DCN 1423

N0534A

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	*Pacific Missile Range Facility, Hawaiian Area, Barking Sands, Kekaha, Hawaii*
Acronym(s) used in correspondence	*PMRF HawArea, PACMISRANFAC HAWAREA, PMRF, PACMISRANFAC*
Commonly accepted short title(s)	*PMRF Barking Sands*

- Complete Mailing Address
  Commanding Officer
  Pacific Missile Range Facility
  Hawaiian Area, Barking Sands
  P. O. Box 128
  Kekaha, Hi 96752-0128

- PLAD
  PACMISRANFAC HAWAREA BARKING SANDS HI

- PRIMARY UIC: N0534A_____ (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): N/A_____ PURPOSE: _____
  N/A_____ _____
  N/A_____ _____

2. PLANT ACCOUNT HOLDER:

- Yes X____ No _____ (check one)

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

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

- Yes X No _____ (check one)

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

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

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

- Yes _____ No X (check one)

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.

Change CPF 9402

Name	Location	UIC
Mauna Kapu	Oahu, Hawaii (BA)	N0534A
Port Allen	Kauai, Hawaii (CA)	N0534A

Kamokala Ridge	Kauai, Hawaii (EA)	N0534A
Makaha Ridge	Kauai, Hawaii (FA)	N0534A
NASA Kokee	Kauai, Hawaii (IA)	N0534A
Niihau Island	Niihau, Hawaii (KA)	N0534A
Mt. Kaala	Oahu, Hawaii (LA)	N0534A
Milolii Ridge	Kauai, Hawaii (MA)	N0534A
Lehua Rock	Niihau, Hawaii (GA)	N0534A
AF Facilities Hawaii	Lihue, Kauai (HA)	N0534A
Mt Kaala Oahu	Mt Kaala, Oahu (LA)	N0534A
Niu Ridge	Kauai, Hawaii (JA)	N0534A

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

Name	UIC	Location	Host name	Host UIC
PACMISRANFAC DET, BARBERSPT	31519	BARBERS POINT, HAWAII	NAVAL AIR STATION, BARBERS PT, HI	00334

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.

Yes. With the projected closure of NAS, Barbers Point, PMRF will have to assess new agreements for the following:

1. Intermediate level maintenance and supply support for assigned aircraft.

2. Logistic flight support for quality of life requirements, e.g. exchange and commissary supplies, military uniforms, award medals and ribbons, etc.

3. Aircraft financial accounting support.

4. EW Beacon maintenance facility and logistics.

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

Current Missions

- PMRF provides major range services for training, tactics development, and evaluation of air, surface and subsurface weapon systems by Pacific Fleet Users, other DOD agencies and Foreign Military forces.

- PMRF maintains a 1,000 square mile Underwater Tracking Range to depths between 600 feet and 15,000 feet and is instrumented to provide tracking data on submarines, targets, and weapons.

- PMRF Maintains more than 42,000 square miles of surface and air space to unlimited altitude to provide air and surface position and performance measurement in the presence of realistic threat scenarios..

- PMRF maintains tracking facilities which include precision radar, telemetry, command control at three different altitudes to provide surveillance data and operational data for range users to evaluate performance.

- PMRF maintains an extensive Electronic Warfare (EW) suite located on Oahu, Kauai, Niihau, range aircraft, and surface boats to provide EW services covering Oahu, the channel from Oahu to Kauai, and all the PMRF range area off Kauai.

- PMRF provides major range services to Research, Development, Test & Evaluation (RDT&E) customers from both military labs and civilian companies.

Projected Missions for FY 2001

- PMRF has unlimited growth potential to handle future state-of-the-art Over-the-Horizon (OTH) weapon systems due to lack of encroachment by commercial activities including airways, shipping lanes, fishing or mining interests and RF spectrum users.

- Provide deep water and shallow water operating area for minefield exercises for submarine and surface units.

- Provide Periscope Detection training for the Fleet and RDT&E activities (both military and civilian).

- Provide satellite channels to control Fleet operations outside the present warning areas of PMRF.

- Provide video system and data transmission system to send real-time data and video to customers throughout the world. (Inter-connect with range users - Fleet and Test and Evaluation (T&E) customers).

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

- PMRF is the largest underwater tracking range in the World, and the only weapons range in the world where multi-participant, subsurface, surface, air and electronic warfare scenarios can be executed simultaneously.

- This unique capability provides the fleet with realistic open ocean freeplay training scenarios, and provides facilities for research, development and testing of weapon systems.

- PMRF's extensive metric data instrumentation (radar and telemetry) covers subsurface through space, providing data on multiple vehicle scenarios from the depths of the ocean to the far reaches of space.

- PMRF supports approximately 5,000 hours of operations annually, completing nearly 3,000 scheduled events. Navy test and evaluation events use over 17% of the support hours; other T&E (DOD users account for 6%) and Navy training users account for 73% of scheduled hours; with the balance available for local or other usage.

Projected Unique Missions for FY 2001

- Provide OTH targeting, command control for Fleet units operating anywhere in the Pacific.

- Provide video/data conferencing to any Range User (Fleet unit in the Pacific or T&E customer, including Foreign military in America and around the rim of the Pacific).

- Provide AEGIS CSSQT testing.

- Provide support to multiple submarine operations (capable of tracking 12 underwater objects simultaneously) for Commander, Submarine Force, U. S. Pacific Fleet (COMSUBPAC).

- Provide RDT&E support for the Mountaintop OTH radar test program.

- Provide RDT&E support for the Sea Based Theater Missile Defense Testing in the littoral threat environment extending well beyond the year 2000.

- Provide RDT&E support for the Strategic Space Defense Commands Ballistic Missile Target Program.

- RDT&E support for a variety of ICBM and satellite programs for the Ballistic Missile Defense organization.

9. IMMEDIATE SUPERIOR IN COMMAND (ISIC): Identify your ISIC. If your ISIC is not your funding source, please identify that source in addition to the operational ISIC.

- Operational name UIC

COMPATWINGSPAC BARBERS POINT HI 05917

- Funding Source UIC

COMNAVAIRPAC SAN DIEGO CA 57025

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 (0534A)	22	96	138
• Tenants (total)	N/A	1	22

Change CNAP 9402

Authorized Positions as of 30 September 1994

	Officers	Enlisted	Civ (App)	Non DOD
• Reporting Command (0534A)	26	89	140	
• Tenants (total)	N/A	5	12	10

Change CPF 9402

• 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			
Robert D. Mullins, CAPT/USN	(808)335-4251	(808)335-4660	(808)337-9525
• Duty Officer	(808)335-4254	(808)335-4660	[N/A]
• XO			
Jon E. Thiele, CDR/USN	(808)335-4252	(808)335-4660	(808)337-9967
• Technical Director			
Richard G. Turlington, GM-15	(808)335-4253	(808)335-4660	(808)332-7165

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
15TH ABW/HIANG	N/A	N/A	N/A	N/A
DOE/SANDIA KAUAI TEST SITE	N/A	N/A	N/A	N/A
NBS RADIO STATION	N/A	N/A	N/A	*4
HIANG 298TH	N/A	N/A	1	N/A
PERSONNEL SUPPORT ACTIVITY (PSA)	N68604	N/A	2	N/A
NAVAL MEDICAL CLINIC, PEARL HARBOR	N68098	N/A	1	N/A
OICC NAVFAC PACDIV, PEARL HARBOR	N62742	N/A	N/A	2
U. S. DEPT OF AGRICULTURE	N/A	N/A	N/A	*6
NAVAL UNDERSEA WARFARE CENTER (NUWC)	N00253	N/A	N/A	10
NAVY EXCHANGE	N30428	N/A	1	N/A
UNIVERSITY OF COLORADO (NASA)	N/A	N/A	N/A	N/A
NAVAL REGIONAL DENTAL CLINIC	N62313	N/A	N/A	N/A

*Non DOD Civilians

● Tenants residing on main complex (homeported units.)

Tenant Command Name	UIC	Officer	Enlisted	Civilian
N/A				

●● Tenants residing in Special Areas (Special Areas are defined as real estate owned by host command not contiguous with main complex; e.g. outlying fields).

Tenant Command Name	UIC	Location	Officer	Enlisted	Civilian
KOKEE PARK GEOPHYSICAL OBSERVATORY (NASA)	N/A	KOKEE, KAUAI, HAWAII	N/A	N/A	N/A
NAVAL UNDERSEA WARFARE CENTER (NUWC)	00253	PORT ALLEN, KAUAI, HAWAII	N/A	N/A	N/A
FACSFAC	R09520	MT KAALA, MAUNA KAPU, OAHU, HAWAII KOKEE, KAUAI, HAWAII	N/A	N/A	N/A
NAVAL INVESTIGATIVE SERVICE (NIS)	63435	MT KAALA, MAUNA KAPU, OAHU, HAWAII	N/A	N/A	N/A
INTERNAL REVENUE SERVICE (IRS)	N/A	MT KAALA, OAHU, HAWAII	N/A	N/A	N/A
FEDERAL BUREAU OF INVESTIGATION (FBI)	N/A	MT KAALA, OAHU, HAWAII	N/A	N/A	N/A

● Tenants (Other than those identified previously)

Tenant Command Name	UIC	Location	Officer	Enlisted	Civilian
SRS TECHNOLOGIES		KAUAI, HAWAII	N/A	N/A	N/A
VITRO LABORATORIES		KAUAI, HAWAII	N/A	N/A	N/A
ALLIED-SIGNAL AEROSPACE CO, GST		KAUAI, HAWAII	N/A	N/A	N/A

BEECH AEROSPACE SERVICES, INC. (BASI)		KAUAI, HAWAII	N/A	N/A	N/A

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

Activity name	Location	Support function (include mechanism such as ISSA, MOU, etc.)
ITT FEDERAL SERVICES	*BARKING SANDS, KAUAI, HAWAII*	*O&M Range Operating Support (ROS) contract*
INTELCOM, INC.	*BARKING SANDS, KAUAI, HAWAII*	*O&M Base Operating Support (BOS) contract*
GSA	*BARKING SANDS, KAUAI, HAWAII*	*O&M Telecommunications Support contract*

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.)

N0534A

INSTALLATION DATA

GENERAL INFORMATION

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

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

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

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

BRAC-95 CERTIFICATION
Data Call Number 1

Activity: **PMRF BARKING SANDS**

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

MAJOR CLAIMANT LEVEL

J. R. FITZGERALD
NAME (Please type or print)

Signature

Commander in Chief
Title

2/15/94
Date

U. S. Pacific Fleet
Activity (Acting)

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

22 FEB 1994

Title

Date

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

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

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

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

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

ACTIVITY COMMANDER

R. D. MULLINS
NAME (Please type or print)

Signature

COMMANDING OFFICER
Title

24 Feb 94
Date

PACIFIC MISSILE RANGE FACILITY
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)

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

Signature

FEB 14 1994
Date

COMMANDER
Title

NAVAL AIR FORCE, U.S. PACIFIC FLEET
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

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.

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

NAME (Please type or print)

Signature

Title

Date

Document Separator

DATA CALL 65
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA
Pacific Missile Range Facility, Barking Sands UIC 0534A

Activity Identification: Please complete the following table, identifying the activity for which this response is being submitted.

Activity Name:	PACIFIC MISSILE RANGE FACILITY, BARKING SANDS
UIC:	N0534A
Major Claimant:	CINCPACFLT

General Instructions/Background:

Information requested in this data call is required for use by the Base Structure Evaluation Committee (BSEC), in concert with information from other data calls, to analyze both the impact that potential closure or realignment actions would have on a local community and the impact that relocations of personnel would have on communities surrounding receiving activities. In addition to Cost of Base Realignment Actions (COBRA) analyses which incorporate standard Department of the Navy (DON) average cost factors, the BSEC will also be conducting more sophisticated economic and community infrastructure analyses requiring more precise, activity-specific data. For example, activity-specific salary rates are required to reflect differences in salary costs for activities with large concentrations of scientists and engineers and to address geographic differences in wage grade salary rates.
Questions relating to "Community Infrastructure" are required to assist the BSEC in evaluating the ability of a community to absorb additional employees and functions as the result of relocation from a closing or realigning DON activity.

Due to the varied nature of potential sources which could be used to respond to the questions contained in this data call, a block appears after each question, requesting the identification of the source of data used to respond to the question. To complete this block, identify the source of the data provided, including the appropriate references for source documents, names and organizational titles of individuals providing information, etc. Completion of this "Source of Data" block is critical since some of the information requested may be available from a non-DoD source such as a published document from the local chamber of commerce, school board, etc. Certification of data obtained from a non-DoD source is then limited to certifying that the information contained in the data call response is an accurate and complete representation of the information obtained from the source. Records must be retained by the certifying official to clearly document the source of any non-DoD information submitted for this data call.

General Instructions/Background (Continued):

The following notes are provided to further define terms and methodologies used in this data call. Please ensure that responses consistently follow this guidance:

Note 1: Throughout this data call, the term **"activity"** is used to refer to the DON installation that is the addressee for the data call.

Note 2: Periodically throughout this data call, questions will include the statement that the response should refer to the **"area defined in response to question 1.b., (page 3)"**. Recognizing that in some large metropolitan areas employee residences may be scattered among many counties or states, **the scope of the "area defined" may be limited to the sum of:**

- **those counties that contain government (DoD) housing units (as identified in 1.b.2)), and,**
- **those counties closest to the activity which, in the aggregate, include the residences of 80% or more of the activity's employees.**

Note 3: Responses to questions referring to **"civilians"** in this data call should reflect **federal civil service appropriated fund employees.**

1. Workforce Data

a. Average Federal Civilian Salary Rate. Provide the projected FY 1996 average gross annual appropriated fund **civil service** salary rate for the activity identified as the addressee in this data call. This rate should include all cash payments to employees, and exclude non-cash personnel benefits such as employer retirement contributions, payments to former employees, etc.

CNAP CHG 9407

Average Appropriated Fund Civilian Salary Rate:	$42,000

Source of Data (1.a. Salary Rate): FY 1995 Apportionment 1996/1997 Budget Exhibit CP-1

b. Location of Residence. Complete the following table to identify where employees live. Data should reflect current workforce.

1) Residency Table. Identify residency data, by county, for both military and civilian (civil service) employees working at the installation (including, for example, operational units that are homeported or stationed at the installation). For each county listed, also provide the estimated average distance from the activity, in miles, of employee residences and the estimated average length of time to commute one-way to work. For the purposes of displaying data in the table, any county(s) in which 1% or fewer of the activity's employees reside may be consolidated as a single line entry in the table, titled "Other".

County of Residence	State	No. of Employees Residing in County		Percentage of Total Employees	Average Distance From Base (Miles)	Average Duration of Commute (Minutes)
		Military	Civilian			
West Side - County of Kauai	Hi	118	136	93.8%	14.25	25
All others - County of Kauai	Hi	0	9	6.2%	34.33	57

= 100%

As discussed in Note 2 on Page 2, subsequent questions in the data call refer to the "area defined in response to question 1.b., (page 3)". In responding to these questions, the scope of the "area defined" may be limited to the sum of: a) those counties that contain government (DoD) housing units (as identified below), and, b) those counties closest to the activity which, in the aggregate, include the residences of 80% or more of the activity's employees.

Due to the unique makeup of the Island of Kauai, identification of the area definition was slightly modified to described more accurately the area as defined above. For the identification of the local area and the inclusion of residences of 80% or more of the activity, the "local area" is defined as the Westside of the Island of Kauai - County of Kauai. The region is defined as the County of Kauai. The island of Kauai is one County and is made up of small distinct townships and the westside is more rural and agriculture and the eastside/southshore/northshore is more urban and resort.

2) Location of Government (DoD) Housing. If some employees of the base live in government housing, identify the county(s) where government housing is located:

On Base PMRF, Barking Sands, County of Kauai, Hawaii.

Source of Data (1.b. 1) & 2) Residence Data): Leland Tottori, PMRF Assoc. Public Works Officer

c. Nearest Metropolitan Area(s). Identify all major metropolitan area(s) (i.e., population concentrations of 100,000 or more people) which are within 50 miles of the installation. If no major metropolitan area is within 50 miles of the base, then identify the nearest major metropolitan area(s) (100,000 or more people) and its distance(s) from the base.

There are no metropolitan areas within 50 miles of the installation. The installation is located on a small rural island. The nearest major metropolitan area is Honolulu on the Island of Oahu and is approximately 125 miles from PMRF Barking Sands.

City	County	Distance from base (miles)
N/A		

Source of Data (1.c. Metro Areas): N/A

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

Age Category	Number of Employees	Percentage of Employees
16 - 19 Years	03	2%
20 - 24 Years	04	3%
25 - 34 Years	25	17%
35 - 44 Years	41	28%
45 - 54 Years	40	27%
55 - 64 Years	33	22%
65 or Older	01	1%
TOTAL	147	100 %

Source of Data (1.d.) Age Data): Retirement Eligibility Listing & Form 50's

e. Education Level of Civilian Workforce

1) Education Level Table. Complete the following table, identifying the education level of the activity's **civil service** workforce.

Last School Year Completed	Number of Employees	Percentage of Employees
8th Grade or less		
9th through 11th Grade	2	1.4%
12th Grade or High School Equivalency	44	30.0%
1-3 Years of College	48	32.5%
4 Years of College (Bachelors Degree)	36	24.5%
5 or More Years of College (Graduate Work)	17	11.6%
TOTAL	147	100 %

2) Degrees Achieved. Complete the following table for the activity's **civil service** workforce. Identify the number of employees with each of the following degrees, etc. To avoid double counting, only identify the highest degree obtained by a worker (e.g., if an employee has both a Master's Degree and a Doctorate, only include the employee under the category "Doctorate").

Degree	Number of Civilian Employees
Terminal Occupation Program - Certificate of Completion, Diploma or Equivalent (for areas such as technicians, craftsmen, artisans, skilled operators, etc.)	15
Associate Degree	21
Bachelor Degree	33
Masters Degree	14
Doctorate	1

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

f. Civilian Employment By Industry. Complete the following table to identify by "industry" the type of work performed by **civil service** employees at the activity. The intent of this table is to attempt to stratify the activity civilian workforce using the same categories of industries used to identify private sector employment. Employees should be categorized based on their primary duties. Additional information on categorization of private sector employment by industry can be found in the Office of Management and Budget Standard Industrial Classification (SIC) Manual. However, you do not need to obtain a copy of this publication to provide the data requested in this table.

Note the following specific guidance regarding the "Industry Type" codes in the first column of the table: Even though categories listed may not perfectly match the type of work performed by civilian employees, please attempt to assign each civilian employee to one of the "Industry Types" identified in the table. However, only use the Category 6, "Public Administration" sub-categories when none of the other categories apply. Retain supporting data used to construct this table at the activity-level, in case questions arise or additional information is required at some future time. **Leave shaded areas blank.**

Industry	SIC Codes	No. of Civilians	% of Civilians
1. Agriculture, Forestry & Fishing	01-09	0	0
2. Construction (includes facility maintenance and repair)	15-17	2	1.4%
3. Manufacturing (includes Intermediate and Depot level maintenance)	20-39		
3a. Fabricated Metal Products (include ordnance, ammo, etc.)	34	0	0
3b. Aircraft (includes engines and missiles)	3721 et al	0	0
3c. Ships	3731	0	0
3d. Other Transportation (includes ground vehicles)	various	0	0
3e. Other Manufacturing not included in 3a. through 3d.	various	0	0
Sub-Total 3a. through 3e.	20-39	0	0
4. Transportation/Communications/Utilities	40-49		
4a. Railroad Transportation	40	0	0

Industry	SIC Codes	No. of Civilians	% of Civilians
4b. Motor Freight Transportation & Warehousing (includes supply services)	42	0	0
4c. Water Transportation (includes organizational level maintenance)	44	0	0
4d. Air Transportation (includes organizational level maintenance)	45	2	1.4%
4e. Other Transportation Services (includes organizational level maintenance)	47	0	0
4f. Communications	48	6	4.1%
4g. Utilities	49	0	0
Sub-Total 4a. through 4g.	40-49	8	5.5%
5. Services	70-89		
5a. Lodging Services	70	0	0
5b. Personal Services (includes laundry and funeral services)	72	0	0
5c. Business Services (includes mail, security guards, pest control, photography, janitorial and ADP services)	73	5	3.4%
5d. Automotive Repair and Services	75	2	1.4%
5e. Other Misc. Repair Services	76	0	0
5f. Motion Pictures	78	1	0.7%
5g. Amusement and Recreation Services	79	14	9.6%
5h. Health Services	80	0	0
5i. Legal Services	81	0	0
5j. Educational Services	82	5	3.4%
5k. Social Services	83	0	0

Industry	SIC Codes	No. of Civilians	% of Civilians
5l. Museums	84	0	0
5m. Engineering, Accounting, Research & Related Services (includes RDT&E, ISE, etc.)	87	59	40.2%
5n. Other Misc. Services	89	0	0
Sub-Total 5a. through 5n.:	70-89	86	58.5%
6. Public Administration	91-97		
6a. Executive and General Government, Except Finance	91	29	19.8%
6b. Justice, Public Order & Safety (includes police, firefighting and emergency management)	92	8	5.5%
6c. Public Finance	93	9	6.2%
6d. Environmental Quality and Housing Programs	95	5	3.4%
Sub-Total 6a. through 6d.		51	34.7%
TOTAL		147	100 %

Source of Data (1.f.) Classification By Industry Data): PMRF Departmental Assessments.

g. Civilian Employment by Occupation. Complete the following table to identify the types of "occupations" performed by **civil service** employees at the activity. Employees should be categorized based on their primary duties. Additional information on categorization of employment by occupation can be found in the Department of Labor Occupational Outlook Handbook. However, you do not need to obtain a copy of this publication to provide the data requested in this table.

Note the following specific guidance regarding the "Occupation Type" codes in the first column of the table: Even though categories listed may not perfectly match the type of work performed by civilian employees, please attempt to assign each civilian employee to one of the "Occupation Types" identified in the table. Refer to the descriptions immediately

following this table for more information on the various occupational categories. Retain supporting data used to construct this table at the activity-level, in case questions arise or additional information is required at some future time. **Leave shaded areas blank.**

Occupation	Number of Civilian Employees	Percent of Civilian Employees
1. Executive, Administrative and Management	10	6.8%
2. Professional Specialty		
2a. Engineers	20	13.6%
2b. Architects and Surveyors	0	0
2c. Computer, Mathematical & Operations Research	15	10.2%
2d. Life Scientists	0	0
2e. Physical Scientists	1	0.7%
2f. Lawyers and Judges	0	0
2g. Social Scientists & Urban Planners	0	0
2h. Social & Recreation Workers	8	5.5%
2i. Religious Workers	0	0
2j. Teachers, Librarians & Counselors	3	2.1%
2k. Health Diagnosing Practitioners (Doctors)	0	0
2l. Health Assessment & Treating(Nurses, Therapists, Pharmacists, Nutritionists, etc.)	0	0
2m. Communications	4	2.8%
2n. Visual Arts	0	0
Sub-Total 2a. through 2n.:	51	34.7%
3. Technicians and Related Support		
3a. Health Technologists and Technicians	0	0
3b. Other Technologists	44	30.0%
Sub-Total 3a. and 3b.:	44	30.0%

Occupation	Number of Civilian Employees	Percent of Civilian Employees
4. Administrative Support & Clerical	26	17.7%
5. Services		
5a. Protective Services (includes guards, firefighters, police)	3	2.1%
5b. Food Preparation & Service	0	0
5c. Dental/Medical Assistants/Aides	0	0
5d. Personal Service & Building & Grounds Services (includes janitorial, grounds maintenance, child care workers)	9	6.2%
Sub-Total 5a. through 5d.	12	8.2%
6. Agricultural, Forestry & Fishing	0	0
7. Mechanics, Installers and Repairers	2	1.4%
8. Construction Trades	1	0.7%
9. Production Occupations	0	0
10. Transportation & Material Moving	0	0
11. Handlers, Equipment Cleaners, Helpers and Laborers (not included elsewhere)	1	0.7%
TOTAL	147	100 %

Source of Data (1.g.) Classification By Occupation Data): PMRF Departmental Assessments.

