separator

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."

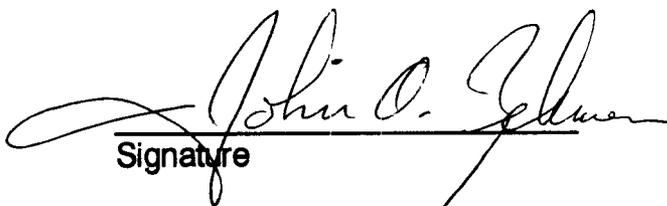
The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

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

John A. Zehmer  
NAME (Please type or print)

  
Signature

Division Director  
Title

5/27/94  
Date

IHDIV NSWC DET - Yorktown  
Activity

**BRAC DATA CALL #4  
CAPACITY ANALYSIS FOR  
IHDIV NSWC DETACHMENT - YORKTOWN**

Revision to the Indian Head Division, Yorktown Detachment, BRAC-95 Data Call #4 revision page 2 Table 1.1. Additional details of changes described on attached 1 sheet.

"REVISION"  
DATA CALL #4  
YORKTOWN DET  
INDIAN HEAD

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

NEXT ECHELON LEVEL (if applicable)

CAPT. D. G. MAXWELL  
NAME (Please type or print)  
COMMANDER  
Title  
INDIAN HEAD DIVISION, NSWC  
Activity

[Signature]  
Signature  
1 June 94  
Date

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

NEXT ECHELON LEVEL (if applicable)

RADM(SEL) D. P. SARGENT, JR.  
NAME (Please type or print)  
COMMANDER  
Title  
NAVAL SURFACE WARFARE CENTER  
Activity

[Signature]  
Signature  
6/3/94  
Date

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

MAJOR CLAIMANT LEVEL

G. B. STERNER  
NAME (Please type or print)  
[Signature]  
Title  
Naval Systems Command  
Activity

[Signature]  
Signature  
7-1-94  
Date

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

DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

J. B. GREENE, JR.  
NAME (Please type or print)  
ACTING  
Title

[Signature]  
Signature  
08 JUL 1994  
Date

**Indian Head Division Detachment Yorktown, VA**  
**Changes to Data Call #4 - Capacity Analysis**

Page 2, Table 1.1:

In reviewing our BRAC 95 data call response and certification, we found several errors in the table. The following changes were made:

- a. Total Funds Received w/o Direct Cite (\$K) for FY 88:

Changed 1431.90 to 1413.90

**This error is a typographical error - the 3 and 1 were inadvertently transposed.**

- b. Changed:

<u>FY</u>	<u>Total Funds Budgeted (\$K)</u>	<u>Budgeted Wkyrs</u>
95	9580	51.08
96	6650	47.05
97	5246	41.38

To:

<u>FY</u>	<u>Total Funds Budgeted (\$K)</u>	<u>Budgeted Wkyrs</u>
95	10457	55.20
96	7249	49.86
97	5869	43.89

**This error was caused by inadvertently leaving out one source of projected workload from Table 1.1 that was included in Table 1.3. Our projected direct workload comes from two other sources, our division workload from the WIS and the workload from the WIS for other cost centers at Indian Head where our division is a performing subcost center. Our estimates of the latter workload source were not included in this table. With making these changes, the budgeted funds totals for Tables 1.1 and 1.3 now match.**

# Document Separator

# MILITARY VALUE DATA CALL

## TECHNICAL CENTERS

<b>Category</b>	<b>Materials</b>
<b>Technical Center Site</b>	<b>Indian Head Division Yorktown Detachment</b>
<b>Location/Address</b>	<b>P.O. Drawer 160 Yorktown, VA</b>

	<b>Page</b>
<b><u>Mission</u></b>	
1. Mission Statement	1
2. Joint Service Missions	2
<b><u>Technical Functions</u></b>	
3. Technical Functions Resource Allocations	3
<b><u>Manpower</u></b>	
4. Work Breakdown Structure	4
5. Technical Staff Qualifications	8
<b><u>Facilities and Equipment</u></b>	
6. Special Facilities/Equipment Resources	17
7. General Facilities/Equipment Resources	17
<b><u>Location</u></b>	
8. Geographic Location	19
<b><u>Features and Capabilities</u></b>	
9. Computational Facilities	20
10. Mobilization Responsibility and Capability	21
11. Range Resources	23

**Quality of Life**

12. Military Housing	24
13. MWR Facilities	33
14. Base Family Support Facilities	35
15. Metropolitan Areas	36
16. VHA	37
17. Off-base Housing Rental and Purchase	38
18. Sea Intensive Ratings	40
19. Commute	40
20. Educational Opportunities	41
21. Employment Opportunities	44
22. Medical/Dental	44
23. Crime Rate	45

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

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

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

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

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

## MILITARY VALUE MEASURES

### MISSION

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

The official mission statement for the Indian Head Division, Naval Surface Warfare Center stated in:

OPNAVNOTE 5450 Ser 09B22/1U510577 "Establishment of Naval Surface and Undersea Warfare Centers, Modification of Title and Disestablishment of Shore Activities and Detachments", dated 23 Dec 91, is:

"Provide primary technical capability in Energetics for all Warfare Centers through engineering, fleet and operational support, manufacturing technology, limited production, industrial base support, and secondary technical capability through research, development, test and evaluation for energetic materials, ordnance devices and components, and related ordnance engineering standards to include chemicals, propellants, and their propulsion systems, explosives, pyrotechnics, warheads, and simulators. Provide support including special weapons support, explosive safety and ordnance environmental support to all Warfare Centers, military departments and the ordnance industry. Execute other responsibilities as assigned by Commander, Naval Surface Warfare Center."

The Yorktown Detachment was administratively transferred from the Naval Weapons Station, Yorktown to the Indian Head Division in June 1988. The Detachment was scheduled to move physically to Indian Head in FY 93, five years after the administrative transfer.

In 1989, a General Accounting Office review concluded that the projected savings from the physical consolidation of the functions at Indian Head were lower than what the Navy estimated. GAO also found that Navy officials agreed that most of the transfer's original objectives had been accomplished by the June 1988 administrative realignment. Based on a 1991 study done by Indian Head Division in response to the GAO review, the Naval Sea Systems Command decided to delay the physical move until a more economically feasible time (i.e. when the workload at the Yorktown Detachment has declined or the host tenant costs Indian Head pays to Naval Weapons Station, Yorktown become prohibitive).

The Yorktown Detachment organizationally is the Explosives Engineering Division of the Energetics Materials Research and Technology Department at Indian Head. Therefore, part of the above mission statement applies to the Yorktown Detachment.

A more specific mission statement for the Yorktown Detachment is:

EXPLOSIVES ENGINEERING DIVISION (IHDIV DETACHMENT YORKTOWN, VA  
(Code 930)

Provides engineering, chemical and physical analysis, operations and consultation services pertaining to high explosives and high explosives processing. Develops and documents high explosives loading processes for all Navy non-nuclear munitions and processes for the removal of high explosives from munitions. Provides direction for the high explosive loading pilot production of Navy non-nuclear munitions. Provides in-service engineering support for Navy high explosives and high explosives loaded munitions. Prepares and loads munitions, both developmental and in-service, test charges and other devices which make use of high explosives; analyzes high explosives, their constituents and materials that come in contact with them; performs other processes involving high explosives. Participates as NAVSEA design agent for the engineering and process development of all Navy booster and main charge explosives. Acts as Associated Components Design Agent for the high explosives loading of Navy Gun Ammunition (20mm to 16-inch). Participates in the role as NAVAIR Performing Field Activity for the high explosives loading of free fall air-launched munitions.

IHDIVNAVSURWARCENINSTR 5400.10H

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

N/A

## TECHNICAL FUNCTIONS

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

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

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

## MANPOWER

### 4. Work Breakdown Structure.

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

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

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

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

#### NOTES:

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

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

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

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

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

**TABLE 4.1, GENERAL SUPPORT RESOURCES FOR  
(ACTIVITY: Indian Head Division Det. Yorktown (UIC: N47652))**

Function	Space allocated (Gross SQFT)	Work Years	Civilian Persnel onboard	Contract Work Years	Military Personnel Onboard	
					Off	Enl
<b>ADMINISTRATION</b>						
Command (CO/XO/TD/etc.)						
Comptroller						
Admin						
Human Resources						
<b>OPERATIONS SUPPORT</b>						
Supply Management						
Consolidated Computational Computer Support						
Information Systems and Communications						
Safety/OSH/Environmental						
<b>INFRASTRUCTURE</b>						
Physical Security						
Public Works/Staff Civil Engr						
Fire Protection						
Medical/Dental						
Military Support						
Air/Waterfront Operations						
Other						
<b>TECHNICAL STAFF</b>						
Technical Operations			46	0	0	0
<b>Totals</b>			46	0	0	0

**Table 4.2, General Support Resources for all Detachments  
 (Activity: Indian Head Division Det. Yorktown) (UIC: N47652) NOT APPLICABLE**

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

**Table 4.3, Previous BRAC Impact to General Support Resources for  
 (Activity: Indian Head Division Det. Yorktown ) (UIC: N47652) NOT APPLICABLE**

Function	Space allocated (Gross SQFT)	Work Years	Civilian Persnel onboard	Contract Work Years	Military Personnel Onboard	
					Off	Enl
<b>ADMINISTRATION</b>						
Command (CO/XO/ TD/etc.)						
Comptroller						
Admin						
Human Resources						
<b>OPERATIONS SUPPORT</b>						
Supply Management						
Consolidated Computer Sup						
Infor Sys & Communication						
Safety/OSH/Environmental						
<b>INFRASTRUCTURE</b>						
Physical Security						
Public Works/Staff Civil Engr						
Fire Protection						
Medical/Dental						
Military Support						
Air/Waterfront Operations						
Other						
<b>TECHNICAL STAFF</b>						
Technical Operations						
<b>Totals</b>						

**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: **Indian Head Division Det. Yorktown** ) (UIC: **N47652**)

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		5	6	2	11	24
B.A./B.S	1	9	2	1	2	15
M.A./M.S		5	1		1	7
Ph.D./ M.D.						
<b>Total</b>	<b>1</b>	<b>19</b>	<b>9</b>	<b>3</b>	<b>14</b>	<b>46</b>

**Table 5.2, Technical Staff Education Level for all Detachments NOT APPLICABLE  
(Parent Activity: Indian Head Division Det. Yorktown) (UIC: N47652)**

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: Indian Head Division Det. Yorktown) (UIC: N47652)**

Academic field	Number
Physics	
Chemistry	2
Biology	
Mathematics/Statistics/ Operations Research	
Engineering	4
Medical	
Dental	
Computer Science	
Social Science	
Other Science	
Non-Science	1
<b>Total</b>	<b>7</b>

**Table 5.4, Technical Staff Academic Fields for all Detachments NOT APPLICABLE  
(Parent Activity: Indian Head Division Det. Yorktown) (UIC: N47652)**

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

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

The unique aspects of the location of the Yorktown Detachment which help in the hiring of qualified personnel include:

The Virginia peninsula region has a large labor pool with military and munitions experience because of the high concentration of military related jobs.

The Yorktown Detachment possesses excellent equipment and facilities designed specifically for their intended research and development functions. These facilities help attract qualified personnel.

The Yorktown Detachment is located near several educational institutions (e.g. College of William & Mary, Peninsula Graduate Engineering Center, Old Dominion University) where personnel can obtain advanced degrees.

The climate, historical and cultural attractions (e.g. Colonial Williamsburg), and closeness to the Atlantic Ocean and Chesapeake Bay all make the Virginia peninsula area an attractive place to live.

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.

Newman, K. E. et al "Experimental Measurement of Vapor-Liquid Equilibrium in Alcohol/Water/Salt Systems," Journal of Chemical & Engineering Data. 1990, 35.

Also, one of our employees (Kirk Newman) is on the editorial board of Particulate Science and Technology: An International Journal.

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. None

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.

American Defense Preparedness Association (ADPA) Bronze Medallion for the 8th Annual Ammunition Technology Division Load, Assembly, and Packaging Section Award given to Kirk Newman and Jim Gusack for development of a continuous PBX processing pilot plant, March 1990.

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

Navy Meritorious Civilian Service Award given April 1993 to Kirk Newman for professional achievement while serving on the technical investigation of an explosive incident at White Oak.

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

U.S. Patent 5,114,630 dated 19 May 1992 was awarded to Kirk Newman, Jim Gusack, and John Zehmer.

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

Patent is pending Navy Case 74231 originally submitted on 16 Apr 93, and then resubmitted 18 Mar 94.

k. Identify any in-house staff that are members of the National Academy of Engineering. None

l. 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 CRADA has been signed: CRADA (NCRADA-IHDNSWC-93-001) on injection loading with Alliant TechSystems, Inc. on 15 Oct 93.

Another CRADA is currently under review and should be signed soon (Demil with Alliant TechSystems).

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

To date, there has been no royalty income from this CRADA.

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.

The Yorktown Detachment prototypes the processes to explosive load Navy munitions and the configurations of the explosives when loaded in those munitions. The product and process developed are linked in documents prepared by the Detachment called Naval Munitions Data (NMD). These documents are specifications which delineate the characteristics of explosives loaded in munitions necessary for them to meet Navy explosive safety standards and performance standards established by munitions program offices. The Detachment issues and maintains these NMDs which become part of Technical Data Packages used to procure explosive loaded munitions from both DoD and industry.

A list of munitions for which the Detachment prototyped the explosive loading process and the resultant explosive load, and that are in current production, follows:

**Explosive or Inert Loaded Munition/Weapon System**

**Referenced NMD**

**Warheads**

Warhead, Guided Missile, High Explosive, WDU-27/B (SEASPARROW)	NMD 104
Warhead, Guided Missile, Dummy, WDU-27(D-1)/B (SEASPARROW)	NMD 117
Warhead, Guided Missile, High Explosive, WDU-24/B (MAVERICK)	NMD 128
Warhead, Guided Missile, High Explosive, WDU-33/B (AMRAAM)	NMD 144
Warhead, Guided Missile, WEU-6/B, Lining of (HARM)	NMD 136
Warhead, Guided Missile, Inert Loaded, WEU-5/B (HARM)	NMD 111
Warhead, Guided Missile, High Explosive, WDU-21/B (HARM)	NMD 102
Warhead, Guided Missile, WEU-10/B, Lining of (Improved HARM)	NMD 169
Warhead, Guided Missile, High Explosive, WDU-37/B (Improved HARM)	NMD 170
Warhead, Guided Missile, High Explosive, Mk 115 Mod 0 (STANDARD Missile)	NMD 103
Warhead, Guided Missile, High Explosive, Mk 115 Mod 1 (STANDARD Missile)	NMD 172
Warhead, Guided Missile, High Explosive, Mk 125 Mod 0, Loaded (STANDARD Missile)	NMD 171
Warhead, Guided Missile, Dummy, WDU-25(D-1)/B (BULLPUP)	NMD 124

Warhead, Guided Missile, High Explosive, WDU-36/B (TOMAHAWK)	NMD 181
Warhead, Guided Missile, High Explosive, WDU-29/B (PHOENIX)	NMD 127
Warhead, Guided Missile, Dummy, WDU-29(D-1)/B (PHOENIX)	NMD 129
Warhead, Guided Missile, High Explosive, WDU-32/B (PENGUIN)	NMD 161
Warhead, Guided Missile, High Explosive, WDU-22/B (SHRIKE)	NMD 101
Warhead, Dual Mode, High Explosive, Mk 118 Mod 0	NMD 116
Warhead, Torpedo, Mk 122 Mod 0, Explosive Loaded	NMD 154
Warhead, Torpedo, Mk 107 Mods 1 & 2, Explosive Loaded	NMD 166

Gun Ammunition

Projectile, 3 Inch 50 Caliber, Mk 33 Mods, Inert Loaded	NMD 108
Projectile, 3 Inch 50 Caliber, Mk 33 Mods, Composition A-3 Loaded	NMD 146
Projectile, 5 Inch 38 Caliber, Mk 46 Mod 1 (Common), Explosive D Loaded	NMD 125
Projectile, 5 Inch 38 Caliber, Mk 51 Mods, Inert Loaded	NMD 140
Projectile, 5 Inch 54 Caliber, Mk 64 Mod 1, Inert Loaded	NMD 107
Projectile, 5 Inch 54 Caliber, Mk 61 Mod 1, Inert Loaded	NMD 174
Projectile, 5 Inch 54 Caliber, Mk 64 Mod 2, PBXN-106 Explosive Loaded	NMD 179
Fuze Adapter, Boostered, PBXN-106 Explosive Loaded	NMD 180
Projectile, 5 Inch 54 Caliber, Mk 64 Mod 2, Explosive Loaded Subassembly	NMD 182

