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	*Navy Personnel Research and Development Center*
Acronym(s) used in correspondence	*NAVPERSRANDCEN SAN DIEGO* *NPRDC*
Commonly accepted short title(s)	*NPRDC*

- Complete Mailing Address

Commanding Officer
Navy Personnel Research and Development Center
53335 Ryne Road
San Diego, CA 92152-7250

- PLAD

NAVPERSRANDCEN SAN DIEGO CA

- PRIMARY UIC: N68221 (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): _____ PURPOSE: _____

2. PLANT ACCOUNT HOLDER:

- Yes X No _____(check one)

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

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

- Yes ____ No X (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 X No ____ (check one)
- Primary Host (current) UIC: N66001
- Primary Host (as of 01 Oct 1995) UIC: N66001
- Primary Host (as of 01 Oct 2001) UIC: N66001

• INDEPENDENT ACTIVITY: For the purposes of this Data Call, this is the "catch-all" designator, and is defined as any activity not previously identified as a host or a tenant. The activity may occupy owned or leased space. Government Owned/Contractor Operated facilities should be included in this designation if not covered elsewhere.

- Yes ____ No X (check one)

4. SPECIAL AREAS: List all Special Areas. Special Areas are defined as Class 1/Class 2 property for which your command has responsibility that is not located on or contiguous to main complex.

Name	Location	UIC
NONE		

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

Name	UIC	Location	Host name	Host UIC
NONE				

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.

No impact.

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	5	13	222
• Tenants (total)			

Authorized Positions as of 30 September 1994

	Officers	Enlisted	Civilian (Appropriated)
• Reporting Command	4	11	227
• Tenants (total)			

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.

Title/Name	Office	Fax	Home
• CO/OIC			
CAPT J. D. McAfee, USN	(619) 553-7812	(619) 553-7815	(618-424-9350
• Duty Officer			[N/A]
• BRAC POC			
Mr. C. F. Bigsby	(619) 553-7811	(619) 553-7857	(618) 755-6570

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

This Center is the only R&D laboratory within the Navy and Marine Corps focusing on manpower and personnel issues affecting combat readiness and personnel reliability. Within the Department of Defense it is the lead laboratory for all R&D concerned with--

- Computer-based testing for personnel selection and assignment;

- Manpower modeling and forecasting technologies for projecting future force requirements;

- Diversity in the work force, including the integration of women into operating units and the impacts of quality of life factors on personnel readiness and reliability;

- Assessing and monitoring attitudes and the impacts of personnel policies and programs on military personnel;

- Enhancing organizational management and productivity.

Projected Unique Missions for FY 2001

Maintain a strong role as lead DOD laboratory for all behavioral sciences R&D in the above mission elements. Increase capabilities for developing and applying new technologies to--

- Generate force projections over a 8-10 year horizon, using complex manpower models having forecasting capabilities;

- Construct simulations of social systems to assess the roles of quality of life factors, work force diversity, and environmental variables on personnel readiness;

- Enhance the delivery of technical training by reducing training time, costs, and the effects of motivational and external factors on trainee proficiency;

- More effectively manage organizations and their work force, whether military or civilian.

9. IMMEDIATE SUPERIOR IN COMMAND (ISIC):

- Operational Name
  Bureau of Naval Personnel, UIC: N00022
- Funding Source
  Chief of Naval Research, UIC: N00014
  Chief of Naval Personnel, UIC: N00022

7. MISSION:

Current Missions

Serve as the principal behavioral sciences research and development laboratory for the Navy and Marine Corps; investigate and apply new and innovative technologies to address Fleet and program managers requirements to improve--

- Capabilities for generating accurate personnel projections, training requirements, and manpower forecasts;

- Recruiting, selecting, and assigning personnel to occupations matching both military needs and individual preferences;

- Schoolhouse and Fleet training effectiveness, including factors which affect motivation, skills sustainment and on-the-job performance;

- Personnel readiness, productivity and reliability while performing on-the-job.

Projected Missions for FY 2001

Continue above mission elements and serve as DOD's lead behavioral sciences research and development laboratory for improving joint service capabilities in--

- Developing manpower forecasting models which simultaneously satisfy multiple requirements and constraints;

- Identifying individual and team competencies critical to operating and maintaining joint service weapons platforms;

- Delivering effective schoolhouse and on-the-job training, through satellite training systems, computer-based tutoring, and virtual environment technologies.

- Effectively predicting and managing quality of life and social issues factors which affect personnel readiness and productivity.

12. TENANT ACTIVITY LIST: This list must be all-inclusive. Tenant activities are to ensure that their host is aware of their existence and any "subleasing" of space. This list should include the name and UIC(s) of all organizations, shore commands and homeported units, active or reserve, DOD or non-DOD (include commercial entities). The tenant listing should be reported in the format provide below, listed in numerical order by UIC, separated into the categories listed below. Host activities are responsible for including authorized personnel numbers, on board as of **30 September 1994**, for all tenants, even if those tenants have also been asked to provide this information on a separate Data Call. (Civilian count shall include Appropriated Fund personnel only.)

• Tenants residing on main complex (shore commands)

Tenant Command Name	UIC	Officer	Enlisted	Civilian
NONE				

• Tenants residing on main complex (homeported units.)

Tenant Command Name	UIC	Officer	Enlisted	Civilian
NONE				

• 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
NONE					

• Tenants (Other than those identified previously)

Tenant Command Name	UIC	Location	Officer	Enlisted	Civilian
NONE					

13. REGIONAL SUPPORT: Identify your relationship with other activities, not reported as a host/tenant, for which you provide support. Again, this list should be all-inclusive. The intent of this question is capture the full breadth of the mission of your command and your customer/supplier relationships. Include in your answer any Government Owned/Contractor Operated facilities for which you provide administrative oversight and control.

Activity name	Location	Support function (include mechanism such as ISSA, MOU, etc.)
NONE		

14. FACILITY MAPS: This is a primary responsibility of the plant account holders/host commands. Tenant activities are not required to comply with submission if it is known that your host activity has complied with the request. Maps and photos should not be dated earlier than 01 January 1991, unless annotated that no changes have taken place. Any recent changes should be annotated on the appropriate map or photo. Date and label all copies.

- Local Area Map. This map should encompass, at a minimum, a 50 mile radius of your activity. Indicate the name and location of all DoD activities within this area, whether or not you support that activity. Map should also provide the geographical relationship to the major civilian communities within this radius. (Provide 12 copies.)

- Installation Map / Activity Map / Base Map / General Development Map / Site Map. Provide the most current map of your activity, clearly showing all the land under ownership/control of your activity, whether owned or leased. Include all outlying areas, special areas, and housing. Indicate date of last update. Map should show all structures (numbered with a legend, if available) and all significant restrictive use areas/zones that encumber further development such as HERO, HERP, HERF, ESQD arcs, agricultural/forestry programs, environmental restrictions (e.g., endangered species). (Provide in two sizes: 36"x 42" (2 copies, if available); and 11"x 17" (12 copies).)

- Aerial photo(s). Aerial shots should show all base use areas (both land and water) as well as any local encroachment sites/issues. You should ensure that these photos provide a good look at the areas identified on your Base Map as areas of concern/interest - remember, a picture tells a thousand words. Again, date and label all copies. (Provide 12 copies of each, 8½"x 11".)

- Air Installations Compatible Use Zones (AICUZ) Map. (Provide 12 copies.)

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

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

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

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

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

ACTIVITY COMMANDER

CAPT J. D. McAFEE, USN
NAME (Please type or print)

Signature

Commanding Officer
Title

4 February 1994
Date

Navy Personnel Research and Development Center
Activity

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print) _____ Signature _____

Title _____ Date _____

Activity _____

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print) _____ Signature _____

Title _____ Date _____

Activity _____

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

MAJOR CLAIMANT LEVEL

R. J. ZLATOPER, VADM — NAME (Please type or print)

Signature

CHIEF OF NAVAL PERSONNEL — Title

16 FEB 1994 — Date

BUREAU OF NAVAL PERSONNEL — Activity

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

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

S. F. Loftus
Vice Admiral, U.S. Navy
Deputy Chief of Naval
Operations (Logistics) — NAME (Please type or print)

Signature

Title

22 FEB 1994 — Date

DATA CALL 66
INSTALLATION RESOURCES

173

Activity Information:

Activity Name:	NAVPERSRANDCEN SAN DIEGO CA
UIC:	N68221
Host Activity Name (if response is for a tenant activity):	Naval Command, Control and Ocean Surveillance Center RDT&E Division
Host Activity UIC:	N66001

General Instructions/Background. A separate response to this data call must be completed for each Department of the Navy (DON) host, independent and tenant activity which separately budgets BOS costs (regardless of appropriation), and, is located in the United States, its territories or possessions.

1. Base Operating Support (BOS) Cost Data. Data is required which captures the total annual cost of operating and maintaining Department of the Navy (DON) shore installations. Information must reflect FY 1996 budget data supporting the FY 1996 NAVCOMPT Budget Submit. Two tables are provided. Table 1A identifies "Other than DBOF Overhead" BOS costs and Table 1B identifies "DBOF Overhead" BOS costs. These tables must be completed, as appropriate, for all DON host, independent or tenant activities which separately budget BOS costs (regardless of appropriation), and, are located in the United States, its territories or possessions. Responses for DBOF activities may need to include both Table 1A and 1B to ensure that all BOS costs, including those incurred by the activity in support of tenants, are identified. If both table 1A and 1B are submitted for a single DON activity, please ensure that no data is double counted (that is, included on both Table 1A and 1B). The following tables are designed to collect all BOS costs currently budgeted, regardless of appropriation, e.g., Operations and Maintenance, Research and Development, Military Personnel, etc. Data must reflect FY 1996 and should be reported in thousands of dollars.

a. Table 1A - Base Operating Support Costs (Other Than DBOF Overhead). This Table should be completed to identify "Other Than DBOF Overhead" Costs. Display, in the format shown on the table, the O&M, R&D and MPN resources currently budgeted for BOS services. O&M cost data must be consistent with data provided on the BS-1 exhibit. Report only direct funding for the activity. Host activities should not include reimbursable support provided to tenants, since tenants will be separately reporting these costs. Military personnel costs should be included on the appropriate lines of the table. Please ensure that individual lines of the table do not include duplicate costs. Add additional lines to the table (following line 2j., as necessary, to identify any additional cost elements not currently shown). **Leave shaded areas of table blank.**

ENCLOSURE (1)

lines to the table (following line 2j., as necessary, to identify any additional cost elements not currently shown). **Leave shaded areas of table blank.**

Table 1A - Base Operating Support Costs (Other Than DBOF Overhead)			
Activity Name: NAVPERSRANDCEN SAN DIEGO CA		**UIC:** N68221	
Category	**FY 1996 BOS Costs ($000)**		
	Non-Labor	**Labor**	**Total**
1. Real Property Maintenance Costs:			
1a. Maintenance and Repair	0	0	0
1b. Minor Construction	0	0	0
1c. Sub-total 1a. and 1b.	0	0	0
2. Other Base Operating Support Costs:	0	0	0
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
2k. Sub-total 2a. through 2j:	0	0	0
3. Grand Total (sum of 1c. and 2k.):	0	0	0

b. Funding Source. If data shown on Table 1A reflects more than one appropriation, then please provide a break out of the total shown for the "3. Grand-Total" line, by appropriation:

Appropriation	Amount ($000)
N/A	

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

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

DATA CALL 66
INSTALLATION RESOURCES

Table 1B - Base Operating Support Costs (DBOF Overhead)			
Activity Name: NAVPERSRANDCEN SAN DIEGO CA		**UIC:** N68221	
Category	**FY 1996 Net Cost From UC/FUND-4 ($000)**		
	Non-Labor	**Labor**	**Total**
1. Real Property Maintenance Costs:			
1a. Real Property Maintenance (>$15K)	200	84	284
1b. Real Property Maintenance (<$15K)	0	0	0
1c. Minor Construction (Expensed)	70	0	70
1d. Minor Construction (Capital Budget)	0	0	0
1c. Sub-total 1a. through 1d.	270	84	354
2. Other Base Operating Support Costs:			
2a. Command Office	270	983	1253
2b. ADP Support	300	530	830
2c. Equipment Maintenance	100	0	100
2d. Civilian Personnel Services	6	65	71
2e. Accounting/Finance	12	446	458
2f. Utilities	500	0	500
2g. Environmental Compliance	0	0	0
2h. Police and Fire	0	0	0
2i. Safety	0	0	0
2j. Supply and Storage Operations	82	131	213
2k. Major Range Test Facility Base Costs	0	0	0
2l. Other (Specify) Training/Awards	75	146	221
2m. Sub-total 2a. through 2l:	1345	2301	3646
3. Depreciation	0	0	0
4. Grand Total (sum of 1c., 2m., and 3.) :	1615	2385	4000

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

Table 2 - Services/Supplies Cost Data		
Activity Name: NAVPERSRANDCEN SAN DIEGO CA	**UIC:**	N68221
Cost Category		**FY 1996 Projected Costs ($000)**
Travel:		650
Material and Supplies (including equipment):		2160
Industrial Fund Purchases (other DBOF purchases):		760
Transportation:		15
Other Purchases (Contract support, etc.):		9130
Total:		12715

3. Contractor Workyears.

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

Table 3 - Contract Workyears	
Activity Name: NAVPERSRANDCEN SAN DIEGO CA	**UIC:** N68221
Contract Type	**FY 1996 Estimated Number of Workyears On-Base**
Construction:	0
Facilities Support:	0
Mission Support:	47.5
Procurement:	0
Other:*	0
Total Workyears:	47.5

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

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)):

3

2) Estimated number of workyears which would be eliminated:

44.5

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

0

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.)
9	Engineering Support

No. of Additional Contract Workyears Which Would Be Relocated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
15.5	Engineering Support

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print

Signature

Title

Date

Activity

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type of print

Signature

Title

Date

Activity

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

MAJOR CLAIMANT LEVEL

R. J. ZLATOPER, VADM

NAME (Please type or print

Signature

CHIEF OF NAVAL PERSONNEL

Title

20 JUL 1994

Date

BUREAU OF NAVAL PERSONNEL

Activity

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

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

W. A. EARNER

NAME (Please type of print

Signature

Title

8/4/94

Date

BRAC-95 CERTIFICATION

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

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

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

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

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

ACTIVITY COMMANDER

CAPT. J. D. McAFEE, USN
NAME (Please type of print)

Signature

Commanding Officer
Title

12 July 1994
Date

NAVPERSRANDCEN
Activity

CAPACITY ANALYSIS:
DATA CALL #4 WORK SHEET FOR
TECHNICAL CENTER or LABORATORY: NAVPERSRANDCEN ;SAN DIEGO, CA

Table of Contents

**********If any responses are classified, attac 1 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 NAVPERSRANDCEN SAN DIEGO, CA (UIC N68221)

Fiscal Year	Total Funds Budgeted ($K)	Total Funds Received w/o Direct Cite ($K)	Direct Cite Funds Received ($K)	Budgeted Wkyrs	Actual In-House Wkyrs	Actual Onsite Contract Wkyrs
86	32408	35865	1947	371	383	104*
87	37829	26852	9120	365	329	108*
88	31200	28524	3899	302	317	90*
89	27559	26890	3296	311	306	59
90	26841	25923	3123	307	304	43
91	31916	28084	2043	285	281	35
92	29357	24904	2170	266	270	32
93	30468	28086	2382	264	245	34
94	26869			231		
95	23878			168		
96	24251			167		
97	25563			167		

* Estimated

Table 1.2 Historical and Projected Workload for Detachments of NAVPERSRANDCEN (UIC N68221)

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

TABLE 1.3 FY 1993 BREAKOUT OF FUNDS BUDGETED for NAVPERSRANDCEN SAN DIEGO, CA
(UIC N68221)

SPONSOR	RDT&E(N)							Other RDT&E	Other Appropriation						
	6.1	6.2	6.3a	6.3 b	6.4	6.5	6.6		OMN	APN	OPN	WPN	SCN	Other Navy	All Other
SECNAV									2227						
OTHER DON			205		50		205	70	479		383			358	
BUPERS			8715		930	1146	525		5961						333
ONR	294	3529	62				473								
CNET									395						
HQ,USMC		480	449						1147						
USAF															5
DOD															1597
OTHER GOVT															214
US ARMY															233

TABLE 1.3 FY 1994 BREAKOUT OF FUNDS BUDGETED for NAVPERSRANDCEN SAN DIEGO, CA (UIC N68221)

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
SECNAV									1208						
BUPERS			10132		938	715			3894						
ONR	306	2905				565									
CNET									246						
HQ,USMC		200				244			1453						
NAVAIR								25		109					
SPAWAR			50												
OTHER DON					11		137	230	508		275			253	78
DOD															1781
ARMY															237
USAF															15
OTHER GOVT															314
ALL OTHER															40

TABLE 1.3 FY 1995 BREAKOUT OF FUNDS BUDGETED for NAVPERSRANDCEN SAN DIEGO, CA (UIC N68221)

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
SECNAV									650						
BUPERS			9646		980	926			2500						
ONR	376	4650				400									
CNET									500						
HQ,USMC						100			1000						
OTHER DON								200	400		250				
ARMY															250
DOD															800
OTHER GOVT															200
ALL OTHER															50

TABLE 1.3 FY 1996 BREAKOUT OF FUNDS BUDGETED for NAVPERSRANDCEN SAN DIEGO, CA (UIC N68221)

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
SECNAV									750						
BUPERS			9957		1000	300			2900						
ONR	389	4775				400									
HQ,USMC						250			1200						
OTHER DON							100	200	500		250				
ARMY															250
DOD															800
OTHER GOVT															230

TABLE 1.3 FY 1997 BREAKOUT OF FUNDS BUDGETED for NAVPERSRANDCEN SAN DIEGO, CA (UIC N68221)

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
SECNAV									850						
BUPERS			10421		1000	296			3400						
ONR	396	5200													
HQ,USMC						250			1400						
OTHER DON							100	200	600		100				
ARMY															250
DOD															900
OTHER GOVT															200

TABLE 1.4 FY 199__ BREAKOUT OF FUNDS BUDGETED for DETACHMENTS of NAVPERSRANDCEN SAN DIEGO, CA (UIC N68221)

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

2. Current Class 2 Assets. Complete Tables 2.1 thru 2.6 below as directed. Tables 2.1, 2.2 & 2.3 will define the Class 2 property owned or leased by your activity (less Detachments). Tables 2.4, 2.5 & 2.6 will define the combined Class 2 assets owned or occupied at your Detachment sites which did not receive this Data Call directly. Report space holdings and assignments as of 31 March 1994. Provide numbered notes to explain imminent changes, additions & deletions such as previous BRAC realignments, MILCON (including BRAC related MILCON) & Special Projects that are currently programmed in the FYDP. Give the project number & title, cost, short description, quantity of additional square footage, award date, estimated/actual construction start date and estimated BOD. Square footage of space is to be reported in "Gross Floor/Building Area" (GF/BA) as defined in NAVFAC P-80. Many of the P-80 Category Code Numbers (CCN's) have assets that are reported in units of measure other than square feet (SF). The only unit of measure desired for this Data Call is SF. Only report the assets in each CCN that are normally reported in SF.

For your Site:

a. Use Table 2.1 below to indicate the total amount of Class 2 space at your site for which you are the plant account holder as of 31 March 1994.

b. Use Table 2.2 below to indicate the total amount of your Class 2 space reported in Table 2.1 that is assigned to your tenant commands and/or independent activities at your site as of 31 March 1994.

c. Use Table 2.3 below to indicate the total amount of Class 2 space, for which you are not the plant account holder, but which is utilized/leased by you (less Detachments). Provide numbered notes to identify the title and UIC of the plant account holder/lessor, quantity of leased space and the associated lease cost.

Table 2.1 Main Site Class 2 Assets of NAVPERSRANDCEN SAN, CA (UIC N68221)

	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					
	Totals				

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 2.2 Main Site Class 2 Space of NAVPERSRANDCEN SAN DIEGO, CA (UIC N68221) Assigned to Tenants

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

Table 2.3 Class 2 Space Utilized/Leased by NAVPERSRANDCEN SAN DIEGO, CA (UIC N68221)

Building type	NAVFAC (P-80) category code	GF/BA (KSF)			
		Adequate	Sub-standard	In-adequate	Total
Operational & Training	100		.8		
Maintenance & Production	200	33.9	29.7		
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	4.5			
Underwater Equip. labs	320				
Technical Services labs	321		.8		
Supply Facilities	400				
Hospital & other Medical	500				
Administrative Facilities	600	4.7	16.4		
Housing & Community	700				
Utilities & Grounds	800				
Other					
	Totals	43.1	47.7		

NOTES:
(1) Plant account holder UIC is 66001 NCCOSC RDTE DIV, San Diego CA
(2) No lease costs are involved. Space is occupied under ISSA with host activity.

For your Detachment sites not receiving this Data Call directly:

e. Use Table 2.4 below to indicate the combined total amount of Class 2 space that is occupied by your Detachments for which you are the plant account holder as of 31 March 1994. Attach a list with the titles and UIC's of these Detachments.

f. Use Table 2.5 below to indicate the total amount of your Class 2 space reported in Table 2.4 that is assigned to tenant commands and/or independent activities as of 31 March 1994. Include numbered notes to indicate the Detachment site that hosts the tenant.

g. Use Table 2.6 below to indicate the combined total amount of Class 2 space utilized/leased by your Detachments for which you are not the plant account holder. Provide numbered notes to indicate the quantity of leased space and their associated rental cost.

Table 2.4 Class 2 Assets of NAVPERSRANDCEN SAN DIEGO, CA Occupied by Detachments

Building type	NAVFAC (P-80) category code	GF/BA (KSF)			
		Adequate	Sub-standard	Inadequate	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					
Totals					

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

(1) FACILITY TYPE/CODE:
(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 2.5 Class 2 Space at Detachment Sites of NAVPERSRANDCEN SAN DIEGO, CA (UIC N68221) Assigned to Tenants

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

Table 2.6 Class 2 Space Utilized/Leased by Detachments of NAVPERSRANDCEN (UIC N68221)

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					
	Totals				

3. Class 2 Space Available for Expansion. An activity's expansion capability is a function of it's ability to reconfigure and/or expand existing facilities to accept new or increased roles. Such a reconfiguration may require rehabilitation or buildout of a space to support the new or expanded role. A space expansion could include converting an underutilized storage space into laboratory spaces, or buildout of a high bay area into a multifloor office/laboratory space. All questions refer to Class 2 property for which you are the plant account holder as of 31 March 1994. Do not report any currently programmed changes or additions previously reported in question #2 above. Expansion opportunities must follow the guidance of NAVFAC P-80 for the appropriate facility category code, as well as applicable fire and safety codes. Personnel loading density should not exceed those specified in the P-80. Space is only available if it is currently unoccupied or the current occupants are officially designated for relocation. Report space as Net Floor Area (NFA) as defined in the P-80. Do not include opportunities that are being reported by your Detachments who received this Data Call directly. Reported expansion opportunities must be able to accommodate the necessary ancillary facilities and equipment, such as adequate parking space, required to support the amount of people projected.

a. What is the maximum quantity of space that could be made available for expansion to accommodate other functions and/or increased efforts? Report in terms of the "Current NFA" as shown in Tables 3.1 & 3.2. _____ SQFT.

b. How much of the space reported in question 3.a. above is currently available with minimal or no reconfiguration costs? Report in terms of the "Current NFA" as shown in Tables 3.1 & 3.2. _____ SQFT.

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

completion date of the downsizing effort.

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

Table 3.1 Constrained Class 2 Space Available for Expansion at NAVPERSRANDCEN SAN DIEGO, CA (UIC N68221)

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		
Totals					

Table 3.2 Unconstrained Class 2 Space Available for Expansion at NAVPERSRANDCEN SAN DIEGO, CA (UIC N68221)

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		

4. Class 1 Space Available for Expansion.

a. Identify in Table 4.1 below the real estate resources which have the potential to facilitate future development, and for which you are the plant account holder as of 31 March 1994, or into which, though a tenant, your activity could reasonably expect to expand. Complete a separate table for each individual site (i.e., main base, outlying airfields, special off-site areas, etc.) and Detachment that did not receive this Data Call directly. The unit of measure is acres. Developed area is defined as land currently with buildings, roads, and utilities where further development is not possible without demolition of existing improvements. Include in "Restricted" acreage that is restricted for future development due to environmental constraints (e.g. wetlands, landfills, archaeological sites), operational restrictions (e.g. ESQD arcs, HERO, HERP, HERF, AICUZ, ranges) or cultural resources restrictions. Identify the reason for the restriction when providing the acreage in the table. Specify any entry in "Other" (e.g. submerged lands).