Description of Occupational Categories used in Table 1.g. The following list identifies public and private sector occupations included in each of the major occupational categories used in the table. Refer to these examples as a guide in determining where to allocate **appropriated fund civil service jobs** at the activity.

1. **Executive, Administrative and Management.** Accountants and auditors; administrative services managers; budget analysts; construction and building inspectors; construction contractors and managers; cost estimators; education administrators; employment interviewers; engineering, science and data processing managers; financial managers; general managers and top executives; chief executives and legislators; health services managers; hotel

managers and assistants; industrial production managers; inspectors and compliance officers, except construction; management analysts and consultants; marketing, advertising and public relations managers; personnel, training and labor relations specialists and managers; property and real estate managers; purchasing agents and managers; restaurant and food service managers; underwriters; wholesale and retail buyers and merchandise managers.

2. **Professional Specialty.** Use sub-headings provided.
3. **Technicians and Related Support.** Health Technologists and Technicians sub-category - self-explanatory. Other Technologists sub-category includes aircraft pilots; air traffic controllers; broadcast technicians; computer programmers; drafters; engineering technicians; library technicians; paralegals; science technicians; numerical control tool programmers.
4. **Administrative Support & Clerical.** Adjusters, investigators and collectors; bank tellers; clerical supervisors and managers; computer and peripheral equipment operators; credit clerks and authorizers; general office clerks; information clerks; mail clerks and messengers; material recording, scheduling, dispatching and distributing; postal clerks and mail carriers; records clerks; secretaries; stenographers and court reporters; teacher aides; telephone, telegraph and teletype operators; typists, word processors and data entry keyers.
5. **Services.** Use sub-headings provided.
6. **Agricultural, Forestry & Fishing.** Self explanatory.
7. **Mechanics, Installers and Repairers.**Aircraft mechanics and engine specialists; automotive body repairers; automotive mechanics; diesel mechanics; electronic equipment repairers; elevator installers and repairers; farm equipment mechanics; general maintenance mechanics; heating, air conditioning and refrigeration technicians; home appliance and power tool repairers, industrial machinery repairers; line installers and cable splicers; millwrights; mobile heavy equipment mechanics; motorcycle, boat and small engine mechanics; musical instrument repairers and tuners; vending machine servicers and repairers.
8. **Construction Trades.** Bricklayers and stonemasons; carpenters; carpet installers; concrete masons and terrazzo workers; drywall workers and lathers; electricians; glaziers; highway maintenance; insulation workers; painters and paperhangers; plasterers; plumbers and pipefitters; roofers; sheet metal workers; structural and reinforcing ironworkers; tilesetters.
9. **Production Occupations.** Assemblers; food processing occupations; inspectors, testers and graders; metalworking and plastics-working occupations; plant and systems operators, printing occupations; textile, apparel and furnishings occupations; woodworking occupations; miscellaneous production operations.
10. **Transportation & Material Moving.** Busdrivers; material moving equipment operators; rail transportation occupations; truckdrivers; water transportation occupations.
11. **Handlers, Equipment Cleaners, Helpers and Laborers** (not included elsewhere). Entry level jobs not requiring significant training.

h. Employment of Military Spouses. Complete the following table to provide estimated information concerning **military spouses** who are also employed in the area defined in response to question 1.b., above. **Do not fill in shaded area.**

1. Percentage of Military Employees Who Are Married:	57.7%
2. Percentage of Military Spouses Who Work Outside of the Home:	42.7%
3. Break out of Spouses' Location of Employment (Total of rows 3a. through 3d. should equal 100% and reflect the number of spouses used in the calculation of the "Percentage of Spouses Who Work Outside of the Home".	
3a. Employed "On-Base" - Appropriated Fund:	10.4%
3b. Employed "On-Base" - Non-Appropriated Fund:	06.9%
3c. Employed "Off-Base" - Federal Employment:	06.9%
3d. Employed "Off-Base" - Other Than Federal Employment	75.9%

Source of Data (1.h.) Spouse Employment Data): PMRF PSD Office - PNC Morris and personnel interviews by departments.

2. Infrastructure Data. For each element of community infrastructure identified in the two tables below, rate the community's ability to accommodate the relocation of additional functions and personnel to your activity. Please complete each of the three columns listed in the table, reflecting the impact of various levels of increase (20%, 50% and 100%) in the number of personnel working at the activity (and their associated families). In ranking each category, use one of the following three ratings:

A - Growth can be accommodated with little or no adverse impact to existing community infrastructure and at little or no additional expense.

B - Growth can be accommodated, but will require some investment to improve and/or expand existing community infrastructure.

C - Growth either cannot be accommodated due to physical/environmental limitations or would require substantial investment in community infrastructure improvements.

Table 2.a., "Local Communities": This first table refers to the local community (i.e., the community in which the base is located) and its ability to meet the increased requirements of the installation.

We have identified the westside of the island of Kauai as our "local community".

Table 2.b., "Economic Region": This second table asks for an assessment of the infrastructure of the economic region (those counties identified in response to question 1.b., (page 3) - taken in the aggregate) and its ability to meet the needs of additional employees and their families moving into the area.

We have identified the whole island of Kauai as our "economic region".

For both tables, annotate with an asterisk (*) any categories which are wholly supported on-base, i.e., are not provided by the local community. These categories should also receive an A-B-C rating. Answers for these "wholly supported on-base" categories should refer to base infrastructure rather than community infrastructure.

a. Table A: Ability of the local community to meet the expanded needs of the base.

1) Using the **A - B - C** rating system described above, complete the table below.

Category	20% Increase	50% Increase	100% Increase
Off-Base Housing	A	A	B
Schools - Public	A	B	B
Schools - Private	A	A	B
Public Transportation - Roadways	A	A	B
Public Transportation - Buses/Subways	A	A	A
Public Transportation - Rail	N/A	N/A	N/A
Fire Protection	A	A	B
Police	A	A	B
Health Care Facilities	A	A	B

Category	20% Increase	50% Increase	100% Increase
Utilities:			
Water Supply	A	B	B
Water Distribution	A	B	B
Energy Supply	A	A	A
Energy Distribution	A	A	A
Wastewater Collection	A	A	B
Wastewater Treatment	A	A	B
Storm Water Collection	A	A	B
Solid Waste Collection and Disposal	A	A	B
Hazardous/Toxic Waste Disposal	A	A	B
Recreational Activities	A	A	B

Remember to mark with an asterisk any categories which are wholly supported on-base.

2) For each rating of "C" identified in the table on the preceding page, attach a brief narrative explanation of the types and magnitude of improvements required and/or the nature of any barriers that preclude expansion.

None.

Source of Data (2.a. 1) & 2) - Local Community Table): County of Kauai Planning Department, Keith Nitta.

b. Table B: Ability of the region described in the response to question 1.b. (page 3) (taken in the aggregate) to meet the needs of additional employees and their families relocating into the area.

1) Using the **A - B - C** rating system described above, complete the table below.

Category	20% Increase	50% Increase	100% Increase
Off-Base Housing	A	A	B
Schools - Public	A	A	B
Schools - Private	A	A	A
Public Transportation - Roadways	A	A	B
Public Transportation - Buses/Subways	A	A	A
Public Transportation - Rail	N/A	N/A	N/A
Fire Protection	A	A	B
Police	A	A	B
Health Care Facilities	A	A	B
Utilities:			
Water Supply	A	A	B
Water Distribution	A	A	B
Energy Supply	A	A	B
Energy Distribution	A	A	B
Wastewater Collection	A	A	A
Wastewater Treatment	A	A	A
Storm Water Collection	A	A	A
Solid Waste Collection and Disposal	A	A	B
Hazardous/Toxic Waste Disposal	A	A	A
Recreation Facilities	A	A	B

Remember to mark with an asterisk any categories which are wholly supported on-base.

2) For each rating of "C" identified in the table on the preceding page, attach a brief narrative explanation of the types and magnitude of improvements required and/or the nature of any barriers that preclude expansion.

None.

Source of Data (2.b. 1) & 2) - Regional Table): County of Kauai, Planning Department, Keith Nitta.

3. Public Facilities Data:

a. **Off-Base Housing Availability.** For the counties identified in the response to question 1.b. (page 3), in the aggregate, estimate the current average vacancy rate for community housing. Use current data or information identified on the latest family housing market analysis. For each of the categories listed (rental units and units for sale), combine single family homes, condominiums, townhouses, mobile homes, etc., into a single rate:

Rental Units: 10%*

Units for Sale: 1002**

Source of Data (3.a. Off-Base Housing): *Rental Realtor information. **Kauai Board of Realtors Multiple Listing Services.

b. **Education.**

1) Information is required on the current capacity and enrollment levels of school systems serving employees of the activity. Information should be keyed to the counties identified in the response to question 1.b. (page 3).

School District	County	Number of Schools			Enrollment		Pupil-to-Teacher Ratio		Does School District Serve Gov't Housing Units? *
		Elementary	Middle	High	Current	Max. Capacity	Current	Max. Ratio	
*Kauai School District - West Kauai	Kauai	4	1	1	2448	2,695	K-2 20:1 3-12 26:5:1**	K-2 20:1 3-12 26:5:1**	Yes

* Answer "Yes" in this column if the school district in question enrolls students who reside in government housing.

*As identified previously in 1.b.1), the majority of the employees reside on the westside of the island of Kauai and we have identified the local community as such.

**Note: Teacher-pupil ratio as delineated does not reflect off ratio positions or auxiliary positions such as: Counselors, Librarians, Special Education, Limited English Speaking (SLEP), Intensive Basic Skills, Primary Instruction Positions, CORE Positions, Teen Pregnancy, Gifted/Talented, Resource Teachers, Comprehensive School Alternative, Voc/Tech, etc., therefore, the teacher to pupil ratio is much higher than what is shown.

Source of Data (3.b.1) Education Table): State of Hawaii, Dept of Education.

2) Are there any on-base "Section 6" Schools? If so, identify number of schools and current enrollment.

No.

Source of Data (3.b.2) On-Base Schools): N/A

3) For the counties identified in the response to question 1.b. (page 3), in the aggregate, list the names of undergraduate and graduate colleges and universities which offer certificates, Associate, Bachelor or Graduate degrees :

Kauai Community College - University of Hawaii

Certificate of Completion: Electrical Installation & Maintenance Technology, Electronic Technology, Facilities Engineering Technology, Food Service, Food Service-Culinary Arts, Hotel Operations, Management, Nurses' Aide, Office Administration & Technology, Visitor Industry-Culinary Arts, Visitor Industry-Dining Room.
Certificate of Achievement: Accounting, Auto Body Repair & Painting, Automotive Mechanics Technology, Carpentry Technology, Early Childhood Education, Electrical Installation & Maintenance Technology, Electronic Technology, Management, Nursing (Practical), Office of Administration & Technology, Visitor Industry-Culinary Arts, Visitor Industry-dining Room, Visitor Industry-Hotel Operations, Welding Technology.
Associate of Science/Art: Accounting, Auto Body Repair & Painting, Automotive Mechanics Technology, Carpentry Technology, Early Childhood Education, electrical Installation & Maintenance Technology, Electronic Technology, Liberal Arts (General), Management, Nursing (Associate), Officer of Administration & Technology, Visitor Industry-Culinary Arts, Visitor Industry-Hospitality Services.

University of Hawaii, Manoa - Kauai Outreach Program

Program to enable students to obtain:
Bachelors and Masters Degree in Education
Bachelors Degree in Nursing
Bachelors Degree in Business
Professional/Diploma Certifications for students with a Baccalaureate.

West Oahu College

Using the facilities at Kauai Community College, West Oahu College offers to students holding an AA/AS degree, a 3-year accelerated program working towards a BA-Professional Studies in Business Administration.

Source of Data (3.b.3) Colleges): Kauai Community College, University of Hawaii - Kauai Outreach Program Coordinator - Helen Masaki and West Oahu College.

4) For the counties identified in the response to question 1.b. (page 3), in the aggregate, list the names and major curriculums of vocational/technical training schools:

Kauai Community College.

Source of Data (3.b.4) Vo-tech Training): Kauai Community College

c. **Transportation.**

1) Is the activity served by public transportation?

	Yes	No
Bus:	___	x
Rail:	___	x
Subway:	___	x
Ferry:	___	x

Source of Data (3.c.1) Transportation): Leland Tottori, PMRF Assoc. Public Works Officer

2) Identify the location of the nearest passenger railroad station (long distance rail service, not commuter service within a city) and the distance from the activity to the station.

None in State.

Source of Data (3.c.2) Transportation): Leland Tottori, PMRF Assoc. Public Works Officer.

3) Identify the name and location of the nearest commercial airport (with public carriers, e.g., USAIR, United, etc.) and the distance from the activity to the airport.

Lihue Airport 35 Miles from PMRF Barking Sands.

Source of Data (3.c.3) Transportation): Leland Tottori, PMRF Assoc. Public Works Officer

4) How many carriers are available at this airport?

Three Carriers.

Source of Data (3.c.4) Transportation): Leland Tottori, PMRF Assoc. Public Works Officer

5) What is the Interstate route number and distance, in miles, from the activity to the nearest Interstate highway?

N/A. There are no Interstate highways.

Source of Data (3.c.5) Transportation):

6) Access to Base:

a) Describe the quality and capacity of the road systems providing access to the base, specifically during peak periods. (Include both information on the area surrounding the base and information on access to the base, e.g., numbers of gates, congestion problems, etc.)

Quality and capacity adequate and con accept expansion. Single two lane rural highway. Three gates - no congestion.

b) Do access roads transit residential neighborhoods?

No.

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

No.

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

No.

Source of Data (3.c.6) Transportation): Leland Tottori, Assoc. Public Works Officer and James Nelson, PMRF Security Officer

d. **Fire Protection/Hazardous Materials Incidents.** Does the activity have an agreement with the local community for fire protection or hazardous materials incidents? Explain the nature of the agreement and identify the provider of the service.

Fire Protection - Mutual Support - Inter-Service Support Agreement (ISSA) with the County of Kauai.

Hazardous Materials incidents - No agreements with local community.

Source of Data (3.d. Fire/Hazmat): Leland Tottori, PMRF Assoc. Public Works Officer and James Nelson, PMRF Security Officer.

e. **Police Protection.**

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

Concurrent.

2) If there is more than one level of legislative jurisdiction for installation property, provide a brief narrative description of the areas covered by each level of legislative jurisdiction and whether there are separate agreements for local law enforcement protection.

Three remote sites under proprietary jurisdiction. Main Base under concurrent, ISSA/Mutual Support agreement with the County of Kauai Police Department.

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

Yes.

4) If agreements exist with more than one local law enforcement entity, provide a brief narrative description of whom the agreement is with and what services are covered.

N/A

5) If military law enforcement officials are routinely augmented by officials of other federal agencies (BLM, Forest Service, etc.), identify any written agreements covering such services and briefly describe the level of support received.

N/A

Source of Data (3.e. 1) - 5) - Police): State of Hawaii Admissions Act/James Nelson, PMRF Security Officer

f. **Utilities.**

1) Does the activity have an agreement with the local community for water, refuse disposal, power or any other utility requirements? Explain the nature of the agreement and identify the provider of the service.

Yes. Water: Utility Service Contract for Water Service with Kekaha Sugar Company, Utility Service Contract for Water Service with Dept. of Water, County of Kauai, Water Service Contract to Torpedo Recovery Boat Docking Facility with Alexander and Baldwin, Inc., Water Service Contract with Dept of Land and Natural Resources, State of Hawaii. Electricity: Electric Service Contract with Citizens Utilities Company, Kauai Electric Division, Electric Service Contract with Hawaiian Electric Company. Telephone: Basic Ordering Agreement for Communications Facilities and Services with GTE Hawaiian Telephone Company. Propane: Purchase order for continuous delivery/tank rental service of liquified petroleum gas - renewed annually. Refuse: BOS Contractor Contract for solid waste collection and disposal with Browning Ferris Industries (BFI), renewed annually. Cable TV: Franchise Agreement for Cable TV services with Kauai Cablevision.

2) Has the activity been subject to water rationing or interruption of delivery during the last five years? If so, identify time period during which rationing existed and the restrictions imposed. Were activity operations affected by these situations? If so, explain extent of impact.

No.

3) Has the activity been subject to any other significant disruptions in utility service, e.g., electrical "brown outs", "rolling black outs", etc., during the last five years? If so, identify time period(s) covered and extent/nature of restrictions/disruption. Were activity operations affected by these situations? If so, explain extent of impact.

Significant Disruptions in utility service - Sept 11 - Nov 4, 1992 caused by Hurricane Iniki. Commercial power not available during this period. Cable TV service not available for another month. Standby and portable generators were operated during outage period. Muse generators were flown in to support activity. Range operations were supported within two weeks of hurricane with Base power.

Source of Data (3.f. 1) - 3) Utilities): LT Wade Wilhelm, PMRF Public Works Officer

4. **Business Profile.** List the top ten employers in the geographic area defined by your response to question 1.b. (page 3), taken in the aggregate, (include your activity, if appropriate):

Employer	Product/Service	No. of Employees
1. Pacific Missile Range Facility	Government Service	795
2. Big Save, Inc.	Super Market/Food Marts/Resort Shops	474
3. Gay & Robinson	Agriculture/Manufacturing	300
4. Kekaha Sugar Company	Agriculture/Manufacturing	296
5. McBryde Sugar Company	Agriculture/Manufacturing	290
6. Kauai Electric Company	Utility	148
7.		
8.		
9.		
10.		

Source of Data (4. Business Profile): Due to the business sensitivity of the information, information was gathered by calling the local bank and businesses individually. The island is small and common knowledge was used to identify the major business. Due to the size of the local community only six businesses were listed. All others are very small, approx. five to 50 employees.

5. **Other Socio-Economic Impacts.** For each of the following areas, describe other recent (past 5 years), on-going or projected economic impacts (both positive and negative) on the geographic region defined by your response to question 1.b. (page 3), in the aggregate:

   a. Loss of Major Employers:

   Due to Hurricane Iniki, four major hotels have yet to re-open. These hotels employ approximately 350 to 1000 employees individually. Three are planning to re-open in CY95 with reduced employment. This loss of hotel rooms not only affected the local employment posture, but also hurt the local businesses that depend on the occupants of these hotels to spend their money on their products and services.

   b. Introduction of New Businesses/Technologies:

   Economic diversification efforts are ongoing and have been stepped up during the recovery period (post Iniki). The movie industry has continued to look at Kauai as a picturesque spot. The Kauai Economic Development Board (KEDB) received a $250,00 in federal funding to pursue a feasibility study for high tech applications.

   c. Natural Disasters:

   Hurricane Iniki on 11 Sep 1992.

   (Pos) As the only base on the island and one that was not drastically affected by the hurricane, PMRF was used as a staging area for Hurricane Iniki relief. PMRF Aircraft were used by the County of Kauai for damage assessment. Military and civilian (both government and contractor) personnel were used for roadway clearing and debris removal.

   PMRF is also on-call for assistance to the Bureau of Land and Natural Resources as a fire fighting unit.

   (Future) PMRF has been identified for a communications site for a relay antenna for the County of Kauai Civil Defense and public safety organization.

d. Overall Economic Trends:

Until the island's major economic support, tourism, is up and running at a level generally accepted to be an equilibrium, it cannot be said that the recovery period from Iniki is over. The big problem with this is that it will be a matter of years before this equilibrium is attained.

Source of Data (5. Other Socio/Econ): From various PMRF Command resource personnel (Sharon Yamagata, Program Analyst and Leland Tottori, Assoc. Public Works Officer) and the Keith Nitta, County of Kauai Planning Department. Glenn Sato, Kauai Economic Development Board Director - excerpt from the First Hawaiian Bank Economic Indicators.

6. Other. Identify any contributions of your activity to the local community not discussed elsewhere in this response.

PMRF participates in a myriad of community events and provides support whenever possible:

- The Annual Waimea Town Celebration. We participate as a partner in the local community. The various military organizations, i.e. CPO association and the First Class Association, set up booths; the command arranges for a ship visit from Pearl Harbor; color guard for the opening ceremony.

- Adopt-a-Highway. The command supports the State of Hawaii Adopt-a-Highway Program. The PMRF personnel scour a four-mile stretch of highway for rubbish.

- Federal Junior Fellowship Program. This is a program that offers outstanding needy high school seniors with a four-year scholarship to the college or university of their choice in the career fields of engineering and computer sciences.

- Kekaha Community Association. This is an organization in the adjacent town. The PMRF family contributed $2,300 to help with restoration projects.

- Affordable Housing Coalition of Kauai. PMRF volunteers donated their time and expertise toward constructing houses for Iniki victims who were left homeless.

- Kauai Visitor Industry Charity Walk. PMRF sends a representative to assist in coordination and provides input back to the command personnel and coordinate military support.

- Adopt-a-School. A large contingent of PMRF volunteer personnel work very closely with the Kekaha Elementary School. Provide tours, provide speakers, and coordination for school projects.

Source of Data (6. Other): Information from Community Relations letter from PMRF to CINCPACFLT.

BRAC-95 CERTIFICATION DATA CALL SIXTY FIVE

PMRF BARKING SANDS

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

MAJOR CLAIMANT LEVEL

R. J. KELLY
NAME (Please type or print)

Signature

Commander In Chief
Title

3 Aug 94
Date

U. S. Pacific Fleet
Activity

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

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

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

Signature

ACTING
Title

16 AUG 1994
Date

BRAC-95 CERTIFICATION
DATA CALL 65
ECONOMIC COMMUNITY INFRASTRUCTURE
PMRF Barking Sands UIC 0534A

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

NEXT ECHELON LEVEL

_VADM Robert J. Spane, USN___ | _____
NAME (Please type or print) | Signature

_Commander_____ | _19 July 1994_____
Title | Date

Commader Naval Air Force, U.S. Pacific Fleet
Activity

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

MAJOR CLAIMANT LEVEL

_____ | _____
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.

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

_____ | _____
NAME (Please type or print) | Signature

_____ | _____
Title | Date

DATA CALL 65
ECONOMIC AND COMMUNITY INFRASTRUCTURE DATA

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

THOMAS L. DANIELS, CAPT/USN — Thomas L Daniels
NAME (Please type or print) — Signature

COMMANDING OFFICER — 7/14/94
Title — Date

PACIFIC MISSILE RANGE FACILITY
Activity

Document Separator

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DATA CALL 63
FAMILY HOUSING DATA

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

Installation Name:	PACMISRANFAC
Unit Identification Code (UIC):	N0534A
Major Claimant:	CINCPACFLT

Percentage of Military Families Living On-Base:	72%
Number of Vacant Officer Housing Units:	0
Number of Vacant Enlisted Housing Units:	0
FY 1996 Family Housing Budget ($000):	$498
Total Number of Officer Housing Units:	16
Total Number of Enlisted Housing Units:	38

Note: All data should reflect figures as of the beginning of FY 1996. If major DON installations share a family housing complex, figures should reflect an estimate of the installation's prorated share of the family housing complex.