Projectile, 5 Inch 54 Caliber, Mk 41, 61, and 64 Mods, BL&P Inert Loaded	NMD 185
Projectile, 5 Inch 54 Caliber, PBXN-106 Explosive Loaded (Type I Configuration)	NMD 114
Beaker, Subcharge, PBXN-106 Explosive Loaded (5 Inch 54 Caliber HIFRAG Projectile)	NMD 112
Beaker, PBXN-106 Explosive Loaded (5 Inch 54 Caliber HIFRAG Projectile)	NMD 113
Projectile, 40 mm (HEIP), Composition A-3 Loaded	NMD 131
Projectile, 76 mm 62 Caliber, Inert Loaded	NMD 109
Projectile, 76 mm 62 Caliber, Composition A-3 Loaded	NMD 110
Projectile, 76 mm 62 Caliber, BL&P, Inert Loaded	NMD 193
<u>Shock Test Charges</u>	
60-Lb Shock Test Charge	NMD 121
90-Lb Shock Test Charge	NMD 147
125-Lb Shock Test Charge	NMD 122
250-Lb Shock Test Charge	NMD 148
320-Lb Shock Test Charge	NMD 142
1200-Lb Shock Test Charge	NMD 141
3500-Lb Shock Test Charge	NMD 186
10,000-Lb Shock Test Charge	NMD 130
40,000-Lb Shock Test Charge	NMD 120

### Bombs

Bomb, General Purpose, 1000 Pound, BLU-110A/B, PBXN-109 Explosive Loaded	NMD 145
Bomb, General Purpose, 500 Pound, BLU-111A/B, PBXN-109 Explosive Loaded	NMD 168
Bomb, General Purpose, 500 Pound, Mk 82 Mod 2, Thermally Protected, Loaded	NMD 183
Bomb, Penetrator, 2000 Pound, BLU-109A/B, PBXN-109 Explosive Loaded	NMD 188
Bomb, Penetrator, 2000 Pound, BLU-109A(D-1)/B, Inert Loaded	NMD 191

### MINES

Explosive Section, Destructor, Mk 14 Mod 0, Explosive Loaded	NMD 132
Explosive Section, Mk 15 Mod 0, Explosive Loaded	NMD 164
Charge, Explosive, Mk 70 Mod 0	NMD 155
Mine, Underwater, Mk 65 Mod 0, Explosive Loaded (QUICKSTRIKE)	NMD 118
Mine, Underwater, Mk 65 Mod 0, Inert Loaded (QUICKSTRIKE)	NMD 135
Explosive Section, Mk 13 Mod 0, Explosive Loaded (SLMM)	NMD 119
Explosive Section, Mk 13 Mod 0, Inert Loaded (SLMM)	NMD 134
Mine Neutralization Charge, Mk 77 Mod 0 (LIMPET)	NMD 106
Charge, Inert Mk 71 Mod 0, Training (LIMPET)	NMD 175

### Other

Burster Tube Assembly, Explosive Loaded (2.75 Inch Rocket Mk 67 Mod 1)	NMD 139
Burster Tube Assembly, Explosive Loaded (5 Inch Rocket Mk 34 Mod 2)	NMD 143

## FACILITIES AND EQUIPMENT

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

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

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

Equipment - Resources used to support the operation of the site with a replacement value of \$500,000 or greater. Do not include land or buildings in this category. In reporting equipment, provide information to indicate the degree of portability of the equipment.

Class 3 Personal Property items ("plant equipment" or "equipment in place") by definition are highly portable and can be moved easily. Some Class 2 Installed Equipment, such as Main-frame computers, test stands and small hyperbaric chambers, require more extensive utilities support and assembly of components, but can be relocated without damage to the facility or equipment, and therefore are considered "moveable" assets. Other Class 2 items are so large and/or integral to the facility that houses them that major demolition and construction would be required to relocate them, and therefore are considered "fixed" assets. Where appropriate, pieces of equipment can be aggregated for the purposes of completing Tab B.

### 7. General Facilities.

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

No

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 .

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

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

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

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

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

None

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

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

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

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

(5) CWE & planned BOD.

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.

One mile to Naval Weapons Station Yorktown pier  
Fifteen miles to Langley Air Force Base  
One mile to Naval Weapons Station Yorktown heliport

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?

14 Magazines  
1,756,150 lbs of capacity

## LOCATION

### 8. Geographic Location.

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

The Yorktown Detachment's facilities must be in a location that has sufficient space to provide the separation of explosive operating buildings per quantity-distance requirements of OP 5. There must also be contiguous supporting services and facilities including:

- explosive magazines for storage of bulk explosives and finished products awaiting shipment,
  - an explosive receiving and shipping facility,
  - a high energy X-ray facility for inspection of explosive loaded products,
  - a facility for disposal of explosive and other hazardous wastes,
  - security forces and systems to secure explosives and explosive loaded products,
- and
- a fire department trained in fighting fires at explosive facilities.

These requirements are all met by the current location at the Naval Weapons Station, Yorktown. Furthermore, most of the facilities used by the Yorktown Detachment were specifically designed for the purpose for which they are being used. These facilities help create an efficiency of operations, and are one of the main reasons we have been able to maintain a relatively small staff for our function.

Other advantages of the current location include:

- it gives us easy access to any explosive loaded hardware experiencing a fleet malfunction,
- our engineers can board ships to see first hand how munitions are stored and handled aboard ship,
- it is in close proximity to other research institutions that can be tapped as partners in dual use pursuits (e.g., NASA Langley Research Center, College of William and Mary, and Old Dominion University), and

- it is in close proximity to DOD operational commands responsible for transportation and handling ordnance.

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

The location of the Detachment is within driving distance of the Indian Head Division, NSWC Headquarters and many of our customers. The capabilities of the Detachment complement the existing capabilities within the Indian Head Division to allow us to provide the Navy with one organization for RDT&E, acquisition engineering and lifetime support for explosives. Therefore, customers and sponsors have the convenience of "one-stop shopping" for technical expertise for all types of explosives.

### **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.

None

## 10. Mobilization Responsibility and Capability.

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

The Yorktown Detachment's primary wartime mission is to provide explosive technical support to production plants producing Navy munitions. It is not very different from our peacetime mission. We also possess explosives processing capability that could be converted from development uses to production uses during mobilization. The Yorktown Detachment performs the following critical missions during surge/mobilization situations, based on current workloading documents and the NAVSEA Logistics Support Mobilization Plan:

Provides technical support to Army, Navy and Industry explosive loading production plants to bring moth-balled production plants back on-line.

Provides quick response to explosive production problems which may develop, by conducting tests or providing consultation to resolve these problems.

Provide quick response development of new explosive loaded munitions as needs are identified on the battlefield.

Provide limited surge production capacity (with a 150 gallon mixer and melt cast kettles), particularly for low production volume munitions such as Plastic Bonded Explosive (PBX) loaded missile warheads.

The Yorktown Detachment is qualified to carry out the technical support mission, because most of the explosive loading processes for Navy munitions were developed by the Detachment. We have ready answers to most explosive loading problems that may develop. For example, we provided assistance to the McAlester Army Ammunition Plant during Operation Desert Shield/Desert Storm in bringing their bomb production plant on-line. Our development facilities and expertise allow for quick explosive loading development in emergency situations. We have a pilot plant capable of producing all types of main charge explosives.

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

The Yorktown Detachment supports the following functional support areas:

### 2.7 Explosives

(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?

None

(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.

The flexible civilian workforce would be reassigned from peacetime operations to meet surge/mobilization requirements, as directed.

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

Yes

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

No

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

(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.

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

The closed production facilities at the Naval Weapons Station, Yorktown could be operated by our personnel in a mobilization scenario if we were directed to do so. These facilities, which include a PBX loading line and a melt cast explosive loading line, may require new or repaired equipment to start-up. These facilities; however, are not owned by the Yorktown Detachment.

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

No

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.

None

## QUALITY OF LIFE

Most of questions 12 through 23 do not apply to the Yorktown Detachment because we have no military personnel or dependents. As a Detachment, we are unable to respond to these questions. Please refer to the Naval Weapons Station, Yorktown response to BRAC 95 Data Calls for answers to these questions.

### 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+				
Officer	3				
Officer	1 or 2				
Enlisted	4+				
Enlisted	3				
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:

What makes it inadequate?

What use is being made of the facility?

What is the cost to upgrade the facility to substandard?

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

Current improvement plans and programmed funding:

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

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

Pay Grade	Number of Bedrooms	Number on List <sup>1</sup>	Average Wait
O-6/7/8/9	1		
	2		
	3		
	4+		
O-4/5	1		
	2		
	3		
	4+		
O-1/2/3/CWO	1		
	2		
	3		
	4+		
E7-E9	1		
	2		
	3		
	4+		
E1-E6	1		
	2		
	3		
	4+		

---

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

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

Top Five Factors Driving the Demand for Base Housing	
1	
2	
3	
4	
5	

(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)?

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

Type of Quarters	Utilization Rate
Adequate	
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?

(b) BEQ:

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

Type of Quarters	Utilization Rate
Adequate	
Substandard	
Inadequate	

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

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

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

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

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

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

(c) BOQ:

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

Type of Quarters	Utilization Rate
Adequate	
Substandard	
Inadequate	

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

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

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

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

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

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

(d) BOQ/BEQ Housing and Messing.

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

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

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

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

(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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**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.

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

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

Facility type/code:

What makes it inadequate?

What use is being made of the facility?

What is the cost to upgrade the facility to substandard?

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

Current improvement plans and programmed funding:

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

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

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

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).

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

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

City	Distance (Miles)

16. Standard Rate VHA Data for Cost of Living:

Paygrade	With Dependents	Without Dependents
E1		
E2		
E3		
E4		
E5		
E6		
E7		
E8		
E9		
W1		
W2		
W3		
W4		
O1E		
O2E		
O3E		
O1		
O2		
O3		
O4		
O5		
O6		
O7		

**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			
Apartment (1-2 Bedroom)			
Apartment (3+ Bedroom)			
Single Family Home (3 Bedroom)			
Single Family Home (4+ Bedroom)			
Town House (2 Bedroom)			
Town House (3+ Bedroom)			
Condominium (2 Bedroom)			
Condominium (3+ Bedroom)			

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

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

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

Type of Home	Median Cost
Single Family Home (3	
Single Family Home (4+	
Town House (2 Bedroom)	
Town House (3+ Bedroom)	
Condominium (2 Bedroom)	
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			
February			
March			
April			
May			
June			
July			
August			
Sept			
October			
Nov			
Dec			

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

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

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

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	%	Distance	Time(min)

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

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

Institution	Type	Grade Level(s)	Special Education Available	Annual Enrollment Cost per Student	1993 Avg SAT/A CT Score	% HS Grad to Higher Educ	Source of Info

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

Institution	Type Classes	Program Type(s)				
		Adult High School	Vocational/ Technical	Undergraduate		Graduate
				Courses	Degree	
	Day					
	Night					
	Day					
	Night					
	Day					
	Night					
	Day					
	Night					

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

Institution	Type Classes	Program Type(s)				
		Adult High School	Vocational/ Technical	Undergraduate		Graduate
				Courses	Degree	
	Day					
	Night					
	Corres-					
	Day					
	Night					
	Corres-					
	Day					
	Night					
	Corres-					
	Day					
	Night					
	Corres-					

**21. Spousal Employment Opportunities.**

Provide the following data on spousal employment opportunities.

Skill Level	Number of Military Spouses Serviced by Family			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.

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.

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

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

Crime Definitions	FY 1991	FY 1992	FY 1993
5. Customs (6M)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			
6. Burglary (6N)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			
7. Larceny - Ordnance (6R)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			
8. Larceny - Government (6S)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			

Crime Definitions	FY 1991	FY 1992	FY 1993
9. Larceny - Personal (6T)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			
10. Wrongful Destruction (6U)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			
11. Larceny - Vehicle (6V)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			
12. Bomb Threat (7B)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			

Crime Definitions	FY 1991	FY 1992	FY 1993
13. Extortion (7E)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			
14. Assault (7G)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			
15. Death (7H)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			
16. Kidnapping (7K)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			

Crime Definitions	FY 1991	FY 1992	FY 1993
18. Narcotics (7N)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			
19. Perjury (7P)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			
20. Robbery (7R)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			
21. Traffic Accident (7T)			
Base Personnel - military			
Base Personnel - civilian			
Off Base Personnel - military			
Off Base Personnel - civilian			

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

**TAB A**  
**TECHNICAL OPERATIONS**  
**FUNCTIONAL SUPPORT AREA - LIFE CYCLE WORK AREA FORM**

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.12 Weapons Propulsion
Life Cycle Work Area	10. Program Support

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.3 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 36

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.5 Mines
Life Cycle Work Area	10. Program Support

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 1.4 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 139

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.7 Explosives
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. 0.1 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 16

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) 1

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.7 Explosives
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. 5.2 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 625

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) 6

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.7 Explosives
Life Cycle Work Area	4. Engineering & Manufacturing Development

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 4.0 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 454

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) 8

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.7 Explosives
Life Cycle Work Area	6. Operational Systems Development

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.7 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 80

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) -0-

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.7 Explosives
Life Cycle Work Area	7. Production

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 1.9 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 294

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) 11

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 15

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.7 Explosives
Life Cycle Work Area	8. Acceptance Testing

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.1 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 8

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0

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

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.7 Explosives
Life Cycle Work Area	9. Modernization

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 8.2 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1030

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) 780

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.7 Explosives
Life Cycle Work Area	10. Program Support

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 8.9 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 983

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) 37

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.7 Explosives
Life Cycle Work Area	12. Repair

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.1 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 22

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.7 Explosives
Life Cycle Work Area	13. Testing

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.7 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 81

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) 1

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.7 Explosives
Life Cycle Work Area	14. In-Service Engineering

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 3.1 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 338

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) 10

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.7 Explosives
Life Cycle Work Area	15. Program Support

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.2 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 24

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 22

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.12 Weapons Propulsion
Life Cycle Work Area	10. Program Support

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.3 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 24

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 22

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.12 Weapons Propulsion
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. 0 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 1

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.13 Other Ordnance
Life Cycle Work Area	9. Modernization

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.1 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 11

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.13 Other Ordnance
Life Cycle Work Area	10. Program Support

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.6 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 62

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.14 Explosive Ordnance Disposal
Life Cycle Work Area	4. Engineering & 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. 1.0 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 112

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 9

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.14 Explosive Ordnance Disposal
Life Cycle Work Area	6. Operational Systems Development

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.3 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 28

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	2. Weapons Systems 2.14 Explosives Ordnance Disposal
Life Cycle Work Area	12. Repair

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.4 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 44

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	5. Sensors & Surveillance Systems 5.5 Ocean Surveillance
Life Cycle Work Area	4. Engineering & 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. 0.3 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 29

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	5. Sensors & Surveillance Systems 5.5 Ocean Surveillance
Life Cycle Work Area	10. Program Support

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.3 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 34

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) 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

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.

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	8. Defense Systems 8.1 Ballistic Missile Defense
Life Cycle Work Area	10. Program Support

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.3 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 31

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	8. Defense Systems 8.2 Countermeasures
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. 0.2 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 25

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	8. Defense Systems 8.2 Countermeasures
Life Cycle Work Area	10. Program Support

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.2 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 21

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	10. General Mission Support 10.9 Activity Mission & Function Support
Life Cycle Work Area	10. Program Support

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.2 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 27

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. \$(K) 0

Note:

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

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

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

Technical Center Site	Indian Head Division Yorktown Detachment
Functional Support Area	10. General Mission Support 10.9 Activity Mission & Function Support
Life Cycle Work Area	15. Program Support

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 0.1 WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. \$(K) 12

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. \$(K) 0

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

**TAB B**

**SPECIAL FACILITIES AND EQUIPMENT**

**FACILITIES/EQUIPMENT CAPABILITY FORM**

<u>Facility</u>	<u>Page</u>
Melt Cast Explosive Mixing/Casting	1
Explosives Press Loading	7
PBX Mixing/Casting/Demil	14
Support	21

**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	Indian Head Division Yorktown Detachment
Facility/Equipment Nomenclature or Title	Building 456 Melt Cast Explosive Mixing/Casting Facility

1. State the primary purpose(s) of the facility/equipment.

The main purposes of this facility are to develop mixing and loading processes for new melt cast explosives and to explosive load special test charges with melt cast explosives. It houses several melt kettles from lab size to a 3,000 lb. kettle which are used to scale-up new explosive formulations to ensure that they can be produced safely and efficiently. For example, this facility will be used to scale-up a new melt cast TPX explosive for the IMAD program that is a candidate explosive for the JDAM program. The larger mixers are used to develop explosive loading processes for new munitions loaded with melt cast explosives. Two of these mixers are connected to vacuum chambers required for high quality loading munitions such as penetrating warheads. We use data collected from such explosive loadings to prepare the Navy Munitions Data (NMD) specification that provides the requirements for production explosive loading of ordnance. The NMD governs in-house and contractor production. During production, this facility is used to conduct studies to help resolve production problems for munitions such as Harpoon, SUS and G. P. Bombs.