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

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

Class 1 Resources of NAVPERSRANDCEN SAN DIEGO, CA (UIC: N68221)
Site Location: SAN DIEGO, CALIFORNIA

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 Outlease Program				
Hunting/Fishing Programs				
Other				
Total:				

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

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

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 NAVPERSRANDCEN SAN DIEGO, CA (UIC: N68221)

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 Requirements			FY 2001 Requirements		
			A	B	C	A	B	C

A = STUDENTS PER YEAR
B = NUMBER OF HOURS EACH STUDENT SPENDS IN THIS TRAINING FACILITY FOR THE TYPE OF TRAINING RECEIVED
C = A x B

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

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

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

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

[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.
NAVPERSRANDCEN has no Ship Berthing Capacity, Tab A is omitted.

7. **Operational Airfield Capacity.** If your activity owns and operates an operational airfield fill out the data sheets provided at TAB B.
NAVPERSRANDCEN has no Operational Airfield Capacity, Tab B is omitted.

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.
NAVPERSRANDCEN has no Depot Level Maintenance Capacity, Tab C is omitted.

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.
NAVPERSRANDCEN has no Ordnance Storage Capacity, Tab D is omitted.

BRAC-95 CERTIFICATION

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

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

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

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

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

ACTIVITY COMMANDER

CAPT J. D. McAFEE, USN
NAME (Please type of print)

Signature

Commanding Officer
Title

3 MAY 94
Date

NAVPERSRANDCEN SAN DIEGO, CA
Activity

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print

Signature

Title

Date

Activity

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type of print

Signature

Title

Date

Activity

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

MAJOR CLAIMANT LEVEL

R. J. ZLATOPER, VADM
NAME (Please type or print

Signature

CHIEF OF NAVAL PERSONNEL
Title

16 MAY 1994
Date

BUREAU OF NAVAL PERSONNEL
Activity

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

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

J.B. Greene, Jr
NAME (Please type of print

Signature

Acting
Title

19 May 1994
Date

BRAC-95 CERTIFICATION

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

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

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

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

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

ACTIVITY COMMANDER

CAPT J. D. McAFEE, USN
NAME (Please type of print)

J D McAfee
Signature

Commanding Officer
Title

3 NOV 94
Date

NAVPERSRANDCEN SAN DIEGO, CA
Activity

BRAC-95 CERTIFICATION

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

CAROL DANTLEY
NAME (Please type or print)

Carol Dantley
Signature

BUDGET ANALYST
Title

11 May 94
Date

CLAIMANCY PROGRAMMING, BUDGET AND EXECUTION DIVISION
Division

PROGRAMMING AND BUDGET BRANCH
Department

BUREAU OF NAVAL PERSONNEL
Activity

Enclosure (1)

SECTION I: TASKING

In accordance with the Deputy Secretary of Defense memorandum dated 7 Jan 94, the Laboratory Joint Cross-Service Group (LJCSG) with DOD components should, where operationally and cost effective, strive to: retain in only one Service military unique capabilities used by two or more Services; consolidate workload across the Service to reduce capacity; and assign operational units from more than one Service to a single base. Specifically, the purpose of the LJCSG is:

- Determine common support functions and bases to be addressed by LJCSG
- Establish guidelines, standards, assumptions, measures of merit, data elements and milestone schedules for DOD Component conduct of cross-service analysis of common support functions
- Review excess capacity analysis
- Develop closure or realignment alternatives
- Analyze cross-service trade-offs

The following information identifies to the Services common support functions and data element requirements necessary to support the cross-service analysis of these common support functions.

1.1 Guidelines

Because the DOD components are organized differently, "Lab" activities are considered to be those involved in the following life cycle efforts: Science and technology, and/or engineering development, and/or in-service engineering.

Service missions and force structure will be as stipulated in the FY1995-2000 Defense Planning Guidance and Interim Force Structure Plan.

The Military Departments will use the projected funding in the FY95 President's Budget Submission (Future Years Defense Plan -- FYDP) and an estimate of funds that will be received from outside the military department for execution.

If "lab" excess capacity exists, the Military Departments will start to reduce it where operationally and cost effective through a combination of downsizing in place within the departments, internal service consolidation, and cross service alternatives.

The Military Departments will gather, exchange, and analyze data collected per this guidance call for Common Support Functions (Appendix C) at "lab" activities (Appendix B) in accordance with the milestones and schedule dates identified in Appendix A.

Cross-service alternatives will result in an aggregate reduction in the overall "lab" infrastructure across the Military Departments -- personnel/funding/facilities and equipment.

Common cross-service Measures of Merit will be consistently applied for all cross-service alternatives.

Integration of weapon systems/components into operational forces will remain with the individual Military Departments responsible for those forces.

1.2 Standards

Evaluation of cross-service alternatives will be consistent with PL 101-510 (as amended) and the eight BRAC criteria. Only certified data will be used.

The COBRA cost model will be used to calculate estimated costs, estimated savings, and Return on Investment (ROI) of alternatives leading to proposed closures and realignments. Common inputs will be used for Military COBRA runs incorporating cross-service alternatives.

Military value analysis will be conducted by the Military Departments IAW Title 10, USC responsibilities.

1.3 Assumptions

"Lab" Common Support Functions and activities identified herein represent the major opportunities for developing cross-service alternatives. The Military Departments are not precluded from proposing other cross-service alternatives to reduce excess capacity as they assess the full complement of "lab" functions.

Previous BRAC decisions will be factored into cross-service alternatives.

"Lab" capacity will be based on budgeted workyears. A workyear is considered to be 2080 hours adjusted for time not on the job (e.g. sick leave, annual leave, etc)

1.4 Measures of Merit

The following Measures of Merit represent the outcome from the DOD component final realignment and closure recommendations that are supported by the capabilities data which will be gathered by activity and common support function in Section III of this guidance.

- Reduction of "lab" infrastructure

- Return on investment (COBRA)
- Military value (BRAC criteria 1-4) -- the composite assessment of the quality of the remaining "lab" infrastructure

1.5 Activities

The Military Departments will collect capacity data for each "lab" activity identified in Appendix B. The "lab" activities were selected by considering all individual aggregates of personnel and facilities located at one base, under the same commander performing predominantly science and technology (S&T), engineering development and/or in-service engineering work. Small subelements of these "lab" activities were included with the activity. Larger subelements were broken out and defined as separate activities. The list of activities was then narrowed down to the list in Appendix B based on a joint Military Department assessment of common support functions with cross-service potential.

1.6 Common Support Functions

The common support functions (CSFs) were selected as shown in Appendix C based on a joint Military Department assessment of commonalty and cross-servicing potential. Common support functions which were already consolidated and being cross serviced were not included.

Common Support Functions are divided into two categories: product and pervasive. Product functions include all S&T, engineering development, and in-service engineering efforts associated with a product from all funding sources. Pervasive functions only include those efforts that are S&T funded, i.e. Technology Base (6.1)/Exploratory Development (6.2)/Advanced Development (6.3).

SECTION II: CAPACITY OF DOD COMPONENTS

2.1 **Workload.** Use the following table to describe historic and projected workload at each activity in terms of funding and workyears. Assume previous BRAC closures and realignments are implemented on schedule. Projected funding will be derived from FY95 President's Budget Submission (Then year dollars). Past fiscal year data shall begin with FY86 or at the inception of the activity as it existed on 1 Oct 93. (BRAC Criteria I & IV)

Information Required	Fiscal Years												
	86	87	88	89	90	91	92	93	94	95	96	97	(R)
Total Funds Programmed ($M)	32.4	37.8	31.2	27.6	26.8	31.9	29.4	30.5	17.9	23.9	24.3	25.6	
Total Actual Funds ($M)	37.8	35.9	32.4	30.2	29.0	33.9	27.1	30.4					
Programmed Workyears*	340	340	277	289	286	266	247	245	114	154	154	154	
Actual Workyears*	352	304	292	284	283	262	251	232					

***Note--civilian workyears only.**

- Budgeted workyears are the selected indicator of the "lab" infrastructure's capacity at an aggregate level for each Military Department. They include both workyears funded directly by the Military Department and the workyears funded from organizations outside the Military Department.

Workyears = government personnel and on-site FFRDCs and SETA

2.2 **Excess "Lab" Capacity -- Measured at the DOD Component Level**

- Excess "Lab" Capacity = Sum of the Peak Workyears - Sum of the Projected Workyears
  -- Peak at each activity = Highest value between FY86 (or since inception of organization) and FY93
  -- Projected at each activity = Estimated at FY97

SECTION II: CAPACITY OF DOD COMPONENTS

2.1 **Workload.** Use the following table to describe historic and projected workload at each activity in terms of funding and workyears. Assume previous BRAC closures and realignments are implemented on schedule. Projected funding will be derived from FY95 President's Budget Submission (Then year dollars). Past fiscal year data shall begin with FY86 or at the inception of the activity as it existed on 1 Oct 93. (BRAC Criteria I & IV)

Information Required	Fiscal Years											
	86	87	88	89	90	91	92	93	94	95	96	97
Total Funds Programmed ($M)	32.4	37.8	31.2	27.6	26.8	31.9	29.4	30.5	27.9	24.9	25.8	27.2
Total Actual Funds ($M)	37.8	35.9	32.4	30.2	29.0	33.9	27.1	30.4				
Programmed Workyears*	340	340	277	289	286	266	247	245	214	154	154	154
Actual Workyears*	352	304	292	284	283	262	251	232				

***Note--civilian workyears only.**

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Workyears = government personnel and on-site FFRDCs and SETAs

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  -- Peak at each activity = Highest value between FY86 (or since inception of organization) and FY93
  -- Projected at each activity = Estimated at FY97

SECTION III: CAPABILITY OF ACTIVITIES TO PERFORM COMMON SUPPORT FUNCTIONS (CSFs): Provide the information described for each common support function listed in Appendix C in which you are actively engaged.

3.0 Mission: Describe the major capabilities at your activity contributing to the common support function in bulletized format. Describe any relationship and interconnectivity with other functions (common or otherwise) in support of the overall activity mission.

NPRDC conducts research and development programs which support the Human Systems, Manpower and Personnel, and Training Systems Common Support Functions (CSF). NPRDC's program support specific Navy and Marine Corps Manpower/Personnel policies and address critical service unique combat mission requirements (i.e., Undersea Warfare, Special Operations, Amphibious Assault, and Carrier Aviation). These program embed the following technologies, models, and development efforts.The Center provides mission support and has no involvement with the 22 product functions listed in Appendix C.

CSF 4--Human Systems

Assessing Human Capabilities With Neuroscience Technology
Developing Information Systems Design Techniques
Constructing Human Cognition Simulation Models
Designing Scientific Visualization-Based Sensor Interpretation Displays

CSF 5--Manpower and Personnel

Designing Effective Planning and Policy Modeling Techniques
Assessing Assignment Policy Executability
Simulating Workforce Dynamics
Defining High Payoff Recruiting Strategies
Quantifying Tradeoffs Between Conflicting Policies
Creating Innovative and Bias-Free Selection and Vocational Aptitude Tests
Establishing Enlistment Testing Standards
Developing Computer-Adaptive Testing Methodologies
Developing Responsive Personnel and Training Management Tools
Adapting Industry Developed School Seating Reservation System
Measuring and Validating Job Performance Standards
Maximizing Drug Use Detection and Deterrence
Assessing Attitudes in the Workforce
Investigating Multicultural Workforce Issues
Evaluating Alternative Forms of Incentives to Retain Quality Personnel

SECTION III: CAPABILITY OF ACTIVITIES TO PERFORM COMMON SUPPORT FUNCTIONS (CSFs): Provide the information described for each common support function listed in Appendix C in which you are actively engaged.

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CSF 4--Human Systems

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Creating Innovative and Bias-Free Selection and Vocational Aptitude Tests
Establishing Enlistment Testing Standards
Developing Computer-Adaptive Testing Methodologies
Developing Responsive Personnel and Training Management Tools
Adapting Industry Developed School Seating Reservation System
Measuring and Validating Job Performance Standards
Maximizing Drug Use Detection and Deterrence
Assessing Attitudes in the Workforce
Investigating Multicultural Workforce Issues
Evaluating Alternative Forms of Incentives to Retain Quality Personnel

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CSF 6--Training Systems

Developing Cognitively-Oriented Task Analysis Methodologies
Designing Relevant and Task-Oriented Schoolhouse Training
Creating Realistic Computer-Based Weapon/Sensor System Simulations
Defining High Fidelity Visual Display Technologies
Developing Practical On--The-Job (OJT) Training Approaches
Developing Readiness-Based "Just in Time" Training Strategies
Determining Accurate Performance and Training Evaluation Technologies
Developing Economical Automated Instructional Design Systems
Designing Cost-Effective Training Consolidation Techniques

3.1 Location

3.1.1 **Geographic/Climatological Features:** Describe any geographic/climatological features in and around your activity that are relevant to each CSF. Indicate and justify those that are required versus those that just serve to enhance accomplishing the mission of the activity. For example, clear air at high altitude that increases quality of atmospheric, ground-based laser experiments in support of the weapons CSF. (BRAC Criteria I)

CSF 4 - None
CSF 5 - None
CSF 6 - None

3.1.2 **Licenses & permits:** Describe and list the licenses or permits (e.g., environmental, safety, etc.) that your activity currently holds and justify why they are required to allow tests, experiments, or other special capabilities at your location for each CSF For example, permit to store and use high explosives. (BRAC Criteria I)

CSF 4 - None
CSF 5 - None
CSF 6 - None

3.1.3 **Environmental constraints:** Describe and list the environmental or land use constraints present at your activity which limit or restrict your current scope for each CSF, i.e., would not allow increased "volume" or "spectrum" for the CSF. Example -- Volume: frequency of a type of experiment. Example -- Spectrum: Current permit to detonate high explosives will not allow detonation or storage of increased quantity of explosives without legal waiver (state law) or relocation of surrounding (non-govt) buildings. (BRAC Criteria II)

CSF 4 - None
CSF 5 - None
CSF 6 - None

3.1.4 **Special Support Infrastructure:** List and describe the importance of any mission related special support infrastructure (e.g. utilities) present at your location for your activity. (BRAC Criteria I)

CSF 4 - None
CSF 5 - None
CSF 6 - None

CSF 6--Training Systems

Developing Cognitively-Oriented Task Analysis Methodologies
Designing Relevant and Task-Oriented Schoolhouse Training
Creating Realistic Computer-Based Weapon/Sensor System Simulations
Defining High Fidelity Visual Display Technologies
Developing Practical On--The-Job (OJT) Training Approaches
Developing Readiness-Based "Just in Time" Training Strategies
Determining Accurate Performance and Training Evaluation Technologies
Developing Economical Automated Instructional Design Systems
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NOT APPLICABLE

3.1.2 **Licenses & permits:** Describe and list the licenses or permits (e.g., environmental, safety, etc.) that your activity currently holds and justify why they are required to allow tests, experiments, or other special capabilities at your location for each CSF. For example, permit to store and use high explosives. (BRAC Criteria I)

NOT APPLICABLE

3.1.3 **Environmental constraints:** Describe and list the environmental or land use constraints present at your activity which limit or restrict your current scope for each CSF, i.e., would not allow increased "volume" or "spectrum" for the CSF. Example -- Volume: frequency of a type of experiment. Example -- Spectrum: Current permit to detonate high explosives will not allow detonation or storage of increased quantity of explosives without legal waiver (state law) or relocation of surrounding (non-govt) buildings. (BRAC Criteria II)

NOT APPLICABLE

3.1.4 **Special Support Infrastructure:** List and describe the importance of any mission related special support infrastructure (e.g. utilities) present at your location for your activity. (BRAC Criteria I)

NOT APPLICABLE

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3.1.5. **Proximity to Mission-Related organizations:** List and describe the importance and impact of not having nearby organizations which facilitate accomplishing or performing your mission -- e.g. operational units, FFRDCs, universities/colleges, other government organizations, and commercial activities. Restrict your response to the top five. Complete the following: (BRAC Criteria I)

Historically, both the Navy and Marine Corps have had strong concentrations of training facilities, fleet units, support functions, and headquarters commands in the San Diego area. As military downsizing progresses, several additional fleet operating units will be transferred to the local area.

The majority of the Center's R&D programs require access to operating units, since the success of our products depends upon customer acceptance and use. Our location enhances and enables:

Establishing informal and beneficial relationships with sponsors and their representatives;

The capability to respond immediately to headquarters requests for data and information from the fleet;

Cost-effective pilot testing, data gathering, and introducing new technologies to the fleet, as compared to a less central location; and

The ability to serve as a coordinator and liaison to other research organizations and researchers who are involved in Defense-related research.

The Center's location not only benefits the Navy in terms of the timeliness and costs for conducting research, but benefits the fleet as well. Representatives from operating and headquarters commands have immediate access to our research organization, whether for addressing specific problems or for seeking technical assistance. Our location fosters greater understanding and appreciation for Navy R&D and the Center's capabilities among our sponsors and customers.

Common Support Functions	Name	Type of Organization	Distance	Workyears Performed by Your Activity	Workyears Funded by Your Activity
4	None				
5	MEPS	Recruit Test	6 miles	15	
6	SUBTRAFAC	Navy Operational	2 miles	18	
6	AIRPAC	Navy Operational	10 miles	14	
6	CampPendleton	USMC Operational	30 miles	15	
6	SURFPAC	Navy Operational	10 miles	20	

3.1.5. **Proximity to Mission-Related organizations:** List and describe the importance and impact of not having nearby organizations which facilitate accomplishing or performing your mission -- e.g. operational units, FFRDCs, universities/colleges, other government organizations, and commercial activities. Restrict your response to the top five. Complete the following: (BRAC Criteria I)

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6	AIRPAC	Navy Operational	10 miles	14	
6	CampPendleton	USMC Operational	30 miles	15	
6	SURFPAC	Navy Operational	10 miles	20	

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3.2 Personnel:

3.2.1 **Total Personnel:** What is the total number of (1) government (military and civilian), on-site federally funded research and development center (FFRDC), and (3) on-site system engineering technical assistance (SETA) personnel engaged in science and technology (S&T), engineering development and in-service engineering activities as of end FY93? For individuals that predominantly work in CSFs, involved in more than one CSF, account for those individuals in the CSF that represents the preponderance of their effort. (BRAC Criteria I)

	Number of Personnel - Data is pro-rated. More detailed information not available			
Types of personnel	**Government NPRDC**		**On-Site FFRDC**	**On-Site SETA**
	Civilian	Military		
CSF 4				
(Research)Technical	2	0	0	0
Management (Supv)	0	0	0	0
Other (Support)	0	0	0	0
CSF 5				
(Research)Technical	65	2	0	0
Management (Supv)	4	1	0	0
Other (Support)	21	6	0	0
CSF 6				
(Research)Technical	85	2	0	0
Management (Supv)	5	1	0	0
Other (Support)	38	7	0	0

3.2 Personnel:

3.2.1 **Total Personnel:** What is the total number of government (military and civilian), on-site federally funded research and development center (FFRDC), and on-site system engineering technical assistance (SETA) personnel engaged in science and technology (S&T), engineering development and in-service engineering activities as of end FY93? For individuals that predominantly work in CSFs, involved in more than one CSF, account for those individuals in the CSF that represents the preponderance of their effort. (BRAC Criteria I)

Types of personnel	Number of Personnel			
	Government NPRDC		On-Site FFRDC	On-Site SETA
	Civilian	Military	N/A	N/A
(Research)Technical	152	4	0	0
Management (Supv)	9	2	0	0
Other (Support)	59	13	0	0

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3.2.2 **Education:** What is the number of government personnel active y engaged in S&T, engineering development and in-service engineering activities by ighest degree and type of position? Provide the data in the following table: (BRAC Crit ria I)

Type of Degree/ Diploma	Number of Government Personnel by Type of Position		
	Technical*	Management (Supv)	Other
CSF 4			
High School or Less	0	0	0
Associates	0	0	0
Bachelor	0	0	0
Masters	1	0	0
Doctorate (include Med/Vet/etc.)	1	0	0
CSF 5			
High School or Less	2	0	0
Associates	6	1	4
Bachelor	15	1	18
Masters	24	2	4
Doctorate include Med/Vet/etc.)	22	0	0
CSF 6			
High School or Less	2	0	23
Associates	4	2	5
Bachelor	39	2	15
Masters	20	2	3
Doctorate (include Med/Vet/etc.)	20	1	0

***Note--This data is pro-rated from data for all Center personnel. A large number of personnel work on/or support more than one project/area.**

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3.2.3 **Experience:** What is the experience level of government personnel? Fill in the number of government personnel in the appropriate boxes of the following table. (BRAC Criteria I)

Type of Position	Years of Government and/or Military Service *				
	Less than 3 years	3-10 years	11-15 years	16-20 years	More than 20 years
CSF 4					
Technical	0	0	0	2	0
Management (Supv)	0	0	0	0	0
Total	0	0	0	2	0
CSF 5					
Technical	2	17	11	9	14
Management (Supv)	1	1	1	1	0
Total	3	18	12	10	14
CSF 6					
Technical	4	30	20	28	15
Management (Supv)	1	2	2	1	1
Total	5	32	22	29	16

***Note--This data is pro-rated from data for all Center personnel. A large number of personnel work on/or support more than one project/area.**

3.2.4 **Accomplishments During FY91-93**: For government personnel answer the following questions.

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"LAB" JOINT CROSS-SERVICE GROUP GUIDANCE PACKAGE

Revisions dated
14 JUNE 94
11 AUG 94
14 SEP 94

3.2.2 **Education:** What is the number of government personnel actively engaged in S&T, engineering development and in-service engineering activities by highest degree and type of position? Provide the data in the following table: (BRAC Criteria I)

Type of Degree/ Diploma	Number of Government Personnel by Type of Position		
	Technical*	Management (Supv)	Other
High School or Less	4	0	0
Associates	4	1	5
Bachelor	19	1	25
Masters	34	3	5
Doctorate (include Med/Vet/etc.)	30	0	0

***Note--This data is pro-rated from data for all Center technical personnel. A large number of technical personnel work on more than one project/area**

3.2.3 **Experience:** What is the experience level of government personnel? Fill in the number of government personnel in the appropriate boxes of the following table. (BRAC Criteria I)

Type of Position	Years of Government and/or Military Service				
	Less than 3 years	3-10 years	11-15 years	16-20 years	More than 20 years
Technical	2	47	31	27	45
Management (Supv)	0	1	1	1	6
Total	2	48	32	28	51

3.2.4 **Accomplishments During FY91-93:** For government personnel answer the following questions.

3.2.4.1 How many patents were awarded and patent disclosures (only count disclosures with issued disclosure numbers) were made? (BRAC Criteria I)

CSF	Disclosures	Awarded	Patent Titles (List)
4	1		Method and/or System for Personal Identification and Impairment Assessment From Brain Activity Patterns
5		1	Electronic Personnel Test Device
Total	1	1	

3.2.4.2 How many papers were published in peer reviewed journals? (BRAC Criteria I)

CSF	Number Published	Paper Titles (List)	
4	3	See list below.	
5	47	See list below.	(R)
5	23	See list below.	(R)
TOTAL	73		(R)

Paper Titles

CSF 4--Human Systems

McDaniel, W. C., & Rankin, W. C. (1991). Determining flight task proficiency of students: A mathematical decision aid. *Human Factors Journal, 33*(3), 293-308.

McDaniel, W. C., & Sistrunk, F. (1991). Management dilemmas and decisions: Impact of framing and anticipated responses. *Journal of Conflict Resolution, 35*(1), 21-42.

Simpson, H. (1990). Book review: Cognitive science and its applications for human-computer interaction (R. Guindon). *Human Factors Society Bulletin, 32*(3), 11.