Enclosure (1)

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

MAJOR CLAIMANT LEVEL

J. E. BUFFINGTON, RADM, CEC, USN
NAME (Please type or print)

Signature

COMMANDER
Title

7/20/94
Date

NAVAL FACILITIES ENGINEERING COMMAND
Activity

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

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

W. A. EARNER

NAME (Please type or print)

Signature

Title

7/25/94
Date

DATA CALL 63
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 that the information contained herein is accurate and complete to the best of my knowledge and belief.

ACTIVITY COMMANDER

L. R. PYLANT, CAPT, CEC, USN
NAME

Signature

15 July 1994
Date

Acting Commander
Title

Pacific Division
Naval Facilities Engineering Command
Activity

Document Separator

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RESPONSES TO QUESTIONS 1 AND 2 PROVIDED BY COMNAVAIRPAC. RESPONSE TO QUESTION 3 PROVIDED BY INDIVIDUAL STATION DATA INCLUDES ALL ADJUSTMENTS THROUGH 08 JULY 1994

Activity Information:

Activity Name:	**PMRF BARKING SANDS, HI**
UIC:	**0534A**
Host Activity Name (if response is for a tenant activity):	
Host Activity UIC:	

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

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

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

currently shown). **Leave shaded areas of table blank.**

Table 1A - Base Operating Support Costs (Other Than DBOF Overhead)			
Activity Name: PMRF BARKING SANDS, HI		**UIC: 0534A**	
Category	**FY 1996 BOS Costs ($000)**		
	Non-Labor	**Labor**	**Total**
1. Real Property Maintenance Costs:			
1a. Maintenance and Repair	1036		1036
1b. Minor Construction	309		309
1c. Sub-total 1a. and 1b.	1345		1345
2. Other Base Operating Support Costs:			
2a. Utilities	5950		5950
2b. Transportation	1540		1540
2c. Environmental	26	236	262
2d. Facility Leases			
2e. Morale, Welfare & Recreation	321	543	864
2f. Bachelor Quarters	41	31	72
2g. Child Care Centers	55	200	255
2h. Family Service Centers			
2i. Administration		1275	1275
2j. Other (Specify) Retail Supply		126	126
Other Base Support		5744	5744
Physical Security		109	109
2k. Sub-total 2a. through 2j:	7933	8264	16197
3. Grand Total (sum of 1c. and 2k.):	9278	8264	17542

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)
OMN	12651
MPN	4891

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..

COMNAVAIRPAC ACTIVITIES HAVE NO DBOF COSTS

Table 1B - Base Operating Support Costs (DBOF Overhead)			
Activity Name: PMRF BARKING SANDS, HI		**UIC: 0534A**	
Category	**FY 1996 Net Cost From UC/FUND-4 ($000)**		
	Non-Labor	**Labor**	**Total**
1. Real Property Maintenance Costs:			
1a. Real Property Maintenance (>$15K)			
1b. Real Property Maintenance (<$15K)			
1c. Minor Construction (Expensed)			

1d. Minor Construction (Capital Budget)			
1c. Sub-total 1a. through 1d.			
2. Other Base Operating Support Costs:			
2a. Command Office			
2b. ADP Support			
2c. Equipment Maintenance			
2d. Civilian Personnel Services			
2e. Accounting/Finance			
2f. Utilities			
2g. Environmental Compliance			
2h. Police and Fire			
2i. Safety			
2j. Supply and Storage Operations			
2k. Major Range Test Facility Base Costs			
2l. Other (Specify)			
2m. Sub-total 2a. through 2l:			
3. Depreciation			
4. Grand Total (sum of 1c., 2m., and 3.) :			

2. <u>Services/Supplies Cost Data</u>. 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 <u>activity</u> 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: PMRF BARKING SANDS, HI	**UIC: 0534A**
Cost Category	**FY 1996 Projected Costs ($000)**
Travel:	140
Material and Supplies (including equipment):	0
Industrial Fund Purchases (other DBOF purchases):	414
Transportation:	0
Other Purchases (Contract support, etc.):	17757
Total:	18311

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: PACIFIC MISSILE RANGE FACILITY	**UIC:** N0534A
Contract Type	**FY 1996 Estimated Number of Workyears On-Base**
Construction:	0
Facilities Support:	286
Mission Support: **	221
Procurement:	4
Other:*	0
Total Workyears:	511

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

** Anticipate a 25% increase in contract workyears in the outyears due to new programs/projects and an increase in tempo of operations for current programs.

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)):

195 Range Operations Support Contractor Workyears and C12 Maintenance Contractor Support.

2) Estimated number of workyears which would be eliminated:

316 Base Operations Support Contractor Workyears, Communications Support Contractor Workyears, and miscellaneous Range Operations Contractor Workyears.

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

None.

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.)
46	Engineering Services, office equipment maintenance, refuse collection, freight services, construction services, Niihau Site services, technical services at the Mauna Kapu Site, and Boat Services at the Port Allen Site.

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

BRAC-95 CERTIFICATION DATA CALL SIXTY SIX

PMRF BARKING SANDS

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

MAJOR CLAIMANT LEVEL

R. J. KELLY
NAME (Please type or print)

Signature

Commander In Chief
Title

3 Aug 94
Date

U. S. Pacific Fleet
Activity

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

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

W. A. EARNER

NAME (Please type or print)

Signature

Title

8/30/94
Date

BRAC-95 CERTIFICATION
DATA CALL 66
INSTALATION RESOURCES
PMRF Barking Sands UIC 0534A

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

NEXT ECHELON LEVEL

_VADM Robert J. Spane, USN___
NAME (Please type or print)

_____
Signature

_Commander_____
Title

_19 July 1994_____
Date

Commader Naval Air Force, U.S. Pacific Fleet
Activity

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

MAJOR CLAIMANT LEVEL

_____
NAME (Please type or print)

_____
Signature

_____
Title

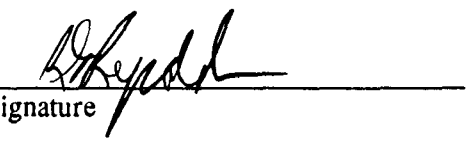
_____
Date

_____
Activity

BRAC-95 CERTIFICATION
DATA CALL 66
INSTALATION RESOURCES
PMRF Barking Sands UIC 0534A

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

CAPT R. G. Reynolds, USN
NAME (Please type or print)


Signature

Shore Activities Officer
Title

18 July 1994
Date

Division

Shore Activities
Department

Commander Naval Air Force, U.S. Pacific Fleet
Activity

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

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

ACTIVITY COMMANDER

THOMAS L. DANIELS, CAPT/USN
NAME (Please type or print)

Thomas L Daniels
Signature

COMMANDING OFFICER
Title

7/14/94
Date

PACIFIC MISSILE RANGE FACILITY
Activity

Document Separator

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BRAC-95 CERTIFICATION

DATA CALL SIXTEEN

PACIFIC MISSILE RANGE FACILITY

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
NAME

Signature

Commander In Chief
Title

17 December 1994
Date

U. S. Pacific Fleet
Activity

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

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

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

Signature

Title

1/11/95
Date

R

DATA CALL #16

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

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

ACTIVITY COMMANDER

T. L. DANIELS, CAPT/USN
NAME (Please type or print)

T L Daniels
Signature

COMMANDING OFFICER
Title

24 OCT 94
Date

PACIFIC MISSILE RANGE FACILITY
Activity

R

BRAC-95 CERTIFICATION

DATA CALL 16
Change 1
PMRF Barking Sands UIC 0534A

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

NEXT ECHELON LEVEL

_VADM Robert J. Spane, USN___	_____
NAME (Please type or print)	Signature
_Commander_____	_28 October 1994_____
Title	Date

Commander Naval Air Force, U.S. Pacific Fleet
Activity

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

MAJOR CLAIMANT LEVEL

_____	_____
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.

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

_____	_____
NAME (Please type or print)	Signature
_____	_____
Title	Date

R

Enlisted												

Remarks:

11. For all reserve units that train at the air station, summarize the average number of candidate reservists on **waiting lists for reserve billets** (i.e., station/squadron/unit/etc.) during the years indicated. N/A

	Average Personnel on Waiting List		
	FY 1991	FY 1992	FY 1993
Pilot			
NFO			
Other Officers			
Enlisted			

TRAINING SUPPORT

12a. Estimate the number of **flight operations** (take-off, landing, touch and go, and approach without landing) per year at your installation that are needed **to maintain required operational readiness** by each squadron/unit assigned to the installation. Provide comments on the basis for these values.

Squadron/ Unit	Aircraft Type	Number of Flight Operations/Yr	Comments
PMRF	UH-3A (PILOTS)	72	SEE NOTE
PMRF	C-12 (PILOTS)	36	SEE NOTE
PMRF	UH-3A (AIRCREW)	34	SEE NOTE
PMRF	C-12 (AIRCREW)	18	SEE NOTE

R

9.a. R (28 Nov 94)

R

NOTE: The number of flights provides for absolute minimum as required by OPNAV 3710, NATOPS and PMRF Training Qualification Instruction. These numbers do not reflect training required for special missions such as DLQ's, Special Range Missions, or increased pilot proficiency flights.

Copy of the page 11-3 of OPNAVINST 3710.7P of 1 December 1992 attached.Change

12b. For each **Special Use Airspace (SUA)** or airspace-for-special use routinely used by squadrons/units assigned to your installation (regardless of location[1]), indicate how many hours per year are **required for** each user to maintain **required operational readiness.** Special Use Airspace includes alert areas, military operating areas (MOA), restricted areas, and warning areas which are used for air-to-air, air-to-ground, electronic (EW, ECM), low level training routes (MTRs), and other training.

[1] include RON/domestic deployment training

SUA	Location/ Distance	Types/Uses	Scheduling Authority (UIC)	Squadron/Unit	Training Requirement (types of training)	Yearly Usage Rate (Hrs)
N/A						

[1] include RON/domestic deployment training

9.b.R (28 NOV 94)

R

Remarks:

12c. For each **Special Use Airspace (SUA)** or airspace-for-special-use complete the following table:

SUA	Location/ Distance	Types/Uses	Scheduling Authority (UIC)	Fiscal Year	Scheduled # Hours	Utilized[1] # Hours	Operating Limitations[2]
N/A				1991			
				1992			
				1993			
				1991			
				1992			
				1993			
				1991			
				1992			
				1993			

[1] For the "Utilized" values, provide reasons for hours scheduled, but not utilized (e.g. 40% cancelled due to weather; 10% cancelled for unscheduled range maintenance, etc.).
[2] Provide any comments on operating limitations.

12d. Assuming that the flight training facility is **not constrained by operational funding** (personnel support, increased overhead costs, etc.), with the present equipment, physical plant, etc. , what **additional use of airspace assets** could be realized? Provide details and assumptions for all calculations.

N/A

12e. Assume that all planned MILCON in PB 1995 (Presidential budget submission) through FY 1997 and BRACON is completed as scheduled. What **additional operating capacity**

9. C. R (28 NOV 94)

aerospace experimental psychologist (NOBC 0852) or an aerospace physiologist (NOBC 0849) and requires incumbents to fly frequently and regularly in the performance of assigned duties.

11.2.2 Additional Ratings

a. Officers possessing additional aeronautical ratings (astronauts, naval flight officers) will comply with the flight time requirements for pilots (excluding flight surgeon).

b. Flight surgeons qualified as naval aviators under the provisions of OPNAVINST 1542.4A (NOTAL) shall meet the flight time minimums for pilots as set forth in this instruction.

11.2.3 Annual Flying Requirements for Aeronautically Designated Officer Personnel

11.2.3.1 Minimum Flying Hours

a. To assure an acceptable minimum level of readiness and to enhance aviation safety, the following annual and semiannual minimum flying hours shall be accomplished:

NAVAL AVIATORS

Fiscal Year Minimum Flying Hours
(Less than 20 Years Aviation Service)

	Semiannual	Annual
Pilot Time	40	100
Night Time	6	12
Instrument Time	6	12

Note

Pilot time includes time credited as first pilot and copilot. At least 50 percent of all the annual minimum pilot requirements must be gained through flying. Of that, 50 percent must be first pilot time. Copilot time may be credited toward the accomplishment of the remaining flying hour requirements. Special crew time does not count towards satisfaction of the annual pilot time requirements set forth in this instruction. Paragraph 11.6 discusses logging of simulator time.

NFO, FLIGHT SURGEONS

Fiscal Year Minimum Flying Hours

	Semiannual	Annual
Special Crew	24	48

b. Fiscal year minimum flying hours for designated naval aviators who have completed 20 years of aviation service and are assigned to operational flying billets designated as 1302, 1312, or 1512 and USMC DIFOPS commands.

	Semiannual	Annual
Pilot Time	25	50
Night Time	3	6
Instrument Time	3	6

(1) Those hours do not reduce prerequisite pilot or instrument hours required for NATOPS qualification and instrument ratings.

(2) Individual Aviation Service Entry Dates (ASED) should be utilized to determine years of aviation service completed.

(3) Enlisted and nondesignated officers:

Fiscal Year Minimum Flying Hours

	Semiannual	Annual
Special Crew Time	24	48

c. Marine aviators undergoing phase I training as outlined by MCO P3500.8B (T&R Manual, Vol. I) (NOTAL) shall not be accountable for meeting semiannual/annual minimums as outlined in this instruction until they have received their primary aircraft MOS designations, which are assigned upon completion of phase I training.

11.2.4 Prorating Minimums

a. Minimum annual/semiannual flying hour requirements shall be prorated based on each full month an individual is attached to a DIFOPS billet/command (i.e., an aviator in DIFOPS status who is assigned to DIFDEN status and departs during July is required to obtain annual/semiannual flight

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

PACIFIC MISSILE RANGE FACILITY, BARKING SANDS
DATACALL #33

BRAC 1995 ENVIRONMENTAL DATA CALL:
All Navy/Marine Corps Host Activities

INDEX

ENVIRONMENTAL DATA CALL

Responses to the following questions provide data that will allow an assessment of the potential environmental impact associated with the closure or realignment of a Navy shore activity. This criterion consists of:

- Endangered/Threatened Species and Biological Habitat
- Wetlands
- Cultural Resources
- Environmental Facilities
- Air Pollution
- Environmental Compliance
- Installation Restoration
- Land/Air/Water Use

As part of the answers to these questions, a *source citation* (e.g., 1993 base loading, 1993 base-wide Endangered Species Survey, 1993 letter from USFWS, 1993 Base Master Plan, 1993 Permit Application, 1993 PA/SI, etc.) must be included. It is probable that, at some point in the future, you will be asked to provide additional information detailing specifics of individual characteristics. In anticipation of this request, supporting documentation (e.g., maps, reports, letters, etc.) regarding answers to these questions should be retained. Information needed to answer these questions is available from the cognizant EFD Planning and Real Estate Divisions, and Environment, Safety, and Health Divisions; and from the activity Public Works Department, and activity Health Monitoring and Safety Offices.

For purposes of the questions associated with land use at your base is *defined* as *land* (acreage owned, withdrawn, leased, and controlled through easements); *air* (space controlled through agreements with the FAA, e.g., MOAs); *and water* (navigation channels and waters along a base shoreline) *under the control of the Navy.*

Provide a list of the tenant activities with UICs that are covered in this response.

ADDED BY CNAP 9505

TENANT COMMAND NAME	UIC
15TH ABW/HIANG	N/A
DOE/SANDIA - KAUAI TEST SITE	N/A
NBS RADIO STATION	N/A
HIANG 298TH	N/A
PERSONNEL SUPPORT ACTIVITY (PSA)	N68604
NAVALMEDICAL CLINIC, PEARL HARBOR	N68098
OICC NAVFACPACDIV,PEARL HARBOR	N62742
NAVALUNDERSEA WARFARE CENTER (NUWC)	N00253
NAVY EXCHANGE	N30428
UNIVERSITY OF COLORADO (NASA)	N/A
NAVALREGIONAL DENTAL CLINIC	N62313
KOKEE PARK GEOPHYSICAL OBSERVATORY(NASA)	N/A
NAVALUNDERSEA WARFARE CENTER (NUWC) PORT ALLEN	N00253
SRS TECHNOLOGIES	N/A
VITRO LABORATORIES	N/A
ALLIED-SIGNAL AEROSPACE CO, GST	N/A
BEECH AEROSPACE SERVICES, INC. (BASI)	N/A

1. ENDANGERED/THREATENED SPECIES AND BIOLOGICAL HABITAT

1a. For federal or state listed endangered, threatened, or category 1 plant and/or animal species on your base, complete the following table. Critical/sensitive habitats for these species are designated by the U. S. Fish and Wildlife Service (USFWS). A species is present on your base if some part of its life-cycle occurs on Navy controlled property (e.g., nesting, feeding, loafing). Important Habitat refers to that number of acres of habitat that is important to some life cycle stage of the threatened/endangered species that is not formally designated.

SPECIES (plant or animal)	Designation (Threatened/ Endangered)	Federal/ State	Critical / Designated Habitat (Acres)	Important Habitat (acres)
example: Haliaeetus leucocephalus - bald eagle	*threatened*	*Federal*	*25*	*0*
Hawaiian Duck	Endangered	Fed/State	0	0
Hawaiian Gallinule	Endangered	Fed/State	0	0
Hawaiian Stilt	Endangered	Fed/State	0	0
Hawaiian Coot	Endangered	Fed/State	0	0
Newell's Shearwater	Threatened	Fed/State	0	0
Humpback Whale	Endangered	Federal	0	0
Hawaiian Monk Seal	Endangered	Fed/State	0	0

Source Citation:_PMRF Natural Resources Management Plan, Mar 88

1b.

Have your base operations or development plans been constrained due to: - USFWS or National Marine Fisheries Service (NMFS)? - State required modifications or constraints? If so, identify below the impact of the constraints including any restrictions on land use.	NO

Are there any requirements resulting from species not residing on base, but which migrate or are present nearby? If so, summarize the impact of such constraints.	YES

Mitigation measure to reduce impacts on Newell's shearwater include using USFWS approved lighting system, which requires special lenses and/or hoods to minimize upward glare.

1c. If the area of the habitat and the associated species have not been identified on base maps provided in Data Call 1, submit this information on an updated version of Data Call 1 map. SEE ATTACHMENT (A)

1d.

Have any efforts been made to relocate any species and/or conduct any mitigation with regards to critical habitats or endangered/threatened species? Explain what has been done and why.	NO

1e.

Will any state or local laws and/or regulations applying to endangered/threatened species which have been enacted or promulgated but not yet effected, constrain base operations or development plans beyond those already identified? Explain.	NO

2. WETLANDS

Note: Jurisdictional wetlands are those areas that meet the wetland definitional criteria detailed in the Corps of Engineers (COE) Wetland Delineation Manual, 1987, Technical Report Y-87-1, U.S. Army Engineer Waterway Experiment Station, Vicksburg, MS or officially adapted state definitions.

2a.

Does your base possess federal jurisdictional wetlands? Two drainage ditches running through PMRF. Kekaha Sugar Co. leases these two ditches to drain the sugar lands situated east of PMRF. Kekaha Sugar Co. has an NPDES permit to discharge irrigation water and rain runoff.	YES
Has a wetlands survey in accordance with established standards been conducted for your base?	YES

When was the survey conducted or when will it be conducted? 03 / /88	
What percent of the base has been surveyed?	39%
What is the total acreage of jurisdictional wetlands present on your base?	11

Source Citation: PACMISRANFAC NATURAL RESOURCES MGMT PLAN MAR 88

2b. If the area of the wetlands has not been identified on base maps provided in Data Call 1, submit this on an updated version of Data Call 1 map.

Map enclosed. SEE ATTACHMENT (A)

2c. Has the EPA, COE or a state wetland regulatory agency required you to modify or constrain base operations or development plans in any way in order to accommodate a jurisdictional wetland? No If YES, summarize the results of such modifications or constraints.

3. CULTURAL RESOURCES

3a.

Has a survey been conducted to determine historic sites, structures, districts or archaeological resources which are listed, or determined eligible for listing, on the National Register of Historic Places? If so, list the sites below.	NO

3b.

Has the President's Advisory Council on Historic Preservation or the cognizant State Historic Preservation Officer required you to mitigate or constrain base operations or development plans in any way in order to accommodate a National Register cultural resource? If YES, list the results of such modifications or constraints below.	NO

3c.

Are there any on base areas identified as sacred areas or burial sites by Native Americans or others? List below.	YES

Nohili Dunes on the northend of PMRF is considered sacred grounds to the native Hawaiians.

4. ENVIRONMENTAL FACILITIES

Notes: If your facility is permitted for less than maximum capacity, state the maximum capacity and explain below the associated table why it is not permitted for maximum capacity. Under "Permit Status" state when the permit expires, and whether the facility is operating under a waiver. For permit violations, limit the list to the last 5 years.

4a.

Does your base have an operating landfill?					**NO**
ID/Location of Landfill	**Permitted Capacity (CYD)**		**Maximum Capacity (CYD)**	**Contents[1]**	**Permit Status**
	TOTAL	**Remaining**			
N/A					

[1] Contents (e.g. building demolition, asbestos, sanitary debris, etc)
Are there any current or programmed projects to correct deficiencies or improve the facility.

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

N/A

4c.

Does your base have any disposal, recycling, or incineration facilities for solid waste?					**NO**
Facility/Type of Operation	**Permitted Capacity**	**Ave Daily Throughput**	**Maximum Capacity**	**Permit Status**	**Comments**
N/A					

List any permit violations and projects to correct deficiencies or improve the facility.

4d.

Does your base own/operate a Domestic Wastewater Treatment Plant (WWTP) ?					**YES**
ID/Location of WWTP	**Permitted Capacity**	**Ave Daily Discharge Rate**	**Maximum Capacity**	**Permit Status**	**Level of Treatment/Year Built**
SEWAGE TREATMENT PLANT/BS 264	N/A	N/A	26,000 GPD	NONE	SECONDARY/1974

OXIDATION /LEACH PONDS/BS 1230	N/A	N/A	40,000 GPD	NONE	PRIMARY/1970

List permit violations and discuss any projects to correct deficiencies.

None. NPDES permit not required because effluent is not discharged to the waters of the US.