Developing the NMD, required by NAVSEAINST 8020.11A, is an inherently governmental function since it ensures that the Navy remains a smart buyer of explosive loaded munitions. It ensures that safety and performance are designed into the munition and that it meets the Navy's requirements. Without this governmental expertise and involvement, the Navy would have to rely on industry to designing in safety. Use of industry explosive loading development contracts which provide all-up-round safety and performance requirements has several problems:

-The Navy ends up buying a "black box". We no longer understand how the explosive system works.

-It is very difficult to establish all-up-round safety requirements that will ensure the safety of the munition. Furthermore, to confirm that a safety requirement is met, a cost prohibitive number of tests would have to be performed for a statistically significant result.

-After production starts, very expensive Lot Acceptance Testing must be performed to try to ensure that all safety and performance requirements are met.

Therefore, the governmental function of preparing and maintaining the NMD ensures that the Navy buys munitions which meet safety and performance requirements, while avoiding costly acceptance tests.

The facility is also used to produce special test charges such as special Shock Test Charges and fragmentation block charges. The former are used for testing ship hull designs and the latter for evaluating and qualifying new munitions. These are special charges required in such limited quantities that private industry has not been interested in producing them. Our facility provides the Navy a source for such items where responsiveness, quantity or uniqueness make industry production impractical. Finally, this facility is used to dry coated explosive materials used to make PBX explosives.

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

This facility is a fixed facility.

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

The current replacement cost of the facility is approximately \$5,035K. This is the replacement cost of the building and ancillary equipment only and does not include the cost of procurement and installation of the processing equipment.

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

The facility occupies approximately 12881 square feet and has ceiling heights up to 40 feet in the casting area.

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

Other than normal electrical power, this building requires the following special utility support: compressed air @ 100 psi, steam, explosive waste water treatment system, and a telephone rated for hazardous atmospheres.

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

The facility must be specially designed and constructed for explosive operations including, as a minimum, all of the following features:

- a. Reinforced concrete floors, and pilings to support the foundation for heavy equipment.
- b. Reinforced concrete blast walls and ceiling.
- c. Frangible outer walls and roof in explosives operating areas to relieve blast overpressure.
- d. Conductive, closed pore coating on floors, and epoxy paint coating on walls to reduce static and prevent hazardous chemical migration into concrete.
- e. Static grounding system with exposed copper grounding buss bars in all operating rooms. Ground connections for all metal parts of building. Personnel grounding bars on exterior entrances.
- f. Lightning protection system.
- g. Buried electrical supply and remote control lines within 50 feet of the building.
- h. Official site planning for use with explosives (existing facility has a 5,000 lb limit).
- i. Engineering studies for Explosives Safety and Quantity Distance (ESQD) arc calculation.
- j. Engineering studies to determine safe explosive quantities in operating areas and safe blast overpressure levels for operators in control areas in case of accident.
- k. Engineering studies to determine sizes of blast walls.
- l. Exterior signaling system for explosives operations and storage.
- m. Electrical lighting, switches, outlets and conduits rated for hazardous atmospheres.

- n. Separate utility rooms for equipment that cannot be rated for hazardous atmospheres.
  - o. Fragment control earth berms around building exterior.
  - p. Fire alarm and interior sprinkler systems with link to local firefighting facility.
  - q. Large bay doors for forklift access. Loading dock for trucking access. Overhead cranes are required for material handling operations
  - r. Separate, reinforced magazine rooms for ready storage of explosives.
  - s. Compressed air distribution network and separate, oil-free instrument grade compressed air supply system, 80 psig @ 80 SCFM.
  - t. Vacuum supply and distribution network, 50 microns @ 10 SCFM.
  - u. Adjustable hot oil supply/circulator and distribution network, 100-500 F @ 5 gpm.
  - v. Building 456 is a three level structure with a 4'X 6'X6' pit in the floor on the first level for loading extremely long casings. The melt cast process is vertically configured with the mixer motors and other non-explosion proof electrical equipment mounted on the top level, mixing kettles are mounted on the second level and vacuum chambers for casting are directly beneath the mixers on the first floor.
7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

This facility requires the following environmental control features:

- a. Once-through, non-recirculating heating system.
- b. Hazardous fume and dust ventilation system having quick-disassemble ducting, and water-filled air tumbler/accumulator to remove hazardous solvents and dusts.
- c. Hazardous waste satellite accumulation site for temporary storage of hazardous chemical wastes.

- d. Wastewater drain troughs in each explosive operating room with filtering screens to support washdown of explosives contaminated floors and associated pumping station to deliver wastewater to treatment plant.

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

Relocating or replicating this facility would be difficult and costly due to a number of special requirements. The facility must have lightning protection, conductive floors, explosion proof equipment, a grounding system and steam supply. Explosive limits and quantity-distance requirements present additional restrictions. The only other activity that currently has some of this pilot plant capability is the HERD at Eglin AFB. They do not, however, possess the larger size kettles and vacuum chambers. This capability is essential to the Yorktown Detachment in fulfilling our mission of ensuring that the explosive loads of all Navy munitions are safe for fleet use as required by NAVSEAINST 8020.5B. Loss of this facility could result in less safe processing procedures for energetic materials and less safe munitions in the fleet for the reasons described in question 1. Since there is an interdependency between all of the Yorktown Detachment's operations, loss of any one facility would affect our capability to objectively review and assess competing loading processes. Loss of this facility could also result in supply problems for various special test charges that are important for ship hull testing, IMAD and munition development programs. The capabilities of the Detachment complement the existing capabilities within the Indian Head Division to allow us to provide the Navy with one organization for RDT&E, acquisition engineering and lifetime support for explosives. Therefore, customers and sponsors have the convenience of "one-stop shopping" for technical expertise for all types of explosives.

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

This facility was constructed in 1944 on site, specifically for explosives processing, with permanent type construction, custom concrete pours and cinderblock construction.

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

## 2.7 Explosives

This facility supports the NSWC Technical Capability: Explosives

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

The historical utilization average is given in man-hours per year worked in the facility. It does not include man-hours worked in the office to support work being performed in the facility.

<u>FY</u>	<u>Utilization (M-H)</u>
89	8,472
90	8,472
91	7,943
92	7,943
93	6,619

12. Provide the projected utilization data out to FY1997.

Projecting facility utilization data is difficult because our workload is constantly changing. We work for many different customers who are not able to give us accurate long range workload forecasts. However, based on historical data and our current workload forecast we project the following facility utilization data:

<u>FY</u>	<u>Utilization (M-H)</u>
94	6,500
95	6,500
96	6,500
97	6,500

13. What is the approximate number of personnel used to operate the facility/equipment?

Typically, five people are required to operate this facility under normal circumstances. Small jobs may be conducted with as few as two operators.

14. What is the approximate number of personnel needed to maintain the equipment?

The facility is maintained by the Naval Weapons Station Public Works Department. Clean-up and minor maintenance operations are conducted by the operating crew. The facility does not require dedicated maintenance personnel.

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



**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	Indian Head Division Yorktown Detachment
Facility/Equipment Nomenclature or Title	Explosives Press Loading Facility, Buildings 1757 & 1248

1. State the primary purpose(s) of the facility/equipment.

The primary purpose of this facility is to develop explosive pressing processes for new booster and main charge explosives and munitions. The facility was specifically designed for this purpose. The main facility contains a specially designed blast wall so that personnel are protected without having to retreat to a remote site. This makes our pressing operations very efficient. Many presses are contained in this facility including hand presses, 10 ton to 2000 ton presses, an extrusion press, and automated presses. The facility also houses preheat ovens and blenders. The 2000 ton press, one of the largest in the country, is operated remotely from building 539.

This facility is essential to ensuring that explosive processes involving pressed explosives are safe and effective prior to transitioning to production. The presses are used to evaluate the pressing properties of new pressed explosives and to evaluate proposed composition changes to existing explosive formulations for the IMAD program. The presses are also used to develop explosive loading processes for new munitions loaded with pressed explosives. A list of munitions recently, currently, or soon to be developed or improved by the Yorktown Detachment are: 5"/54 gun ammunition, 76 mm gun ammunition, SABRE boosters, MK 23/24 Cutter, Predator and LAW. We use data collected from these explosive loadings to prepare the Navy Munitions Data (NMD) specification that provides the requirements for production explosive loading of ordnance. The NMD governs in-house and contractor production. Also, this facility is used to conduct loading studies aimed at resolving production problems. Some of the equipment is typical of production equipment and well suited for this purpose.

Developing the NMD, required by NAVSEAINST 8020.11A, is an inherently governmental function, since it ensures that the Navy remains a smart buyer of explosive loaded munitions. It ensures that safety and performance are designed into the munition and that it meets the Navy's requirements. Without this governmental expertise and

involvement, the Navy would have to rely on industry, which has competing motives (i.e. profit), to designing in safety. Use of industry explosive loading development contracts which provide all-up-round safety and performance requirements has several problems:

-The Navy ends up buying a "black box". We no longer understand how the explosive system works.

-It is very difficult to establish all-up-round safety requirements that will ensure the safety of the munition. Furthermore, to confirm that a safety requirement is met, a cost prohibitive number of tests would have to be performed for a statistically significant result.

-After production starts, very expensive Lot Acceptance Testing must be performed to try to ensure that all safety and performance requirements are met.

Therefore, the governmental function of preparing and maintaining the NMD ensures that the Navy buys munitions which meet safety and performance requirements, while avoiding costly acceptance tests.

The automated press can also be used for limited or special production runs where responsiveness, quantity or uniqueness makes industry production impractical.

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

This facility is a permanent, fixed facility; however, the equipment is moveable.

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

The current replacement cost of the facility/equipment is approximately \$851K. This is the cost of replacing the buildings and ancillary equipment only and does not include the cost of procurement and installation of the processing equipment.

The current replacement cost of the 2000 Ton Press located in building 1248 is approximately \$500,000.

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

The area of the facility is 4888 sq ft. The total cubic feet occupied by the 2000 Ton Press is 1643. The gross weight of the press and its components is approximately 130,000 lbs.

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

Other than normal electrical power, this building requires the following special utility support: three-phase electrical power @ 440 VAC, 200 amps, compressed air @ 100 psi and 80 CFM, ordnance wastewater collection piping and treatment facility, and a telephone rated for hazardous atmospheres.

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

The facility must be specially designed and constructed for explosive operations including, as a minimum, all of the following features:

- a. Reinforced concrete floors, and pilings to support the foundation for heavy equipment.
- b. Reinforced concrete blast walls and ceiling with heavy steel blast doors to protect operator control areas.
- c. Frangible outer walls and roof in explosives operating areas to relieve blast overpressure.
- d. Conductive, closed pore coating on floors, and epoxy paint coating on walls to reduce static and prevent hazardous chemical migration into concrete.
- e. Static grounding system with exposed copper grounding buss bars in all operating rooms. Ground connections for all metal parts of building. Personnel grounding bars on exterior entrances.
- f. Lightning protection system.
- g. Buried electrical supply and remote control lines within 50 feet of the building.
- h. Official site planning for use with explosives.
- i. Engineering studies for Explosives Safety and Quantity Distance (ESQD) arc calculation.
- j. Engineering studies to determine safe explosive quantities in operating areas and safe blast overpressure levels for operators in control areas in case of accident.
- k. Engineering studies to determine sizes of blast walls and doors.
- l. Exterior signaling system for explosives operations and storage.
- m. Electrical lighting, switches, outlets and conduits rated for hazardous atmospheres.

- n. Separate utility rooms for equipment that cannot be rated for hazardous atmospheres.
- o. Fragment control earth berms around building exterior.
- p. Fire alarm and interior sprinkler systems with link to local firefighting facility.
- q. Safety barricades on all access paths and roads for hazardous operations.
- r. Large bay doors for forklift access.
- s. Separate, reinforced magazine room for ready storage of explosives.
- t. Compressed air distribution network and separate, oil-free instrument grade compressed air supply system, 80 psig @ 40 CFM.
- u. Vacuum supply and distribution network, 50 microns @ 10 SCFM.
- v. Adjustable hot oil supply/circulator and distribution network, 100-500 F @ 5 gpm.
- w. In addition, this facility requires a remote control bunker, building # 1756, which is described on a separate form. A remote control cable having 25 #18 gauge conductors is required between this facility and the remote control bunker.
- x. Two 10' deep pits are required for installation of the 200 ton Double-Acting Press and the 2000 Ton Press.

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

This facility/equipment requires the following environmental control features:

- a. Once-through, non-recirculating HVAC system for heating, cooling, and humidity control for powder weighing areas in building 1757.
- b. Hazardous fume and dust ventilation system having quick-disassemble ducting.
- c. Hazardous waste satellite accumulation site for temporary storage of hazardous chemical wastes.
- d. Wastewater drain troughs in each explosive operating room with filtering screens to support washdown of explosives contaminated floors and associated pumping station to deliver wastewater to treatment plant.
- e. Spill containment dams encircling the hydraulic power unit oil reservoirs for each press.

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

Relocating or replicating this facility would be difficult and costly due to a number of special requirements. The facility must have a remote control capability in the building, reinforced concrete pits for housing the larger presses, lightning protection, conductive floors, explosion proof equipment, a separate hydraulic pump room and a grounding system. Explosive limits and quantity-distance requirements present additional restrictions. The 2000 ton press is particularly difficult to move, since the building was built around it after installation. Other activities that currently have some of this capability include NAWC Weapons Division China Lake and a number of private contractors, however, they do not possess the variety and range of sizes of presses in a pilot plant facility that we have. This capability is essential to the Yorktown Detachment in fulfilling our mission of ensuring that the explosive loads of all Navy munitions are safe for fleet use as required by NAVSEAINST 8020.5B. Loss of this facility could result in less safe processing procedures for energetic materials and less safe munitions in the fleet as described in question 1. Since there is an interdependency between all of the Yorktown Detachment's operations, loss of any one facility would affect our capability to objectively review and assess competing loading processes. The capabilities of the Detachment complement the existing capabilities within the Indian Head Division to allow us to provide the Navy with one organization for RDT&E, acquisition engineering and lifetime support for explosives. Therefore, customers and sponsors have the convenience of "one-stop shopping" for technical expertise for all types of explosives.

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

Building 1757 was constructed in 1969 on site, specifically for explosives processing, with permanent type construction, custom concrete pours and cinderblock construction that cannot be moved without being destroyed.

Building 1248 was constructed in 1958 on site, specifically for explosives processing, with permanent type construction, custom concrete pours and cinderblock construction that cannot be moved without being destroyed. The outer walls of the facility were assembled only after the primary explosives processing equipment and the 2000 Ton Press was installed.

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

2.7 Explosives

This facility supports the NSWC Technical Capability: Explosives

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

The historical utilization average is given in man-hours per year worked in the facility. It does not include man-hours worked in the office to support work being performed in the facility.

<u>FY</u>	<u>Utilization (M-H)</u>
89	6,000
90	6,000
91	6,000
92	6,000
93	6,000

12. Provide the projected utilization data out to FY1997.

Projecting facility utilization data is difficult because our workload is constantly changing. We work for many different customers who are not able to give us accurate long range workload forecasts. However, based on historical data and our current workload forecast we project the following facility utilization data:

<u>FY</u>	<u>Utilization (M-H)</u>
94	6,000
95	6,000
96	6,000
97	6,000

13. What is the approximate number of personnel used to operate the facility/equipment?

Three (3) people are required to operate this facility under normal circumstances.