3.2.4.1 How many patents were awarded and patent disclosures (only count disclosures with issued disclosure numbers) were made? (BRAC Criteria I)

CSF	Disclosures	Awarded	Patent Titles (List)
4	1		Method and/or System for Personal Identification and Impairment Assessment From Brain Activity Patterns
5		1	Electronic Personnel Test Device
Total	1	1	

3.2.4.2 How many papers were published in peer reviewed journals? (BRAC Criteria I)

CSF	Number Published	Paper Titles (List)
4	3	See list below.
5	49	See list below.
5	24	See list below.
TOTAL	76	

Paper Titles

CSF 4--Human Systems

McDaniel, W. C., & Rankin, W. C. (1991). Determining flight task proficiency of students: A mathematical decision aid. *Human Factors Journal, 33*(3), 293-308.

McDaniel, W. C., & Sistrunk, F. (1991). Management dilemmas and decisions: Impact of framing and anticipated responses. *Journal of Conflict Resolution, 35*(1), 21-42.

Simpson, H. (1990). Book review: Cognitive science and its applications for human-computer interaction (R. Guindon). *Human Factors Society Bulletin, 32*(3), 11.

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CSF 5--Manpower and Personnel

Abrahams, N. M., Alf Jr., E. F., & Neumann, I. (1993) The treatment of failures in validation research. *Military Psychology, 5*(4), 235-249.

Alderton, D. L., & Larson, G. E. (1990). The dimensionality of Raven's advanced progressive matrices items. *Educational and Psychological Measurement, 50*(4), 887-900.

CITATION DELETED
NOT PEER REVIEWED (R)

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Booth-Kewley, S., Rosenfeld, P., & Edwards, J. E. (1992). Impression management and self-deceptive enhancement among Hispanic and non-Hispanic white Navy recruits. *The Journal of Social Psychology, 132*, 323-329.

CSF 5--Manpower and Personnel

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3.3 Workload

3.3.1 FY93 Workload

3.3.1.1 **Work Year and Lifecycle:** Identify the number of actual work-years executed for each applicable CSF in FY93 for each of the following: government civilian; military; on-site FFRDCs; and on-site SETAs. (BRAC Criteria I)

NPRDC San Diego, CA	Fiscal Year 1993 Actual			
	CSF 4--Human Systems			
	Civilian	Military	FFRDC	SETA
Science & Technology	1.3	0	0	0
Engineering Development	0	0	0	0
In-Service Engineering	0	0	0	0
	CSF 5--Manpower and Personnel			
Science & Technology	47.4	5	0	0
Engineering Development	0	0	0	0
In-Service Engineering	0	0	0	0
	CSF 6--Training Systems			
Science & Technology	73.5	7	0	0
Engineering Development	0	1	0	0
In-Service Engineering	0	0	0	0

3.3 Workload

3.3.1 FY93 Workload

3.3.1.1 **Work Year and Lifecycle:** Identify the number of actual workyears executed for each applicable CSF in FY93 for each of the following: government civilian; military; on-site FFRDCs; and on-site SETAs. (BRAC Criteria I)

NPRDC San Diego, CA	Fiscal Year 1993 Actual			
	CSF 4--Human Systems			
	Civilian	Military	FFRDC	SETA
Science & Technology	1.3	0	0	0
Engineering Development	0	0	0	0
In-Service Engineering	0	0	0	0
	CSF 5--Manpower and Personnel			
Science & Technology	47.4	5	0	0
Engineering Development	9.3	0	0	0
In-Service Engineering	0	0	0	0
	CSF 6--Training Systems			
Science & Technology	73.5	7	0	0
Engineering Development	0	1	0	0
In-Service Engineering	0	0	0	0

3.3.1.2 **Engineering Development By ACAT:** For each Common Support Function (e.g. airborne C4I) at each activity engaged in engineering development, provide:

- For each ACAT IC, ID, and II program (as defined in DODI 5000.2):
  - The name of the program
  - A brief program description
- For each ACAT III and IV programs:
  - The number of such programs
  - A list of program names
- For each program not an ACAT I, II, III, IV:
  - The number of such programs
  - A list of program names
- For the purpose of this question, any program between Milestone I and IV and containing demonstration and validation (Dem/Val 6.4)/Engineering and Manufacturing Development (EMD 6.5) funds in the FY95 PBS is considered to be engaged in engineering development (BRAC Criteria I).

Engineering Development	Name or Number	Workyears (FY93 Actual)	FY93 Funds Received (Obligation Authority)	Narrative
ACAT IC	**(Name)**	N/A	N/A	**(Description)**
ACAT ID	**(Name)**	N/A	N/A	**(Description)**
ACAT II	**(Name)**	N/A	N/A	**(Description)**
ACAT III/IV	**(Number)**	N/A	N/A	**(List)**
Other	**(Number)**	N/A	N/A	**(List)**

3.3.1.3 **In-Service Engineering:** For each Common Support Function at each activity engaged in in-service engineering, list the in-service engineering efforts the FY93 funds (from all sources) obligated for these efforts, the FY93 workyears for these efforts, and the weapon system(s) supported by these efforts. In-service engineering consists of all engineering support of fielded and/or out of production systems and includes efforts to improve cost, throughput, and schedule to support customer requirements as well as mods and upgrades for reliability, maintainability, and performance enhancements. (BRAC Criteria I)

Common Support Functions	In-Service Engineering Efforts (List)	FY93 Actual		Weapon System(s) Supported
		Funds Received (Obligation Authority)	Workyears	
None				

3.3.2 **Projected Funding**

3.3.2.1 **Direct Funding:** For each applicable CSF, identify direct mission funding by appropriation from FY94 to FY97. Use FY95 PBS for FY95-FY97. (BRAC Criteria I)

CSF	FY94	FY95	FY96	FY97
4 - HUMAN SYSTEMS RDT&E,N	0	0	0	0
5 - MANPOWER & PERSONNEL RDT&E,N	4004	4958	4900	5164
6 - TRAINING SYSTEMS RDT&E,N	8922	6728	6506	6774

(R)

3.3.2.2 **Other Obligation Authority:** For each applicable CSF, identify reimbursable and direct-cite funding (other obligation authority expected) from FY94 to FY97. Funding allocation must be traceable to FY95 PBS. (BRAC Criteria I)

CSF	FY94	FY95	FY96	FY97
4 - HUMAN SYSTEMS RDT&E,N	528	590	590	710
5 - MANPOWER & PERSONNEL RDT&E,N	2333	2947	2949	2954
O&M,N	3678	3400	3800	4300
APN	109	0	0	0
OTHER NAVY	888	0	0	0
OTHER DOD	709	750	750	900
OTHER GOVT	140	100	100	75
NON GOVT	0	50	30	50
6 - TRAINING SYSTEMS RDT&E,N	1940	2155	2476	2336
O&M,N	1097	1650	1600	1950
OPN	275	250	250	100
OTHER DOD	1277	300	300	250
OTHER GOVT	0	100	100	75

(R)

* RDT&E,N funding extracted from Presidents' budget. Other funding is estimated based on provisions planning documents or inquries of reimbursable work sponsors.

Common Support Functions	In-Service Engineering Efforts (List)	FY93 Actual		Weapon System(s) Supported
		Funds Received (Obligation Authority)	Workyears	
N/A	N/A	N/A	N/A	N/A

3.3.2 **Projected Funding**

3.3.2.1 **Direct Funding:** For each applicable CSF, identify direct mission funding by appropriation from FY94 to FY97. Use FY95 PBS for FY95-FY97. (BRAC Criteria I)

CSF	FY94	FY95	FY96	FY97
N/A	N/A	N/A	N/A	N/A

3.3.2.2 **Other Obligation Authority:** For each applicable CSF, identify reimbursable and direct-cite funding (other obligation authority expected) from FY94 to FY97. Funding allocation must be traceable to FY95 PBS. (BRAC Criteria I)

CSF	FY94	FY95	FY96	FY97
N/A	N/A	N/A	N/A	N/A

3.4 Facilities and Equipment

3.4.1 **Major Equipment and Facilities:** Describe major facilities and equipment necessary to support each Common Support Function (include SCIFs). If the facilities and equipment are shared with other functions, identify those functions and the percentage of total time used by each of the functions. Provide labeled photographs that picture the breadth and scope of the equipment and facilities described. If it is unique to DOD, to the Federal Government, or to the US, describe why it is unique. Insert the replacement cost. For this exercise, Replacement cost = (Initial cost + capital investment) multiplied by the inflation factor for the original year of construction. (BRAC Criteria II)

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3.4 Facilities and Equipment

3.4.1 **Major Equipment and Facilities:** Describe major facilities and equipment necessary to support each Common Support Function (include SCIFs). If the facilities and equipment are shared with other functions, identify those functions and the percentage of total time used by each of the functions. Provide labeled photographs that picture the breadth and scope of the equipment and facilities described. If it is unique to DOD, to the Federal Government, or to the US, describe why it is unique. Insert the replacement cost. For this exercise, Replacement cost = (Initial cost + capital investment) multiplied by the inflation factor for the original year of construction. (BRAC Criteria I.)

Common Support Function	Major Facility or Equipment Description	Unique To			Replacement Cost ($K)
		DOD	Federal Gov't	U. S.	
4 - HUMAN SYSTEMS	**Neuroelectric and Neuromagnetic Recording Facility**	**No**	**No**	No	$605
This facility provides multichannel neuromagnetic technology for personnel assessment. It allows the application ofneuroelectric and neuromagnetic measurement/recording technology to enable recording of electrical potentials produced by the brain and of minute current and magnetic fields of the brain. Not shared with any other function. (Photograph on following page.)					
5 Manpower & Personnel	Manpower and Personnel Computing Facility (MAPCOM)	No	No	No	$1,034
This is a 2,000 square foot IBM mainframe computer facility used to develop, process, and maintain: statistical and forecasting systems; very large, complex personnel databases, and large software system applications. It combines extensive computing capacity, compatibility with other Navy personnel systems, and large on-line storage capability. Shared with Center Management and Information Support functions. 25% (Photograph not available.)					
6 - Training Systems	Training Research Computing Facility (TRCF)	No	NO	No	$1,390
This is a 1,600 square foot Sun systems facility, operating under the UNIX operating system. It provides network (internal and external) services, data analysis, test processing, and graphics/video image processing software is specialized and, in some cases, custom written for NPRDC applications. Some of the TRCF services required modifications to the UNIX operating system kernel, necessitating an NPRDC source license for the UNIX operating system. Shared with Center Management and Information Support function. 35% (Photograph not available.)					

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3.4 Facilities and Equipment

3.4.1 **Major Equipment and Facilities:** Describe major facilities and equipment necessary to support each Common Support Function (include SCIFs). If the facilities and equipment are shared with other functions, identify those functions and the percentage of total time used by each of the functions. Provide labeled photographs that picture the breadth and scope of the equipment and facilities described. If it is unique to DOD, to the Federal Government, or to the US, describe why it is unique. Insert the replacement cost. For this exercise, Replacement cost = (Initial cost + capital investment) multiplied by the inflation factor for the original year of construction. (BRAC Criteria I.)

(R)

Common Support Function	Major Facility or Equipment Description	Unique To			Replacement Cost ($K)
		DOD	Federal Gov't	U.S	
4 - HUMAN SYSTEMS	Neuroelectric and Neuromagnetic Recording Facility	No	No	No	$605
This facility provides multichannel neuromagnetic technology for personnel assessmen . It allows the application of neuroelectric and neuromagnetic measurement/recording technology to enable recording of electrical potentials produced by the brain and of minute current and magnetic fields of the brain. (Photograph on following page.)					
5 - Manpower & Personnel	Manpower and Personnel Computing Facility (MAPCOM)	No	No	No	$1,034
This is a 2,000 square foot IBM 4381 mainframe computer facility used to develop, process, and maintain: statistical and forecasting systems; very large, complex personnel databases, and large software system applications. It combines extensive computing capacity, compatibility with other Navy personnel systems, and large on-line storage capability. (Photograph on following page.)					
6 - Training Systems	Training Research Computing Facility (TRCF)	No	No	No	$1,390
This is a 1,600 square foot Sun systems facility, operating under the UNIX operating system. It provides network (internal and external) services, data analysis software, text graphics/video image processing software, and electronic mail/news services. The data analysis, test processing, and graphics/video image processing software is specialized and, in some cases, custom written for NPRDC applications. Some of the TRCF services required modifications to the UNIX operating system kernel, necessitating an NPRDC source license for the UNIX operating system. (Photograph not available.)					

CSF - 4 HUMAN SYSTEMS
Neuroelectric and Neuromagnetic Recording Facility (R)

CSF - 5 MANPOWER & PERSONNEL
Training Research Computing Facility (TRCF)

Common Support Function	Major Facility or Equipment Description	Unique To			Replacement Cost ($K)
		DOD	Federal Gov't	U. S.	
N/A	N/A	N/A	N/A	N/A	N/A

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3.5 Expansion Potential

3.5.1 **Laboratory Facilities:** Use facilities records as of fourth-quarter FY93 in answering the following (in sq ft) for each CSF: (BRAC Criteria II)

Common Support Function	Facility or Equipment Description	Space Capacity (KSF)			
		Type of Space*	Current	Used	Excess
4 - HUMAN SYSTEMS	OFFICE	TECHNICAL	1	0	1
"	"	ADMIN	1	1	0
"	WAREHOUSE	STORAGE	.1	.1	0
5 - MANPOWER & PERSONNEL	OFFICE	TECHNICAL	38	33	5
"	OFFICE	ADMIN	13	13	0
"	WAREHOUSE	STORAGE	2	2	0
6 - TRAINING SYSTEMS	OFFICE	TECHNICAL	25	20	5
"	OFFICE	ADMIN	13	13	0
"	WAREHOUSE	STORAGE	2	2	0

* Administrative, Technical, Storage, Utility

3.5.1.1 Describe the capacity of your activity to absorb additional similar workyears categorized in the same common support function with minor facility modification. If major modification is required, describe to what extent the facilities would have to be modified. (Use FY97 workyears as your requirement) (BRAC Criteria III)
This activity could absorb additional similar workyears with little or nof facility modificat on, as follows:
CSF 4 4 Workyears
CSF 5 18 Workyears
CSF 6 18 Workyears
No major modifications are required for this accomodation.
3.5.1.2 If there is capacity to absorb additional workyears, how many additional workyeas can be supported? (BRAC Criteria III)
The activity can absorb a total of 40 additional workyears, based on the end of FY93 criterion.

3.5.1.3 For 3.5.1.1 and 3.5.1.2 (above) describe the impact of military construction programs or other alteration projects programmed in the FY95 PBS. (BRAC Criteria II)
N/A; no military construction programs or alteration projects are programmed in the FY9 PBS.

3.5.2 **Land Use:** Provide number of buildable acres for additional laboratory/administrative support construction at your installation. (BRAC Criteria II)
N/A; NPRDC is a tenant activity of Naval Command Control and Ocean Surveilance Center, RDT&E Division. Host indicates no buildable acres are available.

3.5.3 **Utilities:** Provide an estimate of your installation's capability to expand or procure additional utility services (electric, gas, water). Estimates should be provided in appropriate units -- e.g. K WH of electricity. (BRAC Criteria II)
N/A; NPRDC is a tenant activity of Naval Command Control and Ocean Surveilance Center, RDT&E Division. Additiional utilities could be made available but host indicates no additional buildable acres can be made available per 3.5.2 above.

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3.5 Expansion Potential

3.5.1 **Laboratory Facilities:** Use facilities records as of fourth-quarter FY93 in answering the following (in sq ft) for each CSF: (BRAC Criteria II)

Common Support Function	Facility or Equipment Description	Space Capacity (CSF)			
		Type of Space*	Current	Used	Excess
4 - HUMAN SYSTEMS	OFFICE	TECHNICAL	1	0	1
"	"	ADMIN	1	1	0
"	WAREHOUSE	STORAGE	.1	.1	0
5 - MANPOWER & PERSONNEL	OFFICE	TECHNICAL	38	33	5
"	OFFICE	ADMIN	13	13	0
"	WAREHOUSE	STORAGE	2	2	0
6 - TRAINING SYSTEMS	OFFICE	TECHNICAL	25	20	5
"	OFFICE	ADMIN	13	13	0
"	WAREHOUSE	STORAGE	2	2	0

* Administrative, Technical, Storage, Utility

(R)

3.5.1.1 Describe the capacity of your activity to absorb additional similar workyears categorized in the same common support function with minor facility modification. If major modification is required, describe to what extent the facilities would have to be modified. (Use FY97 workyears as your requirement) (BRAC Criteria III) (R)
This activity could absorb additional similar workyears with little or nof facility modification, as follows:
CSF 4 4 Workyears
CSF 5 18 Workyears
CSF 6 18 Workyears
No major modifications are required for this accomodation.

3.5.1.2 If there is capacity to absorb additional workyears, how many additional workyears can be supported? (BRAC Criteria III)
The activity can absorb a total of 40 additional workyears, based on the end of FY93 criterion. (R)

3.5.1.3 For 3.5.1.1 and 3.5.1.2 (above) describe the impact of military construction programs or other alteration projects programmed in the FY95 PBS. (BRAC Criteria II)
N/A; no military construction programs or alteration projects are programmed in the FY95 PBS. (R)

3.5.2 **Land Use:** Provide number of buildable acres for additional laboratory/administrative support construction at your installation. (BRAC Criteria II)
N/A; NPRDC is a tenant activity of Naval Command Control and Ocean Surveillance Center, RDT&E Division. (R)

3.5.3 **Utilities:** Provide an estimate of your installation's capability to expand or procure additional utility services (electric, gas, water). Estimates should be provided in appropriate units -- e.g. KWH of electricity. (BRAC Criteria II)
N/A; NPRDC is a tenant activity of Naval Command Control and Ocean Surveillance Center, RDT&E Division. (R)

3.5 Expansion Potential

3.5.1 **Laboratory Facilities:** Use facilities records as of fourth-quarter FY93 in answering the following (in sq ft) for each CSF: (BRAC Criteria II)

Common Support Function	Facility or Equipment Description	Type of Space*	Space Capacity (KSF)		
			Current	Used	Excess
N/A	N/A	N/A	N/A	N/A	N/A

* Administrative, Technical, Storage, Utility

3.5.1.1 Describe the capacity of your activity to absorb additional similar workyears categorized in the same common support function with minor facility modification. If major modification is required, describe to what extent the facilities would have to be modified. (Use FY97 workyears as your requirement) (BRAC Criteria III)

3.5.1.2 If there is capacity to absorb additional workyears, how many additional workyears can be supported? (BRAC Criteria III)

3.5.1.3 For 3.5.1.1 and 3.5.1.2 (above) describe the impact of military construction programs or other alteration projects programmed in the FY95 PBS. (BRAC Criteria II)

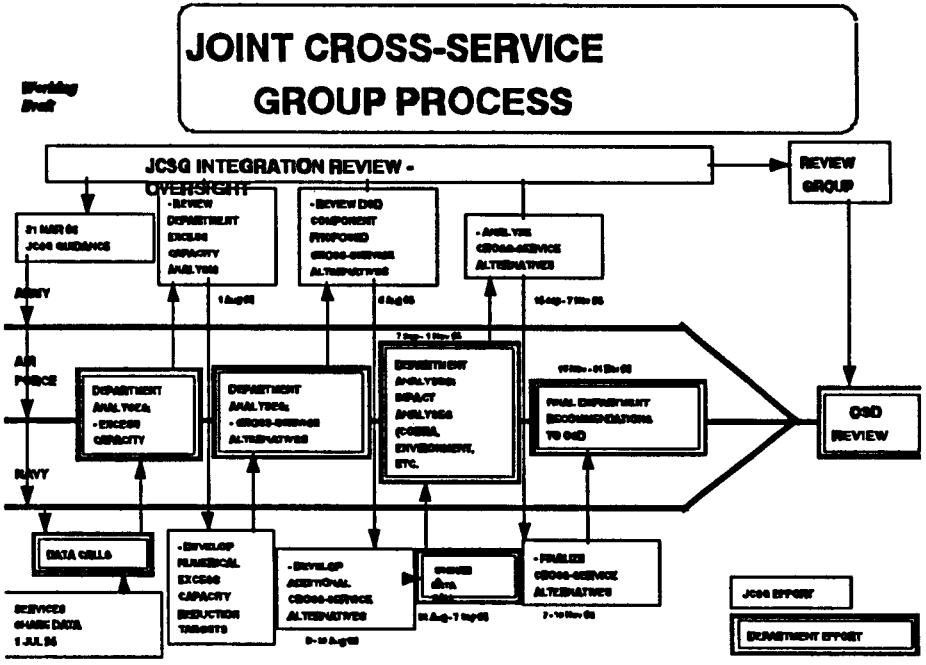
3.5.2 **Land Use:** Provide number of buildable acres for additional laboratory/administrative support construction at your installation. (BRAC Criteria II)

3.5.3 **Utilities:** Provide an estimate of your installation's capability to expand or procure additional utility services (electric, gas, water). Estimates should be provided in appropriate units -- e.g. KWH of electricity. (BRAC Criteria II)

SECTION IV: APPENDICES

A. Macro Process/Schedule
B. List of Activities
C. Common Support Functions

APPENDIX A


JOINT CROSS-SERVICE
GROUP PROCESS
JCSG INTEGRATION REVIEW -
OVERSIGHT
REVIEW
GROUP
ARMY
AIR
FORCE
NAVY
DEPARTMENT
ANALYSES
- EXCESS
CAPACITY
DEPARTMENT
ANALYSES
- CROSS-SERVICE
ALTERNATIVES
DEPARTMENT
ANALYSES
IMPACT
ANALYSES
(COBRA,
ENVIRONMENT,
ETC.
FINAL DEPARTMENT
RECOMMENDATIONS
TO OSD
OSD
REVIEW
DATA CELLS
- DEVELOP
NUMERICAL
EXCESS
CAPACITY
REDUCTION
TARGETS
- DEVELOP
ADDITIONAL
CROSS-SERVICE
ALTERNATIVES
- ANALYZE
CROSS-SERVICE
ALTERNATIVES
JCSG EFFORT
DEPARTMENT EFFORT

APPENDIX B

LIST OF ACTIVITIES

AIR FORCE

1. Armstrong Lab, Brooks AFB
2. Armstrong Lab, Tyndall AFB
3. Armstrong Lab, Wright-Patterson AFB
4. Armstrong Lab, Williams AFB
5. Human Systems Center, Brooks AFB
6. Wright Lab, Wright-Patterson AFB
7. Wright Lab, Eglin AFB
8. Aeronautical Systems Center, Wright-Patterson AFB
9. Aeronautical Systems Center, Eglin AFB
10. Oklahoma City Air Logistics Center, Tinker AFB (In-service engineering)
11. Ogden Air Logistics Center, Hill AFB (In-service engineering)
12. San Antonio Air Logistics Center, Kelly AFB (In-service engineering)
13. Sacramento Air Logistics Center, McClellan AFB (In-service engineering)
14. Warner-Robins Air Logistics Center, Robins AFB (In-service engineering)
15. Phillips Lab, Kirtland AFB
16. Phillips Lab, Hanscom AFB
17. Phillips Lab, Edwards AFB
18. Space & Missile Center, Los Angeles AFB
19. Space & Missile Center, Norton AFB
20. Sacramento Air Logistics Center, Peterson AFB
21. Rome Lab, Griffiss AFB
22. Rome Lab, Hanscom AFB
23. Electronic Systems Center, Hanscom AFB
24. Sacramento Air Logistics Center, Peterson AFB (In-service engineering)

ARMY

1. Army Research Lab (ARL), Adelphi, MD
2. ARL, Aberdeen Proving Grounds (APG), MD
3. ARL, White Sands Missile Range, NM
4. ARL, NASA Langley, VA
5. ARL, NASA Lewis, OH
6. Natick Research, Development and Engineering Center, Natick, MA