4e. If you do not have a domestic WWTP, describe the average discharge rate of your base to the local sanitary sewer authority, discharge limits set by the sanitary sewer authority (flow and pollutants) and whether the base is in compliance with their permit. Discuss recurring discharge violations. N/A

4f.

Does your base operate an Industrial Waste Treatment Plant (IWTP)?					**NO**
ID/Location of IWTP	**Type of Treatment**	**Permitted Capacity**	**Ave Daily Discharge Rate**	**Maximum Capacity**	**Permit Status**
N/A					

List any permit violations and projects to correct deficiencies or improve the facility.

4g. Are there other waste treatment flows not accounted for in the previous tables? Estimate capacity and describe the system.

N/A

4h.

Does your base operate drinking Water Treatment Plants (WTP)?					**YES**
ID/Location of WTP	**Operating (GPD)**		**Method of Treatment**	**Maximum Capacity**	**Permit Status**
	Permitted Capacity	**Daily Rate**			
MAIN BASE	N/A	420,000	CHLORINATION & FLUORIDATION	770,000 GPD	NA
KOKOLE POINT	N/A	420,000	CHLORINATION & FLUORIDATION	770,000 GPD	N/A

List permit violations and projects/actions to correct deficiencies or improve the facility.

Constructed a new 8" waterline to feed Kokole Point station. This new waterline

replaced a 4" pipeline that has deteriorated.

4i. If you do not operate a WTP, what is the source of the base potable water supply. State terms and limits on capacity in the agreement/contract, if applicable.

N/A

4j.

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

4k.

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

4l.

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

Explain: Oil/water separator used to process bilge water.

4m.

Will any state or local laws and/or regulations applying to Environmental Facilities, which have been enacted or promulgated but not yet effected, constrain base operations or development plans beyond those already identified? Explain.	NO

4n. What expansion capacity is possible with these Environmental Facilities? Will any expansions/upgrades as a result of BRACON or projects programmed through the Presidents budget through FY1997 result in additional capacity? Explain.

MILCON Project P-211 is certified ready for design (CRD), but is currently unprogrammed. This project will expand the sewage treatment plant capacity from 26,000 gpd to 46,000 gpd.

4o. Do capacity limitations on any of the facilities discussed in question 4 pose a present or future limitation on base operations? Explain. NO.

5. AIR POLLUTION

5a.

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

5b. For each parcel in a separate AQCA fill in the following table. Identify with and "X" whether the status of each regulated pollutant is: attainment/nonattainment/maintenance. For those areas which are in non-attainment, state whether they are: Marginal, Moderate, Serious, Severe, or Extreme. State target attainment year.

Site: PMRF AQCA: HAWAII

Pollutant	Attainment	Non-Attainment	Maintenance	Target Attainment Year[1]	Comments[2]
CO	X				N/A
Ozone	X				N/A
PM-10	X				N/A
SO_2	X				N/A
NO_2	X				N/A
Pb	X				N/A

[1] Based on national standard for Non-Attainment areas or SIP for Maintenance areas.
[2] Indicate if attainment is dependent upon BRACON, MILCON or Special Projects. Also indicate if the project is currently programmed within the Presidents FY1997 budget.

5c. For your base, identify the baseline level of emissions, established in accordance with the Clean Air Act. Baseline information is assumed to be 1990 data or other year as specified. Determine the total level of emissions (tons/yr) for CO, NOx, VOC, PM10 for the general sources listed. For all data provide a list of the sources and show your calculations. Use known emissions data, or emissions derived from use of state methodologies, or identify other sources used. "Other Mobile" sources include such items as ground support equipment.

No data is available.

	Emission Sources (Tons/Year)				
Pollutant	Permitted Stationary	Personal Automobiles	Aircraft Emissions	Other Mobile	Total
CO	N/A				
NOx	N/A				
VOC	N/A				
PM10	N/A				

Station not required to keep data on or monitor emission sources.

5d. For your base, determine the total FY1993 level of emissions (tons/yr) for CO, NOx, VOC, PM10 for the general sources listed. For all data provide a list of the sources and show your calculations. Use known emissions data, or emissions derived from use of state methodologies, or identify other sources used. "Other Mobile" sources include such items as ground support equipment.

	Emissions Sources (Tons/Year)				
Pollutant	Permitted Stationary	Personal Automobiles	Aircraft Emissions	Other Mobile	Total
CO	0.00	No Record	No Record	No Record	0.00
NOx	0.02	No Record	No Record	No Record	0.02
VOC	0.00	No Record	No Record	No Record	0.00
PM10	0.00	No Record	No Record	No Record	0.00

Source Document: COMPACNAVFACENGCOM Calculations (see attached sheets)
ATTACHMENT B.

Note: Hurricane Iniki struck 11Sep92. FY93 fuel consumption was 96,110 gal. Permit limit is 69,600 gal/yr.

5e. Provide estimated increases/decreases in air emissions (Tons/Year of CO, NOx, VOC, PM10) expected within the next six years (1995-2001). Either from previous BRAC realignments and/or previously planned downsizing shown in the Presidents FY1997 budget. Explain.

PMRF does not foresee any changes within the next six years. PMRF has not been affected by previous BRAC realignments or planned downsizing.

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

No.

5g. Have any base operations/mission/functions (i.e.: training, R&D, ship movement, aircraft movement, military operations, support functions, vehicle trips per day, etc.) been restricted or delayed due to air quality considerations. Explain the reason for the restriction and the "fix"implemented or planned to correct.

No.

5h. Does your base have Emission Reduction Credits (ERCs) or is it subject to any emission offset requirements? If yes, provide details of the sources affected and conditions of the ERCs and offsets. Is there any potential for getting ERCs?

No. Sate of Hawaii does not allow ERCs between installations.

6. ENVIRONMENTAL COMPLIANCE

6a. Identify compliance costs, currently known or estimated that are required for permits or other actions required to bring existing practices into compliance with appropriate regulations. Do not include Installation Restoration costs that are covered in Section 7 or recurring costs included in question 6c. For the last two columns provide the two year totals for those FY's.

Program	Survey Com-pleted?	Costs in $K to correct deficiencies					
		FY1994	FY1995	FY1996	FY1997	FY98-99	FY00-01
Air	1994	50	10	10	10	35	35
Hazardous Waste	1992	65	65	70	70	150	150
Safe Drinking Water Act	1994	20	20	150	10	20	20
PCBs	1992	10	10	10	10	20	20
Other (non-PCB) Toxic Substance Control Act	1994	10	50	50	50	100	100
Lead Based Paint	1993	170	179	188	197	436	457
Radon	NOV89	0	0	0	0	0	0
Clean Water Act	1994	150	225	50	50	100	100
Solid Waste	1993	50	5 2	54	56	118	124
Oil Pollution Act	1993	35	15	20	20	40	40
USTs	1992	200	20	1050	20	40	40
Other							
Total		760	646	1652	493	1059	1086

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

ADDED BY CNAP 9505

Compliance Projects

Description	Cost	Estimated Start	Estimated Completion
Air Permit Application	$30K	June 1994	November 1994
OTTO Fuel Process Tank	$100K	March 1994	December 1994

Storm Water Pollution Control Plan	$85K	March 1994	February 1994
Regional Storm Water Discharge Study	$250K	June 1995	October 1996
Solid Waste Management	$50K	June 1994	December 1994
HAZMIN Plan	$18K	January 1994	September 1994
Historic & Archaeological Resources Protection Plan	$480K	April 1994	April 1996
Underground Storage Tank (UST) Replacement	$1250K	September 1994	March 1997
UST Management Plan	$50K	May 1994	April 1995

6b.

Does your base have structures containing asbestos?__YES_____ What % of your base has been surveyed for asbestos?_____75%_____ Are additional surveys planned? ____YES_____ What is the estimated cost to remediate asbestos ($K) _$500K_____. Are asbestos survey costs based on encapsulation, removal or a combination of both? **A combination of both.**

6c. Provide detailed cost of recurring operational (environmental) compliance costs, with funding source.

Funding Source	FY1992	FY1993	FY1994	FY1995	FY1996	FY1997	FY98-99	FY00-01
O&MN								
HA	50	50	50	50	50	50	100	100
PA	25	25	50	100	100	100	200	200
Other O&MN (specify)	25	25	50	50	50	50	100	100
Other (specify)								
TOTAL:	100	100	150	200	200	200	400	400

6d. Are there any compliance issues/requirements that have impacted operations and/or development plans at your base. No

7. INSTALLATION RESTORATION

7a.

Does your base have any sites that are contaminated with hazardous substances or petroleum products?	YES
Is your base an NPL site or proposed NPL site?	NO

7b. Provide the following information about your Installation Restoration (IR) program. Project list may be provided in separate table format. Note: List only projects eligible for funding under the Defense Environmental Restoration Account (DERA). Do not include UST compliance projects properly listed in section VI.

Site # or name	Type site [1]	Groundwater Contaminated?	Extends off base?	Drinking Water Source?	Cost to Complete ($M)/Est. Compl. Date	Status[2]/Comments
Fire Fighting Pit No. 1	*CERCLA*	No	No	No	$2.06/FY95	R1/Cost to be split with torpedo leach field
Torpedo Leach Field	*CERCLA*	No	No	No	$2.06/FY95	R1/Cost to be split with Fire Fighting Pit No. 1
Fire Fighting Pit No. 2	*CERCLA*	No	No	No	$1.1/FY97	S1

Change 465- CPF JUN 94

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

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

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

No.

7d.

Is there a groundwater treatment system in place?	No
Is there a groundwater treatment system planned?	No

State scope and expected length of pump and treat operation.

7e.

Has a RCRA Facilities Assessment been performed for your base?	No

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

No.

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

No.

7h. Is your base responsible for any non-appropriated fund facilities (exchange, gas station) that require cleanup? If so, describe facility/location and cleanup required/status.

No.

7i.

Do the results of any radiological surveys conducted indicate limitations on future land use? Explain below.	N/A

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

No.

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

None

8. LAND / AIR / WATER USE

8a. List the acreage of each real estate component controlled or managed by your base (e.g., Main Base - 1,200 acres, Outlying Field - 200 acres, Remote Range - 1,000 acres, remote antenna site - 5 acres, Off-Base Housing Area - 25 acres).

Parcel Descriptor	Acres	Location
Main Base	1929	Barking Sands, Kauai
Makaha Ridge	245	Makaha Ridge, Kauai
Kamokala Ridge	74	Kamokala Ridge, Kauai
Port Allen	1	Port Allen, Kauai
Mauna Kapu	2	Mauna Kapu, Oahu

Mt. Kaala	2	Mt. Kaala, Oahu
Niihau Site	3	Island of Niihau

8b. Provide the acreage of the land use categories listed in the table below:

LAND USE CATEGORY		ACRES
Total Developed: (administration, operational, housing, recreational, training, etc.)		870
Total Undeveloped (areas that are left in their natural state but are under specific environmental development constraints, i.e.: wetlands, endangered species, etc.)		Wetlands: 11
		All Others: 1379
Total Undeveloped land considered to be without development constraints, but which may have operational/man caused constraints (i.e.: HERO, HERF, HERP, ESQD, AICUZ, etc.) TOTAL		791
Total Undeveloped land considered to be without development constraints		413
Total Off-base lands held for easements/lease for specific purposes		1800
Breakout of undeveloped, restricted areas. Some restricted areas may overlap:	ESQD	254
	HERF	8
	HERP	1
	HERO	517
	AICUZ	None
	Airfield Safety Criteria	None
	Other	None

8c. How many acres on your base (includes off base sites) are dedicated for training purposes (e.g., vehicular, earth moving, mobilization)? This does not include buildings or interior small arms ranges used for training purposes. 25,600,000

8d. What is the date of your last AICUZ update? _Sep_/_28__/_79__ Are any waivers of airfield safety criteria in effect on your base? Y/N Summarize the conditions of the waivers below.

Yes.

Waiver BS-24. Permit an AN/MPN-14 GCA radar to be located 4850 ft inboard and runway 34 end 488 ft. E. of runway 16-34 centerline.

8e. List the off-base land use *types* (e.g, residential, industrial, agricultural) and *acreage* within Noise Zones 2 & 3 generated by your flight operations and whether it is compatible/incompatible with AICUZ guidelines on land use.

Acreage/Location/ID	**Zones 2 or 3**	**Land Use**	**Compatible/ Incompatible**
4000/East of Barking Sands/Kekaha Sugar Plantation	2	Agricultural	Compatible

8f. List the navigational channels and berthing areas controlled by your base which require maintenance dredging? Include the frequency, volume, current project depth, and costs of the maintenance requirement. N/A

Navigational Channels/ Berthing Areas	**Location / Description**	**Maintenance Dredging Requirement**			
		Frequency	Volume (MCY)	Current Project Depth (FT)	Cost ($M)
N/A					

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

N/A

8h.

Are there available **designated dredge disposal areas** for maintenance dredging material? List location, remaining capacity, and future limitations.	No.
Are there available **designated dredge disposal areas** for new dredge material? List location, remaining capacity, and future limitations.	No.
Are the dredged materials considered contaminated? List known contaminants.	N/A

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

None.

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

N/A

8k.

If the base has a cooperative agreement with the US Fish and Wildlife Service and/or the State Fish and Game Department for conducting a hunting and fishing program, does the agreement or these resources constrain either current or future operations or activities? Explain the nature and extent of restrictions.	N/A

N/A No hunting or fishing program on base.

8l. List any other areas on your base which are indicated as protected or preserved habitat other than threatened/endangered species that have been listed in Section 1. List the species, whether or not treated, and the acres protected/preserved. N/A.

9. WRAPUP

9a. Are there **existing or potential environmental showstoppers** that have affected or will affect the accomplishment of the installation mission that have not been covered in the previous 8 questions?

No. A major factor in the success of PMRF is location. The land area surrounding PMRF to the East is agriculture marsh land that by its nature can never be developed in an economically feasible way. To the West, there is nothing but thousands of miles of ocean. There are no encroachment concerns, from PMRF or to PMRf, either now or anticipated in the future.

9b. Are there any **<u>other</u> environmental permits** required for base operations, include any relating to industrial operations.

Storm water NPDES permit.

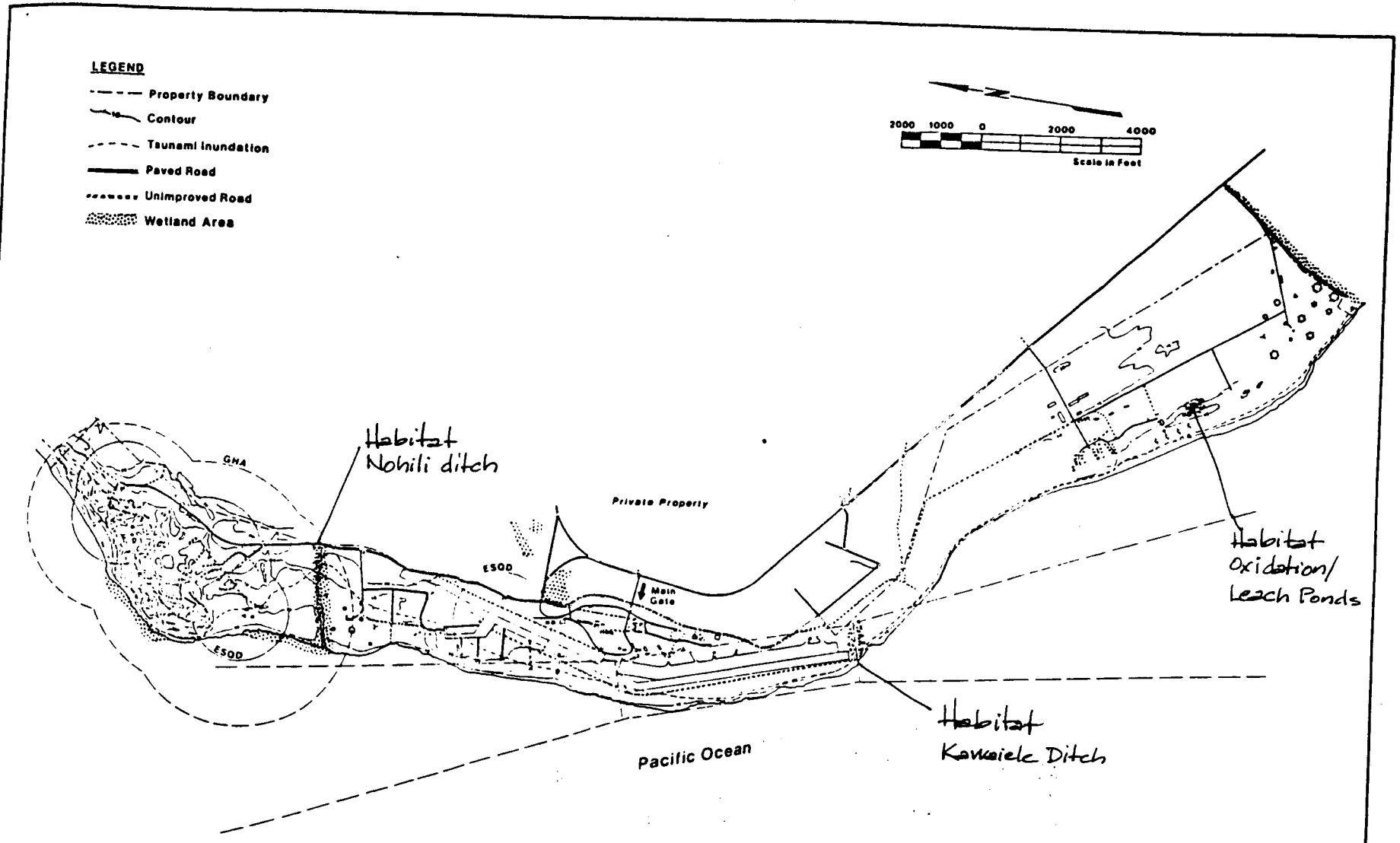
Air permits for diesel generators. Base has four permits and a fifth permit application submitted to the State of Hawaii. State promulgated new Clean Air Act regulation which will required base wide permits vice individual facility permits.

9c. Describe any **other environmental or encroachment restrictions** on base property not covered in the previous 8 sections.

Ground hazard area (GHA) for VANDAL launches extends beyond base boundaries. Restrictive easement with State of Hawaii exists for the next 9 years till 2002.

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

None are known to this date.



Note: Habitat for:

1. Hawaiian duck
2. Hawaiian gallinule
3. Hawaiian stilt
4. Hawaiian coot

Figure A-5
Wetlands
PMRF Barking Sands

1c. & 2b.

File/Application No: _____

ity Name: U.S. NAVY, PACIFIC MISSILE RANGE FACILITY

cation: BARKING SANDS — Island: KAUAI

Mailing Address: P.O. BOX 128 — City: KEKAHA — State: HI — Zip: 96752

Phone: (808) 335-4632 — POC: ROBERT T. INOUYE — Title: ENVIRONMENTAL ENGINEER

Responsible Official (Print/Type) ROBERT D. MULLINS — Title: COMMANDING OFFICER, CAPTAIN, USN

(as defined 11-60.1-1)

(Signature) Robert D. Mullins — Date: 14 APR 1994

SUPPLEMENT 1

ANNUAL EMISSION AND FEE SUMMARY SHEET FOR COVERED SOURCES

(For Air Pollutant Emissions Emitted During Calendar Year 1993)

Equipment	Pollutant Emissions (Tons/Yr.) 0							Others (please specify)						
	TSP	PM10	SO2	CO	NOx	VOC	Lead							
B 291	0.88	0.88	0.00	0.00	0.00	0.00	0.00							
SANDBLAST UNIT														
B 112	0.00	0.00	0.00	0.00	0.02	0.00	0.00							
GENERATORS - DIESEL														
B 112	0.00	0.00	0.00	0.00	0.00	0.00	0.00							
GENERATORS - DIESEL														
B519 & B625	0.00	0.00	0.00	0.00	0.00	0.02	0.00							
UST - NINE 50,000 GALLON														
B 1278	0.01	0.01	0.00	0.00	0.00	0.00	0.00							
BOOTH - SANDBLAST														
Total Emissions for Reporting (Tons/Yr.)	0.89	0.89	0.00	0.00	0.02	0.02	0.00							

Transfer supplement to cover sheet.

For Agency Use Only:
Date Received: _____

HDOH/EMD/CAB (January 1, 1994)

Name: U.S. NAVY, PACIFIC MISSILE RANGE FACILITY

Site: BARKING SANDS

Mailing Address: P.O. BOX 128

Phone: (808) 335-4632 POC: ROBERT T. INOUYE

Responsible Official (Print/Type) ROBERT D. MULLINS

(as defined 11-60.1-1)

(Signature) Robert D Mullins

File/Application No: _____

Island: KAUAI

City: KEKAHA State: HI Zip: 96752

Title: ENVIRONMENTAL ENGINEER

Title COMMANDING OFFICER, CAPTAIN, USN

Date: 14 APR 1994

ANNUAL EMISSION AND FEE SUMMARY SHEET FOR COVERED SOURCES

(For Air Pollutant Emissions Emitted During Calendar Year 1993)

Equipment	Pollutant Emissions (Tons/Yr.) TSP	PM10	SO2	CO	NOx	VOC	Lead	Others (please specify)						
Supplement 1	0.89	0.89	0.00	0.00	0.02	0.02	0.00							
Total Emissions for Reporting (Tons/Yr.)	0.89	0.89	0.00	0.00	0.02	0.02	0.00							
Total Emissions for Fee Calculation (Tons/Yr.- Rounded)	1		0		0	0	0							

Facility's Rounded Total Annual Emissions for Fee Purposes: 1

(round up to the next whole ton)

Note:

1) If total emissions for any one pollutant being reported exceeds 4000 Tons/Yr., enter 4000 Tons/Yr. for purposes of the fee calculation.

2) PM-10 emissions are accounted for under TSP. CO emissions are not assessed an annual fee.

3) Annual fees for air toxic emissions, except those classified as TSP and VOC, shall be deferred to calendar year 1996, for emissions emitted during 1995.

Fees payable to:		Facility's Rounded Total Annual Emissions for Fee Purposes		
Clean Air Special Fund – COV	1 X	$37.00 =	$37.00	*
Clean Air Special Fund – NON	1 X	$4.00 =	$4.00	*
		Total	$41.00	
		Fee Total	$1,000.00	**

Please send checks or money orders to:

Environmental Management Division

Clean Air Branch

P.O. Box 3378

Honolulu, HI 96801-3378

For Agency Use Only:

Date Received: _____

* Except as noted below, two separate checks or money orders should be provided (Clean Air Special Fund – COV and Clean Air Special Fund – NON).

** The total minimum annual fee per facility is $1,000.00, or $4.00 per month for any fraction of calendar year 1993 the covered source facility was in operation. The entire minimum fee shall be made payable payable to Clean Air Special Fund – COV.