14. What is the approximate number of personnel needed to maintain the equipment?

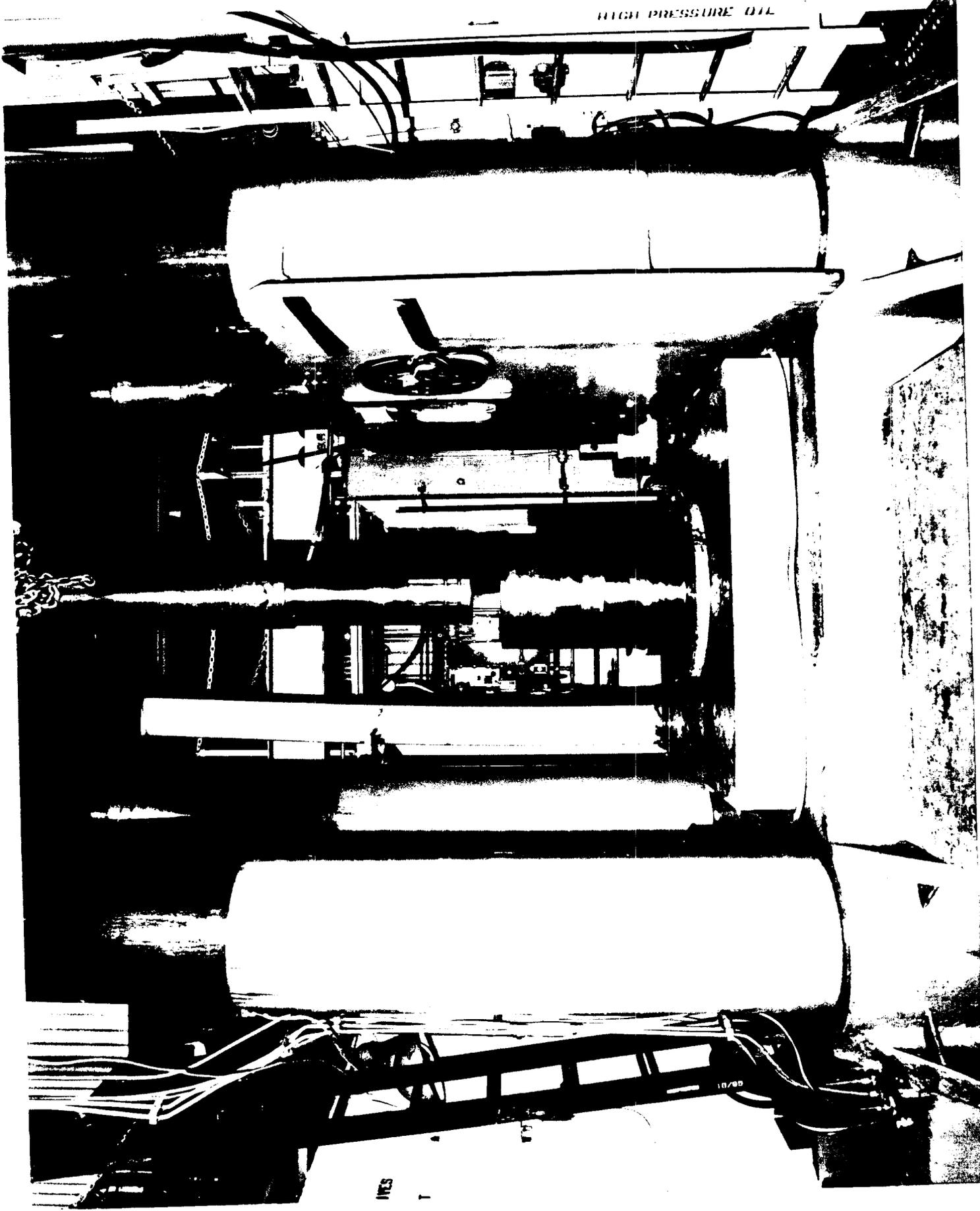
There are no people dedicated to the maintenance of this facility. Maintenance, when required, is performed by the Public Works department of the Naval Weapons Station, Yorktown, Va. Facility operators conduct routine and preventative maintenance on equipment and facilities.

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





HIGH PRESSURE OIL



IVES

10/90

**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	Indian Head Division Yorktown Detachment
Facility/Equipment Nomenclature or Title	PBX Mixing/Casting/Demil Facility Buildings 373, 382, 460, 1754, 1755, 1756 & 1782

1. State the primary purpose(s) of the facility/equipment.

The purpose of this facility is to develop mixing, loading and demil processes for new Plastic Bonded Explosives (PBX). It was specifically designed for this purpose. It houses 2 gallon, 30 gallon and 150 gallon vertical planetary mixers which are used to scale-up new explosive formulations from lab scale to production scale for the IMAD program. It is important to produce large scale batches of new explosives at a pilot plant prior to transitioning the process to production. This pilot plant scale-up eliminates many problems that would otherwise plague the start-up of a new production line.

The facility also includes a PBX continuous processor and PBX injection loader developed under the IMAD program. The former uses a Programmable Logic Controlled (PLC) twin screw extruder and loss-in-weight feeders to mix and load the PBX. This process yields less waste than does conventional batch mixing, and is inherently safer because less material is processed at any one time. It can also achieve much higher production rates at a lower capital investment than with batch processing. The injection loader is used to load highly viscous PBX explosives into submunitions such as JSOW and Tomahawk, and detonation cords for Surf Zone. Currently submunitions are primarily loaded with melt cast explosives which do not meet vulnerability requirements. The injection loading process allows us to load the less vulnerable PBX explosives into these submunitions. In addition to these safety improvements, it can greatly improve the explosive load quality and production rate versus conventional casting methods.

The larger mixers are primarily used to develop explosive loading processes for new munitions loaded with PBX explosives. A list of munitions recently, currently, or soon to be developed or improved by the Yorktown Detachment are: Standard Missile, Penguin, Surf Zone, Tomahawk, SLAM, 5"/54 gun ammunition, 76 mm gun ammunition, Penetrator Bomb, HARM, Deformable Warhead, ESSM and JSOW. We use data collected from these explosive loadings to prepare the Navy Munitions Data (NMD) specification that provides

the requirements for production explosive loading of ordnance. The NMD governs in-house and contractor production. During production, this facility is used to conduct studies to help resolve production problems for munitions such as AMRAAM, HARM, Tomahawk, G.P. Bombs, Penetrator Bomb, Standard Missile, Penguin, gun ammunition, MK 50 Torpedo, and other programs.

Developing the NMD, required by NAVSEAINST 8020.11A, is an inherently governmental function, since it ensures that the Navy remains a smart buyer of explosive loaded munitions. It ensures that safety and performance are designed into the munition and that it meets the Navy's requirements. Without this governmental expertise and involvement, the Navy would have to rely on industry, which has competing motives (i.e. profit), to designing in safety. Use of industry explosive loading development contracts which provide all-up-round safety and performance requirements has several problems:

- The Navy ends up buying a "black box". We no longer understand how the explosive system works.

- It is very difficult to establish all-up-round safety requirements that will ensure the safety of the munition. Furthermore, to confirm that a safety requirement is met, a cost prohibitive number of tests would have to be performed for a statistically significant result.

- After production starts, very expensive Lot Acceptance Testing must be performed to try to ensure that all safety and performance requirements are met.

Therefore, the governmental function of preparing and maintaining the NMD ensures that the Navy buys munitions which meet safety and performance requirements, while avoiding costly acceptance tests.

The facility also contains a high pressure water washout system that is operated from two remote control sites, one (building 459) close by for smaller items and another (building 1782) for larger items. The washout system uses pressurized water and specially designed nozzles to cut the explosive from the munition. The facility is used to develop explosive downloading procedures for new munitions, particularly those loaded with PBX explosives. Downloading procedures are required for all new munitions for life cycle management. These procedures are documented in the Navy Munitions Data specifications as an appendix. This facility is also used for downloading rejected explosive loaded production hardware so that the hardware may be reused. The facility is essential for life cycle management of new munitions and has been used to develop demil procedures for AMRAAM, Maverick, Bombs, Tomahawk, gun ammunition, HARM, Standard Missile, MK 50 Torpedo, Penguin, and other programs.

This facility can also be used for limited or special production where responsiveness, quantity or uniqueness makes industry production impractical.

Buildings 382, 1756 and 1782 are the remote control bunkers for this facility. All explosive mixing is performed remotely to protect personnel from any hazards associated with mixing new explosives.

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

This facility is a permanent facility, but the equipment is moveable.

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

The current replacement cost of the facility is approximately \$2,177K (FY94) not including movable equipment. The replacement cost of the 30 gallon mixer was quoted at \$1,300K and cost of the 150 gallon mixer was quoted at \$1,750K. This is the cost of replacing the building and ancillary equipment only, and does not include the cost of procurement and installation of the processing equipment.

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

The square feet that the facility occupies is approximately 14621 square feet. The cubic feet occupied by the greater than \$500K equipment is 8640 cubic feet for the 150 gallon mixer and 1728 cubic feet for the 30 gallon mixer. Their gross weight is approximately 37,000 lbs.

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

Other than normal electrical power, this facility requires the following special utility support: compressed air @ 100 psi and 100 SCFM, a vacuum system @ 2 mmHg and 80 SCFM, steam @ 125 psi and a telephone rated for hazardous atmospheres.

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

The buildings in this facility must be specially designed and constructed for explosive operations including, as a minimum, all of the following features:

- a. Reinforced concrete floors, and pilings to support the foundation for heavy equipment.
- b. Reinforced concrete blast walls and ceiling with heavy steel blast doors to protect operator control areas.
- c. Frangible outer walls and roof in explosives operating areas to relieve blast overpressure.
- d. Conductive, closed pore coating on floors, and epoxy paint coating on walls to reduce static and prevent hazardous chemical migration into concrete.
- e. Static grounding system with exposed copper grounding buss bars in all operating rooms. Ground connections for all metal parts of building. Personnel grounding bars on exterior entrances.
- f. Lightning protection system.
- g. Buried electrical supply and remote control lines within 50 feet of the building.
- h. Official site planning for use with explosives.
- i. Engineering studies for Explosives Safety and Quantity Distance (ESQD) arc calculation.
- j. Engineering studies to determine safe explosive quantities in operating areas and safe blast overpressure levels for operators in control areas in case of accident.
- k. Engineering studies to determine sizes of blast walls and doors.
- l. Exterior signaling system for explosives operations and storage.
- m. Electrical lighting, switches, outlets and conduits rated for hazardous atmospheres.
- n. Separate utility rooms for equipment that cannot be rated for hazardous atmospheres.
- o. Fragment control earth berms around building exterior.
- p. Fire alarm and interior sprinkler systems with link to local firefighting facility.
- q. Safety barricades on all access paths and roads for hazardous operations.
- r. Large bay doors for forklift access. Loading dock for trucking access.
- s. Separate, reinforced magazine rooms for ready storage of explosives.
- t. Compressed air distribution network system, 100 psig @ 100 SCFM.
- u. Vacuum supply and distribution network, 2 mmHg @ 80 SCFM.
- v. Adjustable hot and chilled water supply/circulator and distribution network, 0-100 C @ 20 gpm.
- w. Over pressure protected remote control bunker in Bldg. 1756 & 382, having at least 20 #18 gauge conductors and CCTV cables running underground to Bldg. 1754 & 373 respectively for control of the processes.

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

This facility requires the following environmental control features:

- a. Once-through, non-recirculating HVAC system for heating, cooling, and humidity for buildings 1754 and 1755. Buildings 373 and 460 have non-recirculating heating systems.
- b. Hazardous fume and dust ventilation system having quick-disassemble ducting, and water-filled air tumbler/accumulator to remove hazardous solvents and dusts.
- c. Hazardous waste satellite accumulation site for temporary storage of hazardous chemical wastes.
- d. Wastewater drain troughs in each explosive operating room with filtering screens to support washdown of explosives contaminated floors and associated pumping station to deliver wastewater to treatment plant.

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

Relocating or replicating this facility would be difficult and costly due to a number of special requirements. The facility must have remote control capability, lightning protection, conductive floors, explosion proof equipment and a grounding system. Explosive limits and quantity-distance requirements present additional restrictions. Other activities that currently have some of this capability include the NSWC Indian Head Division, NAWC Weapons Division China Lake, the HERD at Eglin AFB, the University of Missouri at Rolla (demil only) and a number of private contractors. No other activity possesses all of this capability, and the injection loader is the only operational pilot plant system of its kind. This capability is essential to the Yorktown Detachment in fulfilling our mission of ensuring that the explosive loads of all Navy munitions are safe for fleet use as required by NAVSEAINST 8020.5B. Loss of this facility could result in less safe processing procedures for energetic materials and less safe munitions in the fleet as explained in question 1. Since there is an interdependency between all of the Yorktown Detachment's operations, loss of any one facility would affect our capability to objectively review and assess competing loading processes. The capabilities of the Detachment complement the existing capabilities within the Indian Head Division to allow us to provide the Navy with one organization for RDT&E, acquisition engineering and lifetime support for explosives.

Therefore, customers and sponsors have the convenience of "one-stop shopping" for technical expertise for all types of explosives.

Development of advanced processing techniques is important to saving the Navy money in production costs, meeting new environmental and safety regulations, and meeting new performance and vulnerability requirements. Loss of the injection loading capability will impact programs such as Surf Zone and Tomahawk requiring this technology to explosive load PBX explosives into submunitions for smart weapons and detonation cords for mine clearing systems. This work is inherently governmental to ensure that someone is taking a long term approach to developing improved processes. Industry typically is more short term focused due to bottom line pressures.

The demil capability is essential to the Yorktown Detachment in fulfilling our mission of ensuring that the explosive loads of all Navy munitions are able to be downloaded at the end of their life cycle. Loss of this facility could result in stockpiles of munitions at the end of their life cycle with no method for disposal except detonation. Some of these stockpiled munitions could contain experimental explosives with unknown shelf lives.

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

Buildings 1754, 1755, 1756 & 1782 were constructed in 1969 on site, specifically for explosives processing, with permanent type construction, custom concrete pours and cinderblock construction that cannot be moved without being destroyed.

Buildings 373 and 382 were constructed in 1942 on site, specifically for explosives processing, with permanent type construction, custom concrete pours and cinderblock construction that cannot be moved without being destroyed.

Building 460 was constructed in 1981 on site, specifically for explosives processing, with permanent type construction, custom concrete pours and cinderblock construction that cannot be moved without being destroyed.

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

## 2.7 Explosives

This facility supports the NSWC Technical Capability: Explosives

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

The historical utilization average is given in man-hours per year worked in the facility. It does not include man-hours worked in the office to support work being performed in the facility.

<u>FY</u>	<u>Utilization (M-H)</u>
89	15,886
90	14,120
91	16,061 <sup>1</sup>
92	15,355 <sup>1</sup>
93	13,855

<sup>1</sup> The facility was closed during this time period for repair of the 150 gallon mixer. During this time, we were able to use the 300 gallon mixer owned by the NWS, Yorktown and the 150 gallon mixer located at Indian Head.

12. Provide the projected utilization data out to FY1997.

Projecting facility utilization data is difficult because our workload is constantly changing. We work for many different customers who are not able to give us accurate long range workload forecasts. However, based on historical data and our current workload forecast we project the following facility utilization data:

<u>FY</u>	<u>Utilization (M-H)</u>
94	14,300
95	14,300
96	14,300
97	14,300

13. What is the approximate number of personnel used to operate the facility/equipment?

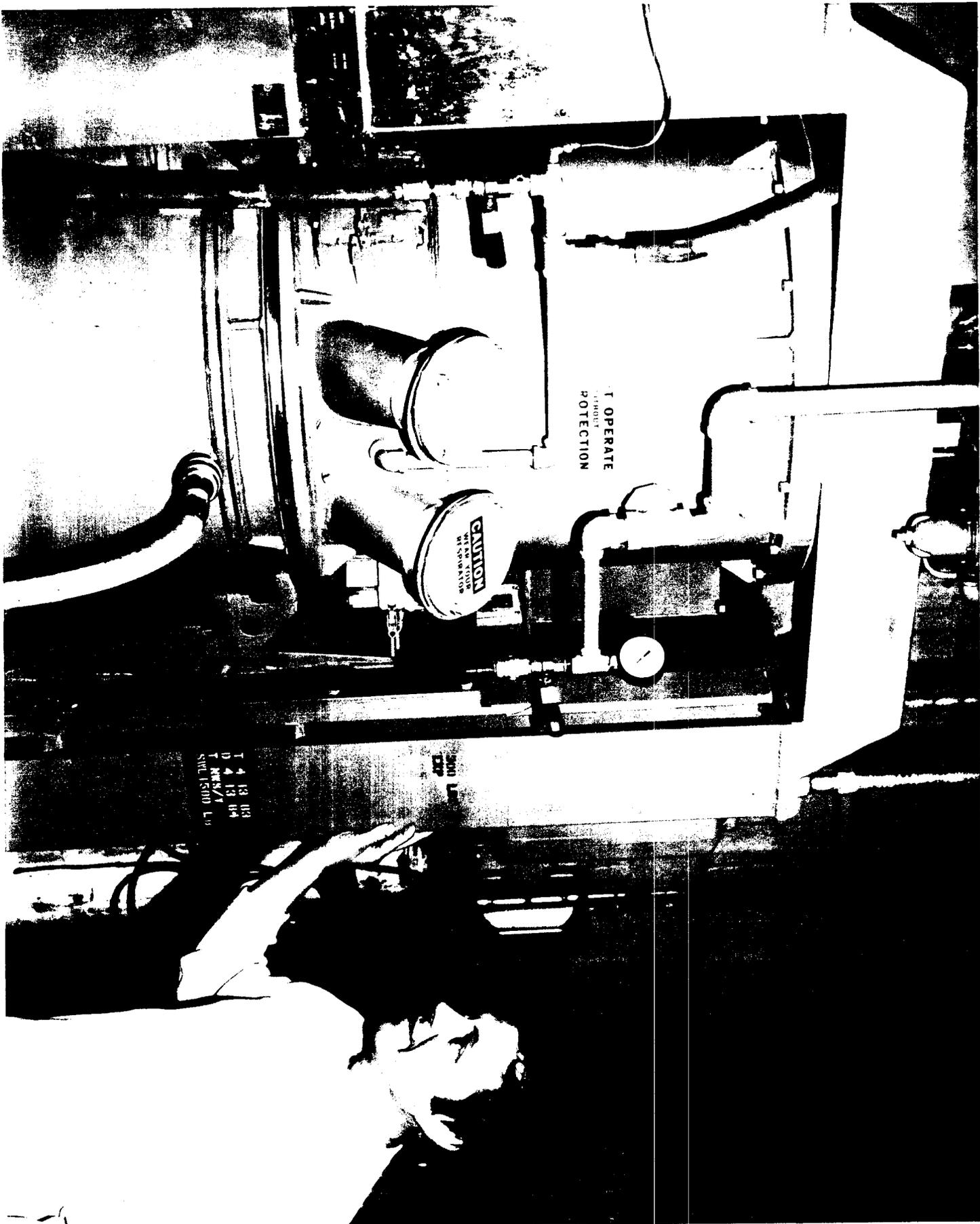
Four people are required to operate this facility under normal circumstances.