7. Aviation Research, Development and Engineering Center, St Louis, MO
8. Aviation Troop Command, Aeroflight Dynamics Directorate, Moffitt Field, CA
9. Aviation Troop Command, Aviation Applied Technology Directorate, Fort Eustis, VA
10. Edgewood Research, Development and Engineering Center, Aberdeen Proving Ground, MD
11. Communications Electronics Command Research, Development and Engineering Center, Ft Mammoth, NJ
12. Communication Electronics Command Research, Development and Engineering Center - Night Vision EO Directorate, Ft Belvoir, VA
13. Missile Research, Development and Engineering Center, Redstone Arsenal, AL
14. Armaments Research, Development and Engineering Center, Picatinny Arsenal, NJ
15. Armaments Research, Development and Engineering Center, Benet Labs, Watervliet Arsenal, NY
16. Tank-Automotive Command Research, Development and Engineering Center, Warren, MI
17. USA Research Institute of Infectious Diseases, Ft Detrick, MD
18. Walter Reed Army Institute of Research, Washington D.C.
19. USA Institute of Surgical Research, Ft Sam Houston, TX
20. USA Aeromedical Research Lab, Ft Rucker, AL
21. Medical Research Institute of Chemical Defense Aberdeen Proving Grounds, MD
22. USA Research Institute of Environmental Medicine, Natick, MA
23. Construction Engineering Research Laboratory, Champaign, IL
24. Cold Regions Research and Engineering Lab, Hanover, NH
25. Topographic Engineering Center, Alexandria, VA
26. Waterways Experiment Station, Vicksburg, MS
27. USA Research Institute for Behavioral & Social Sciences, Alexandria, VA
28. Simulation, Training and Instrumentation Command (STRICOM), Orlando, FL

NAVY

1. Naval Air Warfare Center, Weapons Division, China Lake
2. Naval Air Warfare Center, Weapons Division, Point Mugu
3. Naval Air Warfare Center, Aircraft Division, Patuxent River
4. Naval Air Warfare Center, Aircraft Division, Indianapolis
5. Naval Air Warfare Center, Aircraft Division, Lakehurst
6. Naval Research Lab, Washington D.C.
7. Naval Research Lab Detachment, Bay St Louis
8. Naval Surface Warfare Center, Carderock Division, Bethesda
9. Naval Surface Warfare Center, Carderock Detachment, Annapolis
10. Naval Surface Warfare Center, Crane Division

11. Naval Surface Warfare Center, Crane Detachment, Louisville
12. Naval Surface Warfare Center, Dahlgren Division
13. Naval Surface Warfare Center, Dahlgren Detachment, Panama City
14. Naval Surface Warfare Center, Indian Head Division
15. Naval Surface Warfare Center, Port Hueneme Division
16. Naval Command, Control, and Ocean Surveillance Center, RDT&E Division, San Diego
17. Naval Command, Control, and Ocean Surveillance Center, In-Service Engineering, West Coast Division, San Diego
18. Naval Command, Control, and Ocean Surveillance Center, In-Service Engineering Division, Charleston
19. Naval Aerospace Medical Research Center, Pensacola
20. Naval Biodynamics Lab, New Orleans
21. Naval Dental Research Lab, Great Lakes
22. Naval Health Research Center, San Diego
23. Naval Medical Research Institute, Bethesda
24. Naval Undersea Warfare Center, Keyport Division, WA
25. Naval Surface Warfare Center, Carderock, Philadelphia Detachment
26. Naval Undersea Warfare Center, Newport, RI
27. Naval Undersea Warfare Center (Newport), New London, CT
28. Naval Personnel Research and Development Center, San Diego, CA

DEPARTMENT OF DEFENSE

1. Armed Forces Radiobiology Research Institute (AFRRI), Bethesda, MD

APPENDIX C

COMMON SUPPORT FUNCTIONS (DEFINITIONS LISTED FOLLOWING PAGES)

Product Functions

1. Air Vehicles
   - Fixed
     - -- Structure
     - -- Propulsion
     - -- Avionics
     - -- Flight Subsystems
   - Rotary
     - -- Structure
     - -- Propulsion
     - -- Avionics
     - -- Flight Subsystems

2. Weapons
   - ICBMs/SLBMs
   - Conventional Missiles/Rockets
   - Cruise Missiles
   - Guided Projectiles
   - Bombs
   - Guns and Ammunition
   - Directed Energy
   - Chemical/Biological

3. Space Systems
   - Launch Vehicles
   - Satellites
   - Ground Control Systems

4. C4I Systems
   - Airborne C4I
   - Fixed Ground-Based C4I
   - Ground Mobile C4I

Pervasive Functions

1. Electronic Devices
2. Environmental Sciences
3. Infectious Diseases
4. Human Systems
5. Manpower and Personnel
6. Training Systems
7. Environmental Quality
8. Advanced Materials

DEFINITIONS

COMMON SUPPORT FUNCTIONS

Product Functions

1. Air Vehicles. Air vehicles are broken out into common support functions for fixed wing and rotary wing. Includes but not limited to all science and technology, demonstration and validation, engineering development, and production activities which support employment and in-service engineering of air vehicles. Included are all air vehicles including their application as UAV's and targets.

- Structures. Includes but not limited to all air vehicles structure technology, engineering and production efforts. Include technology and engineering practices which advance structural design and analysis; advanced structural concepts and fabrication techniques; and structural integrity.

- Propulsion. Includes but not limited to all technology, engineering and production efforts associated with air vehicle propulsion such as turbine engine, rotorcraft power drive, and hypersonic propulsion components. Such components include compressors, inlets and nozzles, turbines, mechanical systems and control, gears, bearings, shafts, and clutches. In addition, include associated subsystems activities such as turborocket, turboramjet and rotorcraft transmissions; and supporting technical and engineering disciplines.

- Avionics. Includes but not limited to all technology, engineering and production efforts associated with the air platform's integrated avionics system. The avionics suite includes but is not limited to weapon delivery systems, electronic warfare, navigation, communications, radar, electro-optic sensors, signal/data processing and associated software system and support. Includes efforts associated with developing the integrated avionics system (i.e. optimizing functional partitioning, distribution and integration of avionics/related functions).

- Flight Subsystems. Includes but not limited to all technology, engineering and production efforts for air vehicle support systems such as landing gear; transparent crew enclosures; egress systems; mechanical equipment integrity; electrical component integrity; subsystem integration; and aircraft power, pressurization, and temperature control systems.

2. Weapons. Includes but not limited to all science and technology, demonstration and validation, engineering development, and production activities which support employment and in-service engineering of ICBMs/SLBMs, conventional missiles and rockets, cruise missiles,

guided projectiles, bombs, guns and ammunition, directed energy and chemical/biological munitions. Include with each weapon as appropriate, all related technology, engineering and production activities such as fusing/safe and arm, missile propulsion, warheads and explosives, and guidance and control.

3. Space. Includes but not limited to all science and technology, demonstration and validation, engineering development, and production activities which support employment and in-service engineering of launch vehicles, satellites and associated ground control systems (satellite control only; ground systems for telemetry of data included in C4I). Include under satellites, all technology, engineering and production activities associated with space communications and space-based surveillance (and associated sensors) and space-based C4I.

4. C4I. Includes but not limited to all science and technology, demonstration and validation, engineering development, and production activities which support employment and in-service engineering of airborne, fixed ground-based and mobile ground based C4I systems. Include all technology, engineering and production activities associated with communications networks, radios and links, distributed information systems, data fusion, decision aids, and associated computer architectures.

Pervasive Functions (6.1, 6.2, and 6.3)

1. Electronic Devices. Includes but not limited to all science and technology activities supporting development of semiconductor and superconductor materials for optoelectronic, acoustic and microwave devices. Include all associated electronic materials/device fabrication and processing.

2. Environmental Sciences. Includes but not limited to all science and technology activities to improve measurement, characterization and modeling of the earth atmosphere and space environment. Examples include global prediction systems, space effects and celestial backgrounds/astronomical reference sources.

3. Infectious Diseases. Includes but not limited to all science and technology activities which preserve manpower and performance by the prevention and treatment of militarily important infectious diseases that occur naturally worldwide.

4. Human Systems. Includes but not limited to all science and technology activities to enable, protect, sustain and enhance human effectiveness in DOD operations. The focus of this pervasive, multi-disciplinary area is the human and therefore impacts all DOD systems and operations. This area includes: (1) human performance definition, assessment, and

aiding; (2) physiologic bioeffects of toxic hazards, ionizing and non-ionizing radiation, biodynamic (bio-mechanical) stress, and extreme environments; (3) military operational medicine; and (4) generic, human-centered design standards/methodologies for crew station subsystems, information management and display, and life support.

5. Manpower and Personnel. Includes but not limited to all science and technology activities which support four broad areas: (1) selection and classification of DOD personnel (including pilots); (2) identification of operational tasks performed and requirements for skills, knowledge, and aptitudes; (3) matching the right people with the jobs they are best suited for according to the needs of DOD, (4) and developing techniques for measuring and enhancing the productivity of the operational force.

6. Training Systems. Includes but not limited to all science and technology which support training of personnel, including training strategies, devices and simulators, and computer aided intelligent tutoring systems.

7. Environmental Quality. Includes but not limited to all science and technology activities which support the development of technologies to reduce the environmental costs of DOD operations while ensuring mission accomplishment is not jeopardized by adverse environmental impacts. Specifically, this area encompasses technologies to: (1) identify and cleanup sites contaminated with hazardous materials as a result of DOD operations (cleanup); (2) ensure DOD compliance with current and anticipated local, national, and international environmental laws and treaties (compliance); (3) minimize DOD use of hazardous materials and reduce DOD hazardous waste generation (pollution prevention); and (4) provide for protection of natural resources under DOD stewardship (conservation).

8. Advanced Materials. Includes but not limited to all science and technology activities related to structural, high temperature, electromagnetic protection, electronic, magnetic, optical, and biomolecular materials. Note: excludes materials areas which were included in DDR&E decision of 18 Mar 94 related to the Army's Materials Research Facility at Aberdeen Proving Ground and the Navy's Materials Facility at Carderock.

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print) _____ Signature _____

Title _____ Date _____

Activity _____

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type of print) _____ Signature _____

Title _____ Date _____

Activity _____

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

MAJOR CLAIMANT LEVEL

R. J. ZLATOPER, VADM
NAME (Please type or print)

Signature

12 May 1994

CHIEF OF NAVAL PERSONNEL
Title

Date

BUREAU OF NAVAL PERSONNEL
Activity

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

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

J.B. Greene, Jr
NAME (Please type of print)

Signature

Acting
Title

19 May 1994
Date

BRAC-95 CERTIFICATION

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

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

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

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

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

ACTIVITY COMMANDER

CAPT J. D. McAFEE, USN
NAME (Please type of print)

Signature

Commanding Officer
Title

3 May 94
Date

NAVPERSRANDCEN SAN DIEGO, CA
Activity

REVISIONS DATED 14 JUNE 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)

NAME (Please type or print _____ Signature _____

Title _____ Date _____

Activity _____

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type of print _____ Signature _____

Title _____ Date _____

Activity _____

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

MAJOR CLAIMANT LEVEL

FRANK L. BOWMAN, VADM — Frank L Bowman
NAME (Please type or print — Signature

CHIEF OF NAVAL PERSONNEL — 27 JUL 1994
Title — Date

BUREAU OF NAVAL PERSONNEL
Activity

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

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

W. A. EARNER — W A Earner
NAME (Please type of print — Signature

8/4/94
Title — Date

REVISIONS DATED 14 JUNE 94

BRAC-95 CERTIFICATION

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

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

ACTIVITY COMMANDER

CAPT J. D. McAFEE, USN
NAME (Please type or print)

Commanding Officer
Title

NAVPERSRANDCEN
Activity

Signature

14 June 1994
Date

ENCLOSURE (3)

REVISIONS DATED 11 AUG 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)

NAME (Please type or print) _____ Signature _____

Title _____ Date _____

Activity _____

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type of print) _____ Signature _____

Title _____ Date _____

Activity _____

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

MAJOR CLAIMANT LEVEL

FRANK L. BOWMAN, VADM — Frank L Bowman
NAME (Please type or print) — Signature

CHIEF OF NAVAL PERSONNEL — 30 AUG 1994
Title — Date

BUREAU OF NAVAL PERSONNEL
Activity

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

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

W. A. EARNER — W A Earner
NAME (Please type of print) — Signature

9/1/94
Title — Date

REVISIONS DATED 11 AUG 94

BRAC-95 CERTIFICATION

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

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

ACTIVITY COMMANDER

W. M. KEENEY
NAME (Please type or print)

Signature

Commanding Officer (Acting)
Title

8-15-94
Date

NAVPERSRANDCEN
Activity

173

DEPARTMENT OF THE NAVY
BUREAU OF NAVAL PERSONNEL
WASHINGTON, D.C. 20370-5000

IN REPLY REFER TO

11000
Ser 0222/508-94
21 SEP 1994

From: Chief of Naval Personnel
To: Base Structure Analysis Team
Via: Chief of Naval Operations (N441)

Subj: BRAC DATA CALL NUMBER TWELVE CLARIFICATIONS

Ref: (a) BSAT Fax of 12 Sep 94

Encl: (1) NAVPERSRANDCEN Data Call Number Twelve Clarifications

1. Per reference (a), enclosure (1) is provided. This enclosure has been reviewed and certified to the best of my knowledge.

F. L. BOWMAN
VADM, U.S. NAVY
CHIEF OF NAVAL PERSONNEL

9-14-94 REVISIONS

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print) _____ Signature _____

Title _____ Date _____

Activity _____

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type of print) _____ Signature _____

Title _____ Date _____

Activity _____

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

MAJOR CLAIMANT LEVEL

FRANK L. BOWMAN, VADM — Signature

NAME (Please type or print)

CHIEF OF NAVAL PERSONNEL — 9/20/94

Title — Date

BUREAU OF NAVAL PERSONNEL

Activity

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

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

W. A. EARNER — Signature

NAME (Please type of print)

9/21/94

Title — Date

9-14-94 REVISION

BRAC-95 CERTIFICATION

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

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

ACTIVITY COMMANDER

WILLIAM M. KEENEY
NAME (Please type or print)

Signature

Commanding Officer (Acting)
Title

14 September 1994
Date

NAVPERSRANDCEN
Activity

MILITARY VALUE DATA CALL

TECHNICAL CENTERS

Category	RDT&E
Technical Center Site	Navy Personnel Research and Development Center
Location/Address	53335 Ryne Road San Diego, CA 92152-6800

Quality of Life

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.

To conduct research and development to improve the performance of individuals, teams, and organizations within the Navy and Marine Corps. To provide products and services specifically directed at improving Department of the Navy personnel planning, testing, acquisition, selection, classification, training, utilization, motivation, organization, management, and other contemporary issues.

Reference: BUPERSINST 5450.48 of 8 Nov 1991

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

NAVPERSRANDCEN's lead service assignments after implementation of Tri-Service Reliance include:

Manpower and Personnel

Force Management and Modeling. Development of mathematical, statistical/econometric, and mathematical programming modeling technologies for application to flow forecasting, inventory projection, budgeting/cost projections, personnel/job assignment, and resource allocation.

Selection and Classification. Technology development aimed at enhancing the Service's ability to identify the skills and aptitudes necessary for military jobs, and to select and assign people to those jobs in a more-nearly optimal fashion.

Computer-Based Entrance Testing. Development of new computer-based tests and models to improve the Services' enlistment screening, selection, and classification process.

Service Unique Applications. Development of improved predictor and criterion variables for occupational specialties unique to the U.S. Navy.

Productivity Measurement and Enhancement. Determination of the optimal design of individual and group performance management techniques for application to the Services' civilian workforce.

Training Systems

Sea Warfare Training. Activities directed toward improving instruc:ional technology and techniques for individual and team training, with primary application to ;ea warfare operations. Includes training for combat information center operations, b ıttle group tactical team training; damage control training; and embedded training.

Classroom Training. Development and application of instructional ; nd learning theory/techniques to improve initial skill acquisition and retention in mil .tary classroom settings and to facilitate the generation of curriculum materials. Also inc ludes the evaluation of methods and media in these environments.

Reference: Tri-Service Science and Technology Reliance Strategy R(port of Apr 1991

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 Append x 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: NAVPERSRANDCEN, San Diego) (UIC: N68221)

Function	Space allocated (Gross SQFT)	Work Years	Civilian Personnel onboard	Contract Work Years	Military Personnel Onboard	
					Off	Enl
ADMINISTRATION						
Command (CO/XO/TD/etc.)	2,360	4	4		2	
Comptroller	2,648	15	15			
Admin	4,417	37	37			1
Human Resources	764	2	2			
OPERATIONS SUPPORT						
Supply Management	4,456	4	4			1
Consolidated Computational Computer Support				2		
Information Systems and Communications	994	3	3			1
Safety/OSH/Environmental						
INFRASTRUCTURE						
Physical Security	489	1	1			1
Public Works/Staff	809	2	2			1
Fire Protection						
Medical/Dental						
Military Support	564					3
Air/Waterfront Operations						
Other						
TECHNICAL STAFF						
Technical Operations			152	120	2	4
Totals	17,501	68	220	122	4	12

Table 4.2, General Support Resources for all Detachments
(Activity: N/A) (UIC:)

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

Table 4.3, Previous BRAC Impact to General Support Resources for (Activity: N/A) (UIC:)

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

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: NAVPERSRANDCEN, San Diego) (UIC: N68221)

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						0
High School		3	2	3	5	13
B.A./B.S		15	6	4	6	31
M.A./M.S	1	14	13	9	19	56
Ph.D./ M.D.	1	15	10	11	15	52
Total	2	47	31	27	45	152

Table 5.2, Technical Staff Education Level for all Detachments
(Parent Activity: N/A **) (UIC:** _____ **)**

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

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: NAVPERSRANDCEN, San Diego) (UIC: N68221)

Academic field	Number
Physics	
Chemistry	
Biology	
Mathematics/Statistics/ Operations Research	19
Engineering	
Medical	
Dental	
Computer Science	5
Social Science	73
Other Science	4
Non-Science	7
Total	108

Table 5.4, Technical Staff Academic Fields for all Detachments
(Parent Activity: N/A **) (UIC:** _____ **)**

Academic field	Number
Physics	
Chemistry	
Biology	
Mathematics/Statistics/ Operations Research	
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 hir der in the hiring of qualified personnel?

San Diego is considered a desirable area to live and work. With locality pay it is even more attractive to potential employees from throughout the U.S. The pool of potential employees from the Western states includes candidates with advanced degrees from the University of California, Los Angeles, Santa Barbara, Irvine, Riverside, & Berkeley, University of Southern California, California State, Long Beach, Long Beach & San Jose State Universities, Claremont Graduate School, California School of Professional Psychology, San Diego State University, University of California at San Diego, University of San Diego, United States International University, and the Naval Postgraduate School. Approximately fifty percent of NAVPERSRANDCEN staff hold degrees from California universities.

Revised pg

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.

1994

Rosenfeld, P., Booth-Kewley, S., Edwards, J. E., & Alderton, D. L. (1994). Linking diversity and impression management: A study of Hispanic, black, and white Navy recruits. *American Behavioral Scientist, 37*, 672-681.

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Edwards, J. E., & Thomas, M. D. (1993). The organizational survey process: General steps and practical considerations. In P. Rosenfeld, J. E. Edwards, & M. D. Thomas (Eds.), *Improving organizational surveys: New directions, methods, and applications* (pp. 3-28). Newbury Park, CA: Sage Publications, Inc.

Edwards, J. E., McBride, J. R., Waters, B. K., & Laurence, J. H. (1993). Adaptability screening: Conclusions and implications. In T. Trent & J. H. Laurence (Eds.), *Adaptability screening for the armed forces* (pp. 215-228). Washington, DC: Office of Assistant Secretary of Defense (Force Management and Personnel).

Kerce, E. W., & Booth-Kewley, S. (1993). Quality of work life surveys in organizations: Methods and benefits. In P. Rosenfeld, J. E. Edwards, & M. D. Thomas (Eds.), *Improving organizational surveys: New directions, methods, and applications* (pp. 188-209). Newbury Park, CA: Sage Publications, Inc.

Larson, G. E., & Alderton, D. L. (1993). The structure and capacity of thought: Some comments on the cognitive underpinnings of g*. In D. K. Detterman (Ed.), *Current topics in human intelligence, volume 2: Is mind modular or unitary?* (pp. 141-156). Norwood, NJ: Ablex Publishing Corporation.

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Rosenfeld, P., Edwards, J. E., & Thomas, M. D. (Eds.). (1993). *Improving organizational surveys: New directions, methods, and applications.* Newbury Park, CA: Sage Publications, Inc.

Rosenfeld, P., Edwards, J. E., & Thomas, M. D. (1993). Introduction. In P. Rosenfeld, J. E. Edwards, & M. D. Thomas (Eds.), *Improving organizational surveys: New directions, methods, and applications* (pp. ix-xiv). Newbury Park, CA: Sage Publications, Inc.

Thomas, M. D., & Thomas, P. J. (1993). Surveying pregnancy and single parenthood: The Navy experience. In P. Rosenfeld, J. E. Edwards, & M. D. Thomas (Eds.), *Improving organizational surveys: New directions, methods, and applications* (pp. 145-163). Newbury Park, CA: Sage Publications, Inc.

Thomas, P. J., & Thomas, M. D. (1993). Mothers in uniform. In F. Kaslow (Ed.), *The military family in peace and war* (pp. 25-47). New York: Springer.

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Edwards, J. E., Thomas, M. D., & Burch, R. L. (1992). Hispanic representation in the Federal Government: Lessons from the Navy's equal employment opportunity enhancement research program. In S. B. Knouse, P. Rosenfeld, & A. L. Culbertson (Eds.), *Hispanics in the workplace* (pp. 231-245). Newbury Park, CA: Sage Publications, Inc.

Knouse, S. B., Rosenfeld, P., & Culbertson, A. L. (1992). *Hispanics in the workplace.* Newbury Park, CA: Sage Publications, Inc.

Knouse, S. B., Rosenfeld, P., & Culbertson, A. L. (1992). Hispanics and work: An overview. In S. B. Knouse, P. Rosenfeld, & A. L. Culbertson (Eds.), *Hispanics in the workplace* (pp. 1-5). Newbury Park, CA: Sage Publications, Inc.

Rosenfeld, P., Edwards, J. E., & Thomas, M. D. (Eds.). (1993). *Improving organizational surveys: New directions, methods, and applications.* Newbury Park, CA: Sage Publications, Inc.

Rosenfeld, P., Edwards, J. E., & Thomas, M. D. (1993). Introduction. In P. Rosenfeld, J. E. Edwards, & M. D. Thomas (Eds.), *Improving organizational surveys: New directions, methods, and applications* (pp. ix-xiv). Newbury Park, CA: Sage Publications, Inc.

Thomas, M. D., & Thomas, P. J. (1993). Surveying pregnancy and single parenthood: The Navy experience. In P. Rosenfeld, J. E. Edwards, & M. D. Thomas (Eds.), *Improving organizational surveys: New directions, methods, and applications* (pp. 145-163). Newbury Park, CA: Sage Publications, Inc.

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Trent, T., & Laurence, J. H. (Eds.). (1993). *Adaptability screening for the armed forces.* Washington, DC: Office of Assistant Secretary of Defense (Force Management and personnel).

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Edwards, J. E., Thomas, M. D., & Burch, R. L. (1992). Hispanic representation in the Federal Government: Lessons from the Navy's equal employment opportunity enhancement research program. In S. B. Knouse, P. Rosenfeld, & A. L. Culbertson (Eds.), *Hispanics in the workplace* (pp. 231-245). Newbury Park, CA: Sage Publications, Inc.

Knouse, S. B., Rosenfeld, P., & Culbertson, A. L. (1992). *Hispanics in the workplace.* Newbury Park, CA: Sage Publications, Inc.

Knouse, S. B., Rosenfeld, P., & Culbertson, A. L. (1992). Hispanics and work: An overview. In S. B. Knouse, P. Rosenfeld, & A. L. Culbertson (Eds.), *Hispanics in the workplace* (pp. 1-5). Newbury Park, CA: Sage Publications, Inc.

Rosenfeld, P., & Culbertson, A. L. (1992). Hispanics in the military. In S. B. Knouse, P. Rosenfeld, & A. L. Culbertson (Eds.), *Hispanics in the workplace* (pp. 211-230). Newbury Park, CA: Sage Publications, Inc.

Scheines, R., Spirtes, P., & Glymour, C. (1992). TETRAD II: Finding causal models of statistical data. In F. Faulbaum (Ed.), *Advances in statistical software 3* (pp. 143-152). New York: Gustav Fischer.

Snyder, H. L., & Trejo, L. J. (1992). Research methods. In H. Widdel & D. L. Post (Eds.), *Color in electronic displays* (pp. 95-135). New York: Plenum Press.