HDOH/EMD/CAB (January 1, 1994)

GENERATORS

Equipment ID or No. _____
(to correspond with "Equipment" identification on Annual Emission and Fee Summary Sheet for Covered Sources)

GASOLINE AND DIESEL ENGINES, AND GAS TURBINES
(Equipment Data Sheet and Fuel Usage Record)

File #: * For Period: CY1993

Facility Name: U.S. Navy, Pacific Missile Range Facility
Equipment Address: Barking Sands, Kauai
Equipment Description: Generators* Serial #: *
Stack #: _____
Attester's Signature [signature] Date: 13 Apr 94
Print Attester's Name ROBERT T. INOUYE Title: ENVIRONMENTAL ENGINEER

_____ MMBTU/Hr. (Maximum Design Heat Input)

* kilowatt rating

_____ horse-power rating

Type of Fuel Fired		Fuel Usage (FUse) Gallons per year	% Sulfur Content by Weight	Identify % Nitrogen, % Ash, & % Lead, if applicable
1.	Residual Oil			
	a. Grade No. 6			
	b. Grade No. 5			
	c. Grade No. 4			
2.	Distillate Oil	*	0.24	
3.	Other (specify)			
	a.			
	b.			

Air Pollution Control	Pollutant Controlled	ACF (% reduction)	In Use? Yes or No

*SEE DIESEL ENGINES ATTACHMENT SHEET

DIESEL ENGINES ATTACHMENT SHEET
(Equipment Data Sheet and Fuel Usage Record)

DIESEL GENERATORS						
FILE#	BUILDING	CAPACITY	SERIAL#	FUEL TYPE	FUSE[1]	%S[2]
806	112	320 KW	81204666	Diesel	59.46	0.24
806	112	320 KW	81204660	Diesel		
806	112	320 KW	81204661	Diesel		
	112	600 KW	68357-2	Diesel	2.22	0.24
	112	600 KW	68357-1	Diesel		

1 FUSE = Fuel use in 1000 gallons
2 %S = Percent sulfur in fuel by weight

EMISSION FACTORS (lb/MMBtu): [Reference AP-42, 3.4 of 7/93]

TSP:	0.0620	NOX:	3.1
PM10:	0.0496	VOC:	0.10
SO2:	1.01S (S=0.24) => 0.2424	Lead:	0
CO:	0.81		

ACF = AIR POLLUTION CONTROL EFFICIENCY FACTOR: 0 (No air pollution control device)

ANNUAL EMISSION (AE):

AE = EF x FUEL USE x 0.14 MMBtu/gal x ton/(2000 lb) x (1-ACF)

BRAC-95 CERTIFICATION DATA CALL THIRTY THREE

PMRF BARKING SANDS

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

MAJOR CLAIMANT LEVEL

J. R. FITZGERALD
NAME (Please type or print)

Signature

Commander In Chief (Acting)
Title

1 JUL 94
Date

U. S. Pacific Fleet
Activity

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

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

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

Signature

ACTING
Title

07 JUL 1994
Date

Data Call 33 - Environmental Data Call
Pacific Missile Range Facility Barking Sands

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

NEXT ECHELON LEVEL (if applicable)

VADM Robert J. Spane, USN ____ _____
NAME (Please type or print) Signature

Commander _____ 2 June 1994 _____
Title Date

COMNAVAIRPAC _____
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

_____ _____
NAME (Please type or print) Signature

_____ _____
Title Date

_____
Activity

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

ROBERT D. MULLINS, CAPT/USN
NAME (Please type or print)

Signature

COMMANDING OFFICER
Title

24 MAY 1994
Date

PACIFIC MISSILE RANGE FACILITY
Activity

CAPACITY ANALYSIS:
DATA CALL #4 WORK SHEET FOR
TECHNICAL CENTER or LABORATORY: PMRF Barking Sands

Table of Contents

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

7 April 1994

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

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

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

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

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

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

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

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

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

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

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

Table 1.1 Historical and Projected Workload for PMRF Barking Sands (UIC N0534A)

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	38195	39287	1753			
87	39020	40283	2368	80	80	
88	39950	41343	2723	92	92	
89	40000	37585	1724	96	96	
90	40614	41167	993	103	103	
91	40153	50259	1767	107	107	
92	42930	50164	647	108	108	
93	47500	48340	624	129	129	
94	82208	81724	803	141	-	
95	50500	-	-	153	-	
96	52520	-	-	153	-	
97	54670	-	-	153	-	

FY94 includes one time Senate Appropriations Committee Plus-up of $32,408K for Range upgrade.

Table 1.2 Historical and Projected Workload for Detachments of_____(UIC)_____
N/A

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						

PMRF does not have separately funded sets.

TABLE 1.3 FY 1993 BREAKOUT OF FUNDS BUDGETED for PMRF Barking Sands (UIC N0534A)

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
CINCPACFLT									36500						
CINCPACFLT									18						
CNO		39							32						
NAVFACENGCOM									1					546	3
NAVAIR									149		1229	2			
NAVSEA					253				174			9	1771		265
USASSDC								5309							
NAVAL WPN STA SEAL BEACH											10				
AIRFORCE									220						
NAVAL RESERVES														135	
OTHER FED AGENCIES								383							155
SPAWAR								64							
NAVILCO															132
PRIVATE PARTY															16
NAFI															16
CHIEF OF NAV RESEARCH			308												
NAV ENG LOG OFFICE			55												
ARMY								85							

TABLE 1.3 FY 1994 BREAKOUT OF FUNDS BUDGETED for PMRF Barking Sands (UIC N0534A)

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
CINCPACFLT									56927						
CINCPACFLT									18						
CNO		25							31						
NAVFACENGCOM									1					800	
NAVAIR									120		13785				
NAVSEA		500	200						170			15	3000		1175
USASSDC								4000							
NAVAL WPN STA SEAL BEACH											3				
AIRFORCE									185						
NAVAL RESERVES														135	
OTHER FED AGENCIES								405							175
SPAWAR															
NAVILCO															518
PRIVATE PARTY															10
NAFI															10
CHIEF OF NAV RESEARCH															
NAV ENG LOG OFFICE															
ARMY															

NAVAIR dollars includes $12,785K of SAC 94 range plus-up.

TABLE 1.3 FY 1995 BREAKOUT OF FUNDS BUDGETED for PMRF Barking Sands (UIC N0534A)

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
CINCPACFLT									38200						
CINCPACFLT									15						
CNO		25							31						
NAVFACENGCOM									1					800	
NAVAIR									120		1000				
NAVSEA		200	200		233				150		15		3100		1000
USASSDC								2000							
NAVAL WPN STA SEAL BEACH											3				
AIRFORCE									180						
NAVAL RESERVES														135	
OTHER FED AGENCIES								1500							150
SPAWAR															
NAVILCO															500
PRIVATE PARTY															10
NAFI															10
CHIEF OF NAV RESEARCH				300											
NAV ENG LOG OFFICE															
ARMY															

TABLE 1.3 FY 1996 BREAKOUT OF FUNDS BUDGETED for PMRF Barking Sands (UIC N0534A)

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
CINCPACFLT									39728						
CINCPACFLT									15						
CNO		25							31						
NAVFACENGCOM									1					800	
NAVAIR									120		900				
NAVSEA		200	200		250				150		15		3185		1200
USASSDC								2000							
NAVAL WPN STA SEAL BEACH											3				
AIRFORCE									180						
NAVAL RESERVES														135	
OTHER FED AGENCIES								1500							150
SPAWAR															
NAVILCO															800
PRIVATE PARTY															10
NAFI															10
CHIEF OF NAV RESEARCH				300											
NAV ENG LOG OFFICE															
ARMY															

TABLE 1.3 FY 1997 BREAKOUT OF FUNDS BUDGETED for PMRF Barking Sands (UIC N0534A)

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
CINCPACFLT									41317						
CINCPACFLT									15						
CNO		25							30						
NAVFACENGCOM									1					800	
NAVAIR									120		800				
NAVSEA		200	200		200				150		15		3156		1200
USASSDC								2000							
NAVAL WPN STA SEAL BEACH											3				
AIRFORCE									180						
NAVAL RESERVES														135	
OTHER FED AGENCIES								1500							150
SPAWAR															
NAVILCO															500
PRIVATE PARTY															10
NAFI															10
CHIEF OF NAV RESEARCH				300											
NAV ENG LOG OFFICE															
ARMY															

TABLE 1.4 FY 199 BREAKOUT OF FUNDS BUDGETED for DETACHMENTS of N/A (UIC)

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 PMRF Barking Sands (UIC) N0534A)

Building type	NAVFAC (P-80) category code	Gross Floor/Building Area (KSF)			
		Adequate	Sub-standard	In-adequate	Total
Operational & Training	100	90.7	1.0	0.3	92.0
Maintenance & Production	200	92.2		14.5	106.7
Science labs	310	1.0			1.0
Aircraft labs	311				
Missile and Space labs	312				
Ship and Marine labs	313				
Ground Transportation labs	314				
Weapon and Weapon Systems labs	315	6.4			6.4
Ammunition, Explosives, & Toxics labs	316				
Electrical Equip. labs	317	2.8	0	0	2.8
Propulsion labs	318				
Miscellaneous labs	319	6.0			6.0
Underwater Equip. labs	320				
Technical Services labs	321				
Supply Facilities	400	29.7	10.3	7.9	47.9
Hospital & other Medical	500	1.1			1.1
Administrative Facilities	600	33.0	.1		33.1
Housing & Community	700	180.3	1.0	2.0	183.3
Utilities & Grounds	800	12.4			12.4
Other					
	Totals	455.6	12.4	24.7	492.7

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

(1)FACILITY TYPE/CODE: OPERATIONAL STORAGE/14377
(2)WHAT MAKES IT INADEQUATE? Inadequate due to location, design and physical condition.
(3)WHAT USE IS BEING MADE OF THE FACILITY? Long term storage of non-critical items.
(4)WHAT IS THE COST TO UPGRADE THE FACILITY TO SUBSTANDARD? $5000 (replacement).
(5)WHAT OTHER USE COULD BE MADE OF THE FACILITY AND AT WHAT COST? None.
(6)CURRENT IMPROVEMENT PLANS AND PROGRAMMED FUNDING:None.
(7)HAS THIS FACILITY CONDITION RESULTED IN C3 OR C4 DESIGNATION ON YOUR BASEREP? No.

(1)FACILITY TYPE/CODE:AUTO VEHICLE MAINT-NONCOMB/21420
(2)WHAT MAKES IT INADEQUATE? Inadequate due to location and design.
(3)WHAT USE IS BEING MADE OF THE FACILITY? Auto vehicle maintenance.
(4)WHAT IS THE COST TO UPGRADE THE FACILITY TO SUBSTANDARD? $162,000 (replacement).
(5)WHAT OTHER USE COULD BE MADE OF THE FACILITY AND AT WHAT COST? Storage ($25,000).
(6)CURRENT IMPROVEMENT PLANS AND PROGRAMMED FUNDING: Repair damaged roof due to Hurricane Iniki.
(7)HAS THIS FACILITY CONDITION RESULTED IN C3 OR C4 DESIGNATION ON YOUR BASEREP? No.

(1)FACILITY TYPE/CODE: PUBLIC WORKS SHOP/21910
(2)WHAT MAKES IT INADEQUATE?Inadequate due to location and design.
(3)WHAT USE IS BEING MADE OF THE FACILITY? Public Works Shop.
(4)WHAT IS THE COST TO UPGRADE THE FACILITY TO SUBSTANDARD? $73,000 (Replacement).
(5)WHAT OTHER USE COULD BE MADE OF THE FACILITY AND AT WHAT COST? Storage ($20,000).
(6)CURRENT IMPROVEMENT PLANS AND PROGRAMMED FUNDING: Currently being converted to Public Works Storage.
(7)HAS THIS FACILITY CONDITION RESULTED IN C3 OR C4 DESIGNATION ON YOUR BASEREP? No.

(1)FACILITY TYPE/CODE: PUBLIC WORKS STORAGE/21977
(2)WHAT MAKES IT INADEQUATE? Inadequate due to deteriorated condition.

(3)WHAT USE IS BEING MADE OF THE FACILITY? None.
(4)WHAT IS THE COST TO UPGRADE THE FACILITY TO SUBSTANDARD? $60,000 (replacement).
(5)WHAT OTHER USE COULD BE MADE OF THE FACILITY AND AT WHAT COST? None.
(6)CURRENT IMPROVEMENT PLANS AND PROGRAMMED FUNDING: Approved and planned for demolition.
(7)HAS THIS FACILITY CONDITION RESULTED IN C3 OR C4 DESIGNATION ON YOUR BASEREP? No.

(1)FACILITY TYPE/CODE: AMMONITION STORAGE/DEPOT/421
(2)WHAT MAKES IT INADEQUATE? Inadequate due to location of Main Base.
(3)WHAT USE IS BEING MADE OF THE FACILITY? Missile Magazine/Ammo Storage.
(4)WHAT IS THE COST TO UPGRADE THE FACILITY TO SUBSTANDARD? $1,830,000 (Relocation to main base.
(5)WHAT OTHER USE COULD BE MADE OF THE FACILITY AND AT WHAT COST? None.
(6)CURRENT IMPROVEMENT PLANS AND PROGRAMMED FUNDING: MILCON Project P-043, High Explosive Magazines, unprogrammed.
(7)HAS THIS FACILITY CONDITION RESULTED IN C3 OR C4 DESIGNATION ON YOUR BASEREP? Yes.

(1)FACILITY TYPE/CODE: RECREATION BLDG/740-54
(2)WHAT MAKES IT INADEQUATE? Inadequate due to location and physical condition.
(3)WHAT USE IS BEING MADE OF THE FACILITY? Recreation Building.
(4)WHAT IS THE COST TO UPGRADE THE FACILITY TO SUBSTANDARD? $10,000.
(5)WHAT OTHER USE COULD BE MADE OF THE FACILITY AND AT WHAT COST? Storage ($10,000).
(6)CURRENT IMPROVEMENT PLANS AND PROGRAMMED FUNDING: MILCON Project P-054, Multi-Purpose Recreation Facility has been submitted, unprogrammed.
(7)HAS THIS FACILITY CONDITION RESULTED IN C3 OR C4 DESIGNATION ON YOUR BASEREP? Yes.

Table 2.2 Main Site Class 2 Space of PMRF Barking Sands (UIC N0534A) Assigned to Tenants

TENANT		NAVFAC (P-80) Category Code	GF/BA Assigned (KSF)
Name	UIC		
AIR FORCE (PACAF)	N/A	141-10	1.0
AIR FORCE (PACAF)	N/A	143-10	0.9
AIR FORCE (PACAF)	N/A	143-11	1.9
AIR FORCE (PACAF)	N/A	143-77	2.5
AIR FORCE (PACAF)	N/A	722-10	1.0
AIR FORCE (PACAF)	N/A	723-20	0.7
HAWAII AIR NATIONAL GUARD (298 ATCF)	N/A	171-77	6.0
HAWAII AIR NATIONAL GUARD (298 ATCF)	N/A	214-20	5.6
HAWAII AIR NATIONAL GUARD (298 ATCF)	N/A	610-10	5.2
HAWAII AIR NATIONAL GUARD (298 ATCF)	N/A	721-45	0.9
HAWAII AIR NATIONAL GUARD (298 ATCF)	N/A	721-11	1.9
USDA	N/A	310-25	1.0
USDA	N/A	441-10	0.8
USDA	N/A	610-10	1.8
NAVAL UNDERSEA WARFARE CTR	N35266	216-40	7.8
NAVAL UNDERSEA WARFARE CTR	N35266	143-77	0.3
NAVDENCLINIC PEARL HARBOR	N62313	540-10	0.2
NAVMEDCLINIC PEARL HARBOR	N68098	550-10	0.9
		Total:	39.6

R

Table 2.3 Class 2 Space Utilized/Leased by PMRF Barking Sands (UIC N0534A)

Building type	NAVFAC (P-80) category code	GF/BA (KSF)			
		Adequate	Sub-standard	In-adequate	Total
Operational & Training	100	10.500		6.433	16.933
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	10.500		6.433	16.933

R

10,500 SF leased from Alexander and Baldwin, Inc. at the cost of $6,267/mo.

6,433 SF leased/permitted from the State of Hawaii at the cost

Table 2.3 Class 2 Space Utilized/Leased by PMRF Barking Sands (UIC N0534A)

Building type	NAVFAC (P-80) category code	GF/BA (KSF)			
		Adequate	Sub-standard	In-adequate	Total
Operational & Training	100	10,500		6,433	16,933
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	10,500		6,433	16,933

10,500 SF leased from Alexander and Baldwin, Inc. at the cost of $6,267/mo.
6,433 SF leased/permitted from the State of Hawaii at the cost of $2,365/mo.

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.

N/A No Detachments

Table 2.4 Class 2 Assets of _____ Occupied by Detachments

Building type	NAVFAC (P-80) category code	GF/BA (KSF)			
		Adequate	Sub-standard	In-adequate	Total
Operational & Training	100				
Maintenance & Production	200				
Science labs	310				
Aircraft labs	311				
Missile and Space labs	312				
Ship and Marine labs	313				
Ground Transportation labs	314				
Weapon and Weapon Systems labs	315				
Ammunition, Explosives, and Toxics labs	316				
Electrical Equip. labs	317				
Propulsion labs	318				
Miscellaneous labs	319				
Underwater Equip. labs	320				
Technical Services labs	321				
Supply Facilities	400				
Hospital & other Medical	500				
Administrative Facilities	600				
Housing & Community	700				
Utilities & Grounds	800				
Other					
	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?

N/A No Detachments

Table 2.5 Class 2 Space at Detachment Sites of _____ (UIC)
Assigned to Tenants

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

N/A

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

Building type	NAVFAC (P-80) category code	GF/BA (KSF)			
		Adequate	Sub-standard	In-adequate	Total-adequateTota
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. None. 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. None. 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.

Construction of Class II improvements can be accomplished as necessary and appropriate on any of the uncontrained Class I land detailed in Table 4-1.

N/A

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Table 3.1 Constrained Class 2 Space Available for Expansion at PMRF Barking Sands (UIC N0534A___)

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					

N/A

Table 3.2 Unconstrained Class 2 Space Available for Expansion at PMRF Barking Sands

(UIC N0534A)

CONSTRUCTION FEASIBLE AS REQUIRED.

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					

R

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4. Class 1 Space Available for Expansion.

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

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

No restrictions.

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

PMRF has a unique geographic location which offers a very open electromagnetic and physical environment concerning use of the electromagnetic spectrum.

On Kauai, there is a mountain range 5,500 feet high between PMRF and Oahu. This offers PMRF virtual isolation from interference in the UHF bands for all surface craft. UHF aircraft communication requires coordination and scheduling of PMRF assigned frequencies. VHF bands are equally as clear for the same geographic physical features. The HF bands are capable of communicating with Oahu and other receiver areas such as ships at sea or the U.S. Mainland. HF advantages include the water and ground planes for electromagnetic reception.

Radio frequency interference (RFI) is minimal both to and from PMRF radios because of the physical isolation of PMRF.

R

Note: The information was obtained from two source documents: The PMRF Users Handbook and the Preliminary PMRF Site Manual.

24. R (28 NOV 94)

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4. Class 1 Space Available for Expansion.

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

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

No restrictions.

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

PMRF has a unique geographic location which offers a very open electromagnetic and physical environment concerning use of the electromagnetic spectrum.

On Kauai, there is a mountain range 5,500 feet high between PMRF and Oahu. This offers PMRF virtual isolation from interference in the UHF bands for all surface craft. UHF aircraft communication requires coordination and scheduling of PMRF assigned frequencies. VHF bands are equally as clear for the same geographic physical features. The HF bands are capable of communicating with Oahu and other receiver areas such as ships at sea or the U.S. Mainland. HF advantages include the water and ground planes for electromagnetic reception.

Radio frequency interference (RFI) is minimal both to and from PMRF radios because of the physical isolation of PMRF.

Class 1 Resources of PMRF Barking Sands (UIC: N0534A)
Site Location: MAIN BASE

Land Use	Total Acres	Developed Acreage	Available for Development	
			Restricted	Unrestricted
Maintenance	22	12		10
Operational	473	123	50	300
Training	1180	80	500	600
R & D				
Supply & Storage	16	8		8
Admin	26	16		10
Housing	57	27		30
Recreational	156	56		100
Navy Forestry Program				
Navy Agricultural Outlease Program				
Hunting/Fishing Programs				
Other				
Total:	1930	322	550	1058

d. Of the total Unrestricted Acres reported above, how much of it has existing roads and/or utilities that could support expansion efforts? 1058 Acres. Explain.
All areas identified are within reasonably close proximity to existing roads and/or utilities which could support expansion efforts.

Note: There are no off-site areas which have potential to facilitate future development.

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)	5850 KW	7000 KW	2400 KW	3200 KW
Natural Gas (CFH)				
Sewage (GPD)	26000		12000	20000
Potable Water (GPD)	720000		350000	420000
Steam (PSI & lbm/Hr)				
Long Term Parking				
Short Term Parking	950	2	712	855

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.

R

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 PMRF Barking Sands (UIC: N0534A)

Fiscal Year	MRP ($M)	CPV ($M)	ACE ($M)
1985	0.63	147.6	Unavail.
1986	0.71	152.5	Unavail.
1987	0.66	160.7	3.309
1988	0.67	175.6	2.226
1989	0.73	189.0	3.844
1990	1.004	194.8	6.005
1991	1.545	200.3	4.964
1992	0.819	205.8	2.182
1993	2.03	214.3	11.170
1994	0.98	222.0	2.118
1995	0.96	227.0	4.120
1996	0.98	231.0	3.500
1997	1.00	234.0	2.100

R

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 PMRF Barking Sands (UIC: N0534A)

Fiscal Year	MRP ($M)	CPV ($M)	ACE ($M)
1985	0.63	147.6	UNKNOWN
1986	0.71	152.5	UNKNOWN
1987	0.66	160.7	UNKNOWN
1988	0.67	175.6	UNKNOWN
1989	0.73	189.0	UNKNOWN
1990	0.74	194.8	UNKNOWN
1991	0.64	200.3	UNKNOWN
1992	0.68	205.8	UNKNOWN
1993	2.03	214.3	UNKNOWN
1994	0.98	222.0	UNKNOWN
1995	0.96	227.0	UNKNOWN
1996	0.98	231.0	UNKNOWN
1997	1.00	234.0	UNKNOWN

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
NONE.								

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

R

(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.

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Type Training Facility/CCN	Total Number	Design Capacity (PN)[1]	Capacity (Student HRS/YR)
Multi-Purpose/171-20	2	**60**	**115,200**
Operational Training/211-07	1	**40**	**76,000**

R

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

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DESIGN CAPACITY X HRS X DAYS = CAPACITY

CAPACITY X TOTAL NUMBER = TOTAL CAPACITY

Note:

R.

CCN 171-20 30 X 8 X 240 = 57,600 57,600 X 2 = 115,200

CCN 211-07 40 X 8 X 240 = 76,800 76,800 X 1 = 76,800

---

[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.

R

(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.

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Change N4644- CPF MAY 94

R

Type Training Facility/CCN	Total Number	Design Capacity (PN)[1]	Capacity (Student HRS/YR)
Multi-Purpose/171-20	2	60	115,200
Operational Training/211-07	1	40	76,000

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

Change N4644- CPF MAY 94

DESIGN CAPACITY X HRS X DAYS = CAPACITY

CAPACITY X TOTAL NUMBER = TOTAL CAPACITY

Note:

CCN 171-20 30 X 8 X 240 = 57,600 57,600 X 2 = 115,200

CCN 211-07 40 X 8 X 240 = 76,800 76,800 X 1 = 76,800

[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.