14. What is the approximate number of personnel needed to maintain the equipment?

The facility is maintained by the Naval Weapons Station Public Works Department or outside contractors as needed. Our mechanical engineering technicians perform routine adjustments and preventative maintenance. Repair work to complex equipment is generally performed by the manufacturer's representative.

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

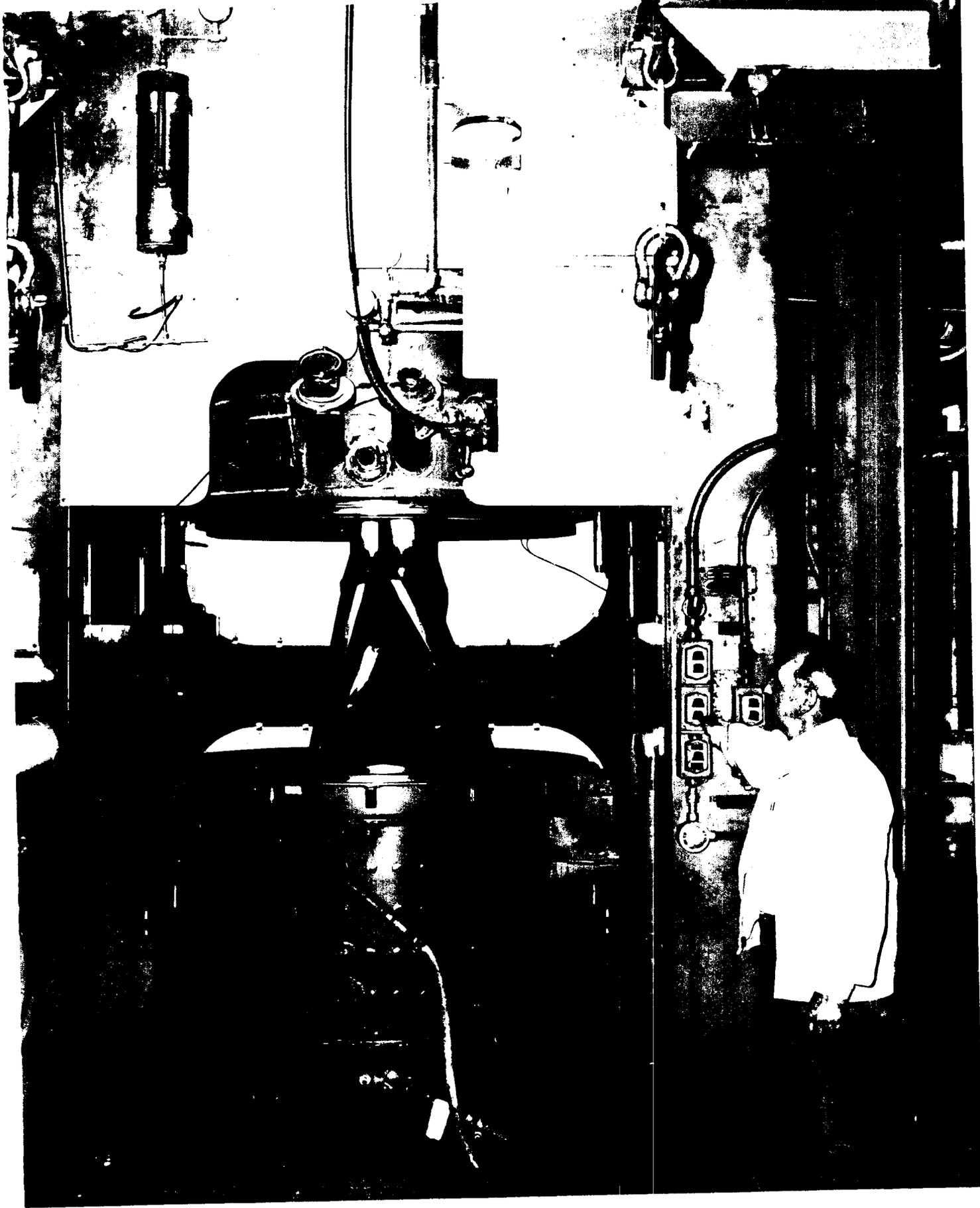


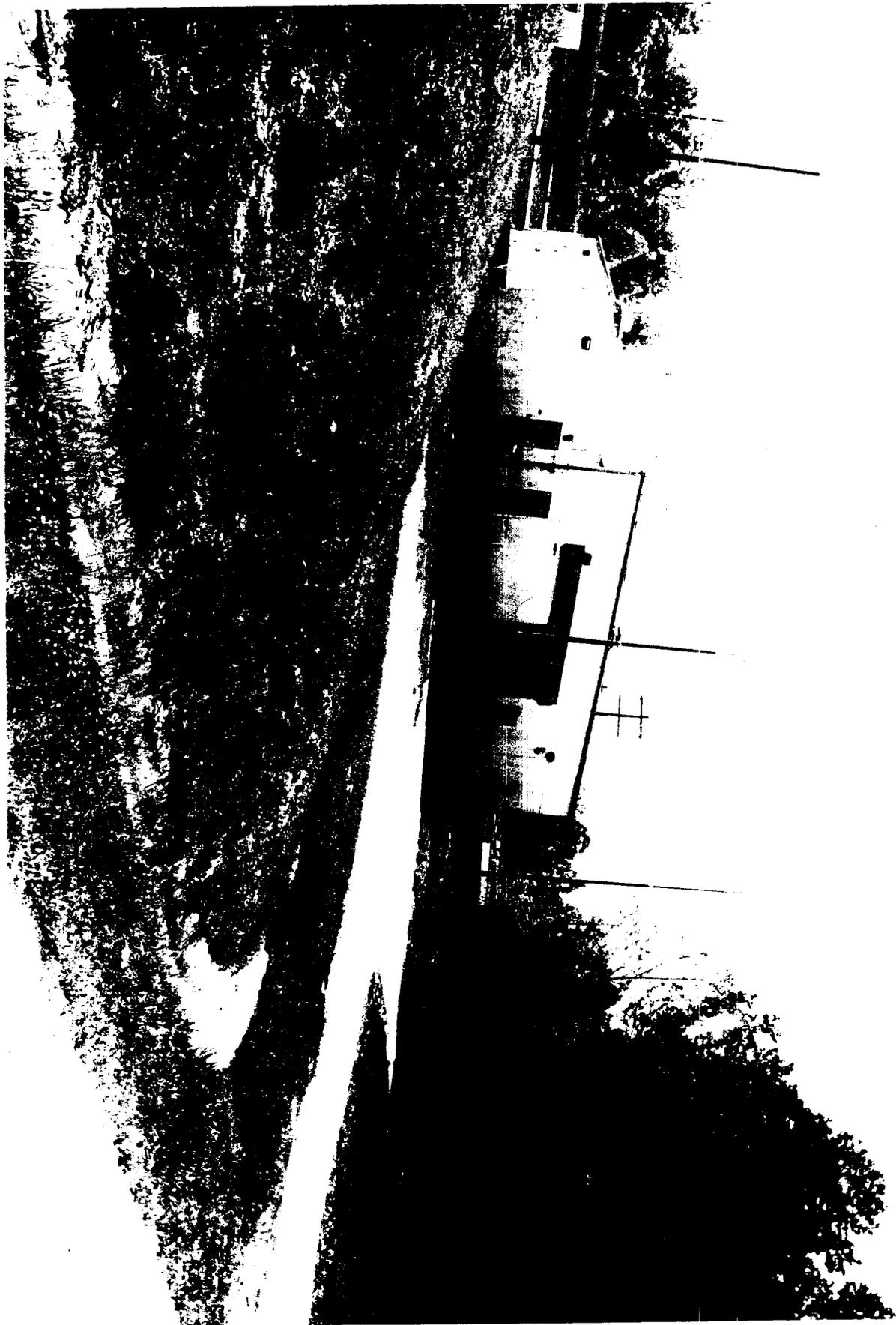


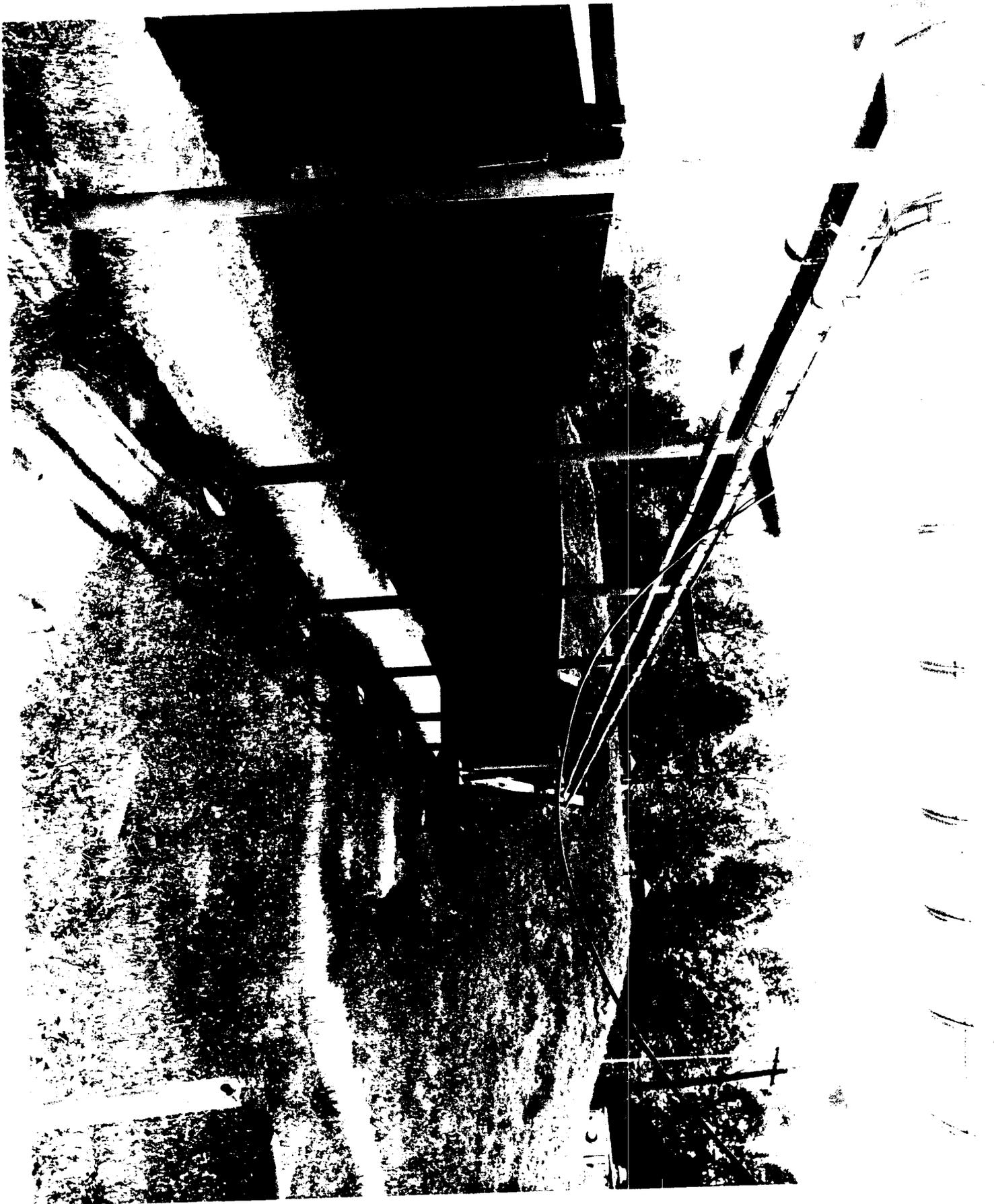
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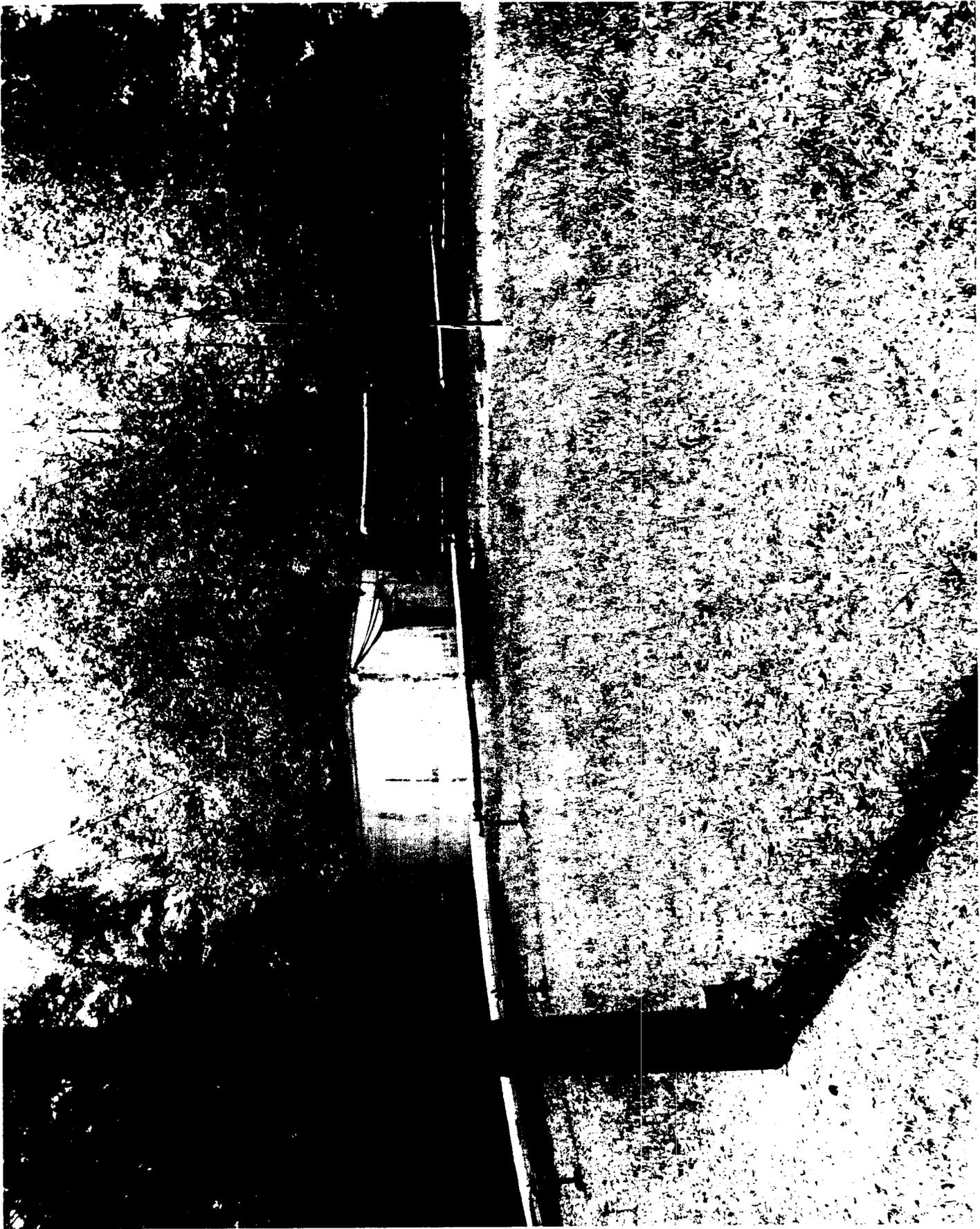