1991

Chang, F. R. (1991). An experimental investigation of text comprehension processes in bilinguals: Implications for training. In R. F. Dillon & J. W. Pellegrino (Eds.), *Instruction: Theoretical and applied perspectives* (pp. 71- 81). New York: Praeger Publishers.

Cuqlock-Knopp, V. C., Wilkins, C. A., & Torgenson, W. S. (199). Multiple cue probability learning and the design of information displays for multiple tasks. In D. L. Damos (Ed.), *Multiple-task performance* (pp. 139-152). London. Washington, DC: Taylor & Francis.

Ellis, J. A., Montague, W. E., & Wulfeck, W. H. (1991). *Problems and promises of computer-based training*. Norwood, NJ: Ablex Publication Corporation.

Federico, P-A. (1991). Student cognitive attributes and performance in a computer-managed instructional setting. In R. F. Dillon & J. W. Pellegrino (Eds.), *Instruction: Theoretical and applied perspectives* (pp. 16-46). New York: Praeger Publishers.

Flaningam, M., & Paulson, D. (1991). Teaching interpretive skills. In R. F. Dillon & J. W. Pellegrino (Eds.), *Instruction: Theoretical and applied perspectives* (pp. 140-149). New York: Praeger Publishers.

Giacalone, R. A., & Rosenfeld, P. (Eds.) (1991). *Applied impression management: How image making affects managerial decision making*. Newbury Park, CA: Sage Publications, Inc.

Konoske, P. J., & Ellis, J. A. (1991). Cognitive factors in learning and retention of procedural tasks. In R. F. Dillon & J. W. Pellegrino (Eds.), *Instruction: Theoretical and applied perspectives* (pp. 47-70). New York: Praeger Publishers.

McDonald, B. A. (1991). Motivation and learning: Prescription for change. In R. F. Dillon & J. W. Pellegrino (Eds.), *Instruction: Theoretical and applied perspectives* (pp. 118-139). New York: Praeger Publishers.

Morrison, R. F. (1991). Meshing corporate and career development strategies. In R. F. Morrison & J. Adams (Eds.), *Contemporary career development issues* (pp. 25- 53). Hillsdale, NJ: Erlbaum.

Morrison, R. F., & Adams, J. (Eds.). (1991). *Contemporary career development issues.* Hillsdale, NJ: Erlbaum.

Morrison, R. F., & Brantner, T. M. (1991). What affects how quickly a new job is learned? In J. L. Wall & L. R. Jauch (Eds.), *Academy of management best paper proceedings 1991* (pp. 52-56). Monroe, LA: Academy of Management.

Rosenfeld, P., & Giacalone, R. A. (1991). From extreme to the mainstream: Applied impression management in organizations. In R. Giacalone & P. Rosenfeld (Eds.), *Applied impression management: How image making affects managerial decision making* (pp. 3-12). Newbury Park, CA: Sage Publications Inc.

Semb, G. B., Ellis, J. A., Montague, W. E., & Wulfeck, W. H. (1991). Self-paced instruction: Perceptions, pitfalls, and potentials. In T. Shlechter (Ed.), *Problems and promises in computer-based training* (pp. 119-137). Norwood, NJ: Ablex.

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.

Edwards, J. (1994). Harvard Business School's International Directory of Business and Management Scholars and Research.

Edwards, J., Lewis, G. (1994-1995). Who's Who in Science and Engineering, 2nd Edition.

Ulozas, B., Robinson, E., & Hewitt, D. (1994). Nebraska Interactive Media Awards--Best Overall Achievement. The Integrated Damage Control Training Technology project was recognized for its high-level simulation and use of drama to create a sense of reality and intensity. Highly complex computer software and

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integration of full-motion video with computer graphics and inputs is exemplary of the ultimate state-of-the-art in multimedia.

Vicino, F. (1994). Who's Who in the West.

Lewis, G. (1993-1994). Who's Who in the World, 11th Edition.

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Lewis, G. (1992-1993). Who's Who in Science and Engineering, Premier (1st Edition).

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Larson, G. (1992). The American Mensa Education and Research Foundation Award for Excellence in Research. Based on a journal article entitled "Cognitive Correlates of General Intelligence: toward a Process Theory of 'g'."

Morrison, R. (1991). Academy of Management Award for Best Paper titled *What Affects How Quickly a New Job is Learned.*

Silverman, J. (1990). Operations Research Society of America's KOOPMAN Prize for Best Published Paper in Military Operations Research.

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

integration of full-motion video with computer graphics and inputs is exemplary of the ultimate state-of-the-art in multimedia.

Vicino, F. (1994). Who's Who in the West.

Lewis, G. (1993-1994). Who's Who in the World, 11th Edition.

NAVPERSRANDCEN (1993). Partnerships in Education Program Award for 10-years involvement with Pacific Beach Middle School (PBMS). For over 10-years, NAVPERSRANDCEN has provided computers, tutoring, equipment repair, and technical expertise to PBMS students.

Reynolds, J. (1993). San Diego Junior Achievement Consultant of the Year. Based on teaching "Business Basics" to the greatest number of classes (13) with the greatest number of students (390) in the shortest timeframe. Reynolds was also cited for bringing the Mountain Empire School District into the Junior Achievement Program.

Robinson, E. (1993). Certificate of Appreciation from the American Society of Naval Engineers, Inc., San Diego Section.

Lewis, G. (1992-1993). Who's Who in Science and Engineering, Premier (1st Edition).

Whitehill, B. (1992-1993). San Diego City Schools Volunteer Program Partner in Education certificate for tutoring the computer laboratory at the Hancock Elementary School.

Larson, G. (1992). The American Mensa Education and Research Foundation Award for Excellence in Research. Based on a journal article entitled 'Cognitive Correlates of General Intelligence: toward a Process Theory of 'g'."

Morrison, R. (1991). Academy of Management Award for Best Paper titled *What Affects How Quickly a New Job is Learned.*

Silverman, J. (1990). Operations Research Society of America's KOOPMAN Prize for Best Published Paper in Military Operations Research.

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

Cowen, M. (1991). Office of Naval Research, Certificate of Commendation for Independent Research Paper titled *CBT for Operating a Digitally Controlled Device.*

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Rowe, M. (1991). Navy Meritorious Civilian Service Award for work related to Project Reliance through the Training and Personnel Systems Science and Technology Evaluation and Management Committee.

Ryan-Jones, D. L., & Lewis, G. W. (1991). Office of Naval Research, Certificate of Commendation for Best Independent Research Paper titled *Neural network Analysis of Event-Related Potential (ERP) Data.*

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Edwards, J. (1991). Office of Naval Research, Certificate of Commendation in Recognition of Nomination for Best Manpower, Personnel, and Training Basic Research Project.

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

Patent No. 4,755,140 (1988). Electronic Personnel Test Device.

Wetzel-Smith, S. (1991). Navy Superior Service Award for exceptional achievement while serving on the staff of the Deputy for Antisubmarine Warfare, Office of the Secretary of Navy.

Rowe, M. (1991). Navy Meritorious Civilian Service Award for work related to Project Reliance through the Training and Personnel Systems Science and Technology Evaluation and Management Committee.

Ryan-Jones, D. L., & Lewis, G. W. (1991). Office of Naval Research, Certificate of Commendation for Best Independent Research Paper titled *Neural network Analysis of Event-Related Potential (ERP) Data.*

Vorce, R. (1991). Navy Meritorious Civilian Service Award for superior service while serving as Program Manager for the Navy Science Assistance Program for engineering and administrative contributions to the program.

Montague, W. (1991). Office of Naval Research, Certificate of Recognition for Hypertext Laboratory Display at the Navy Independent Research/Independent Exploratory Development Symposium.

Edwards, J. (1991). Office of Naval Research, Certificate of Commendation in Recognition of Nomination for Best Manpower, Personnel, and Training Basic Research Project.

McMichael, J. (1990). Navy Meritorious Civilian Service Award for transitioning NAVPERSRANDCEN from SPAWAR to CNP leadership, restructuring and improving the quality and relevance of NAVPERSRANDCEN's technical program, and reducing business operations costs.

Ryan-Jones, D. L., Lewis, G. W., Trejo, L. T., & Hemmer, J. D. 1990). Office of Naval Research, Certificate of Commendation in Recognition of Nomination for Best Navy Independent Research Paper titled Brain Activity During Visual Recognition.

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

Patent No. 4,755,140 (1988). Electronic Personnel Test Device.

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

Patent Office Serial No. 08/039,596 (patent pending). Method and/or System for Personal Identification and Impairment Assessment from Brain Activity Patterns.

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.

Other Affiliations

Academy of Management
Bob Morrison
Charlie Tatum
Amy Culbertson
George Edw Seymour
Barrie Cooper
Jack Edwards

Aera Military Education & Training Special Interest Group
John Ellis

Alpha Kappa Mu (National Academic Honor Society)
Jack Edwards

American Association for the Advancement of Science
Greg Lewis
Frank Vicino
Len Trejo

American Counseling Association
Idell Neumann

American Educational Research Association
Josephine Randel
Frank Vicino
Nick Van Matre

Gerry Larson
April Moranville
Vern Malec
Doug Wetzel
Bill Montague
Betty Whitehill
Barbara Morris
Mike Cowen
Mike Flaningam
Larry Pugh
John Ellis
Ron Bearden
Meryl S Baker
Wally Wulfeck
Ellie Robinson

American Mathematical Society
Yuh-Ling Su

American Psychological Association
Pat Thomas
Frank Vicino
Marie Thomas
Doug Wetzel
David Ryan-Jones
Larry Pugh
George Edw Seymour
J Philip Craiger

American Psychological Society
Jack Edwards
Nick Van Matre
Marie Thomas
Len Trejo
Mike Cowen
Mike Flaningam
Bob Morrison
David Ryan-Jones
Charlie Tatum
Wally Wulfeck
J Philip Craiger
Barrie Cooper

American Society of Quality Control
Amy Culbertson

American Sociological Association
Sue Frazier

American Statistical Association
John Folchi
Jules Borack

Arthritis Health Professionals Association
Amy Culbertson

Association for Computing Machinery
Doug Wetzel
J Philip Craiger

Association for Educational Communications and Training
Merle Vogel

Association for the Development of Computer-Based Instruct Systems
Merle Vogel

Association for Women in Psychology
Marie Thomas

Beta Kappa Chi (national science honor society)
Jack Edwards

Cognitive Science Society
Bill Montague
Wally Wulfeck

Deming User Group
Amy Culbertson

Human Factors and Ergonomics Society
Bill Montague
Ellie Robinson

Human Factors Society
Vern Malec
Mike Cowen
Mike Flaningam
David Ryan-Jones
Larry Pugh
Wally Wulfeck

Institute for Industrial Engineering
Mike Shoecraft

Institute for Human Performance, Decision Making & Cybernetics
J Philip Craiger

Institute of Management Science
Jules Borack

International Brain Research Organization
Greg Lewis

International Interactive Communications Society
Merle Vogel

International Neuropsychological Society
Doug Wetzel

International Organization of Psychophysiology
Greg Lewis

Mensa
Gerry Larson

Midwestern Psychological Association
George Edw Seymour

Military Operations Research Society
Bob Morrison

Military Testing Association
Jack Edwards
Frank Vicino
Tom Trent

Bill Montague
John Ellis
Ron Bearden

National Academy of School Executives (Academy Professor)
Frank Vicino

National Consortium for Instruction and Cognition
Bill Montague
John Ellis

National Council on Measurement in Education
Idell Neumann
Meryl s Baker

National Society for Performance and Instruction
Merle Vogel
Betty Whitehill

New York Academy of Sciencies
Greg Lewis

Operations Research Society of America (ORSA)
Mark Chipman
Mike Shoecraft

Organizational Development Network
Amy Culbertson

Psychonomic Society
Doug Wetzel
Bill Montague

San Diego Computer Society
George Edw Seymour

Sigma XI (Scientific Research Honor Society)
Michael White
Greg Lewis
Marie Thomas
Bill Montague
Bob Morrison

Josephine Randel

Society for Industrial & Organizational Psychology
Jack Edwards
Bob Morrison
Barrie Cooper

Society for Neuroscience
Greg Lewis
Doug Wetzel

Society for Psychophysiological Research
Greg Lewis
David Ryan-Jones

The Institute of Management Sciences (TIMS)
Mike Shoecraft
Stephen Sorensen

U.S. Distance Learning Association
Mike Flaningam

U.S. Naval Institute
Merle Vogel

USENIX Association
Wally Wulfeck

Western Psychological Association
Mike Flaningam

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

None.

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

None.

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.

On-Site Research Applications by Project

Implemented Product	Sponsor/User/Site	Citation
Advancement Interface System (ADIN)		
Petty officer advancement planning model	Bureau of Naval Personnel (BUPERS) (PERS-222C)	Jordan, R. (1987). *Navy enlisted Advancement Planning and the Advancement Interface System (ADIN)* (NPRDC-TR-87-17). San Diego: Navy Personnel Research and Development Center.
Force Analysis Simulation Technique (FAST)		
Enlisted inventory projection model	BUPERS (PERS-22C)	Chipman, M. (1983). *The Navy Officer Force Projection (OPRO) model* (NPRDC-SR-83-17). San Diego: Navy Personnel Research and Development Center.
Enlisted all Navy inventory projection model	BUPERS (PERS-222)	
Enlisted Personnel Planning System (ESPS)		
Obligated Service Contract Analysis Report (OSCAR) (a retention and retirement forecasting model)	BUPERS (PERS-22)	Stephan, R., & Campbell, D. (1983). *Minifast: An interactive enlisted personnel planning model* (NPRDC-TR-83-23). San Diego: Navy Personnel Research and Development Center.

Implemented Product	Sponsor/User/Site	Citation
Structured Accession Planning System for Officers (PCSTRAPO)		
Officer manpower analyses system	BUPERS (PERS-21)	Rowe, M. (1982). *The Structured Accession Planning System for Officers (STRAPO): A system for assessing the feasibility of Navy officer manpower plans* (NPRDC-SR 82-26). San Diego: Navy Personnel Research and Development Center.
Enlisted Nomination Modeling		
Computer-Enhanced Detailing and Distribution (CEDAD)	BUPERS (PERS-40)	Liang, T. T., Thompson, T. J., & Zimmerman, G. L. (1986). *Enlisted Personnel Allocation and Nomination System (EPANS): Prototype for the administrative/deck/supply ratings* (NPRDC TR-87-11). San Diego: Navy Personnel Research and Development Center.
Officer Personnel Information System (OPIS)		
Officer information delivery system	BUPERS (PERS-21), (PERS-23)	Bres, E. S., Charnes, A., Burns, A. D., & Cooper, W. W. (1979). *Optimal officer accession planning for the U.S. Navy* (NPRDC-TR-80-5). San Diego: Navy Personnel Research and Development Center. Chipman, M. (1979). *Forecasting the naval officer personnel force structure to estimate basic pay* (NPRDC-TR-80-4). San Diego: Navy Personnel Research and Development Center.

Implemented Product	Sponsor/User/Site	Citation
Officer information delivery system (continued)		Chipman, M (1983). *The Navy Officer Force Projection (OPRO) model* (NPRDC-SR-83-17). San Diego: Navy Personnel Research and Development Center. Siegel, B. (1983). *Methods for forecasting officer loss rates* (NPRDC-TR-83-30). San Diego: Navy Personnel Research and Development Center.
Permanent Change of Station (PCS)/Readiness Impact		
PCS moves/unit readiness model	BUPERS (PERS-46)	Thompson, W. J., Krass, I. A., & Liang, T. T. (1991). *Quantifying the impact of the Permanent Change of Station (PCS) budget on Navy enlisted personnel unit readiness* (NPRDC-TN-91-16). San Diego: Navy Personnel Research and Development Center.
Recruiting Effectiveness		
Recruiting Information Delivery System (RIDS)	Naval Recruiting Command, BUPERS (PERS-23)	Documentation and user's manual distributed directly to sponsor, Navy Recruiting Command.
Recruiting Resource Allocation		
Recruiting Resource Allocation Model (RAM)	Naval Recruiting Command, BUPERS (PERS-23)	Documentation and user's manual distributed directly to sponsor, Navy Recruiting Command.
Cost-performance tradeoff model	BUPERS (PERS-233)	
Navy recruiting resource model	Recruiting Command (CNRC 20)	

Implemented Product	Sponsor/User/Site	Citation
Sea/Shore Rotation Management System		
Sea shore rotation modeling system (COURTNEY)	BUPERS (PERS-221)	Rowe, M., & Smith, M. (1978). *Interactive sea/shore billet rotation model (BILROT): User's guide* (NPRDC-TN-78-17). San Diego: Navy Personnel Research and Development Center. Rowe, M., & Smith, M. (1978). *Interactive sea/shore billet rotation model* (NPRDC-TN-78-33). San Diego: Navy Personnel Research and Development Center.
Budget Obligation Analysis and Tracking System (BOATS)		
PCS expenditure IDS	BUPERS (PERS-71)	Pinciaro, S... (1989). *The development and implementation of the budget obligation analysis and tracking system (BOATS)* (NPRDC-TN-89-5). San Diego: Navy Personnel Research and Development Center.
Overseas Station Allowance IDS	BUPERS (PERS-71)	
Manpower budget execution management system	BUPERS (PERS-7); DFAs, Cleveland	
NSWSES Staffing Model		
Equations relating direct charged manpower to workload by Department, program, sponsor, and type funds	Navy Surface Weapons Center, Port Hueneme Division	
Medical Manpower Requirements		
Medical mobilization model to determine medical mobilization manpower requirements	BUPERS (PERS-515), CNO (OP-931D), BUMED	
Medical Assignment Model to assign peacetime manpower to mobilization manpower requirements	BUPERS (PERS-515), CNO (OP-931D), BUMED	

Implemented Product	Sponsor/User/Site	Citation
Joint Specialty Officer (JSO)		
JSO Information Delivery System (IDS)	BUPERS (PERS-45)	Hentschel, D. J. (1993). *Joint Specialty Officer Modeling System (JSOMS): Development, impact, and uses for the U.S. Navy* (NPRDC-TN-94-1). San Diego: Navy Personnel Research and Development Center.
JSO Management System (JSOMS)	BUPERS (PERS-45)	
Enlisted Force Distributable Inventory		
Skill Personnel Projection For Enlisted Rotation (SKIPPER)	BUPERS (PERS-221)	Documentation and user's manual distributed directly to sponsor, Chief of Naval Personnel.
SKIPPER2, Prototype (enlisted inventory projection extended to paygrade)	BUPERS (PERS-221)	
SKIPPER2-R, Prototype (enlisted inventory projection by paygrade extended to Reserves)	CNRF (21)	
NEC SKIPPER, Prototype (enlisted inventory projection model at the NEC level)	BUPERS (PERS-222)	
Enlisted management community manning report system	BUPERS (PERS-221)	
Enlisted Navy career options for retention (ENCORE)	BUPERS (PERS-221)	
Accession planning system	BUPERS (PERS-221)	
Enlisted management communities algorithm	CNO (OP-132C)	
Women in the Navy	BUPERS (PERS-221)	
Officer Distribution Management System (ODMS)		
User/system documentation for ODMS	BUPERS (PERS-47), (PERS-454)	Documentation and user's manual distributed directly to sponsor, Chief of Naval Personnel.

Implemented Product	Sponsor/User/Site	Citation
Officer Navy manning plan and officer distribution projection system moved to production region of PERS-47 computer	BUPERS (PERS-47), (PERS-454), Placement Officers	
Design for expansion of ODMS restricted line, limited duty, and, chief warrant officers	BUPERS (PERS-454)	
Officer distributable projection system	BUPERS (PERS-45)	
Navy manning plan officer/officer manning information system	BUPERS (PERS-45), (PERS-41), (PERS-42), (PERS-43), (PERS-44)	
Total Force Manpower Trade Offs		
PC-programmed manpower authorizations system	BUPERS (PERS-52)	Documentation and user's manual distributed directly to sponsor, Chief of Naval Personnel.
Tooth to tail analysis	BUPERS (PERS-52)	
General duty billet allocation model	BUPERS (PERS-52)	
PCS Moves Forecasting		
PCS moves forecasting model	BUPERS (PERS-73)	Documentation and user's manual distributed directly to sponsor, Chief of Naval Personnel.
U.S. Marine Corps (USMC) Enlisted Planning System		
Inventory projection model/manpower planning model/selective reenlistment bonus planning model/promotion planning model	HQMC (MPP-20)	Boyle, J. P., & Mullins, C. (1993). *Integration of PREPAS and EPS attrition and reenlistment rate forecasts* (NPRDC-TN-93-03). San Diego: Navy Personnel Research and Development Center.

Implemented Product	Sponsor/User/Site	Citation
Inventory projection model/manpower . . . (continued)		Boyle, J. P., & Mullins, C. (1989). *Improving M rine Corps enlisted personnel los s forecasting* (NPRDC-TN 89-35). San Diego: Navy Person el Research and Development Center.
Defense Acquisition Work Force		
Defense Acquisition Work Force Improvement Act (DAWIA) Management Information System	ASN (RDA) (DACM)	Documentati n and user's manual distributed d rectly to sponsor, Assistant Se retary of Navy (RDA) (ACM).
Training Resources Management (TRAINTRACK)		
"C" school planning systems	BUPERS (PERS-22); Chief of Naval Technical Training (CNTT)	Nakada, M. C., Milczewsky, W., & Wax, S. R. (1989). *Enlisted training tracking file (TRAINTRACK).* (NPRDC-TN-90-02). San Diego: Navy Personnel Research and Developmen Center.
TRAINTRACK	N-7, BUPERS (PERS-2, PERS-4); Navy Training Systems Center (NAVTRASYSCEN); CNTT; Chief of Naval Education and Training (CNET); Training Command, Atlantic Fleet	
Officer Assignment Decision Support System		
Officer assignment	HQMC (MM), (MMOA-3)	Chatfield, R E., & Gullett, S. A. (1991). *Dev lopment of a USMC officer assig ment decision support system: Gen ral design specification* (NPRDC-TN-91-4). San Diego: Navy Personnel R search and Development Center

Implemented Product	Sponsor/User/Site	Citation
Officer assignment (continued)		Chatfield, R E., & Gullett, S. A. (1991). *Development of a USMC officer assignment decision support system: Projection management plan* (NPRDC-TN-91-9). San Diego: Navy Personnel Research and Development Center.
		Chatfield, R E., & Gullett, S. A. (1990). *Development of a USMC officer assignment decision support system: Data* (NPRDC-TN-90-12). San Diego: Navy Personnel Research and Development Center.
Officer Selection Systems		
Maintain/evaluate selection system	U.S. Naval Academy	Neumann, I., Mattson, J. D., & Abrahams, N. M. (1989). *Development and evaluation of an officer potential composite* (NPRDC-TR-89-18). San Diego: Navy Personnel Research and Development Center.
		Alf, E. F., Neumann, I., & Mattson, J. D. (1988). *Revision of the United States Naval Academy selection composite* (NPRDC-TR-88-61). San Diego: Navy Personnel Research and Development Center.
		Abrahams, N. M., Alf, E. F., & Neumann, I (1993). The treatment of failures in validation research. *Military Psychology*, 5(4), 235-249.
Navy Occupational Data System Leadership Survey		
Design of officer leadership training needs analysis	CNO (OP-152)	Distribution limited to sponsor (BUPERS, Pers-6) concerning survey description, results, and documentation.

Implemented Product	Sponsor/User/Site	Citation
Experienced-Based Learning		
Assessment of Naval Operations (NAVOP) NAVOP-105 policy	CNO (OP-13)	
Classification and Assignment Within PRIDE (Personalized Recruiting for Immediate and Delayed Enlistment) (CLASP)		
Maintain/evaluate classification and assignment system	BUPERS (PERS-291)	Kroeker, L., & Folchi, J. (1984). *Classification and Assignment Within PRIDE (CLASP) system: Development and evaluation of an attrition component* (NPRDC-TR-84-40). San Diego: Navy Personnel Research and Development Center.
Monthly CLASP presentation analyses	BUPERS (PERS-23)	
Annually update parameter values for CLASP models	BUPERS (PERS-23)	
Advancement Planning Tool (APT)		
Enlisted advancement planning model	BUPERS (PERS-222)	Jordan, R. (1987). *Navy enlisted advancement planning and the advancement interface system (ADIN)* (NPRDC-TR-87-17). San Diego: Navy Personnel Research and Development Center.
Decision Aids for Strength Control (DASC)		
Enlisted Standard Personnel Measures Report (SPM)	BUPERS (PERS-22)	Liang, T. T., & Thompson, T. J. (1986). *Optimizing personnel assignment in the Navy: The seaman, fireman, and airman application* (NPRDC-TR-86-24). San Diego: Navy Personnel Research and Development Center.