(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.

CNAP CHANGED 9405

Change N4644-CPF MAY 94

Type Training Facility/CCN	Total Number	Design Capacity (PN)[1]	Capacity (Student HRS/YR)
Multi-Purpose/171-20	2	**550**	**2,640,000**
Operational Training/211-07	1	**240**	**576,000**

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

Change N4644-CPF MAY 94

DESIGN CAPACITY X HRS X DAYS = CAPACITY

CAPACITY X TOTAL NUMBER = TOTAL CAPACITY

[1] Design Capacity (PN) is the total number of seats available for students in spaces used for academic instruction; applied instruction; and seats or positions for operational trainer spaces and training facilities other than buildings, i.e., ranges. Design Capacity (PN) must reflect current use of the facilities.

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

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

8. Depot Level Maintenance Capacity. Fill out the data sheets provided at TAB C if you or your subordinate activities perform depot level maintenance on a piece of equipment or system. **N/A**

Change
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CPF
MAY 94

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

TAB A

SHIP BERTHING CAPACITY

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

N/A

SHIP BERTHING CAPACITY

1. [11.] For each Pier/Wharf at your facility list the following structural characteristics. Indicate the additional controls required if the pier is inside a Controlled Industrial Area or High Security Area. Provide the average number of days per year over the last eight years that the pier was out of service (OOS) because of maintenance, including dredging of the associated slip:

Table 11.1

Pier/ Wharf & Age[1]	CCN[2]	Moor Length (ft)	Design Dredge Depth[3] (ft) (MLLW)	Slip Width[4] (ft)	Pier Width (ft)[5]	CIA/Security Area? (Y/N)[6]	ESQD Limit[7]	# Days OOS for maint.

[1]Original age and footnote a list of MILCON improvements in the past 10 years.
[2]Use NAVFAC P-80 for category code number.
[3]Comment if unable to maintain design dredge depth
[4]Water distance between adjacent finger piers.
[5]Indicate if RO/RO and/or Aircraft access.
[6]Describe the additional controls for the pier.
[7]Net explosive weight. List all ESQD waivers that are in effect with expiration date.

N/A

2. [12.] For each Pier/Wharf at your facility list the following ship support characteristics:
Table 12.1

Pier/ Wharf	OPNAV 3000.8 (Y/N)	Shore Pwr (KVA) & 4160V (KVA)	Comp. Air Press. & Capacity[1]	Potable Water (GPD)	CHT (GPD)	Oily Waste[1] (gpd)	Steam (lbm/hr & PSI)[2]	Fendering limits[3]

[1]List only permanently installed facilities.
[2]indicate if the steam is certified steam.
[3]Describe any permanent fendering arrangement limits on ship berthing.

N/A

3. [13.] For each pier/wharf listed above state today's normal loading, the maximum capacity for berthing, maximum capacity for weapons handling evolutions, and maximum capacity to conduct intermediate maintenance.

Table 13.1

Pier/Wharf	Typical Steady State Loading[1]	Ship Berthing Capacity	Ordnance Handling Pier Capacity[2]	IMA Maintenance Pier Capacity[3]

[1] Typical pier loading by ship class with current facility ship loading.

[2] List the maximum number of ships that can be moored to conduct ordnance handling evolutions at each pier/berth without berth shifts. Consider safety, ESQD and access limitations.

[3] List the maximum number of ships that can be serviced in maintenance availabilities at each pier without berth shifts because of crane, laydown or access limitations.

N/A

4. [14.] For each pier/wharf listed above, based on Presidential Budget 1995 budgeted infrastructure improvements in the Presidential Budget 1995 through FY 1997 and the BRAC-91 and BRAC-93 realignments, state the expected normal loading, the maximum capacity for berthing, maximum capacity for weapons handling evolutions, and maximum capacity to conduct intermediate maintenance.

Table 14.1

Pier/ Wharf	Typical Steady State Loading[1]	Ship Berthing Capacity	Ordnance Handling Pier Capacity[2]	IMA Maintenance Pier Capacity[3]

[1] Typical pier loading by ship class with current facility ship loading.

[2] List the maximum number of ships that can be moored to conduct ordnance handling evolutions at each pier/berth without berth shifts. Consider safety, ESQD and access limitations.

[3] List the maximum number of ships that can be serviced in maintenance availabilities at each pier without berth shifts because of crane, laydown, or access limitations.

5. [15.a.] How much pier space is required to berth and support ancillary craft (tugs, barges, floating cranes, etc.) currently at your facility? Indicate if certain piers are uniquely suited to support these craft.

N/A

6. [15.b.] What is the average pier loading in ships per day due to visiting ships at your base. Indicate if it varies significantly by season.

N/A

7. [15.c.] Given no funding or manning limits, what modifications or improvements would you make to the waterfront infrastructure to increase the cold iron ship berthing capacity of your installation? Provide a description , cost estimates, and additional capacity gained.

N/A

8. [15.d.] Describe any unique limits or enhancements on the berthing of ships at specific piers at your base.

N/A

TAB B

OPERATIONAL AIRFIELD CAPACITY

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

R

1. [1a.] For the **main airfield and each auxiliary airfield,** answer the following questions:

Airfield Name BARKING SANDS_____

For each runway, give its designation, length, width, load capacity, lighting configurations, and arresting gear types. For each runway list any approach obstructions or any restrictions on flight patterns.

Runway	Length (ft)	Width (ft)	Max load	Lighting				Arresting Gear Type(s)
				F	P	C	N	
16/34	6000	150	245,000		X			E-28 (BI-DIRECTIONAL)

R

F -- Full lighting (runway edge, center, and threshold)
P -- Partial lighting (less than full)
C -- Carrier deck lighting simulated
N -- No lighting

2. [1b.] Provide the **composition** (concrete, asphalt) and **load bearing capacity** of your aprons, ramps and taxiway.

Apron/ramp/taxiway Location - ID	SF	Comp.	Load Bearing Capacity	Comments
N. TAXIWAY	900,000	ASPHALT	242,000 LBS	
PARKING APRON	511,065	ASPHALT/ CONCRETE	530,000 LBS	
RED LABEL AREA	96,660	ASPHALT	242,000 LBS	

3. [1c.] Do you have **high speed taxiways?** Discuss number and impact on airfield operations.

NO.

1. [1a.] For the **main airfield and each auxiliary airfield,** answer the following questions:

Airfield Name BARKING SANDS_____

For each runway, give its designation, length, width, load capacity, lighting configurations, and arresting gear types. For each runway list any approach obstructions or any restrictions on flight patterns.

Runway	Length (ft)	Width (ft)	Max load	Lighting				Arresting Gear Type(s)
				F	P	C	N	
16	6000	150	245,000		X			E-28 (BI-DIRECTIONAL)
34	6000	150	245,000		X			E-28 (BI-DIRECTIONAL)

F -- Full lighting (runway edge, center, and threshold)
P -- Partial lighting (less than full)
C -- Carrier deck lighting simulated
N -- No lighting

2. [1b.] Provide the **composition** (concrete, asphalt) and **load bearing capacity** of your aprons, ramps and taxiway.

Apron/ramp/taxiway Location - ID	SF	Comp.	Load Bearing Capacity	Comments
N. TAXIWAY	900,000	ASPHALT	242,000 LBS	
PARKING APRON	511,065	ASPHALT/ CONCRETE	530,000 LBS	
RED LABEL AREA	96,660	ASPHALT	242,000 LBS	

3. [1c.] Do you have **high speed taxiways**? Discuss number and impact on airfield operations.

NO.

4. [1d.] Are **all runways** with approved instrument approaches served by **hi-speed taxiways**?

N/A

5. [1e.] List any restrictions to **runways with approach obstructions** or any **restrictions on flight patterns.** Explain

No restrictions on runway approaches or flight patterns.

6. [1f.] For the main airfield and each auxiliary and outlying field, discuss any **runway design features** that are specific to particular types of aircraft (i.e., are the airfield facilities designated primarily fixed wing jet, prop, or helo aircraft?)

None; runway is for multi-purpose use.

7. [2a.] List the **number of flight operations** (take-off, landing, or approach without landing) that the main airfield and all auxiliary fields can support on an hourly basis in both VMC and IMC. Comment on the factors at each field that limit this capacity (e.g., taxiway/runway limitations, airspace, ATC restrictions, environmental restrictions).

Airfield	# Flight Ops/Hr		Comments on Limiting Factors
	IMC	VMC	
Main	6	30	IMC AT BARKING SANDS ARE VERY RARE. TACAN APPROACHES INTO BARKING SANDS.
Auxiliary _____			
Auxiliary _____			
Auxiliary _____			

8. [2b.] Provide the average number of **(historical) flight operations** per month conducted at this station and the total number of days during which these operations were conducted. If data is not normally recorded, include estimates (and how derived). A flight operation is defined as a take-off, landing, or approach without a landing.

FY	Main Airfield		Auxiliary Field		Auxiliary Field		Auxiliary Field	
	# Ops	# Days	# Ops	# Days	# Ops.	# Days	# Ops.	# Days
1991	1700	20	N/A	N/A	N/A	N/A	N/A	N/A
1992	1522	20	N/A	N/A	N/A	N/A	N/A	N/A
1993	1144	20	N/A	N/A	N/A	N/A	N/A	N/A

9. [2c.] What percent of your flight operations are Fleet Carrier Landing Practices (FCLPs)? None.

10. [2d.] Are you designated as an **authorized divert field** for any non-DoD aircraft? Explain.

Yes, during range operations, carrier operations.

11. [2d.] Is your airfield designated as a **joint use airfield** (i.e. civilian/military)? Explain.

No.

12. [2e.] What **percentage of total operations are civilian**?

10%

13. [2f.] Describe the major **civilian air traffic structures** (routes, terminal control areas, approaches, etc.) discuss the present and likely future impact of each on air station operations.

Most civilian traffic are aircraft transiting the restricted and warning areas. Other civilian traffic involve aircraft contracted and all civilian users require facility licenses.

14. [2g.] Are there any **air traffic control constraints**/procedures that currently, or may in the future, limit air station operations? If yes, fully explain impact.

None.

15. [4.] List all **NAVAIDS** with published approaches that support the main airfield and/or your auxiliary airfields. Note any additions/upgrades to be added between now and FY1997.

NAVAID	DESCRIPTION/LOCATION
TWO HIGH TACAN APPROACH	LOCATED AT RUNWAY 16/34
LOW TACAN APPROACH	LOCATED AT RUNWAY 16/34

16. [5a.] List all **active duty Navy/USMC squadrons/detachments** and the number of aircraft by type, model, and series (T/M/S), that will be permanently stationed/are scheduled to be stationed at this air station at the **end** of the indicated fiscal years.

Squadron/Det	# of Aircraft (PAA)	Aircraft (T/M/S)	FY 1994	FY 1995	FY 1997	FY 1999	FY 2001
N/A							

17. [5b.] Summarize average **visiting squadron/det loading** on air station operations(i.e. airwing/wing weapons deployment).

Squadron/Det Size (#A/C)	Apron Space Used	Hangar Space Assigned	Maintenance Support	Ave length of stay
HMM 364 8 CH-46	8 AIRCRAFT	N/A	N/A	14 DAYS X 3 PERIODS
HMM 165 8 CH-46	8 AIRCRAFT	N/A	N/A	14 DAYS X 3 PERIODS
HMH-463 8 CH-53	8 AIRCRAFT	N/A	N/A	14 DAYS X 3 PERIODS
HMH-463 8 CH-53	6 AIRCRAFT	N/A	N/A	14 DAYS X 10 PERIODS
(ARG) MAINLAND UNITS	16 AIRCRAFT	N/A	N/A	4 DAYS X 2 PERIODS

Projected increase of CH-53D. All Aircraft in USMC inventory to be stationed at Kaneohe Marine Corps Base, Hawaii.

18. [5c.] If a major percent of flight operations at your air station is from other than permanently stationed squadron/detachments, provide explanation.

N/A

19. [6a.] List all **reserve Navy/USMC squadrons/detachments** and the number of aircraft by type, model, and series (T/M/S), which will be stationed/are scheduled to be stationed at this air station at the **end** of the indicated fiscal years.

Squadron/Det	# of Aircraft (PAA)	Aircraft (T/M/S)	FY 1994	FY 1995	FY 1997	FY 1999	FY 2001
N/A							

20. [7.] List all **Station aircraft** by number, type, model, and series (T/M/S), which will be parked or stationed/are scheduled to be stationed at this air station at the **end** of the indicated fiscal years.

Squadron/ Custodian	# of Aircraft (PAA)	Aircraft (T/M/S)	FY 1994	FY 1995	FY 1997	FY 1999	FY 2001
PMRF	6	UH3A	6	0	0	0	0
PMRF	5	UH3H	0	5	5	5	5
PMRF	2	RC12F	2	2	2	2	2

21. [8.] List all **DoD and non-DoD aircraft** not previously listed, by custodian, including number, type, model, and series (T/M/S) of aircraft, which will be parked or stationed/are scheduled to be stationed at this air station at the **end** of the indicated fiscal years.

Service/ Agency/ Custodian	# of Aircraft (PAA)	Aircraft (T/M/S)	FY 1994	FY 1995	FY 1997	FY 1999	FY 2001
N/A							

22. [9a.] List other **operational command or support units** (ie. air wing staffs, MWSG, MWSS, MACG, MASS, etc.) stationed at this installation. For each Unit, give the unit identification number/UIC, mission, and facilities required (currently being used) to support the unit (i.e. equipment parking - 2500 SF; maintenance shop-200 SF; etc.).

Support Unit Identification/ UIC	Mission	Facilities Required	Equipment Laydown Requirement (covered/ uncovered in SF)
N/A			

23. [9b.] Due to BRAC or other realignments, what increases/decreases in operational command or support units will occur at your installation. Provide expected gains/losses by year through 2001.

None.

24. [10a.] List all **other USN/USNR, USMC/USMCR, and other DoD or non-DoD active and SELRES units** not listed previously, that are scheduled to be stationed at this air station at the **end** of the indicated fiscal years.

Unit	Active or Reserve	FY 1994	FY 1995	FY 1997	FY 1999	FY 2001
N/A						

25. [12b.] For each **Special Use Airspace (SUA)** or airspace-for-special use routinely used by squadrons/units assigned to your installation (regardless of location[2]), indicate how many hours per year are **required for** each user to maintain required **readiness**. Special Use Airspace includes alert areas, military operating areas (MOA), restricted areas, and warning areas which are used for air-to-air, air-to-ground, electronic (EW, ECM), low level training routes (MTRs), and other training.

[1] include RON/domestic deployment training

SUA	Location/ Distance	Types/Uses	Scheduling Authority (UIC)	Squadron/Unit	Training Requirement (types of training)	Yearly Usage Rate (Hrs)
N/A						

Remarks: Units are not assigned to this station.

[2] include RON/domestic deployment training

26. [12c.] For each **Special Use Airspace (SUA)** or airspace-for-special-use complete the following table:

SUA	Location/ Distance	Types/Uses	Scheduling Authority (UIC)	Fiscal Year	Scheduled	Utilized[1]	Operating Limitations[2]
					# Hours	# Hours	
N/A				1991			
				1992			
				1993			
				1991			
				1992			
				1993			
				1991			
				1992			
				1993			

[1] For the "Utilized" values, provide reasons for hours scheduled, but not utilized (e.g. 40% cancelled due to weather; 10% cancelled for unscheduled range maintenance, etc.).
[2] Provide any comments on operating limitations.

27. [12d.] Assuming that the flight training facility is **not constrained by operational funding** (personnel support, increased overhead costs, etc.), with the present equipment, physical plant, etc. , what **additional use of airspace assets** could be realized? Provide details and assumptions for all calculations.

N/A

28. [12h.] In the event that it became necessary to increase base loading at your installation, does the **airspace** overlying and adjacent to your installation have the **capacity** to assume an additional workload? Estimate the percentage of the possible increase. Provide the basis/calculations for these estimates.

N/A

29. [17a.] Using the types (and mix) of aircraft currently stationed at your installation, project the additional number of these aircraft (maintain approximate current mix/ratio of A/C) that could be based and parked on your **current parking aprons.**
Provide two estimates:

1. Using NAVFAC P-80 standard measures
2. Using real world planning factors to accomodate a surge demand for space (maintaining safe operating procedures).

Aircraft Type	Current # of Aircraft Parked/Stationed	Maximum Additional Capacity (# of Aircraft)		Total	
		NAVFAC	Surge	NAVFAC	Surge
RC-12F	2	3	6	5	8
UH-3A	6	14	28	20	34

Provide the **details of your calculations**, including your assumptions on the minimum separation between aircraft, parking angle, folding of aircraft wings and any obstructions that may limit the placement of aircraft on the parking apron spaces. Indicate if taxiway aprons are used in the projection.30. [18a.] List the **hangars** at the air station. Identify by (P-80) type, year built, dimensions.

30.[18a.] List the **hangars** at the air station. Identify by (P-80) type, year built, dimensions.

Hangar ID/#	Type I, II or (O)ther	Year Built	Hangar Deck Dimensions	Limiting Height	Current Usage	In SF			
						Adequate	Substandard	Inadequate	Total
384	I	1988	192'X100'	29'	Maintenance/ shelter	19776	0	0	19776

In accordance with NAVFACINST 11010.44E, an inadequate facility cannot be made adequate for its present use through "economically justifiable means". For all the categories above where inadequate facilities are identified describe why the facility is inadequate; indicate how it is being used and list other possible uses; and specify the costs to remove the deficiencies that make it inadequate. Indicate current plans to remove these deficiencies and the amount of any programmed funds. Discuss any material conditions of substandard facilities which have resulted in a C3 or C4 designation on your BASEREP.

31. [18b.] For each **hangar** provide **space allocation** information listed in table below. Indicate if OPS/ADMIN space is in a non-contiguous building, Provide subtotal for each hangar.

Hangar #/ID/Type	SQD/Mod# Assignment[1]	Ops + Admin Spaces SF/ Module	Maint Shops SF/ Module (O Level)	Hangar Deck SF/Module	A/C Line parking spaces [2,3]		
					#/ Module	SF	Elec. Pwr.
384/I	ALL PMRF	8704	8704	19776	8/ALL PMRF	19776	YES
TOTAL		8704	8704	19776	8	19776	

[1] Provide which SQD/Det was assigned to the specific module at receipt of this Data Call. (i.e., VFA-15, Hgr 1, Mod C)

[2] Dedicated aircraft parking spaces per Module and total square feet (SF) of A/C line parking spaces

[3] Are there A/C line parking spaces supported by permanently installed electric power? (Y/N)

All OPS/ADMIN spaces contained in same hangar.

32. [18f.] List all **squadrons/detachments** normally homeported at this air station that were deployed and **not assigned** hangar/maintenance spaces at receipt of this data call.

Squadron/Detachment	#/Type Aircraft	Deployed Location
N/A		

33. [18g.] List all **squadrons/detachments** normally homeported at this air station that were deployed and **were assigned** hangar/maintenance spaces at receipt of this data call.

Squadron/Detachment	#/Type Aircraft	Hanger Module Assignment
N/A		

R

34. [18h.] Using the types (and mix) of **aircraft** currently stationed at your installation, project the maximum additional number of these aircraft (maintain approximate current mix/ratio of A/C) that could be housed and maintained in **your current hangars**. Provide two estimates:

1. Using NAVFAC P-80 standard measures
2. Using real world planning factors to accomodate a surge demand for space (maintaining safe operating procedures).

CNAP CHANGED 9405

Aircraft Type	Current # of Aircraft Parked/Stationed	Maximum Additional Capacity (# of Aircraft)		Total (Current + Additional)	
		NAVFAC	Surge	NAVFAC	Surge
RC-12F	2	~~1~~ ~~0~~	~~1~~ ~~0~~	2	0
UH-3A	6	~~6~~ ~~0~~	~~6~~ ~~0~~	6	0

chgd by PMRF 24 Oct 94

Provide the **details of your calculations**, including your assumptions on the minimum separation between aircraft, folding of aircraft wings and any obstructions that may limit the placement of aircraft in the hangars.

34. [18h.] Using the types (and mix) of **aircraft** currently stationed at your installation, project the maximum additional number of these aircraft (maintain approximate current mix/ratio of A/C) that could be housed and maintained in **your current hangars**. Provide two estimates:

1. Using NAVFAC P-80 standard measures
2. Using real world planning factors to accomodate a surge demand for space (maintaining safe operating procedures).

CNAP CHANGED 9405

Aircraft Type	Current # of Aircraft Parked/Stationed	Maximum Additional Capacity (# of Aircraft)		Total (Current + Additional)	
		NAVFAC	Surge	NAVFAC	Surge
RC-12F	2	2	2	2	0
UH-3A	6	6	6	6	0

Provide the **details of your calculations**, including your assumptions on the minimum separation between aircraft, folding of aircraft wings and any obstructions that may limit the placement of aircraft in the hangars.

R

35. [19.] Do you have any of the following **special use facilities** at the Air Station?

Change PMRF OCT94

CNAP CHANGED 9405

CCN	Type of Facility	In SF				# of Units	Year Built
		Adequate	Substandard	Inadequate	Total		
211-01	Aircraft Acoustical Enclosure						
211-02	Nose Hangar						
211-03	Corrosion Control Hangar						
211-75	Parachute/Survival Equipment Shop						
211-81	Engine Test Cell						
211-88	Power Check Pad with Sound Suppression						
211-89	Power Check Pad without Sound Suppression						
211-96	Maintenance, Aircraft Spares Storage	**4000**			**4000**	**1**	**1971**
116-10	Airfield Washrack Pavement	**7227**			**7277**	**1**	**1990**
116-15	Aircraft Rinse Facility	**900**			**900**	**1**	**1974**
214-30	Refueling Vehicle Shop						
218-60	Aircraft Ground Support Equipment	**3000**			**3000**	**1**	**1990**
	Other						

Note: The source document for the numbers identified is from the Shore Facilities Planning System Property Records.

R

In accordance with NAVFACINST 11010.44E, an inadequate facility cannot be made adequate for its present use through "economically justifiable means". For all the categories above where inadequate facilities are identified describe why the facility is inadequate; indicate how it is being used and list other possible uses; and specify the costs to remove the deficiencies that make it inadequate. Indicate current plans to remove these deficiencies and the amount of any programmed funds. Discuss any material conditions of substandard facilities which have resulted in a C3 or C4 designation on your BASEREP.

R

35. [19.] Do you have any of the following **special use facilities** at the Air Station?

Change PMRF OCT94

CNAP CHANGED 9405

CCN	Type of Facility	In SF				# of Units	Year Built
		Adequate	Substandard	Inadequate	Total		
211-01	Aircraft Acoustical Enclosure						
211-02	Nose Hangar						
211-03	Corrosion Control Hangar						
211-75	Parachute/Survival Equipment Shop						
211-81	Engine Test Cell	264			264	1	1979
211-88	Power Check Pad with Sound Suppression						
211-89	Power Check Pad without Sound Suppression						
211-96	Maintenance, Aircraft Spares Storage	4000			4000	1	1971
116-10	Airfield Washrack Pavement	7227			7277	1	1990
116-15	Aircraft Rinse Facility	900			900	1	1974
214-30	Refueling Vehicle Shop						
218-60	Aircraft Ground Support Equipment	3000			3000	1	1990
	Other						

R

Note: The source document for the numbers identified is from the Shore Facilities Planning System Property Records.