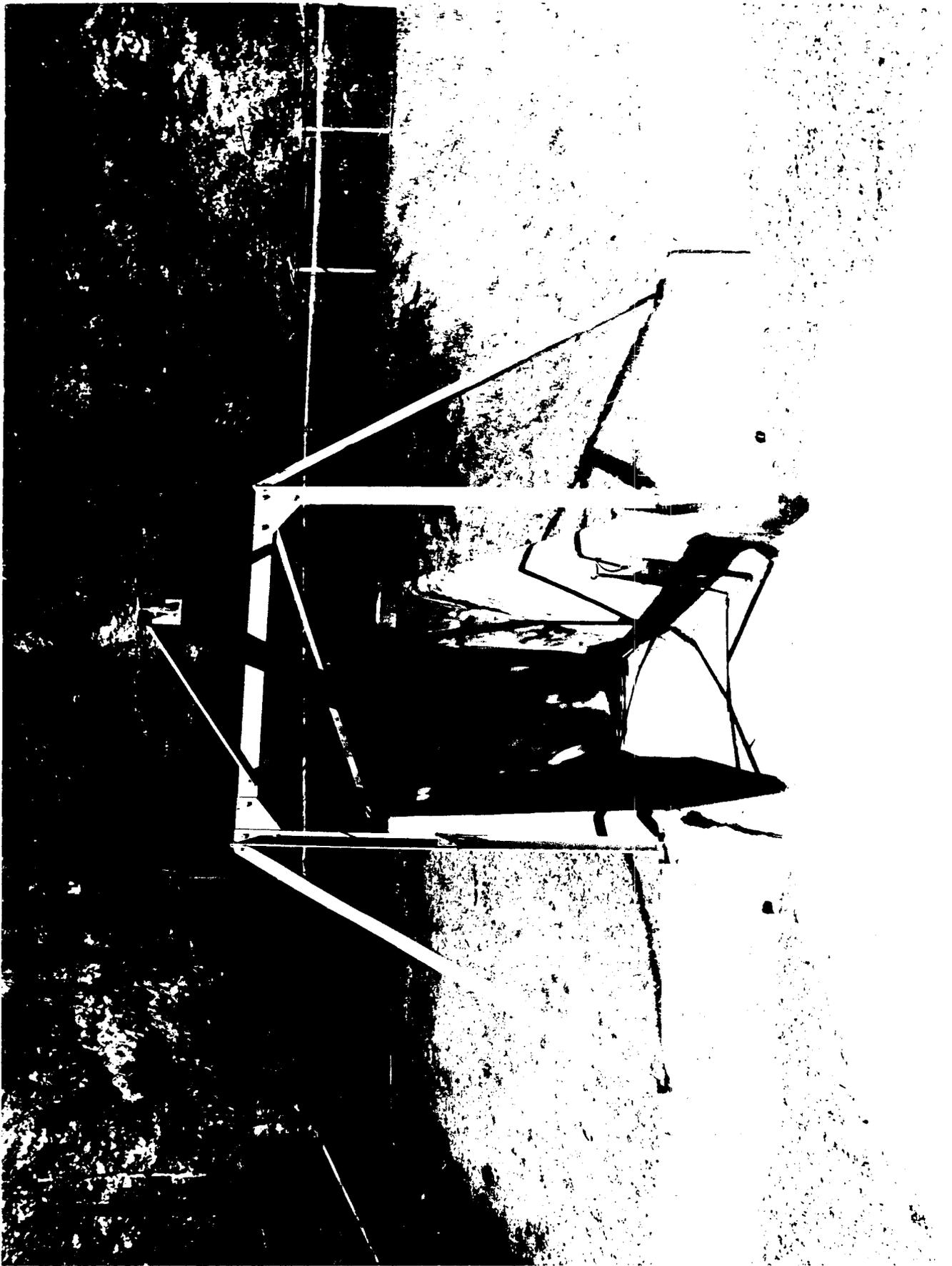












**SPECIAL FACILITIES AND EQUIPMENT  
FACILITIES/EQUIPMENT CAPABILITY FORM**

Technical Center Site	Indian Head Division Yorktown Detachment
Facility/Equipment Nomenclature or Title	Support Facilities Bldgs: 459, 537, 539, 1479, 1751, 1752 & 1753

1. State the primary purpose(s) of the facility/equipment.

The purpose of this facility is to provide support to the other explosive processing operations of the Yorktown Detachment. The support facility includes:

- an explosives chemistry laboratory which possesses state-of-the-art equipment for conducting thermal analysis, compatibility testing, composition analysis, elemental analysis and raw material analysis related to explosive materials;
- a physical properties testing & small scale mixing laboratory containing equipment for physical property measurement and small scale processing equipment for making PBX explosives, melt cast explosives, and pressed explosive molding powders;
- explosive machining buildings which house a hacksaw, radial arm drill, several core and cavity drills, a band saw, lathe and mill for machining bare and cased explosives, and sectioning warheads;
- munition preparation building which houses two hot melt lining tanks, preheat ovens and a paint booth;
- a machine and wood shop for manufacturing fixtures and tooling; and
- explosive storage magazines.

Before working with any new explosive material, laboratory characterization tests are essential to ensure that the material is safe to process. Compatibility testing is particularly important for determining whether materials that could come into contact with explosives can be used safely in munitions.

Measurement of explosives' physical properties is important for meeting performance and vulnerability requirements. Measurement of properties such as viscosity and particle size distribution is important in determining producibility of materials. Small scale work is essential before proceeding to larger scales (batches > 10 lbs.) to minimize the risks associated with processing new materials.

The explosive machining equipment is used to machine explosive loaded hardware for development, qualification or surveillance programs. In development, this equipment is used to characterize explosive loaded munitions. It is also used for final explosive machining of pressed explosives (i.e. facing or fuze cavity drilling). Before loading, most munitions must be lined and painted. The lining equipment is used to provide a protective coat around the explosive to prevent accidental detonations. We use data collected from taking core samples from test hardware and from these munition preparation operations to prepare the Navy Munitions Data (NMD) specification that provides the requirements for production explosive loading of ordnance. The NMD governs in-house and contractor production. This equipment is also used to conduct loading studies aimed at resolving production problems. This equipment has recently been used to support programs mentioned in the other facility sections of Tab B.

Developing the NMD, required by NAVSEAINST 8020.11A, is an inherently governmental function, since it ensures that the Navy remains a smart buyer of explosive loaded munitions. It ensures that safety and performance are designed into the munition and that it meets the Navy's requirements. Without this governmental expertise and involvement, the Navy would have to rely on industry, which has competing motives (i.e. profit), to designing in safety. Use of industry explosive loading development contracts which provide all-up-round safety and performance requirements has several problems:

- The Navy ends up buying a "black box". We no longer understand how the explosive system works.

- It is very difficult to establish all-up-round safety requirements that will ensure the safety of the munition. Furthermore, to confirm that a safety requirement is met, a cost prohibitive number of tests would have to be performed for a statistically significant result.

- After production starts, very expensive Lot Acceptance Testing must be performed to try to ensure that all safety and performance requirements are met.

Therefore, the governmental function of preparing and maintaining the NMD ensures that the Navy buys munitions which meet safety and performance requirements, while avoiding costly acceptance tests.

This machining equipment is also used to section First Article samples submitted by production facilities. The samples are analyzed to ensure that requirements are met before qualifying the producer. This work is also inherently governmental, since the government must be certain that its contractors are capable. We have recently qualified producers such as Thiokol for Tomahawk, McAlester AAP for the Penetrator Bomb, ARS for Tomahawk, Crane AAP for the 5"/54 projectile and HiTech for the MK 98 MND.

The machining equipment is also used to section fleet issue hardware for surveillance purposes. Samples are taken and analyzed to ensure that munitions in the fleet are still safe and able to perform. We recently performed surveillance work on HARM warheads.

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call.

This facility is a permanent, fixed facility but the equipment is moveable.

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

The current replacement cost of the facility is approximately \$ 4,501K. This is the cost of replacing the building and ancillary equipment only and does not include the cost of procurement and installation of processing equipment.

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

The area of the facility is 25,865 sq ft.

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power.

Other than normal electrical power, most of the buildings in the support facility require the following special utility support: compressed air @ 100 psi and 80 CFM, ordnance wastewater collection piping and treatment facility, and a telephone rated for hazardous atmospheres. Building 1753 also requires three-phase electrical power @ 440 VAC, 100 amps. The magazine complex does not require any utilities.

6. Indicate any special budget requirements for the facility/equipment (i.e., special foundations, non-ferrous materials, shielding, hardening, etc.).

The operating facilities must be specially designed and constructed for explosive operations including, as a minimum, all of the following features:

- a. Reinforced concrete floors, and pilings to support the foundation for heavy equipment.
- b. Reinforced concrete blast walls and ceiling with heavy steel blast doors to protect operator control areas.
- c. Frangible outer walls and roof in explosives operating areas to relieve blast overpressure.
- d. Conductive, closed pore coating on floors, and epoxy paint coating on walls to reduce static and prevent hazardous chemical migration into concrete.
- e. Static grounding system with exposed copper grounding buss bars in all operating rooms. Ground connections for all metal parts of building. Personnel grounding bars on exterior entrances.
- f. Lightning protection system.
- g. Buried electrical supply and remote control lines within 50 feet of the building.
- h. Official site planning for use with explosives.
- i. Engineering studies for Explosives Safety and Quantity Distance (ESQD) arc calculation.
- j. Engineering studies to determine safe explosive quantities in operating areas and safe blast overpressure levels for operators in control areas in case of accident.
- k. Engineering studies to determine sizes of blast walls and doors.
- l. Exterior signaling system for explosives operations and storage.
- m. Electrical lighting, switches, outlets and conduits rated for hazardous atmospheres.
- n. Separate utility rooms for equipment that cannot be rated for hazardous atmospheres.
- o. Fragment control earth berms around building exterior.
- p. Fire alarm and interior sprinkler systems with link to local firefighting facility.
- q. Safety barricades on all access paths and roads for hazardous operations.
- r. Large bay doors for forklift access. Loading dock for trucking access.
- s. Separate, reinforced magazine room for ready storage of explosives.
- t. Compressed air distribution network and separate, oil-free instrument grade compressed air supply system, 80 psig @ 80 SCFM.
- u. Vacuum supply and distribution network, 50 microns @ 10 SCFM.
- v. In addition, building 1753 requires a remote control bunker, building # 1756, which is described on a separate form. A remote control cable having 60 #18 gauge conductors is required between this building and the remote control bunker.

The magazines must be specially designed and constructed for explosive storage including, as a minimum, all of the following features:

- a. Reinforced concrete construction with a minimum earth cover of 2 feet and equipped with a concrete pad or loading platform for loading/unloading trucks.
- b. Lightning protection system.
- c. Official site planning for use with explosives.
- d. Engineering studies for Explosives Safety and Quantity Distance (ESQD) arc calculation.
- e. Fragment control earth berms around magazine exterior.
- f. Steel doors connected to the secondary grounding system.
- g. Reinforced concrete floors with smooth finish.
- h. Metal ventilators which must be bonded to the secondary grounding system.

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing).

The facility requires the following environmental control features:

- a. Once-through, non-recirculating HVAC system for heating, cooling, and humidity control for explosive operating buildings (537, 1753, 1751 & 1752).
- b. Hazardous fume and dust ventilation system having quick-disassemble ducting, and water-filled air tumbler/accumulator to remove hazardous solvents and dusts for explosive operating buildings and building 1479.
- c. Hazardous waste satellite accumulation site for temporary storage of hazardous chemical wastes for all operating buildings.
- d. Wastewater drain troughs in each explosive operating room with filtering screens to support washdown of explosives contaminated floors and associated pumping station to deliver wastewater to treatment plant.

8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements are formulated.

Relocating or replicating the machining equipment would be difficult and costly due to a number of special requirements. The facility must have remote control capability, lightning protection, conductive floors, explosion proof equipment and a grounding system. Explosive limits and quantity-distance requirements present additional restrictions. They present restrictions with relocating or replicating the laboratories as well, although their limits are relatively small. Also, the small scale mixing equipment requires remote control capability, and its facility must have lightning protection, conductive floors, explosion proof equipment and a grounding system. The inert operations would be relatively easy to relocate. Relocating or replicating our storage magazines would be difficult and costly due to construction requirements, and explosive limits and quantity-distance restrictions.

Other activities that currently have some of this capability include the NSWC Indian Head Division, NSWC Crane Division, NAWC Weapons Division China Lake, the HERD at Eglin AFB, ARDEC at Picatinny Arsenal and a number of private contractors. None, however, contain this entire capability which is essential to the Yorktown Detachment in fulfilling our mission of ensuring that the explosive loads of all Navy munitions are safe for fleet use as required by NAVSEAINST 8020.5B. Many other activities possess explosive storage magazines, but available space may be limited. This facility supports all of our other explosive facilities. It is important for ensuring the safety of older fleet issue munitions. It is also important for ensuring that producers are correctly explosive loading a munition to meet safety and performance requirements. Loss of this facility could result in less safe processing procedures for energetic materials and less safe munitions in the fleet for the reasons discussed in question 1. Since there is an interdependency between all of the Yorktown Detachment's operations, loss of any one facility would affect our capability to objectively review and assess competing loading processes. The capabilities of the Detachment complement the existing capabilities within the Indian Head Division to allow us to provide the Navy with one organization for RDT&E, acquisition engineering and lifetime support for explosives. Therefore, customers and sponsors have the convenience of "one-stop shopping" for technical expertise for all types of explosives.

9. Indicate how and when the facility/equipment was transported and or constructed at the site.

The buildings in this facility were constructed on site with permanent type construction, custom concrete pours and cinderblock construction (except building 1479 which is metal frames), as follows:

- Building 459 was constructed in 1944 and modified in the late 1950's for explosive processing.
- Building 537 was built in 1946 and modified in the 1950's for explosive processing.
- Building 539 was built in 1944 and was used as an X-Ray facility and a explosive processing facility prior to being converted to a machine shop and control bunker (for building 1248).
- Building 1479 was built in 1964 to be used as an inert preparation facility.
- Buildings 1751 and 1752 were built in 1969 to provide explosive chemistry laboratory support.
- Building 1753 was built in 1969 to be utilized for explosive processing.

10. List the functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas.

#### 2.7 Explosives

This facility supports the NSWC Technical Capability: Explosives

11. Provide the historical utilization average for the past five fiscal years (1989-1993). Define the unit of measure used.

The historical utilization average is given in man-hours per year worked in the facility. It does not include man-hours worked in the office to support work being performed in the facility.

<u>FY</u>	<u>Utilization (M-H)</u>
89	20,827
90	19,945
91	18,533
92	17,297
93	18,091

12. Provide the projected utilization data out to FY1997.

Projecting facility utilization data is difficult because our workload is constantly changing. We work for many different customers who are not able to give us accurate long range workload forecasts. However, based on historical data and our current workload forecast we project the following facility utilization data:

<u>FY</u>	<u>Utilization (M-H)</u>
94	17,300
95	17,300
96	17,300
97	17,300

13. What is the approximate number of personnel used to operate the facility/equipment?

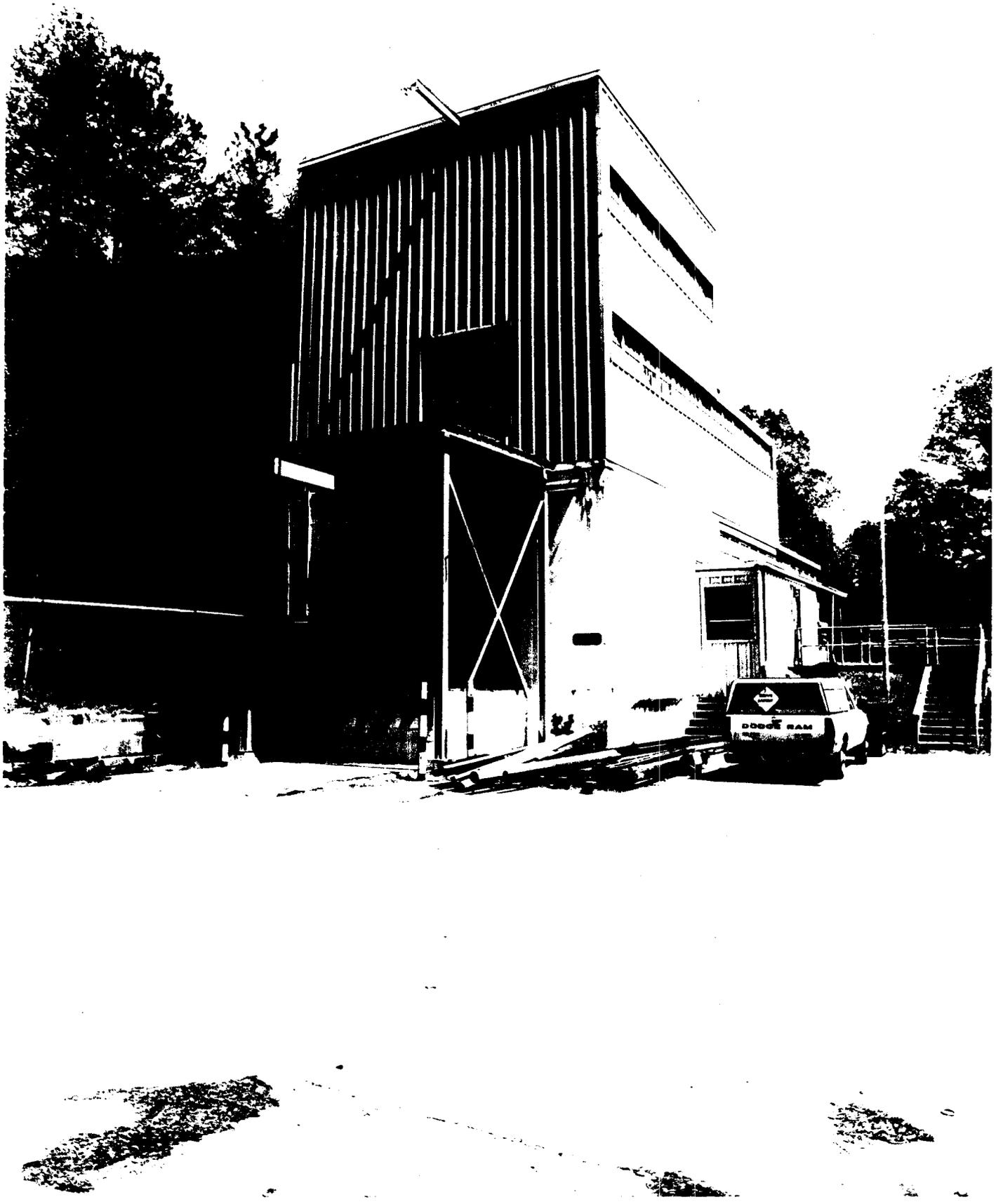
Ten (10) people are required to operate this facility/equipment under normal circumstances.