Implemented Product	Sponsor/User/Site	Citation
Enlisted Retirement Forecasting Model (RETIR)		Dorsey, J., King, R., Rowe, M., & Chipman, M (1981). *Certain places pay: Current inconsistencies and suggested alternatives* (NPRDC-TR-82-17). San Diego: Navy Personnel Research and Development Center.
Navy Enlisted Transaction Model (NET)	BUPERS (PERS-22)	
Enlisted Gain and Grade Change Model (GAGE)	BUPERS (PERS-22)	
	BUPERS (PERS-22)	
Accession Management		
ECM Tutorial	BUPERS (PERS-22); TTITRAFAC; NATTC; Service School Command, Great Lakes, Subschool, New London	Baker, H. G. (1983). *Navy Personnel Accessioning System (NPAS): II. Summary of research and development efforts* (NPRDC-SR-83-35). San Diego: Navy Personnel Research and Development Center.
Navy Class Scheduling System	Naval Technology Training Center, Meridian; Fleet ASW Training Center, San Diego	Baker, H. G., Rafacz, B. A., & Sands, W. A. (1983). *Navy personnel accessioning system: III. Development of a microcomputer demonstration system* (NPRDC-SR-83-36). San Diego: Navy Personnel Research and Development Center.
Statistical Method for Drug Testing		
Drug Information Presentation Manager (DIRM)	CINCPAC, CINCLANT, BUPERS (PERS-6), CINCUSNAVEUR	

Implemented Product	Sponsor/User/Site	Citation
Drug Policy Analysis System (DPAS)	BUPERS (PERS-6), CINCPAC, CINCLANT, CINSUSNAVEUR	
Armed Services Vocational Aptitude Battery		
Validations of Navy "A" school selection standards	BUPERS (PERS-234)	
Career Systems Design		
Rating continuum design methodology	CNO (OP-111)	Moranville, A., & Hewitt, D. (1992). *Rating training continuum: Baseline data* (NPRDC-TR-93-1). San Diego: Navy Personnel Research and Development Center.
Revision of ASW training	Fleet ASW School, San Diego	Moranville, A. (1992). *Rating training continuum: Development procedures* (NPRDC-TR-92-7). San Diego: Navy Personnel Research and Development Center.
Personnel performance profile (PPP) tables and training path systems (TPS)	Naval Education and Training Program Management Support Activity (NETPMSA)	Megrditchian, A. M., & Moranville, A. (1991). *Rating training continuum: Evaluation plan* (NPRDC-TR-91-25). San Diego: Navy Personnel Research and Development Center.
Surface Combat Officer Training (SURCOT)		
Developed Prototype	EW "A" School	Schuler, J. W. (1994). *AN/SLQ-32 operator training: Development of performance assessment instrument* (NPRDC-TR-94-13). San Diego: Navy Personnel Research and Development Center. Moranville, A., Cowen, M. B., Hewitt, D. H., & McCabe, K. I. (1993). Surface combat operator training update. Published in the *Proceedings of the 38th Annual Joint Electronic Warfare Conference.*

Implemented Product	Sponsor/User/Site	Citation
Videographics		
A media selection training course incorporated into the existing Instructor Training course and also inserted into the new NAVEDTRA 131 instructions	CNET	Wetzel, C. D. (1993). *Review of the effectiveness of video media in instruction* (NPRDC-TR-93-07). San Diego: Navy Personnel Research and Development Center.
USMC Individual Training Standards		
Development of training standards for over 100 military occupational specialties	HQMC/Marine Corps Control Data Center (MCCDC)	
Helo Map Interpretation and Terrain Association Course (MITAC)		
Improvement of pilot navigation skills	All USMC Squadrons	Degraf, W., & Erickson, D. (1983). *Engagement Simulation (ES) training of U.S. Marine Corps units* (NPRDC-SR-83-46). San Diego: Navy Personnel Research and Development Center.
Improved map interpretation for USMC infantry ground combat personnel	Officer Basic School, Quantico; Division Schools, Camps LeJeune, Pendleton	Paulson, D. (1982). *Map interpretation for low-altitude flight: Evaluation of a prototype course* (NPRDC-TR-82-47). San Diego: Navy Personnel Research and Development Center.
Intelligent Maintenance Training System		
Training of SH-3H, AE, and AD maintenance personnel	Naval Aviation Maintenance Training Group, North Island	Smith, M. (1982). *SHIP-II simulation model: validation and evaluation* (NPRDC-TR-82-26). San Diego: Navy Personnel Research and Development Center.

Implemented Product	Sponsor/User/Site	Citation
		Pine, S. M., Koch, C. G., & Malec, V. M. (1981). *Electronic Equipment Maintenance Training (EEMT) system: System definition phase* (NPRDC-TR 81-11). San Diego: Navy Personnel Research and Development Center.
Steam Propulsion Plant Operator Training System (STEAMER)		
Training aid in teaching operation of 1200 lb propulsion system	Surface Warfare Officers School, Coronado	Stevens, A., Roberts, B., Stead, L., Forbus, K., Steinberg, C., & Smith, B. (1982). *Project STEAMER: VI. Advanced computer-aided instruction in propulsion engineering--an interim report* (NPRDC-TR-82-28). San Diego: Navy Personnel Research and Development Center. Stead, L. (1981). *Project STEAMER: II. User's manual for the STEAMER interactive graphics package* (NPRDC-TN 81-22). San Diego: Navy Personnel Research and Development Center.
Electronic Countermeasures/Electronic Counter-Countermeasures		
Training in recognizing and countering electronic warfare threats	Fleet Combat Training Center, Pacific (FCTC-P); Fleet Combat Training Center, Atlantic (FCTC-L)	Urban, C. D. (1988). *Performance measurement methodology for enhanced submarine combat system effectiveness* NPRDC-TN-88-15). San Diego: Navy Personnel Research and Development Center.

Implemented Product	Sponsor/User/Site	Citation
Training in recognizing . . . (continued)		McDonald, E. A., & Crawford, A. M. (1986). *Microcomputer-based electronics countermeasures recognition training: school and shipboard evaluations* (NPRDC-TR-87-03). San Diego: Navy Personnel Research and Development Center.
S-3B Feature Analysis Decision System		
Training of personnel to recognize contacts on advanced radar system	VS-27; Fleet Aviation Special Operations Detachment, Cecil Field	Greitzer, F. L., Hutchins, S. G., & Kelly, R. T. (1984). *Dual-task performance in a simulated Antiair Warfare (AAW) problem* (NPRDC-TR-84-39). San Diego: Navy Personnel Research and Development Center.
Training for helicopter aircrews in recognizing distant ship profiles	HSL-32; HSL-30	Wetzel-Smith, S. K., Forgnoni, R. L., & Kribs, H. D. (1988). *Analysis of information loads on S-3B crews* (NPRDC-TR-89-01). San Diego: Navy Personnel Research and Development Center.
		Windle, S., Kribs, H. D., & Ladd, J. N. (1980). *Deployable acoustic analysis training using the Digital Acoustic Sensor Simulator (DASS)* (NPRDC-SR-81-05). San Diego: Navy Personnel Research and Development Center.

Implemented Product	Sponsor/User/Site	Citation
S-3B Passive Acoustic Decision System		
Training of advanced acoustic decision system	VS-27, VS-41, VP-30, VP-31; Anti-Submarine Warfare Training Center, Pacific, Atlantic; Surface Ship Acoustic Analysis Center	Wetzel, S. K., Smith, W. H., & Konoske, P. . . (1985). *Advanced acoustic analysis course: Phase I development* (NPRDC-TR-85-16). San Diego: Navy Personnel Research and Development Center. Curry, R., Dick, R., & Parker, E. (1985). *The use of knowledge-based simulation models to verify operability in new combat systems--an initial application to the AN/SQQ-89 ASW combat system* (NPRDC-TR 86-03). San Diego: Navy Personnel Research and Development Center. Wetzel-Smith, S. K., & Forgnoni, R. L. (1986). *Survey of squadron training programs for the maintenance of advanced passive acoustic analysis skills and knowledge* (NPRDC-TR-86-13). San Diego: Navy Personnel Research and Development Center. Hershman, R. L., & Kelly, R. T. (1984). *Operability test of AN/SQS-53C active sonar displays* (NPRDC-TR 84-27). San Diego: Navy Personnel Research and Development Center.
E-2C Radar Operator Simulation Training		
Training of tactical personnel in operation of radar system	VFW-110, VFW-120	

Implemented Product	Sponsor/User/Site	Citation
H-53 Helicopter Maintenance Simulation		
Computer training system for USMC H-53 maintenance personnel	MCAS, El Toro	
Battle-Management Assessment System and Raid Originator Bogie Ingress (BATMAN & ROBIN)		
A desk-top, computer-based, performance-measurement system incorporating high resolution graphics, low level modeling, and artificial intelligence techniques to fill the gap between board games that are run in real or fictitious time with subjective assessment and inappropriate feedback and very expensive and manhour-intensive mainframe-based simulators. Used for: (1) training and testing tactical knowledge, (2) planning and decision aiding for tactical situations, (3) developing and evaluating tactics themselves, (4) analyzing and evaluating various tactical sensor, weapon, and communication systems, (5) frontending sophisticated tactical computer models and complex databases, (6) interfacing tactical artificial intelligent and expert systems,	Naval Command, Control & Ocean Surveillance Center, RDT&E Division; Naval Air Development Center; Naval Warfare Assessment Center; Naval War College; Naval Training Systems Center; Naval Research Laboratory; Naval Surface Warfare Center; Naval Postgraduate School; Naval Weapons Center; United States Naval Academy; Space and Naval Warfare Systems Command; Chief of Naval Operations, Modeling and Analysis Section; Advanced Research Projects Agency, Advanced Systems Technology Office; United States Central Command, Combat Analysis Group; United States Army TRADOC Analysis Command; Armstrong Laboratory, Human Resources Directorate; Applied Physics Laboratory, John Hopkins University; Canadian Defense and Civilian Institute of Environmental Medicine; Royal Australian Navy, Commodore of Training	Federico, P-A., Ullrich, R. R., Van de Wetering B. L., Tomlinson, C. I., Long, D. J. E., Long, F. R. E., & Bridges, T. E. (1991). *Human-computer interfaces for tactical decision making, analysis, and assessment using artificially intelligent platforms: Volume 1, software design and database descriptions for BATMAN & ROBIN* (NPRDC-TR-91-20). San Diego: Navy Personnel Research and Development Center.

Implemented Product	Sponsor/User/Site	Citation
(7) generating rapidly scenarios for tactical trainers, (8) prototyping complicated scenarios for major wargaming systems, (9) orienting novices to facets of naval warfare, (10) evaluating tactical display symbologies and formats, (11) providing an experimental environment for studying tactical decision making.		
Skill Enhancement Program		
Basic electricity/electronics remeditation ICW	NTC (Great Lakes, New Orleans, Memphis, and San Diego)	Randel, J. M., Main, R. E., Seymour, G. E., & Morris, B. A. (1992). Relation of study factors to performance in Navy technical schools. *Military Psychology, 4,* 75-86.
Electro-adventure game	AV "A" School, NAS Memphis	Randel, J. M., Morris, B. A., Wetzel, C. D., & Whitehill, B. V. (1992). The effectiveness of games for educational purposes: A review of recent research. *Simulation & Gaming, 23*, 261-276.
Prototype capacitance and reactance ICW curriculum	AV "A" School, NAS Memphis	Main, R. E., Randel, J. M., & Morris, B. A. (1991). *Measuring training productivity in Navy schools* (NPRDC-TR-92-1). San Diego, CA: Navy Personnel Research and Development Center.

Implemented Product	Sponsor/User/Site	Citation
Prototype capacitance . . . (continued)		Morris, B. A., Main, R. E., Randel, J. M., & Seymour, G. E. (1991). *Front-end analysis of three Navy electrical/electronics technical schools in the model schools program* (NPRDC-TR-91-1). San Diego: Navy Personnel Research and Development Center. Seymour, G. E., Main, R. E., Randel, J. M., & Morris, B. A. (1991). *Study factors and their impact on military school performance measures* (NPRDC-TR-92-10). San Diego: Navy Personnel Research and Development Center.
Low Cost Micro-Computer Training Systems (CBESS)		
Officer and specialist threat memorization training	Navy and Marine Corps Intelligence Center, Dam Neck	Wetzel, C. D., & Wulfeck, W. H. II. (1991, January). *Low cost microcomputer training systems project, computer based educational software system: Final report* (NPRDC-TR-91-4). San Diego: Navy Personnel Research and Development Center.
Threat memorization training	Commander Tactical Wings, Atlantic; NAS Oceana	Wetzel, C.D. Van Kekerix, D. L., & Wulfeck, W. H. (1987). *Characteristics of Navy training courses and potential for computer support* (NPRDC-TR-87-25). San Diego: Navy Personnel Research and Development Center.

Implemented Product	Sponsor/User/Site	Citation
Threat memorization . . . (continued)	FCTC-P, San Diego	Wetzel, C. D., Van Kekerix, D. L., & Wulfeck, W. H. (1987). *Analysis of Navy technical school training objectives for microcomputer based training systems* (NPRDC-TR-88-3). San Diego: Navy Personnel Research and Development Center.
Tactical action officer threat memorization training		
Helicopter crew threat recognition training	Aviation Research and Development Facility, Ft. Rucker	
Remedial training job-oriented basic skills	CNTT	
Remedial training (SeaBees)	Naval Construction Training Centers, Gulfport, Port Hueneme	
Basic electricity/electronics remeditation computer-based instruction (CBI)	NTC (Great Lakes, Orlando, Memphis, and San Diego)	
Refresher training	CNET Water Front Trailers, Long Beach, Norfolk	
Authoring Instructional Materials		
70 weeks of instruction in various fields	Naval Education and Training Support Center, Pacific (NETSCPAC), Training Systems Development Department	Vogt, J. L., Robinson, E. R. N., Taylor, B. E., & Wulfeck II, W. H. (1989). *Authoring Instructional Materials (AIM): Automated curriculum development* (NPRDC-TR-89-12). San Diego: Navy Personnel Research and Development Center.
Navy's official automated curriculum development system	All surface and subsurface training development organizations	
Over 500 weeks of instruction in engineering and electrical systems	Service School Command, NTC, Great Lakes	

Implemented Product	Sponsor/User/Site	Citation
Submarine systems	Naval Submarine School, New London	
TRIDENT engineering, operations, and strategic weapons training materials	TRIDENT Training Facilities, Kings Bay, Bangor	
Naval Sea Systems Command curricula	Naval Ship Weapons System Engineering Stations, Philadelphia, Port Hueneme	
SSN-21 systems	Newport News Shipbuilding	
Technical training course development	AEGIS Training Center, Dahlgren; Fleet Combat Training Center, Atlantic, Dam Neck, Virginia Beach; Fleet Training Center, San Diego; Naval Technical Training Command, NAS Memphis; Naval Technical Training Center, Corry Station, Pensacola; Naval Sea Combat Systems Engineering Station (NSCSES), Norfolk; Submarine Systems Program Office (SSP-15), Arlington	
Computerized front-end analysis tools	NETSCPAC, Training Systems; Service School Command, NTC, Great Lakes	

Joint Staff Officer Training System

Training for all action officers assigned to the Joint Staff	The Joint Staff, Pentagon, Washington, DC	

Implemented Product	Sponsor/User/Site	Citation
AI in Explosive Ordnance Disposal		
Information delivery system for identifying ordnance and retrieving render-safe procedures	Naval Explosive Ordnance Disposal Technology Center, Indian Head	Conner, H. B., Madrid, R. G., Williams, R. A., & Holland, J. V. (1992). *Artificial intelligence explosive ordnance disposal information search, retrieval and delivery system* (NPRDC-TR-92-13). San Diego: Navy Personnel Research and Development Center.
Guidelines for Transportable Education and Training		
Transportable lessons from Defense Systems Management College's (DSMC's) Program Management Course and lessons learned in converting transportable course/lessonware	DSMC; Air Force Institute of Technology; Army Training and Doctrine Command, Ft. Monroe	Tarker, B., Rybowiak, A., Flaningam, M. R., & Hulton, V. (1990). *Lessons learned in converting residential courseware to transportable courseware* (NPRDC-TN-90-21). San Diego: Navy Personnel Research and Development Center.
Courseware Portability		
Programming standards for computer-based instruction/interactive video (MIL-STD-1379D)	Office of the Secretary of Defense (OSD)	Wetzel, C. D., & Wulfeck II, W. H. (1991). *Low-cost microcomputer training systems project, computer-based educational software system: Final report* (NPRDC-TR-91-04)

Implemented Product	Sponsor/User/Site	Citation
Portability conformance test suite	OSD and Interactive Multi-Media Association	Wetzel, C. D., Van Kekerix, D. L., & Wulfeck II, W. H. (1987). *Analysis of Navy technical school training objectives for microcomputer-based training systems* (NPRDC-TR-88-03). San Diego: Navy Personnel Research and Development Center.
OPNAV Instruction 1500.73	CNO (N7)	
Interactive courseware standards	CNO (N7)	
Experimental Civilian Personnel Office		
Evaluation of innovative civilian personnel practices with recommendations and guidelines for Department of Defense implementation	Distributed to over 50 DOD and federal agencies	Sheposh, J. P., Shettel Dutcher, J., Hayashida, C. A., Arbor, H., Cooke, R., McNulty W., St. Clair, P. C., & Trusso, P. (1994) *Experimental Civilian Personnel Office Project (EXPO): Final report for appropriated fund sites* (NPRDC-TR 94-4). San Diego: Navy Personnel Research and Development Center. Shettel-Neuber, J., Sheposh, J. P., Hayashida, C. A., Arbor, H., Cooke, R., McNulty, W., St. Clair, P. C., & Trusso, P. (1991) *Experimental Civilian Personnel Office Project (EXPO): Final report for nonappropriated fund sites* (NPRDC-TR 91-10). San Diego: Navy Personnel Research and Development Center.

Implemented Product	Sponsor/User/Site	Citation
Demonstration Project		
Pacer Share Demonstration Project evaluation	Distributed to over 50 DOD and federal agencies	Shettel-Neuber, J., Hayashida, C. A., Sheposh, J. P., & Dickason, D. (1992). *Pacer Share: A Federal management demonstration project--Fourth-year project evaluation report.* Washington, DC: U.S. Office of Personnel Management. Shettel-Neuber, J., Sheposh, J. P., Dickason, D , & Hayashida, C. A. (1993). *Pacer Share: A Federal management demonstration project--Final evaluation.* Washington, DC: U.S. Office of Personnel Management.
DON Navy Leadership		
Design and develop DON leadership program	NETC, Newport	
Total Quality Leadership		
TQL Climate Survey	Administered at 30 DON sites. Provided over 50 copies to interested DOD organizations	White, M. A., & Culbertson, A. L. (1992). *Recognizing, awarding, and appraising people in a total quality leadership organization: The Naval Aviation Supply Office model* (TQLQ 92-04). Washington, DC: Department of the Navy Total Quality Leadership Office.
Total Quality Implementation Survey (TQIS)	Distributed 100 copies to interested DOD organizations	
Strategic Planning Deployment Aid (SPADA)	Distributed to over 20 interested DON organizations	
Innovative personnel management practices	Distributed 5,150 copies to requesting DOD and federal organizations	

Implemented Product	Sponsor/User/Site	Citation
Team oriented performance management executive summary	Distributed over 100 copies to requesting DOD and federal organizations	
Senior Leader's Seminar Instructor Guide for presenting an overview and implementation of TQL to DON leaders	NPGS, Monterey; DON TQL Training Sites at Little Creek and Coronado; Dam Neck; Washington, DC; TQL training sites worldwide	
Senior Leader's Seminar Student Guide for DON leaders to prepare them for implementation of TQL	NPGS, Monterey; DON TQL Training Sites at Little Creek and Coronado; Dam Neck; Washington, DC; TQL training sites worldwide	
Instructor Guide for presenting a basic overview of TQL concepts; Student Guide for obtaining a basic overview of TQL concepts (this course is a prerequisite to all other DON TQL courses)	DON TQL training sites at Little Creek and Coronado; Mobile Training Sites worldwide	
Instructor Guide for teaching basic graphic tools in a systems context; Student Guide for preparing students in the applications of graphic tools in a systems context	DON TQL training sites at Little Creek and Coronado; Mobile training sites worldwide	
A prototype operational evaluation package to evaluate the effectiveness of TQL instructional materials including data collection procedures and survey materials	DON TQL training sites at Little Creek and Coronado; Dam Neck, Anacosta; Mobile training sites worldwide	
Comprehensive system of evaluating effectiveness of DON TQL course, including surveys, data collection and analysis procedures, and report generation; Quarterly reports; Special reports	NPGS, Monterey; TQL training sites at Little Creek and Coronado; Dam Neck, Anacosta; Mobile training sites worldwide	

Implemented Product	Sponsor/User/Site	Citation
Validated knowledge tests	TQL training sites at Little Creek and Coronado; Dam Neck, Anacosta; Mobile training sites worldwide	
TQL curriculum development and presentation that resulted in trained CNO TQL consultants (TQL Fleet Teams); Documentation of CNO fleet demonstration units' TQL efforts *(TQL in the fleet: From theory to practice)*	CINCLANTFLT, CINCPACFLT, DON-wide	
Trained DON TQL course instructors	Pensacola; Little Creek; Coronado	
Personnel Surveys		
Developed CCIC CINCLANT	CINCLANT Fleet	Culbertson, A. L., Rosenfeld, P., & Newell, C. E. (1993). *Sexual harassment in the active-duty Navy* (NPRDC-TR 94-2). San Diego: Navy Personnel Research and Development Center.
Navy Equal Opportunity/Sexual Harassment Survey	Distributed 250 copies to BUPERS, CNET, 125 fleet units, Defense Manpower Data Center, DACOWITS, civilian researchers	Culbertson, A. L., & Rosenfeld, P. (1994). Assessment of sexual harassment in the active-duty Navy. *Military Psychology, 6*, 69-93. Culbertson, A. L., & Rosenfeld, P. (1993). Understanding sexual harassment through organizational surveys. In P. Rosenfeld, J. E. Edwards, & M. D. Thomas (Eds.). *Improving organizational surveys: New directions, methods, and applications* (pp. 164-187). Newbury Park, CA: Sage.

Implemented Product	Sponsor/User/Site	Citation
Navy Equal . . . (continued)		Culbertson A. L., Rosenfeld, P., Booth-Kewley, S., & Magnusson, P. (1992). *Assessment of sexual harassment in the Navy: Results of the 1989 Navy-Wide Survey* (NPRDC-TR-92-11). San Diego: Navy Personnel Research and Development Center. Rosenfeld, P., Culbertson, A. L., Booth-Kewley, S., & Magnusson, P. (1992). *Assessment of equal opportunity climate: Results of the 1989 Navy Wide Survey* (NPRDC-TR-92-14). San Diego: Navy Personnel Research and Development Center. Rosenfeld, P., Thomas, M. D., Edwards, J. E., Thomas, P. J., & Thomas, E. D. (199). Navy research into race, ethnicity, and gender issues: An historical review. *International Journal of Intercultural Relations, 15*, 407-42 .
Organizational Survey		
Command Assessment Team Survey System	CNET Navy-wide at over 2,000 sites	Rosenfeld, P., & Culbertson, A. L. (1993). *Command assessment team survey system (CATSYS): User guide* (NPRDC-TN-94-11). San Diego: Navy Personnel Research and Development Center.
Morale, Welfare and Recognition Programs (MWR)		
MWR customer satisfaction survey	Distributed to DON Headquarters; Used in FY93-94 assessment of 60,000 MWR customers at 50 sites worldwide	Research still underway; technical reports scheduled for FY95.