In accordance with NAVFACINST 11010.44E, an inadequate facility cannot be made adequate for its present use through "economically justifiable means". For all the categories above where inadequate facilities are identified describe why the facility is inadequate; indicate how it is being used and list other possible uses; and specify the costs to remove the deficiencies that make it inadequate. Indicate current plans to remove these deficiencies and the amount of any programmed funds. Discuss any material conditions of substandard facilities which have resulted in a C3 or C4 designation on your BASEREP.

35. [19.] Do you have any of the following **special use facilities** at the Air Station?

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CNAP CHANGED 9405

CCN	Type of Facility	In SF				# of Units	Year Built
		Adequate	Substandard	Inadequate	Total		
211-01	Aircraft Acoustical Enclosure						
211-02	Nose Hangar						
211-03	Corrosion Control Hangar						
211-75	Parachute/Survival Equipment Shop						
211-81	Engine Test Cell						
211-88	Power Check Pad with Sound Suppression						
211-89	Power Check Pad without Sound Suppression						
211-96	Maintenance, Aircraft Spares Storage	**4000**			**4000**	**1**	**1971**
116-10	Airfield Washrack Pavement	**7227**			**7277**	**1**	**1990**
116-15	Aircraft Rinse Facility	**900**			**900**	**1**	**1974**
214-30	Refueling Vehicle Shop						
218-60	Aircraft Ground Support Equipment	**3000**			**3000**	**1**	**1990**
	Other						

In accordance with NAVFACINST 11010.44E, an inadequate facility cannot be made adequate for its present use through "economically justifiable means". For all the categories above where inadequate facilities are identified describe why the facility is inadequate; indicate how it is being used and list other possible uses; and specify the costs to remove the deficiencies that make it inadequate. Indicate current plans to remove these deficiencies and the amount of any programmed funds. Discuss any material conditions of substandard facilities which have resulted in a C3 or C4 designation on your BASEREP.

36. [21a.] For the following **aircraft support facility** category codes, provide the amount of adequate substandard, and inadequate facilities.

CCN	Facility Type	Unit of Measure	Adequate	Substandard	Inadequate	Total	Number of Units
111-20	Landing Pads	SF	10,008			10,008	1
121-10	Direct Fueling	OL/GM					
124-30	Fuel Storage	GA	450,000			450,000	*
421-xx	Ammunition Storage	CF/TONS	83,244/140			83,244/140	11
425-xx	Open Ammunition Storage	SF					
113-20	Parking Aprons	SF	495,900		283,365	779,265	2
113-40	Access Aprons	SF	9,603			9,603	1
116-56	Combat Aircraft Ordnance Loading Area	SF					
	Other						

*One fuel (storage) farm with 9 storage tanks, 50K capacity.

In accordance with NAVFACINST 11010.44E, an inadequate facility cannot be made adequate for its present use through "economically justifiable means". For all the categories above where inadequate facilities are identified describe why the facility is inadequate; indicate how it is being used and list other possible uses; and specify the costs to remove the deficiencies that make it inadequate. Indicate current plans to remove these deficiencies and the amount of any programmed funds. Discuss any material conditions of substandard facilities which have resulted in a C3 or C4 designation on your BASEREP.

TAB C

DEPOT LEVEL MAINTENANCE CAPACITY

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JCSG-DM: Maintenance and Industrial Activities

Commodity Groups List

1. Aircraft Airframes:
   - Rotary
   - VSTOL
   - Fixed Wing
     - Transport / Tanker / Bomber / Command and Control
     - Light Combat
     - Admin / Training
   - Other

2. Aircraft Components
   - Dynamic Components
   - Aircraft Structures
   - Hydraulic/Pneumatic
   - Instruments
   - Landing Gear
   - Aviation Ordnance
   - Avionics/Electronics
   - APUs
   - Other

3. Engines (Gas Turbine)
   - Aircraft
   - Ship
   - Tank
   - Blades / Vanes (Type 2)

4. Missiles and Missile Components
   - Strategic
   - Tactical / MLRS

5. Amphibians
   - Vehicles
   - Components (less GTE)

6. Ground Combat Vehicles
   - Self-propelled
   - Tanks
   - Towed Combat Vehicles
   - Components (less GTE)

7. Ground and Shipboard Communications and Electronic Equipment
   - Radar
   - Radio Communications
   - Wire Communications
   - Electronic Warfare
   - Navigational Aids
   - Electro-Optics / Night Vision
   - Satellite Control / Space Sensors

8. Automotive / Construction Equipment

9. Tactical Vehicles
   - Tactical Automotive Vehicles
   - Components

10. Ground General Purpose Items
    - Ground Support Equipment (except aircraft)
    - Small Arms / Personal Weapons
    - Munitions / Ordnance
    - Ground Generators
    - Other

11. Sea Systems
    - Ships
    - Weapons Systems

12. Software
    - Tactical Systems
    - Support Equipment

13. Special Interest Items
    - Bearings Refurbishment
    - Calibration (Type I)
    - TMDE

14. Other

Refer to the following notes when filling out the tables in this TAB.

Notes:

1. "Production" equates to the number of items processed per Fiscal Year (FY), unless otherwise specified.

2. Base yourresponses for FY 1994 and previous years on executed workload, and for FY 1995 and subsequent years on workload as programmed. Unless otherwise specified, use workload mixes as programmed. In estimating projected workload capabilities, use the Activity's configuration as of completion of implementation of the BRAC-88/91/93 actions.

3. Use single shift operations (1-8-5) as the basis for your calculations. Report in specified units of throughput and Direct Labor Man Hours (DLMHs).

4. If any responses are classified, so annotate the applicable question and include those responses in a separate classified annex.

5. Capacity Index and Utilization Index will be calculated in accordance with the Defense Depot Maintenance Council approved update to Department of Defense Instruction (DoDInst) 4151.15H, "Depot Maintenance Capacity/Utilization Index Measurement."

6. The Major Owner/Operator questions will be answered by the Major Claimant/Systems Commander.

7. Utilize the tables provided to answer each question. Answer the questions for all of the commodity groups that are applicable to your activity. In the Aircraft Airframes and Engines (Gas Turbine) commodity groups break out the information by aircraft type, model, series or by engine type as applicable when filling out the tables.

N/A

PART I: MAINTENANCE & INDUSTRIAL ACTIVITIES

1. Historic and Predicted Workload

1.1 Given the current configuration and operation of your activity, provide the depot/industrial level maintenance by commodity group (from the List above) that was executed in and is programmed for the Fiscal Years (FY) requested in units throughput (Tables 1.1.a and 1.1.b) and in Direct Labor Man Hours (DLMHs) (Tables 1.1.c and 1.1.d). Add additional rows as required to report all commodity types serviced at this activity.

Table 1.1.a: **Historic and Predicted Depot/Industrial Workload**

Commodity Type	Throughput (Units)							
	FY 1986	FY 1987	FY 1988	FY 1989	FY 1990	FY 1991	FY 1992	FY 1993
Total:								

N/A

Table 1.1.b: **Historic and Predicted Depot/Industrial Workload**

Commodity Type	Throughput (Units)							
	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
Total:								

N/A

Table 1.1.c: **Historic and Predicted Depot/Industrial Workload**

Commodity Type	Throughput (DLMHs)							
	FY 1986	FY 1987	FY 1988	FY 1989	FY 1990	FY 1991	FY 1992	FY 1993
Total:								

N/A

Table 1.1.d: **Historic and Predicted Depot/Industrial Workload**

Commodity Type	Throughput (DLMHs)							
	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
Total:								

N/A

1.2 For each commodity type reported in Tables 1.1.a through 1.1.d, assume (a) the current projected total depot / industrial workload remains as assigned; (b) that sufficient production demand is available to justify maximum hiring, optimum (repeat order manufacturing lead times) procurement, and maximum equipment support; and (c) no major MILCON additional to that already programmed: what is the maximum extent to which depot / industrial maintenance operations could be expanded at this activity, based on the current and future planned workload mixes, for the requested period? Please provide your response in both the absolute maximum number of units and DLMHs that could be processed at this activity by applicable commodity group. Add additional rows as necessary to accommodate all commodity types serviced at this activity.

Table 1.2.a: **Maximum Potential Depot/Industrial Workload**

Commodity Type	Throughput (Units)						
	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
Total:							

Table 1.2.b: **Maximum Potential Depot/Industrial Workload**

NA

Commodity Type	Throughput (DLMHs)							
	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
Total:								

1.3 Provide details of your calculations including assumptions on additional space utilized, major equipment required, production rates, and constraints that limit increased workload by commodity group at this activity.

1.4 Given an environment unconstrained by funds or manning, what Industrial Plant Equipment (IPE) would you change (add, delete, or modify) to increase your activity's capability to perform workload in each of the applicable commodity groups? Describe quantitatively how the changes above would increase your activity's depot/industrial level maintenance capabilities. What would the associated costs be? What would be the payback period and return on investment?

1.5 Are there any environmental, legal, or otherwise limiting factors that inhibit further the development of depot/industrial level workload and this activity (AICUZ encroachment, pollutant discharge, etc.)?

N/A

2. Workload Summary

2.1 Enter the information from the Predicted and Potential Workload sections of the previous question into the table below and calculate the variance between projected and potential workloads. Again, clearly identify each commodity and include all commodities serviced at this activity.

Table 2.1.a: **PREDICTED WORKLOAD VARIANCE FOR FY 1995**
N/A

FY 1995 Commodity Type	Product (units)			DLMHs		
	Predicted Workload	Potential Workload	Variance	Predicted Workload	Potential Workload	Variance
Total	N / A	N / A	N / A			

[1] This workload is not duplicative of any previously reported workload. Detail all production categorized as "other".

Table 2.1.b: **PREDICTED WORKLOAD VARIANCE FOR FY 1996**

NA

FY 1996 Commodity Type	Product (units)			DLMHs		
	Predicted Workload	Potential Workload	Variance	Predicted Workload	Potential Workload	Variance
Total	N / A	N / A	N / A			

[1] This workload is not duplicative of any previously reported workload. Detail all production categorized as "other".

Table 2.1.c: **PREDICTED WORKLOAD VARIANCE FOR FY 1997**

NA

FY 1997 Commodity Type	Product (units)			DLMHs		
	Predicted Workload	Potential Workload	Variance	Predicted Workload	Potential Workload	Variance
Total	N / A	N / A	N / A			

[1] This workload is not duplicative of any previously reported workload. Detail all production categorized as "other".

Table 2.1.d: **PREDICTED WORKLOAD VARIANCE FOR FY 1998**

NA

FY 1998 Commodity Type	Product (units)			DLMHs		
	Predicted Workload	Potential Workload	Variance	Predicted Workload	Potential Workload	Variance
Total	N / A	N / A	N / A			

[1] This workload is not duplicative of any previously reported workload. Detail all production categorized as "other".

Table 2.1.e: **PREDICTED WORKLOAD VARIANCE FOR FY 1999**

FY 1999 Commodity Type	Product (units)			DLMHs		
	Predicted Workload	Potential Workload	Variance	Predicted Workload	Potential Workload	Variance
Total	N / A	N / A	N / A			

[1] This workload is not duplicative of any previously reported workload. Detail all production categorized as "other".

Table 2.1.f: **PREDICTED WORKLOAD VARIANCE FOR FY 2000**

FY 2000 Commodity Type	Product (units)			DLMHs		
	Predicted Workload	Potential Workload	Variance	Predicted Workload	Potential Workload	Variance
Total	N / A	N / A	N / A			

[1] This workload is not duplicative of any previously reported workload. Detail all production categorized as "other".

Table 2.1.g: **PREDICTED WORKLOAD VARIANCE FOR FY 2001**

FY 2001 Commodity Type	Product (units)			DLMHs		
	Predicted Workload	Potential Workload	Variance	Predicted Workload	Potential Workload	Variance
Total	N / A	N / A	N / A			

[1] This workload is not duplicative of any previously reported workload. Detail all production categorized as "other".

PART II: HEADQUARTERS (MAJOR OWNERS & OPERATORS)

1. Interservicing Candidates

1.1 Specify all depot and/or industrial workload programs, performed by any of your activities, that are possible candidates for interservicing, *both* in to and out from the activity. Provide detailed supporting data for your recommendations.

2. Core Requirements

2.1 Given the current programmed configuration and operation for these activities, provide the projected Core Workload, Directed workload, Core "Plus" Workload, and Workload required to be retained to meet the Secretary of the Navy's Title 10 responsibilities. Within each Fiscal Year (FY) requested, provide your response in Units of throughput (where applicable) and Direct Labor Man Hours (DLMHs) for the categories in the following Tables. Core workload includes all Core work performed for other Military Departments (please specify such work within each commodity category).

- Core workload calculations are to be performed in accordance with the Office of the Under Secretary of Defense (Logistics) (OUSD(L)) Memorandum dated 15 November 1993 (subject: "Policy for Maintaining Core Depot Maintenance Capability").

- Directed workload includes: Foreign Military Sales (FMS); Low Quantity Non-Core; Low Quantity Above Core; Best Value; Engineering Support; and Last Source of Repair. Directed workload is tabulated in Section 2.2, following.

- Core-Plus workload is the sum of Core workload and Directed workload.

- Title 10 workload is that portion of Core workload that must be retained within the Department of the Navy in order to meet the Secretary of the Navy's Title 10 responsibilities.

N/A

Table 2.1.a: **Workload Requirements FY 1993**

FY 1993 Commodity Type	Core Workload (DLMHs)			
	Core Workload	Directed Workload	Core "Plus" Workload	Title 10 Workload
Total:				

N/A

Table 2.1.b: **Workload Requirements FY 1994**

FY 1994 Commodity Type	Core Workload (DLMHs)			
	Core Workload	Directed Workload	Core "Plus" Workload	Title 10 Workload
Total:				

N/A

Table 2.1.c: **Workload Requirements FY 1995**

FY 1995 Commodity Type	Core Workload (DLMHs)			
	Core Workload	Directed Workload	Core "Plus" Workload	Title 10 Workload
Total:				

N/A

Table 2.1.d: **Workload Requirements FY 1996**

FY 1996 Commodity Type	Core Workload (DLMHs)			
	Core Workload	Directed Workload	Core "Plus" Workload	Title 10 Workload
Total:				

N/A

Table 2.1.e: **Workload Requirements FY 1997**

FY 1997 Commodity Type	Core Workload (DLMHs)			
	Core Workload	Directed Workload	Core "Plus" Workload	Title 10 Workload
Total:				

N/A

Table 2.1.f: **Workload Requirements FY 1998**

FY 1998 Commodity Type	Core Workload (DLMHs)			
	Core Workload	Directed Workload	Core "Plus" Workload	Title 10 Workload
Total:				

N/A

Table 2.1.g: **Workload Requirements FY 1999**

FY 1999 Commodity Type	Core Workload (DLMHs)			
	Core Workload	Directed Workload	Core "Plus" Workload	Title 10 Workload
Total:				

N/A

Table 2.1.h: **Workload Requirements FY 2000**

FY 2000 Commodity Type	Core Workload (DLMHs)			
	Core Workload	Directed Workload	Core "Plus" Workload	Title 10 Workload
Total:				

N/A

Table 2.1.i: **Workload Requirements FY 2001**

FY 2001 Commodity Type	Core Workload (DLMHs)			
	Core Workload	Directed Workload	Core "Plus" Workload	Title 10 Workload
Total:				

2.2 Given the current programmed configuration and operation of the NADEPs, provide the projected Directed Workload. Within each Fiscal Year (FY) requested, provide your response in units throughput (where available) and Direct Labor Man Hours (DLMHs) for the categories requested.

- Foreign Military Sales (FMS) include airframe, engine and component maintenance and manufacturing support.

- Modifications (Mods) include *only those modifications* performed concurrently with scheduled depot level work packages constituting Core workload.

- Low Quantity Non-Core (LQNC) is that Non-Core workload with insufficient programmed quantity for competition. This category also includes above threshold Core workload for weapons systems which have a total projected workload greater than the computed core quantity (above core workload).

- Best Value (BV) includes items that have been offered for maintenance under competitive rules and no offerer has provided a bid that is equal to or better than the value provided by a current organic source.

- Engineering Support (Engr) consists of Engineering Support to field, modify, operate, and maintain aviation weapon systems (i.e. RCM analysis, defining maintenance intervals, developing maintenance concepts, modification management, industrial support, investigations, bulletins and flight safety, and environmental issues).

- Last Source of Repair (LSOR) comprises Non-Core workload which has been offered for maintenance under competitive rules and no offerer has provided a bid, and for which a workload requirement exists and the organic depot is the only remaining source of repair.

N/A

Table 2.2.a: **Directed Workloads - FY 1993**

FY 1993 Commodity	Units Throughput						Total
	FMS	Mods	LQNC	BV	Engr	LSOR	
FY 1993 Total:							

N/A

Table 2.2.b: **Directed Workloads - FY 1994**

FY 1994 Commodity	Units Throughput						Total
	FMS	Mods	LQNC	BV	Engr	LSOR	
FY 1994 Total:							

N/A

Table 2.2.c: **Directed Workloads - FY 1995**

FY 1995 Commodity	Units Throughput						Total
	FMS	Mods	LQNC	BV	Engr	LSOR	
FY 1995 Total:							

N/A

Table 2.2.d: **Directed Workloads - FY 1996**

FY 1996 Commodity	Units Throughput						Total
	FMS	Mods	LQNC	BV	Engr	LSOR	
FY 1996 Total:							

N/A

Table 2.2.e: **Directed Workloads - FY 1997**

FY 1997 Commodity	Units Throughput						Total
	FMS	Mods	LQNC	BV	Engr	LSOR	
FY 1997 Total:							

N/A

Table 2.2.f: **Directed Workloads - FY 1998**

FY 1998 Commodity	Units Throughput						Total
	FMS	Mods	LQNC	BV	Engr	LSOR	
FY 1998 Total:							

N/A

Table 2.2.g: **Directed Workloads - FY 1999**

FY 1999 Commodity	Units Throughput						Total
	FMS	Mods	LQNC	BV	Engr	LSOR	
FY 1999 Total:							

N/A

Table 2.2.h: **Directed Workloads - FY 2000**

FY 2000 Commodity	Units Throughput						Total
	FMS	Mods	LQNC	BV	Engr	LSOR	
FY 2000 Total:							

N/A

Table 2.2.i: **Directed Workloads - FY 2001**

FY 2001 Commodity	Units Throughput						Total
	FMS	Mods	LQNC	BV	Engr	LSOR	
FY 2001 Total:							

3. Organization

3.1 Can the depot/industrial level workload be transferred to other sources such as other Navy activities, interservice to other DoD entities, or outsourced to commercial activities? Identify all applicable considerations to your recommendations. N/A

Change
N4644-
CPF
MAY 94

TAB D

ORDNANCE STORAGE CAPACITY

ORDNANCE STORAGE CAPACITY

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

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

1. Ordnance Stowage and Support

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

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

Change N3A-CPF MAY 94

Facility Number	PRESENT INVENTORY		PREDICTED INVENTORY FY 2001		MAXIMUM RATED CAPABILITY	
	TONS	SQ FT	TONS	SQ FT	TONS	SQ FT
1GT1 - 1GT10	78	9450	150	9450	150	9450
3992	0.2	60	1.5	60	.5	60
100A	0	425	0	425	115	425
TOTAL	78.2	9935	151.5	10475	265.5	9935

R

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

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

Table 1.2: **Total Facility Ordnance Stowage Summary**

Facility Number/Type	Currently Stowed Commodity Type(s)	Reason for Stowage at your Activity	Commodity Type(s) Which Can Be Stowed
1GT1 GALLERY	ROCKET MOTORS	OWN ACTIVITY USE	See comments
1GT2 GALLERY	FUSE DETONATOR	OWN ACTIVITY USE	See comments
1GT3 GALLERY	ROCKET MOTORS	OWN ACTIVITY USE	See comments
1GT4 GALLERY	ROCKET MOTORS	STOWAGE	See comments
1GT5 GALLERY	BLASTING CAPS	OWN ACTIVITY USE	See comments
1GT6 GALLERY	SMALL ARMS AMMUNITION	OWN ACTIVITY USE	See comments
1GT7 GALLERY	ROCKET MOTORS	OWN ACTIVITY USE	See comments
1GT8 GALLERY	ROCKET MOTORS	OWN ACTIVITY USE	See comments
1GT9 GALLERY	FUSE/DETONATOR	OWN ACTIVITY USE	See comments
1GT10 GALLERY	RFI MSL/DEMO 20MM AMMO	DEEP STOW (WR)	See comments
2Y2 RSL	PYRO/ROCKETS MOTORS	OWN ACTIVITY USE	See comments
3992 2Y1	1.3 & 1.4	OWN ACTIVITY USE	See comments

R

Additional comments: Commodity types that can be stowed are listed in column 2. Mixture will depend on stowage compatibility and size of packages.

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

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

Table 1.2: **Total Facility Ordnance Stowage Summary**

Facility Number/Type	Currently Stowed Commodity Type(s)	Reason for Stowage at your Activity	Commodity Type(s) Which Can Be Stowed
1GT1 GALLERY	ROCKET MOTORS	OWN ACTIVITY USE	See comments
1GT2 GALLERY	FUSE DETONATOR	OWN ACTIVITY USE	See comments
1GT3 GALLERY	ROCKET MOTORS	OWN ACTIVITY USE	See comments
1GT4 GALLERY	ROCKET MOTORS	STOWAGE	See comments
1GT5 GALLERY	BLASTING CAPS	OWN ACTIVITY USE	See comments
1GT6 GALLERY	SMALL ARMS AMMUNITION	OWN ACTIVITY USE	See comments
1GT7 GALLERY	ROCKET MOTORS	OWN ACTIVITY USE	See comments
1GT8 GALLERY	ROCKET MOTORS	OWN ACTIVITY USE	See comments
1GT9 GALLERY	FUSE/DETONATOR	OWN ACTIVITY USE	See comments
1GT10 GALLERY	RFI MSL/DEMO 20MM AMMO	DEEP STOW (WR)	See comments
2Y2 RSL	PYRO/ROCKETS MOTORS	OWN ACTIVITY USE	See comments

Additional comments: Commodity types that can be stowed are listed in column 2. Mixture will depend on stowage compatibility and size of packages.