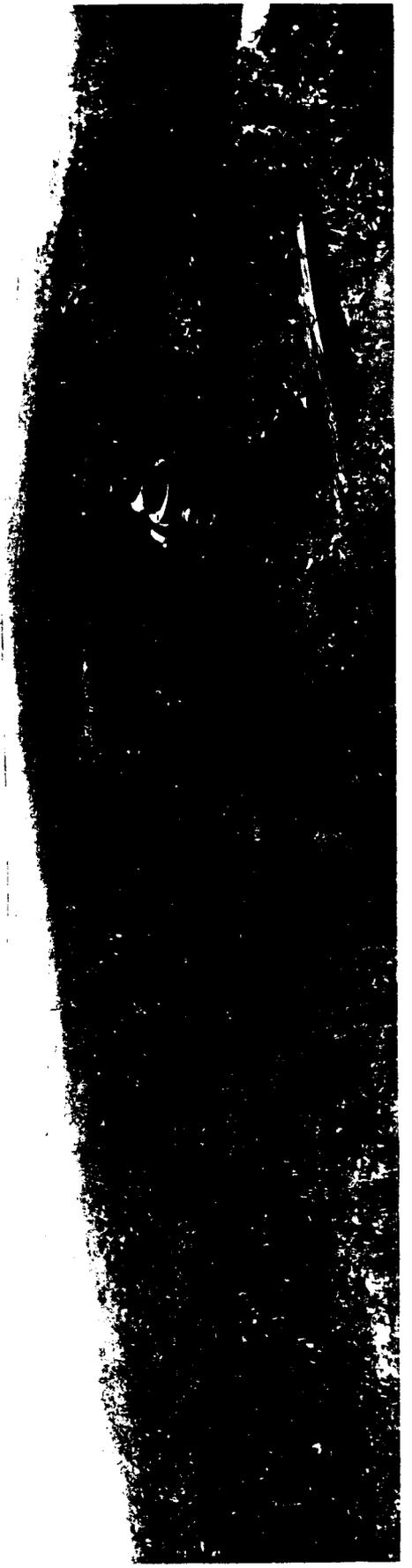
14. What is the approximate number of personnel needed to maintain the equipment?

There are no people dedicated to the maintenance of this facility. Maintenance, when required, is performed by the Public Works department of the Naval Weapons Station, Yorktown, Va. Operating personnel may perform routine maintenance in conjunction with their duties as operators.

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

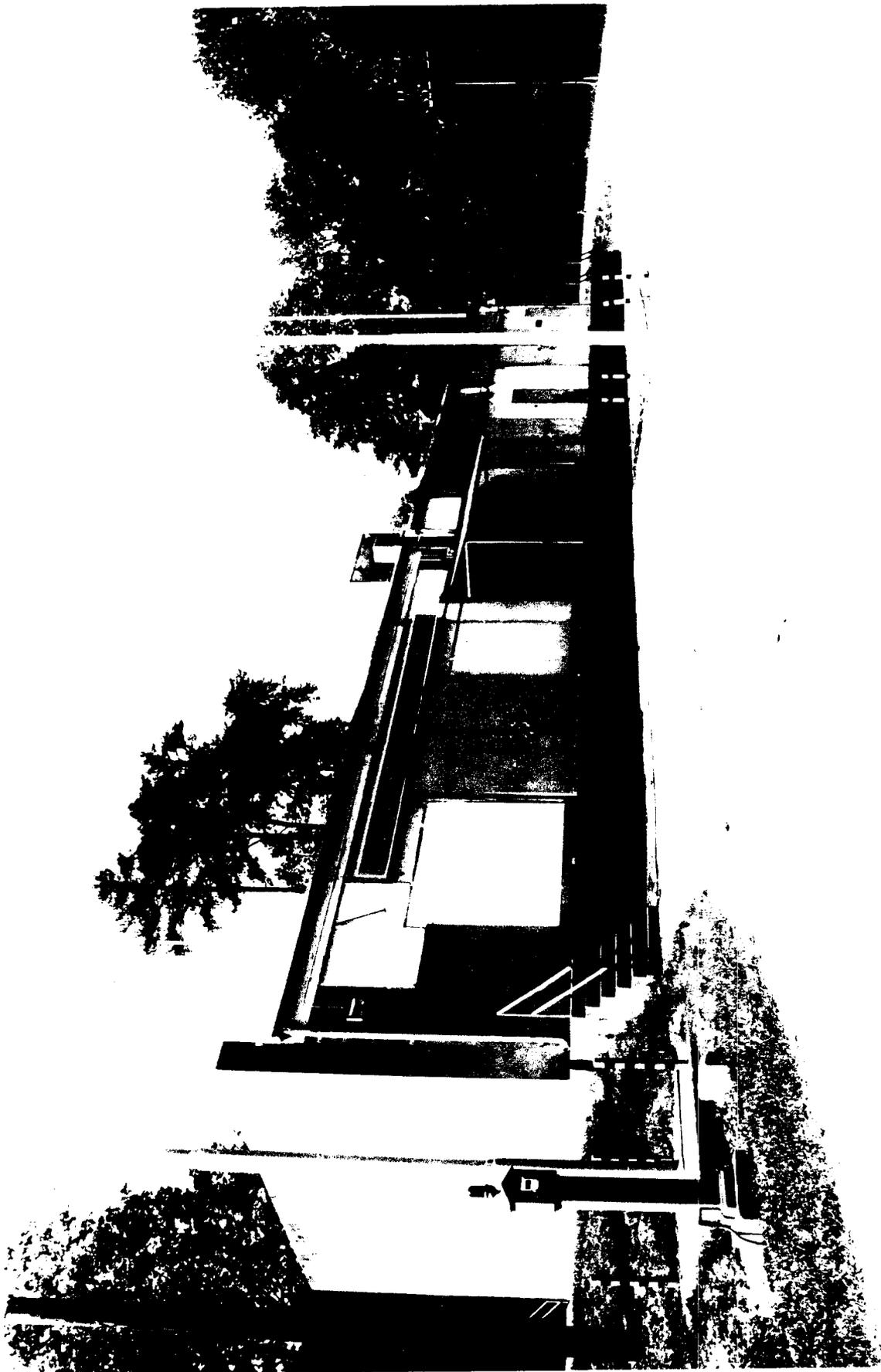












**TAB C: Range Resources**

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**TAB C**

**RANGE RESOURCES**

**RANGE CAPABILITY FORM**

**NOT APPLICABLE**

**RANGE RESOURCES  
RANGE CAPABILITY FORM**

Technical Center Site	
Range Nomenclature or Title	

1. List all the ranges that your activity maintains and operates. Provide the following information on each range:

- a. A brief statement of what the range is used for.
- b. Geographic location of the range.
- c. Distance from the range to the activity's headquarters facility (main site).
- d. Range size in square miles.
- e. Scheduling authority.
- f. Air space available/restrictions.
- g. Maximum water depth available/restrictions.
- h. Instrumentation capability.
- i. Accuracy of tracking.
- j. Data collection/replay capability.
- k. What are the maximum hours per year that this range is available to support activities? Provide the actual hours that the range was up and capable of providing services. Do not count "down time" due to maintenance, reconfiguration, or administrative activities (i.e., Holiday shutdowns).

l. What were the actual hours this range was utilized per year for the last five years (FYs 1989-1993)?

m. What were the actual hours that this range was utilized in FY1993?

n. Who are the customers of the range?

o. Of the actual hours utilized what percentage of utilization time was provided to which customers?

p. Provide a sketch, drawing or map of the range.

2. Are any of your ranges part of the DoD Major Range and Test Facility Base (MRTFB)? (yes/no) If yes, which ones?

3. Are there any limiting (current or future) environmental and/or encroachment characteristics that are associated with this range.

NSWC IH, YORKTOWN  
DATA CALL #5

JL  
SEADOK  
5/13/94

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

NEXT ECHELON LEVEL (if applicable)

CAPT. D. G. MAXWELL  
NAME (Please type or print)  
COMMANDER  
Title  
INDIAN HEAD DIVISION  
Activity

[Signature]  
Signature  
7 MAY 1994  
Date

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

NEXT ECHELON LEVEL (if applicable)

RADM(SEL) D.P. SARGENT, JR.  
NAME (Please type or print)  
COMMANDER  
Title  
NAVAL SURFACE WARFARE CENTER  
Activity

[Signature]  
Signature  
5/11/94  
Date

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

MAJOR CLAIMANT LEVEL

**G. R. STERNER**

G. R. STERNER  
NAME (Please type or print)  
Commander  
Title  
Naval Sea Systems Command  
Activity

[Signature]  
Signature  
5-13-94  
Date

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

DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

J. B. Greene, Jr  
NAME (Please type or print)  
Acting  
Title

[Signature]  
Signature  
20 MAY 1994  
Date

NSWC IH, YORKTOWN  
DATA CALL #5

JL  
SEA OFX  
5/13/94

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

In accordance with policy set forth by the Secretary of the Navy, personnel of the Department of the Navy, uniformed and civilian, who provide information for use in the BRAC-95 process are required to provide a signed certification that states "I certify that the information contained herein is accurate and complete to the best of my knowledge and belief."

The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

Each individual in your activity generating information for the BRAC-95 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated as necessary. You are directed to maintain those certifications at your activity for audit purposes. For purposes of this certification sheet, the commander of the activity will begin the certification process and each reporting senior in the Chain of Command reviewing the information will also sign this certification sheet. This sheet must remain attached to this package and be forwarded up the Chain of Command. Copies must be retained by each level in the Chain of Command for audit purposes.

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

ACTIVITY COMMANDER

John A. Zehmer

NAME (Please type or print)

Division Director

Title

IHDIV NSWC DET - Yorktown

Activity



Signature

6 May 94

Date

BRAC DATA CALL #5  
MILITARY VALUE FOR  
IHDIV NSWC DETACHMENT - YORKTOWN

201

**DATA CALL 66  
INSTALLATION RESOURCES**

**Activity Information:**

Activity Name:	<b>Indian Head Division Detachment Yorktown, VA</b>
UIC:	<b>47652</b>
Host Activity Name (if response is for a tenant activity):	<b>Naval Weapons Station Yorktown, VA</b>
Host Activity UIC:	<b>00109</b>

**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.

**Note:** The IHDIV Detachment Yorktown, VA has no BOS budget or BOS funds spent on it.

**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)**

<b>Activity Name: IHDIV Detachment Yorktown, VA</b>	<b>UIC: 47652</b>
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Category	FY 1996 BOS Costs (\$000)		
	Non-Labor	Labor	Total
<b>1. Real Property Maintenance Costs:</b>			
1a. Maintenance and Repair	0	0	0
1b. Minor Construction	0	0	0
<b>1c. Sub-total 1a. and 1b.</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>2. Other Base Operating Support Costs:</b>			
2a. Utilities	0	0	0
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)	0	0	0
<b>2k. Sub-total 2a. through 2j:</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>3. Grand Total (sum of 1c. and 2k.):</b>	<b>0</b>	<b>0</b>	<b>0</b>

**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	N/A

**DATA CALL 66**  
**INSTALLATION RESOURCES**

c. **Table 1B - Base Operating Support Costs (DBOF Overhead).** This Table should be submitted for all current DBOF activities. Costs reported should reflect BOS costs supporting the DBOF activity itself (usually included in the G&A cost of the activity). For DBOF activities which are tenants on another installation, total cost of BOS incurred by the tenant activity for itself should be shown on this table. It is recognized that differences exist among DBOF activity groups regarding the costing of base operating support: some groups reflect all such costs only in general and administrative (G&A), while others spread them between G&A and production overhead. Regardless of the costing process, all such costs should be included on Table 1B. The Minor Construction portion of the FY 1996 capital budget should be included on the appropriate line. Military personnel costs (at civilian equivalency rates) should also be included on the appropriate lines of the table. Please ensure that individual lines of the table do not include duplicate costs. Also ensure that there is no duplication between data provided on Table 1A. and 1B. These two tables must be mutually exclusive, since in those cases where both tables are submitted for an activity, the two tables will be added together to estimate total BOS costs at the activity. Add additional lines to the table (following line 21., as necessary, to identify any additional cost elements not currently shown). **Leave shaded areas of table blank.**

**Other Notes:** All costs of operating the five Major Range Test Facility Bases at DBOF activities (even if direct RDT&E funded) should be included on Table 1B. Weapon Stations should include underutilized plant capacity costs as a DBOF overhead "BOS expense" on Table 1B.

**DATA CALL 66  
INSTALLATION RESOURCES**

<b>Table 1B - Base Operating Support Costs (DBOF Overhead)</b>			
<b>Activity Name: IHDIV Detachment Yorktown, VA</b>			<b>UIC: 47652</b>
Category	FY 1996 Net Cost From UC/FUND-4 (\$000)		
	Non-Labor	Labor	Total
<b>1. Real Property Maintenance Costs:</b>			
1a. Real Property Maintenance (>\$15K)	0	0	0
1b. Real Property Maintenance (<\$15K)	0	0	0
1c. Minor Construction (Expensed)	0	0	0
1d. Minor Construction (Capital Budget)	0	0	0
<b>1e. Sub-total 1a. through 1d.</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>2. Other Base Operating Support Costs:</b>			
2a. Command Office	0	0	0
2b. ADP Support	0	0	0
2c. Equipment Maintenance	0	0	0
2d. Civilian Personnel Services	0	0	0
2e. Accounting/Finance	0	0	0
2f. Utilities	0	0	0
2g. Environmental Compliance	0	0	0
2h. Police and Fire	0	0	0
2i. Safety	0	0	0
2j. Supply and Storage Operations	0	0	0
2k. Major Range Test Facility Base Costs	0	0	0
2l. Other (Specify)	0	0	0
<b>2m. Sub-total 2a. through 2l:</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>3. Depreciation</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>4. Grand Total (sum of 1c., 2m., and 3.) :</b>	<b>0</b>	<b>0</b>	<b>0</b>

**DATA CALL 66  
INSTALLATION RESOURCES**

**2. Services/Supplies Cost Data.** The purpose of Table 2 is to provide information about projected FY 1996 costs for the purchase of services and supplies by the activity. (Note: Unlike Question 1 and Tables 1A and 1B, above, this question is not limited to overhead costs.) The source for this information, where possible, should be either the NAVCOMPT OP-32 Budget Exhibit for O&M activities or the NAVCOMPT UC/FUND-1/IF-4 exhibit for DBOF activities. Information must reflect FY 1996 budget data supporting the FY 1996 NAVCOMPT Budget Submit. Break out cost data by the major sub-headings identified on the OP-32 or UC/FUND-1/IF-4 exhibit, disregarding the sub-headings on the exhibit which apply to civilian and military salary costs and depreciation. Please note that while the OP-32 exhibit aggregates information by budget activity, this data call requests OP-32 data for the activity responding to the data call. Refer to NAVCOMPTINST 7102.2B of 23 April 1990, Subj: Guidance for the Preparation, Submission and Review of the Department of the Navy (DON) Budget Estimates (DON Budget Guidance Manual) with Changes 1 and 2 for more information on categories of costs identified. Any rows that do not apply to your activity may be left blank. However, totals reported should reflect all costs, exclusive of salary and depreciation.

<b>Table 2 - Services/Supplies Cost Data</b>	
<b>Activity Name: IHDIV Detachment Yorktown, VA</b>	<b>UIC: 47652</b>
<b>Cost Category</b>	<b>FY 1996 Projected Costs (\$000)</b>
<b>Travel:</b>	<b>98</b>
<b>Material and Supplies (including equipment):</b>	<b>725</b>
<b>Industrial Fund Purchases (other DBOF purchases):</b>	<b>0</b>
<b>Transportation:</b>	<b>0</b>
<b>Other Purchases (Contract support, etc.):</b>	<b>1,473*</b>
<b>Total:</b>	<b>2,296</b>

**\* Part of this figure is the cost of our Tenant Service Agreement with NWS, Yorktown which includes payment for services such as utilities, security, safety, etc.**

**DATA CALL 66  
INSTALLATION RESOURCES**

**3. Contractor Workyears.**

**a. On-Base Contract Workyear Table.** Provide a projected estimate of the number of contract workyears expected to be performed "on base" in support of the installation during FY 1996. Information should represent an annual estimate on a full-time equivalency basis. Several categories of contract support have been identified in the table below. While some of the categories are self-explanatory, please note that the category "mission support" entails management support, labor service and other mission support contracting efforts, e.g., aircraft maintenance, RDT&E support, technical services in support of aircraft and ships, etc.