Implemented Product	Sponsor/User/Site	Citation
Computerized MWR survey feedback system	Distributed to 16 sites in CONUS; 50 sites worldwide in FY94	
Executive summary of customer satisfaction with MWR	Distributed to 16 sites in CONUS; 50 sites worldwide in FY94	
Total Quality Management (TQM)		
TQM prototype TQM assessment	NAVAIR-04; DCASR, Philadelphia; OSD, Under Secretary of Defense (Acquisitions); DCA; Naval Aviation Depot (NADEP), North Island; Sacramento Army Depot; Naval Shipyards, Pearl Harbor, Portsmouth; NADEP, North Island, Cherry Point; NSC, San Diego; Sacramento Army Depot	Rosen, H. H., & Pope, T. D. (1990). *Interim plan for the Department of the Navy Quality Support Center* (NPRDC-TN-90-3). San Diego: Navy Personnel Research and Development Center. McDaniel, D. M., & Doherty, L. M. (1990). *Total quality management case study in a Navy headquarters organization* (NPRDC-TN-90-10). San Diego: Navy Personnel Research and Development Center. Bachaitis, N., & Rosen, H. H. (1990). *Readings on management organizational quality* (NPRDC-TN-90-19). San Diego: Navy Personnel Research and Development Center.
Productivity Gain-Sharing		
Organizational readiness assessment	16 DON organizations	

Implemented Product	Sponsor/User/Site	Citation
Acquisition Technology		
Technology enhancements in Program Management Offices	NAVAIR (PMA-273), (PMA-260)	Kochevar, . W. (1981). *Training technology handbook for system acquisition planners* (NPRDC-T N-81-28). San Diego: Navy Pers nnel Research and Developme it Center.
Suicide Prevention Research		
Scannable suicide questionnaire, statistical results to prevent suicides	Fleet Marine Force Pacific (FMFPAC), Camp H. M. Smith, HI	Questionna re items, forms, norms, and results distributed directly to sponsor; nc other reports distributed.
Corrections Program Evaluation System		
Ongoing evaluation of correctional retraining	BUPERS (PERS-84)	
USMC QOL Assessment Model		
Assessment of QOL and organization outcome	HQMC (MA)	
Compensatory Screening Model (CSM)		
Screens non-high school graduate applicants for enlistment	BUPERS (PERS-23); CNRC	
USMC Training Support		
Electronics theory instruction course	USMC, Engineering School, Camp Lejeune	Lang, G. D., Allen, M. E., McCann, P. H., & Ch adbourne, J. C. (1991). *United Stat s Marine Corps training evaluation c nd feedback requirement s report* (NPRDC-TN-91-15). San Diego: Navy Perso nel Research and Developmer t Center.

Implemented Product	Sponsor/User/Site	Citation
Systems Approach to Training (SAT) users guide	Marine Corps Combat Development Command (MCCDC), Standards Branch, Training Management Section, Quantico	Contractor reports distributed by sponsor (USMC). No NPRDC technical reports are required.
Basic marksmanship training course	USMC, Weapons Training Battalion, Quantico (reported in the 7 March 1994 issue of the Navy Times)	
Range coach course	USMC Weapons Training Battalion, Quantico	
Writing skills course for newly commissioned Marine Corps Officers	The Basic School at the Marine Corps University, Quantico	Randel, J. M., Hewitt, D. H., & Warner, B. M. (1994). *Writing skills course for newly commissioned Marine Corps officers* (NPRDC-TN 94-5). San Diego: Navy Personnel Research and Development Center. Sympson, J. B. (1993). *Extracting information from wrong answers in computerized adaptive testing* (NPRDC-TN 94-1). San Diego: Navy Personnel Research and Development Center.
Cost-benefits analysis of the Marine Corps Automated Instructional Management System (MCAIMS) and the Air Force Advanced Training System (ATS)	MCCDC, Standards Branch, Training Management Section, Quantico	
Cost benefits analysis of the Range Facilities Management Support System (RFMSS) and the Land Use Management System (LUMS)	MCCDC, Training Resources Branch, Quantico	

Implemented Product	Sponsor/User/Site	Citation
CD-ROM applications in Professional Military Education	MCCDC, Marine Corps University, Quantico	Redmond, K., Sheppard, J., Humphrey, M., & Stacy, L. (1992). *CD-ROM Applications in Professional Military Education (PME)* (NPRDC-TN-93-1). San Diego: Navy Personnel Research and Development Center.
USMC training evaluation and feedback requirements report	MCCDC, Standards Branch, Training Management Section, Quantico	Lang, G. D. Allen, M. E., McCann, P. H., & Chadbourne, J. C. (1991) *United States Marine Corps training evaluation and feedback requirement. report* (NPRDC-TN-91-15). San Diego: Navy Personnel Research and Development Center.
Junior leadership corps implementation evaluation	DON, SECNAV, Drug Demand Reduction Task Force, Arlington	
Evaluation user's guide	MCCDC, Standards Branch, Training Management Section, Quantico	
HARDMAN analysis of the Bangalore versus the Anti-Personnel Obstacle Breaching System (APOBS)	Marine Corps Systems Command, Arlington	
FMFM-09 field firing manual	USMC Weapons Training, Battalion, Quantico	
Competition-in-arms course	USMCUSMC Weapons Training, Battalion, Quantico	
Small arms weapons instructor course	USMC Weapons Training, Battalion, Quantico	
Scout sniper course and instructor course	USMC Weapons Training, Battalion, Quantico	
High risk personnel course	USMC Weapons Training, Battalion, Quantico	
Breacher instructor course	USMC Weapons Training, Battalion, Quantico	

Implemented Product	Sponsor/User/Site	Citation
Marine gunner course	USMC Weapons Training, Battalion, Quantico	
Range officer course	USMC Weapons Training, Battalion, Quantico	
Integrated Damage Control Training Technology (IDCTT)		
Interactive-Video Courseware (ICW) for training damage control assistants (DCAs)	Damage Control Training Department, Surface Warfare Officer School Command (SWOSCOLCOM), New Port, RI; Afloat Training Group (ATG), San Diego	Effort still underway with technical reports scheduled for FY95.
Master's thesis on the ICW's Measures of Performance (MOPs) and Measures of Effectiveness (MOEs)	Naval Postgraduate School (NPS), Monterey	
Master's thesis on the Validation of the ICW	Naval Postgraduate School (NPS), Monterey	
Communication Networks in Training (CNIT/VTT)		
Videoteletraining (VTT) course conversion methods and guidelines	CNET Electronic Schoolhouse Network (CESN), Dam Neck and San Diego	Simpson, H. (1993). *Conversion of live instruction for videoteletraining: training and classroom design considerations* (NPRDC-TN-93-04). San Diego: Navy Personnel Research and Development Center.
Navy Personnel Survey System		
Navy-Wide Personnel Survey 1990-1994	PERS-01	Hollingsworth, S. (1993). *When we listened, this is what we heard!* (NPRDC-TN-94-10). San Diego: Navy Personnel Research and Development Center.

Implemented Product	Sponsor/User/Site	Citation
Integrated survey information display system (ISAID)	PERS-01	Quenette, M. A. (1992). *Navy-Wide Personnel Survey (NPS) 1991: Management report of findings* (NPRDC-TR-92-20). San Diego: Navy Personnel Research and Development Center. Quenette, M. A. (1994). *Navy-Wide Personnel Survey (NPS) 1993: Statistical tables for enlisted personnel* (NPRDC-TR-94-16). San Diego: Navy Personnel Research and Development Center. Quenette, M. A. (1994). *Navy-Wide Personnel Survey (NPS) 1993: Statistical tables for officers* (NPRDC-TR-94-17). San Diego: Navy Personnel Research and Development Center. Quenette, M. A., Gordon-Espe, M., Eliassen, D., Kalus, S., Hase, J., & Brinderson, C. (1992). *Navy-Wide Personnel Survey (NPS) 1991: Graphic presentation of results for enlisted personnel* (NPRDC-TN-92-20). San Diego: Navy Personnel Research and Development Center. Quenette, M. A., Gordon-Espe, M., Eliassen, D., Kalus, S., Hase, J., & Brinderson, C. (1992). *Navy-Wide Personnel Survey (NPS) 1991: Statistical tables for enlisted personnel* (NPRDC-TN-92-21). San Diego: Navy Personnel Research and Development Center.

Implemented Product	Sponsor/User/Site	Citation
Integrated survey information . . . (continued)		Quenette, M. A., Kalus, S., Hase, J., & Brinderson, C. (1991, August). *Navy Personnel Survey (NPS 1990), survey report, statistical tables, volume 1, enlisted personnel* (NPRDC-TN-91-17). San Diego: Navy Personnel Research and Development Center. Quenette, M. A., Kalus, S., Hase, J., & Brinderson, C. (1991, August). *Navy Personnel Survey (NPS 1990), survey report, statistical tables, volume 2, officers* (NPRDC-TN-91-17). San Diego: Navy Personnel Research and Development Center. Quenette, M. A., Kalus, S., Hase, J., & Brinderson, C. (1991, August). *Navy Personnel Survey (NPS 1990), survey report, graphical representations, volume 3, enlisted personnel* (NPRDC-TN-91-17). San Diego: Navy Personnel Research and Development Center. Quenette, M. A., Kalus, S., Hase, J., & Brinderson, C. (1991, August). *Navy Personnel Survey (NPS 1990), survey report, graphical representations, volume 4, officers* (NPRDC-TN-91-17). San Diego: Navy Personnel Research and Development Center. Quenette, M. A., Steerman, C. J., & Le, S. K. (1993). *Navy-Wide Personnel Survey (NPS) 1992: Statistical tables for enlisted personnel* (NPRDC-TN-93-8). San Diego: Navy Personnel Research and Development Center.

Implemented Product	Sponsor/User/Site	Citation
Integrated survey information . . . (continued)		Quenette, M. A., Steerman, C. J., & Le, S. K. (1993). *Navy-Wide Personnel Survey (NPS) 1992: Statistical tables for officers* (NPRDC-TN-93-9). San Diego: Navy Personnel Research and Development Center.
		Quenette, M. A., Steerman, C. J., Le, S. K., & Bendik, C. (1993). *Navy-Wide Personnel Survey (NPS) 1992: Graphic presentation of results for enlisted personnel* (NPRDC-TN-93-10). San Diego: Navy Personnel Research and Development Center.
		Quenette, M. A., Steerman, C. J., Le, S. K., & Bendik, C. (1993). *Navy-Wide Personnel Survey (NPS) 1992: Graphic presentation of results for officers* (NPRDC-TN-93-11). San Diego: Navy Personnel Research and Development Center.
		Wilcove, G. L. (1992). *The Chief of Naval Personnel asked and here is what they said (An analysis of written comments from the Navy Personnel Survey)* (NPRDC-TN 92-10). San Diego: Navy Personnel Research and Development Center.
		Wilcove, G. L. (1994). *Quality of life in the Navy Findings from 1990 to 1992: The Navy-Wide Personnel Survey* (NPRDC-TR-94-6). San Diego: Navy Personnel Research and Development Center.

Implemented Product	Sponsor/User/Site	Citation
Integrated survey information . . . (continued)		Wilcove, G. L., & Quenette, M. A. (1992). *Navy-Wide Personnel Survey (NPS) 1991: Statistical tables for enlisted personnel* (NPRDC-TN-92-22). San Diego: Navy Personnel Research and Development Center. Wilcove, G. L., & Quenette, M. A. (1992). *Navy-Wide Personnel Survey (NPS) 1991: Statistical tables for officers* (NPRDC-TN-92-23). San Diego: Navy Personnel Research and Development Center.
What Works		
Reference document of NAVEDTRACOM managers and instructors	NAVEDTRA	Montague. W. E. (1988) *What works: Summary of research findings with implications for Navy instruction and learning* (NAVEDTRA 115-1). Pensacola: Chief of Naval Education and Training

Databases

Database Description[a]	Sponsor/User/Site	Citation
Naval Reserve Officer Training Corps--Applicant information, school performance information, fitness report (FITREP) data	Chief of Naval Education and Training (N-1A)	Day, L. E. (1986). *NROTC longitudinal officer data base documentation.* San Diego: Navy Personnel Research and Development Center.
Naval Academy--Applicant information, school performance information, FITREP data	U.S. Naval Academy (Dean of Admissions)	Wahrenbrock, A. L., & Neumann, I. (1989). *United States Naval Academy longitudinal officer data base documentation.* San Diego: Navy Personnel Research and Development Center.
Officer Career--Questionnaire information, officer master file information	BUPERS (PERS-21)	Morrison, R. F. (1983). *Officer career development: Surface warfare officer interviews* (NPRDC-TN-83-11). San Diego: Navy Personnel Research and Development Center. University of San Diego (1984). Proceedings: Volume 1. Group reports. Tri-service career research workshop. San Diego: University of San Diego, Continuing Education. Morrison, R. F., Martinex, C., & Townsend, F. W. (1984). *Officer career development: Description of aviation assignment decisions in the antisubmarine warfare (ASW) patrol community* (NPRDC-TR-84-31). San Diego: Navy Personnel Research and Development Center.

[a]Databases listed were created and compiled by NAVPERSRANDCEN and have transitioned to sponsors indicated for operational use.

Database Description[a]	Sponsor/User/Site	Citation
Officer Career (continued)		Morrison, R. F., & Cook, T. M. (1985). *Military officer career development and decision making: A multiple-cohort longitudinal analysis of the first 24 years* (NPRDC-TN-85-4). San Diego: Navy Personnel Research and Development Center. Wilcove, G. L., Bruni, J. R., & Morrison, R. F. (1987). *Officer career development: Reactions of two unrestricted line communities to detailers* (NPRDC-TN-87-40). San Diego: Navy Personnel Research and Development Center. Morrison, R. F. (1988). *Officer career development: URL officers in joint-duty assignments* (NPRDC-TN-88-26). San Diego: Navy Personnel Research and Development Center. Wilcove, G. L. (Ed.) (1988). *Officer career development: Problems of three unrestricted line communities* (NPRDC-TR-88-13). San Diego: Navy Personnel Research and Development Center. Wilcove G. L. (1988). *Officer career development: General unrestricted line officer perceptions of the dual-career track* (NPRDC-TN-88-62). San Diego: Navy Personnel Research and Development Center.

Database Description[a]	Sponsor/User/Site	Citation
Officer Career (continued)		Bruni, J. R., & Wilcove, G. W. (1988). *Officer career development: Preliminary surface warfare officer perceptions of a major career path change* (NPRDC-TN-89-5). San Diego: Navy Personnel Research and Development Center. Bruce, R. A. (1989). *Officer career development: Fleet perceptions of the aviation duty officer program* (NPRDC-TN-89-25). San Diego: Navy Personnel Research and Development Center. Bruce, R. A., & Burch, R. (1989). *Officer career development: Modeling married aviator retention* (NPRDC-TR-89-11). San Diego: Navy Personnel Research and Development Center. Bruce, R. A. (1991). *The career transition cycle: Antecedents and consequences of career events* (NPRDC-TR-91-8). San Diego: Navy Personnel Research and Development Center. Burch, R. L., Bruce, R. A., & Russell, G. L. (1991). *Officer career development: Longitudinal sample--Fiscal year 1982* (NPRDC-TN-92-2). San Diego: Navy Personnel Research and Development Center.

Database Description[a]	Sponsor/User/Site	Citation
Officer Career (continued)		Burch, R. L., Bruce, R. A., & Russell, G. L. (1991). *Officer career development: Longitudinal sample--Fiscal years 1986/1987* (NPRDC-TN-92-1). San Diego: Navy Personnel Research and Development Center. Bruce, R. A., Burch, R. L., & Russel, G. L. (1991). *Officer career development: Cross-sectional sample--Fiscal years 1986/1987* (NPRDC-TN-91-24). San Diego: Navy Personnel Research and Development Center. Burch, R. L., Sheposh, J. P., & Morrison, R. F. (1991). *Officer career development: Surface warfare officer retention* (NPRDC-TR-91-5). San Diego: Navy Personnel Research and Development Center. Wilcove G. L., & Wilson, W. C. (1991). *Officer career development: Measures and samples in the 1981-1989 research program* (NPRDC-TN-91-8). San Diego: Navy Personnel Research and Development Center. Kozlowski, S. W. J., & Morrison, R. F. (1990). *Officer career development: Mapping rater strategies in officer fitness report ratings* (NPRDC-TR-91-2). San Diego: Navy Personnel Research and Development Center.

Database Description[a]	Sponsor/User/Site	Citation
Officer Career (continued)		Wilcove, G. L., & Morrison, R. F. (1990). *Officer career development: Factors that predict subspecialty decisions and proven subspecialty status* (NPRDC-TN-91-7). San Diego: Navy Personnel Research and Development Center. Morrison, R. F., & Adams, J. (Eds.) (1991). *Contemporary career development issues.* Hillsdale, NJ: Lawrence Erlbaun . Bruce, R. A., Russel, G. L., & Morrison, R. F. (1991). *Officer career development: The Post-Resignation Survey* (NPRDC-TN-91-6). San Diego: Navy Personnel Research and Development Center. Wilcove, G. L., & Morrison, R. F. (1992). *Officer career development: Opinions on the Navy's career guidance and reassignment practices* (NPRDC-TN-92-11). San Diego: Navy Personnel Research and Development Center.
Compensatory Screening Model--FY88-91 DOD applicant data and first-term attrition data. FY93-94 enlisted contracts and attrition data	BUPERS (PERS-23); CNRC	Trent, T (1993). The Armed Services Applicant Profile (ASAP). In T. Trent & J. H. Laurence (Eds.), *Adaptability screening for the armed forces* (pp. 71-99). Washington, DC: Office of Assistant Secretary of Defense (Force Management and Personnel).

Database Description[a]	Sponsor/User/Site	Citation
Compensatory Screening Model (continued)		Trent, T., & Laurence, J. H. (Eds.) (1993). *Adaptability screening for the armed forces.* Washington, DC: Office of Assistant Secretary of Defense (Force Management and Personnel). Trent, T., & Quenette, M. A. (1992). *Armed Services Applicant Profile (ASAP): Development and validation of operational forms* (NPRDC-TR-92-9). San Diego, CA: Navy Personnel Research and Development Center.
Personnel Quality Requirements--Ability requirements and task characteristics of entry level occupations	BUPERS (PERS-234)	McCloy, R. A., Harris, D. A., Barnes, J. D., Hogan, P. F., Smith, D. A., Clifton, D., & Sola, M. (1992). *Accession quality, job performance, and cost: A cost-performance tradeoff model* (HumRRO FR-PRD-92-11). San Diego: Navy Personnel Research and Development Center. Reynolds, D. H., Barnes, J. D., Harris, D. A., & Harris, J. H. (1992). *Analysis and clustering of entry level Navy ratings* (HumRRO FR-PRD-92-20). San Diego: Navy Personnel Research and Development Center.
Tooth to Tail--Historical manpower data[b] for forces and support categories	Bureau of Naval Personnel (BUPERS) (PERS-52)	

[b]Documentation not cited hereafter. No formal manuals or related documentation are available. Documentation was provided directly to sponsors.

Database Description[a]	Sponsor/User/Site	Citation
Personal Computer--Officer Programmed Authorizations/Enlisted Programmed Authorizations and future years defense plans end strength and billets	BUPERS (PERS-52)	
Manpower Projection--Ships, aircraft, and manpower (historical)	BUPERS (PERS-52)	
Force Analysis Simulation Technique (FAST) Input Model (FAIM)--Historical enlisted Navy personnel data	BUPERS (PERS-221)	
Enlisted Management Community Database--Historical enlisted Navy personnel data	BUPERS (PERS-221)	
FAIM-O--Historical longitudinal Navy officer personnel data	BUPERS (PERS-21)	
Officer Personnel Information System (PCOPIS)--Historical, aggregated Navy officer personnel data	BUPERS (PERS-21)	
Judicial Employee Management System (JEMS)--Ad-hoc access to current personnel data	AOUSC (HRD/SMP)	
TARGET/Enlisted (Prototype)--Ad-hoc access to current EMR data	BUPERS (PERS-22)	
TARGET/Officer (Prototype)--Ad-hoc access to current OPINS data	BUPERS (PERS-21)	
U.S. Marine Corps (USMC) Enlisted Personnel Database--Historical, longitudinal USMC enlisted personnel data	USMC	
USMC Officer Personnel Database--Historical, longitudinal USMC officer personnel data	USMC (MPP-30)	
Qualified Military Available Database--Qualified military available projections for USMC recruiting regions	USMC	

Database Description[a]	Sponsor/User/Site	Citation
Recruiting Information Delivery System (RIDS)--Historical demographic, economic, educational, production data by Navy recruiting areas, districts, and counties	BUPERS (PERS-23), Naval Recruiting Command	
Budget Obligation Analysis and Tracking System--Navy military personnel entitlements data and forecast	BUPERS (PERS-7)	
Standard Personnel Measures (SPM)--Procedures for measuring personnel system behavior	BUPERS (PERS-22)	
Joint Specialty Officer (JIDS)--Historical aggregate Navy data on JSOs	BUPERS (PERS-45)	
Navy Health Research Center Green Book System--Historical Navy Enlisted end-strengths	Navy Health Research Center	
Defense Acquisition Workforce Improvement Act (DAWIA)--Navy, USMC, and civilian acquisition workforce personnel, certification and training data	ASN(RDA), DACM	
Navy Acquisition Career Management Center (NACMC)--Navy, USMC, and civilian acquisitions training reservation and quotas	ASN(RDA), DACM, NACMC	
Medical Manpower--Manpower requirements for Medical Mobilization Platforms	BUPERS (PERS-515), CNO (OP-931D), BUMED	
Drug and Alcohol Use, Evaluation, and Treatment Database--Historical Navy drug and alcohol data from ADMITS and drug screening labs	BUPERS (PERS-6)	
Navy Integrated and Training System--Navy class "A" school information merged with Armed Services Vocational Aptitude Battery (ASVAB) data used for ASVAB validation and related studies and analyses	CNO (OP-135L), BUPERS (PERS-291)	

Database Description[a]	Sponsor/User/Site	Citation
Computer Managed Instruction Dataa--Similar to Navy integrated training and reporting system data, merged with ASVAB data and used for ASVAB validation and related studies and analyses	CNO (OP-135L), BUPERS (PERS-291)	
Joint Officer Monitor Officer--Officer and billet data pertaining to past and present joint duty assignments for USMC officers	Headquarters, Marine Corps (MMOA-3)	
Classification and Assignment within PRIDE (CLASP)--Accession data, job options presented by CLASP	BUPERS (PERS-291)	
PRIDE Data[c]--Recruitment information (data of enlistment, targeted rating) from automated classification system (CLASP) used for studies on Navy recruits and creating regression formulas used in CLASP	BUPERS (PERS-23), PERS-291)	
Defense Manpower Data Center/ASVAB Data[b]--Navy enlisted applicants and accessions by fiscal year used for validation and related studies and analyses	BUPERS (PERS-23), (PERS-291)	
American Youth Population Data--Maintained 1980 metric sample for ASVAB (youth 18-23), used for calibrating new forms of ASVAB, developed population parameters needed to correct for restriction of range in ASVAB validation samples	BUPERS (PERS-23), (PERS-291)	
Reading Grade Level--Examinee data on both ASVAB and reading grade tests, used to estimate reading ability of military accessions without administering a reading test	OASD (FM&P)	
Operations Specialist (OS) Career Systems Design Rating--Materials, information, and products resulting from the OS rating training continuum	CNO (OP-111J)	

[c]Databases are extracted from larger databases for use in responding to consumer's requests for data analysis.

Database Description[a]	Sponsor/User/Site	Citation
Electronic Warfare (EW) Career Systems Design Rating--Materials, information, and products resulting from the EW rating training continuum	CNO (OP-111J)	
Training Tracking File (TRAINTRACK)--Historical longitudinal Navy training and personnel data--an SSN-based data file	BUPERS (PERS-22), N-7, Chief of Naval Education and Training	
Total Quality Management (TQM)/Productivity Gain-sharing (PGS)--Maintained data on status of implementation of TQM and PGS for Navy organizations with 50 or more civilian employees	Office of the Secretary of the Navy (SECNAV)	
Organizational Systems--Maintained data on organizational culture, climate, and effects of implementing TQM and PGS for those organizations participating in follow-up evaluations of TQM and PGS	SECNAV	
STEAMER Simulation-Based Training System--Computer training for Marine steam propulsion system operators installed at 13 reserve training sites	Commander, Naval Surface Reserve Force, New Orleans	
System Acquisition Funds Manager Correspondence Course (CSAFM)--Level II certification training for system acquisition funds managers	Defense Systems Management College, Ft Belvoir	

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.

Battle-Management Assessment System (BATMAN) assesses how well individuals can allocate, deploy, and manage air, surface, and/or subsurface tactical assets during simulated sea battles in many warfare areas. Raid Originator Bogie Ingress (ROBIN) generates rapid RED force raids comprised of a large number of air, surface, and/or subsurface tactical assets against Blue naval task forces or land bases in many warfare theaters. In order to complete a scenario, the user also specifies in ROBIN Blue force tactical resources that will be available in BATMAN for allocation, deployment, and management as well as Green or neutral force air, surface, and/or subsurface movements. Together BATMAN & ROBIN form a desk-top, computer-based, performance-measurement system incorporating high resolution graphics, low level modeling, and artificial intelligence technologies. Two of the major contributions of these dual systems are very friendly human-computer interfaces and automated performance measurement.

Because of the nature of their generic software and independent databases, as well as the potential for incorporating different computer models, BATMAN & ROBIN can be used for a variety of functions: (1) training and testing tactical knowledge, (2) planning and decision aiding for tactical situations, (3) developing and evaluating tactics themselves, (4) analyzing and evaluating various tactical sensor, weapon, and communication systems, (5) frontending sophisticated tactical computer models and complex databases, (6) interfacing tactical artificial intelligent and expert systems, (7) generating rapid scenarios for tactical trainers, (8) prototyping complicated scenarios for major wargaming systems, (9) orienting novices to facets of naval warfare, (10) evaluating tactical display symbologies and formats, and (11) providing an experimental environment for studying tactical decision making.

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.

One resource falls within these definitions.

Manpower and Personnel Computing Facility (MAPCOM). An IBM mainframe computer facility with installed equipment having a replacement value in excess of $500K. Described in 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.

Naval Air Station, North Island is located within 1/4 mile across the San Diego Bay from NAVPERSRANDCEN's host activity, NRaD, however, surface street distance around the Bay is approximately 15 miles. Combatant Piers are located at Naval Base San Diego located approximately 15 miles south of NRaD.

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?

None.

LOCATION

8. Geographic Location

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

Yes. Historically, both the Navy and Marine Corps have had strong concentrations of training facilities, fleet units, support functions, and headquarters commands in the San Diego area. As military downsizing progresses, several additional fleet operating units will be transferred to the local area.

The majority of the Center's R&D programs require access to operating units, since the success of our products depends upon customer acceptance and use. Our location both fosters and enables:

- Establishing informal and beneficial relationships with sponsors and their representatives;
- The capability to respond immediately to headquarters requests for data and information from the fleet;
- Cost-effective pilot testing, data gathering, and introducing new technologies to the fleet, as compared to a less central location; and
- The ability to serve as a coordinator and liaison to other research organizations and researchers who are involved in Defense-related research.

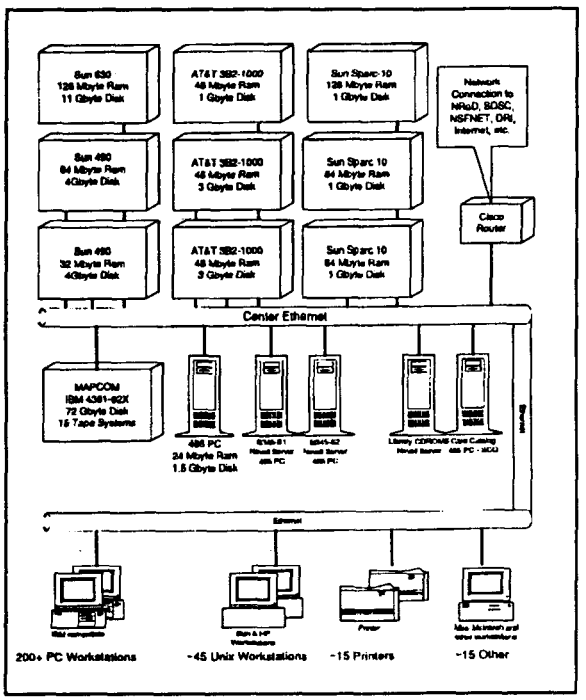
b. What is the importance of the present location relative to customers supported?

The Center's location not only benefits the Navy in terms of the timeliness and costs for conducting research, but benefits the fleet as well. Representatives from operating and headquarters commands have immediate access to our research organization, whether for addressing specific problems or for seeking technical assistance. Our location fosters greater understanding and appreciation for Navy R&D and the Center's capabilities among our sponsors and customers.

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.

Figure 1. NAVPERSRANDCEN's Computing Facilities-Winter 1994.



Data Communications Network:

The Center's network consists of several interoperating subsystems including: (1) The Center ethernet connects all buildings. This is a multiple segment network consisting

of both fiber optic and copper segments. (2) The Center's Ungermann-Bass CATV coax network is used for terminal and printer services and for video distribution. (3) An IBM 3270 network consists of coaxial cable plus a fiber-optic connection from building 330 to 328. This network supports terminal and printer communications with the MAPCOM machine.

- MAPCOM is an IBM 4381-92E. It's main features and capabilities include 70 Gbytes of on-line disk storage, and 16 tape drives for manipulating large sets of data such as the Navy's databases containing personnel information. The MAPCOM facility also provides connectivity through the Navy's PERSPAY network to PERS-10, PERS-47, EPMAC, DFAS and others.

- The SUN and AT&T machines includes six SUN mini-computers, three AT&T minicomputers, and some other smaller machines. These systems supply connectivity services, that is the networking "glue" that helps machines from different manufacturers communicate with each other and with other machines available over the internet. They support all of the Center's E-mail handling facilities, netnews, and internet connectivity. They also provides software, file system, and applications software for Sun workstation users across the Center.

Other Facilities:

NAVPERSRANDCEN maintains experimental laboratories which investigate new information technologies for use in Navy training. These include facilities for computer-controlled multimedia including video, and a video-teletraining facility at the Fleet Training Center, San Diego, which includes "teleconferencing" capability.

10. **Mobilization Responsibility and Capability**

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

Operational Strategy

It is not anticipated that on mobilization that the mission of NAVPERSRANDCEN will change since the Center will continue, "To conduct research and development to improve the performance of individuals, teams, and organizations within the Navy and Marine Corps. To provide products and services specifically directed at improving Department of the Navy personnel planning, testing, acquisition, selection, classification, training, utilization, motivation, organization, management, and other contemporary issues."

In the event of a national mobilization the Center's research and development thrusts would change. Below is an assessment of the Center's R&D program applicability to anticipated mobilization requirements:

In the event of a mobilization and/or national emergency of wartime proportions, NAVPERSRANDCEN would focus on research and development which effectively and efficiently match the Navy's growing population with the myriad of Navy jobs in a manner that assures maximum efficiency performing a job. This includes specific functional R&D efforts to:

- Expand and improve personnel classification and selection methods, including computerized testing, to enhance the efficiency of Navy training and the Navy's utilization of mobilized manpower, both military and civilian.

- Develop necessary Navy training time reduction programs to speed the process of readying personnel for operational assignments.

- Identify occupational clusterings, both ratings and Navy Enlisted Classifications, to increase the Navy's ability to effectively absorb the increased manpower inputs.

- Increase the utilization of women throughout the Navy by identifying those revamped Navy jobs which can easily integrate and employ greater numbers of women.

- Develop lateral entry programs for using skilled personnel direct from civil life.

- Design or redesign Navy jobs to match rapid changes in technology that will result from wartime weapons systems developments.

- Determine and define Navy personnel requirements for highly specialized skills.

- Improve the productivity of Navy acquisition and logistics organizations.

- Develop personnel planning systems which accommodate sharp increases in personnel flows, inventories, and structural complexity.

- Develop automated methods of personnel assignment to handle large volumes of movement and increased variety of skills.

Support Strategy

In support of the wartime personnel R&D program enumerated above, NAVPERSRANDCEN has the following response capabilities:

- Personnel skilled in training system analysis and development for evaluating and establishing training time-reduction programs.

- Statisticians and operational research analysts for logistical and tactical analysis and evaluations.

- Personnel specialists with extensive expertise in job design, selection and classification, including personnel test development; computerized as well as paper and pencil varieties.

- Computer scientists with skills in programming and designing programs for use in multi-computer configurations.

- Organizational psychologists skilled in productivity enhancement methods.

Additionally, several NAVPERSRANDCEN products would be very useful in supporting a wartime personnel build-up. These include, but are not limited to:

- Program to accelerate the assimilation and utilization of skilled personnel from civilian life and the development of a system to quality selected lower aptitude recruits for specific Navy occupations, should quality shortfalls occur.

- Microcomputer-based training programs for on-site use to enhance crew training.

- Program to accelerate student throughput in "A," "C," and basic schools.

- Methods to expand and improve personnel classification and selection procedures to improve the processing of incoming personnel. Automated allocation of personnel assets to the fleets and nomination of persons to jobs to reduce assignment processing time, assisting detailers to best match manpower demands with available personnel skills.

- Development of an occupational and organizational structure that will strengthen the security of nuclear weapons from terrorists/saboteurs.

- Introduction of incentive programs and process improvement programs to increase the productivity of personnel in acquisition organizations, e.g., SYSCOM headquarters, and in logistics organizations, such as naval aviation depots (NADEPS) and shipyards.

Further, within the support strategies category, NAVPERSRANDCEN has made or currently has in development the applications and databases listed under Manpower, Technical Staff Qualifications, page 26, paragraph 5. o.

Reference: BUPERS Mobilization Plan and BUPERSINST 5450 48

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

All functional support areas identified under Technical Functions, Technical Functions Resource Allocations, page 3, paragraph 3 above.

(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.

Three.

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

Yes.

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

No.

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

None.

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

No.

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

None.

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

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.

Not applicable.

QUALITY OF LIFE

12. **Military Housing**--This entire section is not applicable to NAVPERSRANDCEN per phonecon between LT Montgomery (PERS-02) and Ms. Zaske (NAVPERSRANDCEN, Code 03) of 22 Apr 1994.

(a) Family Housing: NOT APPLICABLE

(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[1]	Average Wait
O-6/7/8/9	1		
	2		
	3		
	4+		
O-4/5	1		
	2		
	3		
	4+		
O-1/2/3/CWO	1		
	2		
	3		
	4+		
E7-E9	1		
	2		
	3		
	4+		
E1-E6	1		
	2		
	3		
	4+		

[1] 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:

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

(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			
TOTAL		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:

AOB = (# Geographic Bachelors x 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			
TOTAL		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 F	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[10] 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 NOT APPLICABLE **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		

Facility	Unit of Measure	Total	Profitable (Y,N,N/A)

[10]Spaces designed for a particular use. A single building might contain several fac lities, each of which should be listed separately.

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.** NOT APPLICABLE

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:** NOT APPLICABLE

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** NOT APPLICABLE

(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 Bedroom)	
Single Family Home (4+ Bedroom)	
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			
September			

October			
November			
December			

(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:** NOT APPLICABLE

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.** NOT APPLICABLE

Location	% Employees	Distance (mi)	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:** NOT APPLICABLE

(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/ ACT 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 only	Degree Program	
	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 program s by placing a "Yes" or "No" in all boxes as applies.

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

21. **Spousal Employment Opportunities.** NOT APPLICABLE

Provide the following data on spousal employment opportunities.

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

22. **Medical/Dental.** NOT APPLICABLE

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. NOT APPLICABLE

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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1 Personnel and Training
Life Cycle Work Area	03 Advanced Development

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

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

2. Expenditures.

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. $(K)198.9

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)551.1

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 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1 Personnel and Training
Life Cycle Work Area	10 Program Support

Note: An example of an functional support area - life cycle work area776 "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. 1.14 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)55.9

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 7or this functional support are-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 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1 Personnel and Training
Life Cycle Work Area	15 Program Support

Note: An example of an 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 functiona 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)51.7

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)23.7

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

Note:
In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.1 Submarine-Related Trainig Systems
Life Cycle Work Area	03 Advanced Development

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

1. In-House Work Years. Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 6.7 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)343.5

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)731.7

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

Note:

In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.3 Surface Ship-Related Training Systems
Life Cycle Work Area	02 Exploratory Development

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

1. In-House Work Years. Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 2.9 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)277.7

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)72.3

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 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.3 Surface Ship-Related Training Systems
Life Cycle Work Area	03 Advance Development

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

1. In-House Work Years. Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 13.6 WYs

2. Expenditures.

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. $(K)866

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)399

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 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.3 Surface Ship-Related Training Systems
Life Cycle Work Area	04 Engineering and Manufacturing Development

Note: An example of an 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)4.5

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)0.4

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. $(K)45.2

Note:
In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.3 Surface Ship-Related Training Systems
Life Cycle Work Area	17 Training/Operational Support

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

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

2. Expenditures.

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. $(K)593.1

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)265.5

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. $(K)359.3

Note:

In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.4 Weapons-Related Training Systems
Life Cycle Work Area	02 Exploratory Development

Note: An example of an 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. 1.6 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)125.4

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)74.5

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

Note:
In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.4 Weapons-Related Training Systems
Life Cycle Work Area	03 Advanced Development

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

1. In-House Work Years. Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 6.1 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)501.5

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)153.5

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

Note:

In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.4 Weapons-Related Training Systems
Life Cycle Work Area	15 Program Support

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

1. In-House Work Years. Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 3.0 WYs

2. Expenditures.

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. $(K)197.5

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)19.8

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. $(K)631.0

Note:
In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.4 Weapons-Related Training Systems
Life Cycle Work Area	17 Training/Operational Support

Note: An example of an 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. 0.8 WYs

2. Expenditures.

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. $(K)12.2

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)10.3

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. $(K)328.3

Note:
In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.5 Human Resources Research and Development
Life Cycle Work Area	01 Basic Research

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

1. In-House Work Years. Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 2.6 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)162.5

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)53.8

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 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.5 Human Resources Research and Development
Life Cycle Work Area	02 Exploratory Development

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

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

2. Expenditures.

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. $(K)2165.4

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)1008.5

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. $(K)14.9

Note:
In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.5 Human Resources Research and Development
Life Cycle Work Area	03 Advanced Development

Note: An example of an 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. 38.7 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)2740.1

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)2646.8

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. $(K)338.6

Note:
In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.5 Human Resources Research and Development
Life Cycle Work Area	04 Engineering and Manufacturing

Note: An example of an 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. 8.6 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)498.2

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)431.8

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 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.5 Human Resources Research and Development
Life Cycle Work Area	05 RDT&E Management Support

Note: An example of an 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)0

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)300

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 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.5 Human Resources Research and Development
Life Cycle Work Area	09 Modernization

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

1. In-House Work Years. Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 2.2 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)130.6

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)142.4

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

Note:
In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.5 Human Resources Research and Development
Life Cycle Work Area	10 Program Support

Note: An example of an 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. 24.5 WYs

2. Expenditures.

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. $(K)1430.5

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)690.5

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

Note:

In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.5 Human Resources Research and Development
Life Cycle Work Area	11 Maintenance

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

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

2. Expenditures.

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. $(K)150

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)99.9

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 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.5 Human Resources Research and Development
Life Cycle Work Area	15 Program Support

Note: An example of an 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. 55.75 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)3446.8

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)2296.2

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. $(K)331.5

Note:

In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.1.5 Human Resources Research and Development
Life Cycle Work Area	17 Training/Operational Support

Note: An example of an 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)0

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)2.5

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

Note:

In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.3 Facilities Engineering
Life Cycle Work Area	05 RDT&E Management Support

Note: An example of an 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)391.6

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)340.6

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 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.9 Facilities Engineering
Life Cycle Work Area	09 Modernization

Note: An example of an 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)0

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)283

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 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.9 Activity Mission and Function Support
Life Cycle Work Area	05 RDT&E Management Support

Note: An example of an 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. 0.5 WYs

2. Expenditures.

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. $(K)24.5

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)43.6

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 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.9 Activity Mission and Function Support
Life Cycle Work Area	10 Program Support

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

1. In-House Work Years. Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 18.5 WYs

2. Expenditures.

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. $(K)1061.4

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)615.8

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. $(K)325

Note:

In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.9 Activity Mission and Function Support
Life Cycle Work Area	11 Maintenance

Note: An example of an 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. 0.8 WYs

2. Expenditures.

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. $(K)58.6

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)11.3

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 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.9 Activity Mission and Function Support
Life Cycle Work Area	15 Program Support

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

1. In-House Work Years. Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. 6.8 WYs

2. Expenditures.

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. $(K)425.4

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)349.6

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 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	10.9 Activity Mission and Function Support
Life Cycle Work Area	17 Training/Operational Support

Note: An example of an 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. 3.9 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)212.9

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)82.6

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 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	11.1 Computers
Life Cycle Work Area	01

Note: An example of an 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)1.4

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)51.1

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

Note:
In-House Expenditures - is comprised of 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 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	Navy Personnel Research and Development Center, San Diego, CA
Functional Support Area	4.2 Coastal/Special Warfare Support
Life Cycle Work Area	02 Exploratory Development

Note: An example of an 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. 1.7 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)187.6

b. **Out-of-House Expenditures.** Provide the total funds expended during FY1993 for this functional support are-life cycle work area. Do not include direct cite funding. $(K)18.7

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. $(K)8.6

Note:
In-House Expenditures - is comprised of 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 entities, industrial firms, educational institutions, not-for-profit institutions and private individuals.

TAB B

SPECIAL FACILITIES AND EQUIPMENT

FACILITIES/EQUIPMENT CAPABILITY FORM

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	Navy Personnel Research and Development Center, San Diego, CA
Facility/Equipment Nomenclature or Title	Manpower and Personnel Computing Facility

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

It is an IBM 4381 mainframe computer facility that is used to develop, process, and maintain:

- statistical and forecasting systems
- very large, complex personnel and training databases
- large software system applications.

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

The equipment would fit the definition of "movable," in that it is mainframe computer equipment that would require more extensive utility support and assembly of components than "portable" equipment. It could be relocated without damage to the facility or equipment.

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

The replacement cost of the equipment is $534,100.

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

Weight = 33,952 pounds

Cube = 371.5 square feet area with an average height of 67 inches. (Note: These dimensions are for shipping purposes only. Installation requires significantly greater area and height to allow clearance between pieces of equipment for operator access and service.)

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

No special utility support is required other than 208/240 volt, 3 phase electrical power.

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

The equipment must be installed in a facility that has (or can be altered to provide):

- raised computer-room flooring
- controlled access
- dry-pipe fire sprinkler system
- power conditioning
- fire-proof storage vault for storage of data tapes/cartridges.

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

The equipment requires typical temperature and humidity controls for mainframe computer rooms.

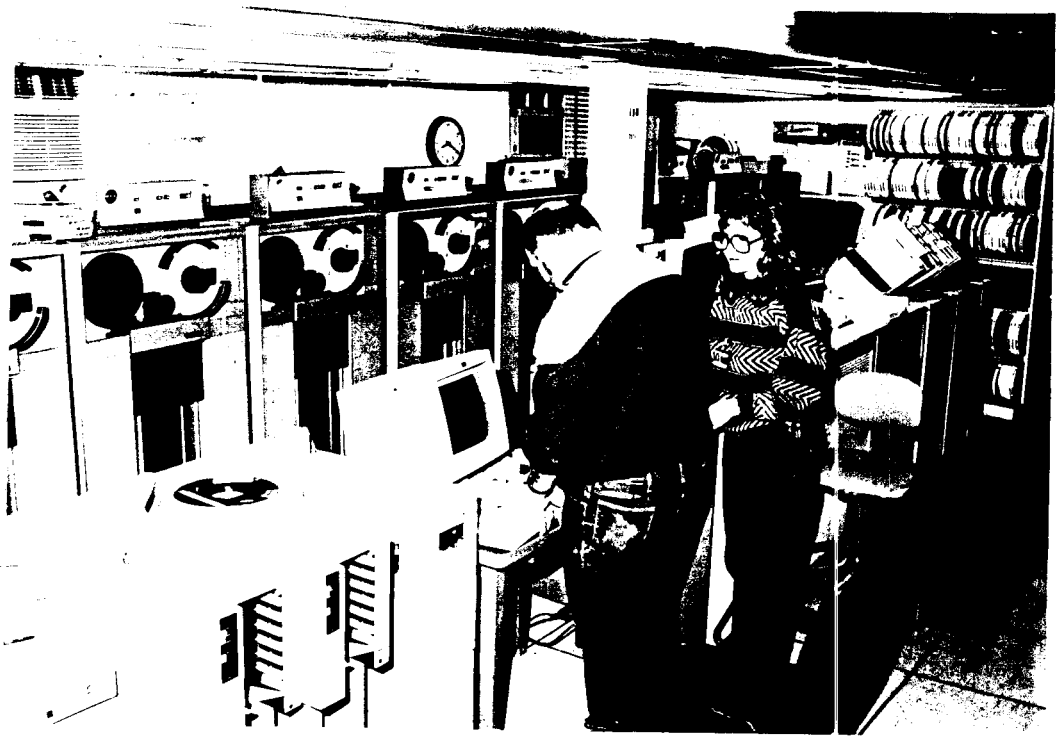
8. Indicate if this facility/equipment would be extremely difficult or impossible to replicate or relocate at another site and the impact to the Department of the Navy if this facility/equipment were lost. Consider existing Government-wide and commercial capabilities as the replication and impact statements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

The equipment could be relocated to another site.
If the equipment alone were lost, it could be replaced. However, if the customized software and data were lost, it would have a significant impact upon the Navy's ability to manage its manpower, personnel, and training (MPT) systems. The facility contains historical data records that are not duplicated elsewhere and uses custom-written software to enable Center research personnel to manipulate and analyze large, unique databases for Navy MPT program managers.

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

The equipment was shipped by moving van as the various items were purchased during the period from June 1983 to the present.

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.



General Mission Support--Personnel and Training. Human resources research and development for the areas of manpower, personnel, education, and training and its support and service functions for human factors effort in system design, development, and acquisition. Included are those systems related to submarine, aircraft, surface ship, and weapons training, as well as human resources research.

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 3,440.9 central processing unit (CPU) hours per year.

12. Provide the projected utilization data out to FY1997.

Utilization is expected to average 4,200 CPU hours per year through FY1997.

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

Hardware--2 people Software--2 people

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

All maintenance is done by contract. There is actually less than 1 person who performs the maintenance. Only comes when equipment breaks down.

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

TAB C

RANGE RESOURCES

RANGE CAPABILITY FORM

RANGE RESOURCES
RANGE CAPABILITY FORM

Technical Center Site	NOT APPLICABLE
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.

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print) _____ Signature _____

Title _____ Date _____

Activity _____

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type of print) _____ Signature _____

Title _____ Date _____

Activity _____

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

MAJOR CLAIMANT LEVEL

R. J. ZLATOPER, VADM
NAME (Please type or print)

Signature

12 MAY 1994
Date

CHIEF OF NAVAL PERSONNEL
Title

BUREAU OF NAVAL PERSONNEL
Activity

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

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

J.B. Greene, Jr
NAME (Please type of print)

Signature

Acting
Title

20 MAY 1994
Date

BRAC-95 CERTIFICATION

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

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

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

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

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

ACTIVITY COMMANDER

CAPT J. D. McAFEE, USN
NAME (Please type of print)

Commanding Officer
Title

NAVPERSRANDCEN SAN DIEGO, CA
Activity

J D McAfee
Signature

3 MAY 94
Date

pg 12, 13, 15, 18, 20, 23, 24

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print

Signature

Title

Date

Activity

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type of print

Signature

Title

Date

Activity

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

MAJOR CLAIMANT LEVEL

FRANK L. BOWMAN, VADM
NAME (Please type or print

Signature

CHIEF OF NAVAL PERSONNEL
Title

9/20/94
Date

BUREAU OF NAVAL PERSONNEL
Activity

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

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

W. A. EARNER
NAME (Please type of print

Signature

Title

9/23/94
Date

BRAC-95 CERTIFICATION

Reference: SECNAV NOTE 11000 dtd 8 Dec 93

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

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

ACTIVITY COMMANDER

CAPT J. D. McAFEE
NAME (Please type of print)

J D McAfee
Signature

Commanding Officer
Title

2 September 94
Date

NAVPERSRANDCEN
Activity