<b>Table 3 - Contract Workyears</b>	
<b>Activity Name: IHDIV Detachment Yorktown, VA</b>	<b>UIC: 47652</b>
<b>Contract Type</b>	<b>FY 1996 Estimated Number of Workyears On-Base</b>
Construction:	<b>0</b>
Facilities Support:	<b>0</b>
Mission Support:	<b>0</b>
Procurement:	<b>0</b>
Other:*	<b>0</b>
<b>Total Workyears:</b>	<b>0</b>

**\* Note:** Provide a brief narrative description of the type(s) of contracts, if any, included under the "Other" category.

**DATA CALL 66  
INSTALLATION RESOURCES**

**b. Potential Disposition of On-Base Contract Workyears.** If the mission/functions of your activity were relocated to another site, what would be the anticipated disposition of the on-base contract workyears identified in Table 3.?

1) Estimated number of contract workyears which would be transferred to the receiving site (This number should reflect the number of jobs which would in the future be contracted for at the receiving site, not an estimate of the number of people who would move or an indication that work would necessarily be done by the same contractor(s)):

N/A

2) Estimated number of workyears which would be eliminated:

N/A

3) Estimated number of contract workyears which would remain in place (i.e., contract would remain in place in current location even if activity were relocated outside of the local area):

N/A

**DATA CALL 66  
INSTALLATION RESOURCES**

**c. "Off-Base" Contract Workyear Data.** Are there any contract workyears located in the local community, but not on-base, which would either be eliminated or relocated if your activity were to be closed or relocated? If so, then provide the following information (**ensure that numbers reported below do not double count numbers included in 3.a. and 3.b., above**):

No. of Additional Contract Workyears Which Would Be Eliminated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
<b>0</b>	<b>N/A</b>

No. of Additional Contract Workyears Which Would Be Relocated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
<b>.4</b>	<b>Equipment Maintenance, Rental, Repair, and Installation; Laundry</b>

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

NEXT ECHELON LEVEL (if applicable)

CAPT. D. G. MAXWELL

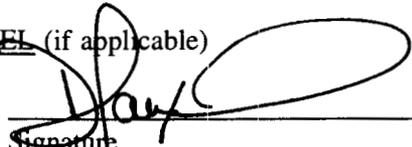
NAME (Please type or print)

COMMANDER

Title

INDIAN HEAD DIVISION, NSWC

Activity

  
Signature

25 July 95  
Date

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

NEXT ECHELON LEVEL (if applicable)

RADM(SEL) D. P. SARGENT, JR.

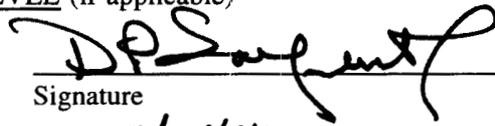
NAME (Please type or print)

COMMANDER

Title

NAVAL SURFACE WARFARE CENTER

Activity

  
Signature

7/28/94  
Date

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

MAJOR CLAIMANT LEVEL

G. R. STERNER

NAME (Please type or print)

Naval Data Systems Command  
Title

Activity

  
Signature

8-4-94  
Date

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

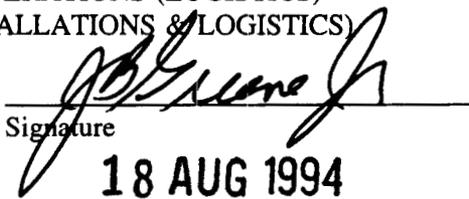
DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)  
DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

J. B. GREENE, JR.

NAME (Please type or print)

ACTING

Title

  
Signature

18 AUG 1994  
Date

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 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."

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

Lester B. Leonard, III  
NAME (Please type or print)

Lester B. Leonard, III  
Signature

Acting Division Director  
Title

21 July 1994  
Date

IHDIV NSWC DET - Yorktown  
Activity

BRAC DATA CALL #66  
INSTALLATION RESOURCES FOR  
IHDIV NSWC DETACHMENT - YORKTOWN

## INSTALLATION DATA

### GENERAL INFORMATION

This is the first Data Call for the 1995 base realignment and closure (BRAC-95) process. This General Information Data Call is designed to provide the Base Structure Evaluation Committee (BSEC) with a broad view of each installation, looking across the entire range of missions performed, who performs them, and the geographic alignment of each installation (internal to itself and the relationship to the surrounding community). The desired end result of this Data Call is to give the BSEC a complete picture of the shore facility infrastructure and general information on every organization performing a mission for the Department of the Navy today. This review is not limited to "above threshold" activities (those activities with more than 300 civilian personnel). It is absolutely imperative that all organizations complete the appropriate information about their organization so that follow-on Data Calls can be correctly focused and complete. There will be other Data Calls organized by category/subcategory (function) to gather information on military value, capacity, and economic/environmental impact.

The activities receiving this Data Call will fall into one of three categories: host command; tenant command; or independent activity. Each activity will be asked to identify themselves into one of these three categories. Due to the broad nature of the Data Call, not all questions will be applicable to all respondents, but all questions require a complete response. If a question is not applicable to your organization, clearly mark the response as "N/A"; do not leave blank.

The Data Call has been structured so that all responses, with the exception of the facility maps, can be made within the Data Call without the need to provide enclosures. The format for the tabular data allows for the expansion of each row as additional data is inputted, by pressing "enter" each time a new entry is made. Responses should be as complete and concise as possible.

In accordance with SECNAVNOTE 11000 of 08 December 1993, pertaining to the BRAC-95 process, all data provided must be certified and will be submitted hardcopy. Distribution of the Data Calls will flow through the operational command structure and inquiries should be directed in that manner to facilitate consistent and informative responses.

**DATA CALL 1: GENERAL INSTALLATION INFORMATION**

1. **ACTIVITY:** Follow example as provided in the table below (*delete the examples when providing your input*). If any of the questions have multiple responses, please provide all. If any of the information requested is subject to change between now and the end of Fiscal Year (FY) 1995 due to known redesignations, realignments/closures or other action, provide current and projected data and so annotate.

- Name

Official name	<i>Indian Head Division Detachment Yorktown, VA Naval Surface Warfare Center</i>
Acronym(s) used in correspondence	<i>Naval Explosives Development Engineering Detachment</i>
Commonly accepted short title(s)	<i>NEDED</i>

- Complete Mailing Address

**Commander**  
**Indian Head Division**  
**Naval Surface Warfare Center**  
**P.O. Drawer 160**  
**Yorktown, VA 23691-0160**

- PLAD

**NAVSURFWARCENDIV DET YORKTOWN VA**

- PRIMARY UIC: N47652 (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): None PURPOSE: N/A

\_\_\_\_\_  
 \_\_\_\_\_

2. **PLANT ACCOUNT HOLDER:**

- Yes \_\_\_\_\_ No X (check one)

3. **ACTIVITY TYPE:** Choose most appropriate type that describes your activity and completely answer all questions.

• **HOST COMMAND:** A host command is an activity that provides facilities for its own functions and the functions of other (tenant) activities. A host has accountability for Class 1 (land), and/or Class 2 (buildings, structures, and utilities) property, regardless of occupancy. It can also be a tenant at other host activities.

• Yes  No  (check one)

• **TENANT COMMAND:** A tenant command is an activity or unit that occupies facilities for which another activity (i.e., the host) has accountability. A tenant may have several hosts, although one is usually designated its primary host. If answer is "Yes," provide best known information for your primary host only.

• Yes  No  (check one)

- Primary Host (current) UIC: N00109
- Primary Host (as of 01 Oct 1995) UIC: N00109
- Primary Host (as of 01 Oct 2001) UIC: N00109

• **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.

**No special areas.**

Name	Location	UIC
N/A	N/A	N/A

5. DETACHMENTS: If your activity has detachments at other locations, please list them in the table below.

No detachments.

Name	UIC	Location	Host name	Host UIC
N/A	N/A	N/A	N/A	N/A

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.

**Note:** The Indian Head Division Detachment Yorktown, VA was not directly impacted by any BRAC decisions. However, its parent command, Indian Head Division, NSWC, was impacted as follows:

A. **BRAC-88:** No impact

B. **BRAC-91:** Indian Head became a Division of the newly formed Naval Surface Warfare Center. Indian Head's name changed from Naval Ordnance Station to Indian Head Division, NSWC. There were no functional transfers directed by BRAC-91 that affected Indian Head. Indian Head eliminated 30 indirect positions as directed by BRAC-91.

C. **BRAC-93:** Disestablish the Dahlgren Division, White Oak Detachment. Administratively realign (in-place) the NSWC Dahlgren Division, White Oak Detachment personnel in the Explosives Research and Underwater Warheads groups to the Indian Head Division, NSWC on 3 April 1994. Physically relocate the associated 265 billets from White Oak to Indian Head from FY 95 through FY 97.

The Indian Head Division, White Oak Detachment is currently a tenant of the Dahlgren Division, White Oak Detachment. As a result of closing the Dahlgren Division, White Oak Detachment, relocate the Indian Head Division, White Oak Detachment to the Indian Head Division, NSWC, Indian Head, Maryland. Physically relocate the associated 20 billets from White Oak to Indian Head by FY 95.

The Naval Sea Automated Data Systems Activity (SEAADSA) is a current tenant of the Indian Head Division, NSWC. Disestablish SEAADSA and relocate to IHDIV NSWC by FY 97.

7. MISSION: Do not simply report the standard mission statement. Instead, describe important functions in a bulletized format. Include anticipated mission changes and brief narrative explanation of change; also indicate if any current/projected mission changes are a result of previous BRAC-88, -91,-93 action(s).

Current Missions

- **Provide Explosives RDT&E, Engineering Manufacturing, Manufacturing technology, and fleet support expertise/capabilities to the Navy, and FMS customers.**

Projected Missions for FY 2001

- **Same as above, no changes projected**

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

- **The Naval Surface Warfare Center has unique responsibilities in the following 14 Leadership Areas:**

- Surface Warfare Modeling and Analysis
- Surface Ship Combat Control Systems
- Surface Ship Electronic Warfare
- Surface Ship Electromagnetic and Electro-optic Reconnaissance, Search & Track Systems
- Surface Ship Weapons Systems (including Shipboard Missile Integration)
- Ship Vulnerability and Survivability (includes Submarine HM&E)
- Ship Active and Passive Signatures (includes Submarine HM&E)
- Surface and Undersea Vehicle Hull, Machinery, Propulsors and Equipment
- Platform Systems Integration
- Strategic Targeting Support (including Fire Control, Targeting & Re-entry Systems)
- Amphibious Warfare Systems
- Special Warfare Systems
- Warheads (Explosives and Energetic Materials)
- Mines, Mine Countermeasures and Mine Clearing Systems

- **Indian Head Division Detachment Yorktown, VA has unique responsibilities in the following Leadership Area:**

- Warheads (Explosives and Energetic Materials)

Projected Unique Missions for FY 2001

- **Same as above, no changes projected.**

9. IMMEDIATE SUPERIOR IN COMMAND (ISIC): Identify your ISIC. If your ISIC is not your funding source, please identify that source in addition to the operational ISIC.

• Operational name	UIC
<u>Commander NSWC</u>	<u>N68933</u>
• Funding Source	UIC
<u>DBOF</u>	<u>Multiple</u>

10. PERSONNEL NUMBERS: Host activities are responsible for totalling the personnel numbers for all of their tenant commands, even if the tenant command has been asked to separately report the data. The tenant totals here should match the total tally for the tenant listing provided subsequently in this Data Call (see Tenant Activity list). (Civilian count shall include Appropriated Fund personnel only.)

On Board Count as of 01 January 1994

	Officers	Enlisted	Civilian (Appropriated)
• Reporting Command	<u>0</u>	<u>0</u>	<u>47</u>
• Tenants (total)	<u>0</u>	<u>0</u>	<u>0</u>

Authorized Positions as of 30 September 1994

	Officers	Enlisted	Civilian (Appropriated)
• Reporting Command	<u>0</u>	<u>0</u>	<u>44</u>
• Tenants (total)	<u>0</u>	<u>0</u>	<u>0</u>

11. KEY POINTS OF CONTACT (POC): Provide the work, FAX, and home telephone numbers for the Commanding Officer or OIC, and the Duty Officer. Include area code(s). You may provide other key POCs if so desired in addition to those above.

<u>Title/Name</u>	<u>Office</u>	<u>Fax</u>	<u>Home</u>
• CO/OIC <u>Captain David G. Maxwell</u>	DSN 354-4401 301-753-6387	DSN 354-6743 301-743-6743	301-743-3324
• Chief Staff Officer <u>LCDR James Melesky</u>	DSN 354-4301 301-743-4301	DSN 354-6743 301-743-6743	301-743-4220
• Executive Director <u>Roger M. Smith</u>	DSN 354-6500 301-743-6500	DSN 354-6743 301-743-6743	301-565-0906
• IHDIV BRAC Coordinator <u>Mark A. Michienzi</u>	DSN 354-4575 301-743-4575	DSN 354-6425 301-743-6425	301-870-5029
• Yorktown POC <u>Lester B. Leonard</u>	DSN 953-4715 804-887-4715	DSN 953-4766 804-887-4766	804-229-0825

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.)

**No tenants.**

- Tenants residing on main complex (shore commands)

Tenant Command Name	UIC	Officer	Enlisted	Civilian
N/A	N/A	N/A	N/A	N/A

- Tenants residing on main complex (homeported units.)

Tenant Command Name	UIC	Officer	Enlisted	Civilian
N/A	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A	N/A

- Tenants (Other than those identified previously)

Tenant Command Name	UIC	Location	Officer	Enlisted	Civilian
N/A	N/A	N/A	N/A	N/A	N/A

13. **REGIONAL SUPPORT:** Identify your relationship with other activities, not reported as a host/tenant, for which you provide support. Again, this list should be all-inclusive. The intent of this question is capture the full breadth of the mission of your command and your customer/supplier relationships. Include in your answer any Government Owned/Contractor Operated facilities for which you provide administrative oversight and control.

**Regional support provided by host - Naval Weapons Station, Yorktown. UIC N00109**

Activity name	Location	Support function (include mechanism such as ISSA, MOU, etc.)
N/A	N/A	N/A

14. **FACILITY MAPS:** This is a primary responsibility of the plant account holders/host commands. Tenant activities are not required to comply with submission if it is known that your host activity has complied with the request. Maps and photos should not be dated earlier than 01 January 1991, unless annotated that no changes have taken place. Any recent changes should be annotated on the appropriate map or photo. Date and label all copies.

- **Local Area Map.** This map should encompass, at a minimum, a 50 mile radius of your activity. Indicate the name and location of all DoD activities within this area, whether or not you support that activity. Map should also provide the geographical relationship to the major civilian communities within this radius. (Provide 12 copies.)

**Provided by host, Naval Weapons Station, Yorktown (UIC N00109) in response to 1995 Base Realignment and Closure (BRAC-95) Data Call No. 1.**

- **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).)

**Provided by host, Naval Weapons Station, Yorktown (UIC N00109) in response to 1995 Base Realignment and Closure (BRAC-95) Data Call No. 1.**

- **Aerial photo(s).** Aerial shots should show all base use areas (both land and water) as well as any local encroachment sites/issues. You should ensure that these photos provide a good look at the areas identified on your Base Map as areas of concern/interest - remember, a picture tells a thousand words. Again, date and label all copies. (Provide 12 copies of each, 8½"x 11".)

**Provided by host, Naval Weapons Station, Yorktown (UIC N00109) in response to 1995 Base Realignment and Closure (BRAC-95) Data Call No. 1. Aerial photo of the NEDED area is enclosed to supplement the hosts' submission.**

- **Air Installations Compatible Use Zones (AICUZ) Map.** (Provide 12 copies.)

**Provided by host, Naval Weapons Station, Yorktown (UIC N00109) in response to 1995 Base Realignment and Closure (BRAC-95) Data Call No. 1.**



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.

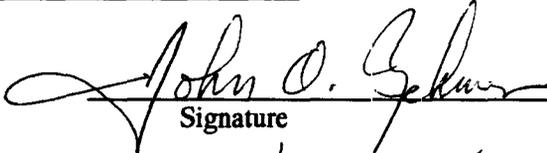
Each individual in your activity generating information for the BRAC-95 process must certify that information. Enclosure (1) is provided for individual certifications and may be duplicated as necessary. You are directed to maintain those certifications at your activity for audit purposes. For purposes 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

J. A. ZEHMER  
NAME (Please type or print)

Director  
Title

  
Signature  
21 June 1994  
Date

Indian Head Division Detachment Yorktown, VA  
Activity