R

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

Table 1.3: **Facility Rated Status**

Facility Number / Type	Hazard Rating (1.1-1.4)	Rated NEW	ESQD Arc		
			Established (Y / N)	Waiver (Y / N)	Waiver Expiration Date
1GT1	1.3	30,000	Y	N	N/A
1GT2	1.2	20,000	Y	N	N/A
1GT3	1.3	30,000	Y	N	N/A
1GT4	1.3	30,000	Y	N	N/A
1GT5	1.1	10,000	Y	N	N/A
1GT6	1.4	10,000	Y	N	N/A
1GT7	1.3	30,000	Y	N	N/A
1GT8	1.3	30,000	Y	N	N/A
1GT9	1.2	20,000	Y	N	N/A
1GT10	1.1	30,000	Y	N	N/A
2Y2	1.3	20,000	Y	N	N/A

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

Table 1.3: **Facility Rated Status**

Facility Number / Type	Hazard Rating (1.1-1.4)	Rated NEW	ESQD Arc		
			Established (Y / N)	Waiver (Y / N)	Waiver Expiration Date
1GT1	1.3	30,000	Y	N	N/A
1GT2	1.2	30,000	Y	N	N/A
1GT3	1.3	30,000	Y	N	N/A
1GT4	1.3	30,000	Y	N	N/A
1GT5	1.1	10,000	Y	N	N/A
1GT6	1.4	10,000	Y	N	N/A
1GT7	1.3	30,000	Y	N	N/A
1GT8	1.3	30,000	Y	N	N/A
1GT9	1.2	30,000	Y	N	N/A
1GT10	1.1	30,000	Y	N	N/A
2Y2	1.3	20,000	Y	N	N/A

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

NONE

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

Table 1.5: **Related Ordnance Support**

Related Functions	Performed? (Y / N)	Type of Commodity	DLMHs
Maintenance (specify level) Storage Handling	**N**		
Testing	**N**		
Manufacturing	**N**		
Outload	**N**		
Technical Support	**N**		

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

NEXT ECHELON LEVEL (if applicable)

Captain James E. Eckart
NAME (Please type or print)

Signature

Acting
Title

11 May 1994
Date

COMNAVAIRPAC
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. KELLY, ADM USN
NAME (Please type or print)

Signature

COMMANDER IN CHIEF
Title

23 MAY 1994
Date

U.S. PACIFIC FLEET
Activity

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

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

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

Signature

Acting
Title

2 Jun 94
Date

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

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

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

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

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

ACTIVITY COMMANDER

JON E. THIELE, CDR/USN
NAME (Please type or print)

Jon E. Thiele
Signature

ACTING COMMANDING OFFICER
Title

04 MAY 1994
Date

PACIFIC MISSILE RANGE FACILITY
Activity

177

R

BRAC-95 CERTIFICATION

DATA CALL FOUR

PACIFIC MISSILE RANGE FACILITY

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
NAME

Signature

Commander In Chief
Title

17 December 1994
Date

U. S. Pacific Fleet
Activity

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

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

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

Signature

Title

1/11/95
Date

DATA CALL #4

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."

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

ACTIVITY COMMANDER

T. L. DANIELS, CAPT/USN
NAME (Please type or print)

T L Daniels
Signature

COMMANDING OFFICER
Title

11/1/94
Date

PACIFIC MISSILE RANGE FACILITY
Activity

ENCLOSURE (1)

R

BRAC-95 CERTIFICATION

DATA CALL 4
Audit Changes
PMRF UIC 0534A

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

NEXT ECHELON LEVEL

_VADM Robert J. Spane, USN___
NAME (Please type or print)

Signature

_Commander_____
Title

_21 November 1994_____
Date

Commander Naval Air Force, U.S. Pacific Fleet
Activity

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

MAJOR CLAIMANT LEVEL

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.

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

NAME (Please type or print)

Signature

Title

Date

R

177

BRAC-95 CERTIFICATION

DATA CALL FOUR

PACIFIC MISSILE RANGE FACILITY

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
NAME

Signature

Commander In Chief
Title

17 December 1994
Date

U. S. Pacific Fleet
Activity

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

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

W. A. EARNER

NAME (Please type or print)

Signature

Title

1/11/95
Date

R

DATA CALL #4

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

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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

T. L. DANIELS, CAPT/USN
NAME (Please type or print)

T L Daniels
Signature

COMMANDING OFFICER
Title

24 OCT 94
Date

PACIFIC MISSILE RANGE FACILITY
Activity

R

BRAC-95 CERTIFICATION
DATA CALL 4
Change 1
PMRF Barking Sands UIC 0534A

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

NEXT ECHELON LEVEL

_VADM Robert J. Spane, USN___
NAME (Please type or print)

Signature

_Commander_____
Title

_28 October 1994_____
Date

Commander Naval Air Force, U.S. Pacific Fleet
Activity

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

MAJOR CLAIMANT LEVEL

_____
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.

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

_____
NAME (Please type or print)

_____
Signature

_____
Title

_____
Date

177

Department of Defense

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

March 31, 1994

MILITARY VALUE DATA CALL

TECHNICAL CENTERS

Category	**10.7**
Technical Center Site	**PMRF**
Location/Address	**BARKING SANDS, KEKAHA, HI 96752**

MILITARY VALUE MEASURES

MISSION

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

The mission of PMRF is to provide major range services which facilitate training, tactics development, and evaluation for air, surface, and subsurface weapons systems for PACFLT, other DOD agencies, and Foreign Military Forces. In addition it is to maintain and operate facilities and provide services and material to support operations of aviation activities and units of the operating forces of the Navy, other activities and units designated by the Chief of Naval Operations.

PMRF's mission is assigned by NAVAIRPACINST 5450.9 series.

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

None.

TECHNICAL FUNCTIONS

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

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

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

MANPOWER

4. **Work Breakdown Structure.**

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

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

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

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

NOTES:

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

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

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

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

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

Table 4.1, General Support Resources for
(Activity:-PMRF (UIC:-N0534A)

Function	Space allocated (Gross SQFT)	Work Years	Civilian Persnel onboard	Contract Work Years	Military Personnel Onboard	
					Off	Enl
ADMINISTRATION						
Command (CO/XO/TD/etc.)	3238	12	9	0	2	1
Comptroller	2000	12	8	4	0	0
Admin	2700	34	29	0	2	0
Human Resources	100	1	1	0	0	0
OPERATIONS SUPPORT						
Supply Management	2000	34	6	25	1	2
Consolidated Computational Computer Support	0	0	0	0	0	0
Information Systems and Communications	4673	12	0	12	0	0
Safety/OSH/Environmental	700	12	4	4	4	0
INFRASTRUCTURE						
Physical Security	4456	68	3	65	0	0
Public Works/Staff Civil	2000	117	12	104	1	0
Fire Protection	4973	48	0	48	0	0
Medical/Dental	1115	0	0	0	0	0
Military Support	40174	83	2	0	6	75
Air/Waterfront Operations	3194	21	1	16	3	1
Other						
TECHNICAL STAFF						
Technical Operations	114500	271	65	196	6	10
Totals	185823	725	140	474	25	89

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page_____of_____
UIC_____

Table 4.2, General Support Resources for all Detachments
(Activity:_____) (UIC:_____) N/A - No Detachments

Function	Space allocated (Gross SQFT)	Work Years	Civilian Persnel 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:_____) (UIC:_____)None

Function	Space allocated (Gross SQFT)	Work Years	Civilian Persnel 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:-PMRF) (UIC:-N0534A)

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	0	0	0	0	0
High School	0	6	4	6	15	31
B.A./B.S	0	12	3	2	9	26
M.A./M.S	0	3	1	2	1	7
Ph.D./ M.D.	0	0	0	0	1	1
Total	0	21	8	10	26	65

Table 5.2, Technical Staff Education Level for all Detachments
(Parent Activity:_____) (UIC:_____) None

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:-PMRF) (UIC:-N0534A)

Academic field	Number
Physics	1
Chemistry	0
Biology	0
Mathematics/Statistics/ Operations Research	1
Engineering	2
Medical	0
Dental	0
Computer Science	1
Social Science	0
Other Science	2
Non-Science	1
Total	8

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Table 5.4, Technical Staff Academic Fields for all Detachments
(Parent Activity:_____) (UIC:_____) N/A - No Detachments

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 hinder in the hiring of qualified personnel?

The high cost of living of Kauai and the location of PMRF on the west side of the island may be a hinderance to some potential hires. However, for those that choose PMRF, the island is considered to be a most desirable aspect of the job and to the local residents the most desirable place of employment.

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. None.

e. List all technical books and/or chapters written by the in-house technical staff that were published or accepted for publication since 1 January 1990. None.

f. Identify any Nobel laureates employed at this activity. None.

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

None

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

One Beneficial Suggestion for saving over $100,000 1992.

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

One patent issued for Portable Automatic Radar Simulator 1992.

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

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None

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

l. Identify any in-house staff that are members of the National Academy of Sciences. None.

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

One end item prototype in production and use by the Navy -- Portable Automatic Radar Simulator. Reference -- Portable Automatic Radar Simulator, PARS-2, Users Guide and Technical Manual by Robert Hedin and Alan Chun, Pacific Missile Range Facility, Hawaiian Area, Barking Sands,Kekaha, Kauai, Hi 96752, July 1990.

FACILITIES AND EQUIPMENT

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

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

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

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

(a) Simulation Capabilities and Facilities.

(1) Aerial Threat Simulation.

The following aerial targets are launched from the Pacific Missile Range Facility's launch pad to simulate hostile aerial threats to range users:

BQM-34S. BQM-34S Missile Target, surface or air launched, recoverable, remotely controlled, subsonic target. Missile provides realistic subsonic target for air-to-air and surface-to-air training exercises. Operational altitude: 50,000 feet, maximum speed: Mach 0.9; minimum altitude: 30 feet (Radar Altimeter Low Altitude Control System), on station flying time: one hour, maneuverability: 5 G.

BQM-74C. BQM-74C Missile Target, surface or air launched, remotely controlled, subsonic, recoverable turbojet powered target. Missile provides realistic subsonic target for air-to-air, surface-to-air and gunnery exercises. Typical operations are target flight altitudes of 50 to 4,000 feet, speed of 430 knots on station for 30 minutes.

MQM-8. MQM-8 Missile Target, surface launched supersonic, non-recoverable, remotely controlled target. This "VANDAL" target simulates midcourse phase of an attacking Anti-Ship Cruise Missile for surface-to-air weapon system exercises. Maximum range is approximately 165 NM at altitudes from 30 to 70,000 feet with speeds from Mach 2.1 to 2.7.

The following aerial target is normally air launched:

AQM-37C. AQM-37C Missile Target, supersonic, non-recoverable, liquid fueled rocket powered target. Target flight controlled is by a self-contained preset guidance system. The AQM-37C simulates a high performance aircraft for air-to-air and surface-to-air weapon system exercises. Maximum range is approximately 155 NM at altitudes from 1,000 to 100,000 feet, at speeds from Mach 0.7 to 4.0.

Aerial Targets Facility:

The Aerial Targets Facility presently consists of four major buildings where aerial targets/avionics are stored (Bldg 443), repaired (Bldg 416), maintained and assembled (Bldg 413-hangar) and tested (Bldg 429-engine test cell). Contractor and government personnel are presently in trailers and soon to be relocated into a permanent office facility, Bldg 442. The VANDAL assembly is performed in Bldg 573.

(2) Surface Threat Simulation Capability.

The following surface targets are provided by the Pacific Missile Range Facility to simulate hostile threats to range users:

QST-35 SEPTAR. QST-35 SEPTAR, (Seaborne Powered Target), medium speed, remotely controlled, 57 foot, gasoline engine driven fiberglass hulled target boat. The SEPTAR boat provides a low-cost, recoverable/reusable target for gunfire and missile exercises. This boat has a point-to-point round trip range of 150 NM at a maximum speed of 34 knots. Passive augmentation includes radar enhancement screens and reflectors. Active radar threat simulators and rocket boosted chaff can be provided on the target.

QST-33 SEPTAR. QST-33 SEPTAR, small (18 feet), high speed, radio controlled, single gasoline engine powered target boat. The QST-33 is used mostly for gunnery, rocket and bombing exercises. Maximum cruise speed at 40 knots in calm seas with on station time of 4-6 hours. Augmentation includes strobe light and optional radar reflector.

ISTT. ISTT (Improved Surface Tow Target), fiberglass hull, 28 foot, tow target. The ISTT is authorized for receiving direct fire in surface gunnery training exercises.

HULK. Hulk Target, instrumented and augmented inactive reserve hulks are used as targets for anti-ship cruise missile exercises. Hulk allocations are controlled by COMTHIRDFLT and maintained by the Naval Inactive Ship Maintenance Facility (NISMF), Pearl harbor. Augmentation includes passive and active devices such as: radar corner and screen reflectors, STE (surface threat emitter) radar simulator, E jammers, HF direction finder and high speed cameras.

SEPTAR Facility.

The following facility provides the infrastructure to which all SEPTAR operations are located: Port Allen Warehouse and Compound, leased facility from A&B Properties, building and compoind serve to secure operations and provide areas where boat maintenance: hull, engine, mechanical, electrical, structural, and corrosion control work can be performed. This facility is manned by Navy personnel who perform all operations and maintenance of the SEPTARs and other surface targets.

The Port Allen pier and shed, leased by PMRF from the State of Hawaii supports the marine department's weapons and torpedo recovery boatrs (TWR 833, WRB-101, and WRB-102) as well as serving as a staging, deploying point for the QST-35 and the QST-33 target SEPTARs.

(3) Electronic Threat Simulation Capability.

The following are Electronic Wargare Threat Simulation capabilities in various presentation platforms: a) as man portable threat simulators, b) as ship (TWR, WRB & QST) mounted threat simulators, c) as aerial target (BQM-74C) mounted threat simulators, d) as aircraft (RC-12F) mounted threat simulators, and e) as land based threat simulators on Kauai (Makaha Ridge, Niihau Island (Perch Site) and Oahu (Mauna Kapu, Barbers Pt., Camp Smith, Kaneohe Marine Corps Air Station, and Pearl Harbor.

Electronic Warfare Facilities:

The Electronic Warfare Facilities are unique and scattered throughout the islands. On the Island of Kauai, the Pacific Missile Range Facility's assets on base include the electronic warfare shop, building 254, occupied by contractor personnel and building 233, occupied by government personnel. Equipment repairs, prototype design/mock up, storage and maintenance activities are performed in these buildings. The electronic Warfare Facility, building 770 on Makaha Ridge supports the operational requirements for the Bees Jammer, DLQ-3 Jammers, I/J TES Threat Emitter and the DPT-1 Threat Emitter.

The facility on Niihau Island, Perch Site, houses the portable DLQ-3 Jammers and the DPT-1 Threat Emitters for operational purposes.

The Island of Oahu is supported with two permanent building sites for Electronic Warfare: Barbers Point Naval air Station, building 1146 supports the ROS contractor's personnel in providing maintenance, storage and repairs for all EW equipment operating on Oahu, this includes the Bees Jammer, ANCIEN Van, FIC Van and the DPT-1 threat emitters; Mauna Kapu, building 204 support the FIC (frequency interference control) function for Joint Frequency Management, the DPT-1 threat emitters and other portable emitters.

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 Brace-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.

100 miles to Oahu - Hickam Air Force Base.

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?

Ten Storage Magazines
Three Service Magazines
265.5 Tons Storage Capacity

LOCATION

8. **Geographic Location.**

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

Yes. A major factor in the success of PMRF is location. The land area surrounding PMRF to the east is agriculture marsh land that by its nature can never be developed in an economically feasible way. To the west, there is nothing but thousands of miles of ocean. PMRF has scheduling authority for warning and restricted airspace that covers over 40,000 square miles and extends from the surface to unlimited altitude. There are not sea lanes running through PMRF's sea range. With no major population centers within 125 miles of PMRF, the electromagnetic spectrum is reasonably clear. There are no encroachment concerns, from PMRF or to PMRF, either now or anticipated in the future. The work of PMRF is benign to the local community and provides jobs. There is strong community support for PMRF and its contribution to the local economy which is considerable.

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

Clear weather, lack of encroachment, a sea test range where large missile hazard areas can be readily cleared, deep water, shallow water and Navy controlled airspace are all important to ensure that tests and operations can be completed with minimal impact by factors outside of test parameters. This results in excellent support within scheduled periods and reduced cost of false starts and retests. Additionally, data gathering instrumentation and launch facilities are located in the mountains adjacent to the range at elevations that extend

the area of instrumentation coverage and closely simulate the altitudes of tactical aircraft. This provides sites that are particularly suitable for testing airborne systems without having to fly aircraft. This capability extends test time availability, facilitates adjustments to equipment during testing and significantly reduces testing costs. The mid-Pacific location of PMRF is ideal for a variety of exoatmospheric/space studies involving satellites and rocketborne experiments, and the location is right for midcourse data gathering on ICBM launched from the West coast of the CONUS. The location and layout of PMRF's instrumentation and launching facilities are ideal for testing and training missions in a littoral warfare situation and this mid-Pacific site is perfect for theater missile defence development, testing and training.

FEATURES AND CAPABILITIES

9. Computational Facilities.

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

(1) Range Operations Control System (ROCS)

The ROCS collects data from range sensor instrumentation, provides acquisition data between instrumentation, records all instrumentation data, processes and displays data in three separate operations control rooms, performs exercise playbacks and provides exercise data products. In general the ROCS suite of equipment includes the entire system (computer, peripherals and software) purchased by the government. under the ROCS contract and additions made to the system by PMRF. The ROCS is built around computers from the Gould (Encore)CONCEPT series, including four Gould 32/97 central computers, each capable of 4.67 million instructions per second (MIPS). Although the computers have different functions for real-time-time data collection, exercise playback, data products, and software development their identical configuration (3 of the 4) provides a measure of redundancy that allows non-interruption of higher priority operations in the event of computer failure. Twelve NTDS channels on each computer provides the interface to external systems and sensors including SPARS, TTTS, NTDS, ITCS and APIS. All three central computers are linked via high-speed parallel DMA interface to two Gould 32/67 computers that functions as data servers. Approximately 22 Gbytes of storage are dual-ported through these two processors.

(a) Range Operations Sub-System (ROSS)

ROSS is the real-time range processing software which processes incoming range data and special operational applications and passes the data to the ROCS Display Console Sub-System and Data Storage Sub-system. The software runs on a Gould 32/97 with a Front End Processor (FEP).

(b)Exercise Playback Sub-System (EPSS)

EPSS software resides on a Gould 32/97 and can play back exercise data immediately after it is stored. The sub-system plays back recorded data at rates of 1 to 10 times actual real-time rates. The system allows for immediate playback and analysis of events, crew debriefings, demonstrations and production of near-real-time (quick-look) data packages.

(c) Process Control Stations (PCS)

Three Gould MicroSELS, are tied to the central processors. Using Alphanumeric terminals, the man machine interface support the system as Process Control Stations (PCS). Both ROSS and EPSS interface with the PCS. The 3 PCS can be used in a variety of ways to share control of the three ROCS operations rooms.

(d) Display Console Sub-System (DCSS)

The three central computers are linked to over 25 display processors via a series of Local Area Networks (LANS). Any of these consoles can be functionally linked to either ROSS or EPSS. Most of these processors, Gould MicroSELS, have two high-resolution Chromatics CXII color graphics engines and serve as Operations Display Consoles (ODC). Data is displayed at each ODC on two 19-inch color monitors. One of these displays, parameter display, is normally used to display alphanumeric data while the other, position display, is used to display graphics data. Two touch-sensitive electroluminescent panels are used as function keys. These programmable panels allow control of display functions through the use of chained menus for control of the parameter and position displays.

Three specific workstations, Gould MicroSELS, are used to control the six ROCS large screen displays (LSDs) two in each Operations Control Room (OCR). These Hughes Model 1000 color projectors can be controlled in real-time to provide outputs identical to those available at an ODC or can be specifically tailored for LSD presentation. Special annotation capability is provided for the LSDs to provide more readable formats for observers.

Another three workstations perform the Quick Look Display (QDS) functions or can act as ODC's. The Quick look displays can control EPSS playbacks and display the playback data. The system design allows any of the other display consoles to receive playback data once a playback is started.

The Display consoles are spread among 4 rooms. They are the 3 Operations Control Rooms (Alpha, Bravo and Charlie) and the Range Facility Control Office (RFCO) located in the mezzanine. The ROCS system can process data on all equipment simultaneously.

(e) Range Data Products Group.

The Range Data Products Group (RDPG) consists of 2 ROCS sub-systems (DPCS and DPWS), computers and their peripheral equipment, CALCOMP pen plotters, disk drives, data terminals, line printers, magnetic tape units, copiers and drafting equipment that are primarily used in the production of data products. The RDPG also includes PODAF equipment. As the major producer of Data Products for the entire range, Data Products functionality includes the collection, archiving, transmittal of all range data products. A data product is considered the end product from the RDPG or other systems, consisting of reconstructed plots of operational events, data booklets, tabular printouts, magnetic tapes, video cassettes, logs and other products requested by users.

Data Products Computer Sub-System (DPCS)

The DPCS consists of a 32/97 which accesses the Data Storage Sub-system. In general the DPCS performs the initial processing of the post operational data and passes data to the DPWS. It also can output data to peripherals such as tape units. The data is immediately accessible after storage from the real-time system.

Data Products Workstations (DPWS).

Each DPWS is a Gould MicroSEL with a single graphics display and capable of directing hard copy devices for graphics data (plotters and screen copiers), are used in a post-exercise mode. These workstations are used to perform detailed analysis of data. One stand alone DPWS with 2 tape drives can perform post-operational data processing until all functionality is operational on the on-line RDPG.

(f) Software Support Equipment (SSE).

The Software Support System consists of a Gould 32/97 computer, a system console, two system disks, four visual display terminals, five console printers, a two-drive nine-track magnetic tape unit, a high speed laser printer, time code generator, a floppy disk drive, a Power Distribution Unit (PDU), and one each ODC, PCS and DPWS console. The SSE is currently located in Building 105, Room A-105. The SSE was designed for remote software development but the ROCS design allows the individual components to act as parts of most of the ROCS sub-systems.

(g) Tactical Mission Analysis System (TACMAS)

The TACMAS is a stand alone workstation used for the presentation of mission data. It is comprised of an open system running Unix/Xwindows/Motif. Besides standard XY data presentation, graphs and parameter displays the TACMAS provides range safety displays for missile and target presentations.

(h) Other .

ROCS provides a variety of other functions including video switching to allow data to be sent to hard copy units and a video station able to record in Beta and Super VHS. Stand alone disk drives are used to bring diagnostics and software to the various computer systems. A stand alone Zenith 248 contains the entire library of system drawings along with other equipment drawings for Building 105 (including Bonaventure Annex).

(2) Range Data Processing System

(a) Barking Sands Operations Support System (BOSS).

The Barking Sands Operations Support system primarily located in the Range Operations Building, Room B-4, performs computations for specialized launch operations, provides control for the one or more operations in progress, processes and provides data for display and acquisition from tracking sensors at Barking Sands, Makaha Ridge, Kokee Park, Sandia and Kaena Point on Oahu. Additionally, the BOSS accepts and displays tracking data from ITCS, APIS, and the TTTS.

The BOSS consists of four Univac 1230 computers, two on-line and two in the stand-by mode, and their associated peripheral equipment, several PC's, and a MicroVax III system. Digital-to-Analog converters provides the interface between BOSS and the analog equipment in the T&C rooms.

Range Display Sub-System

Tracking and Control Room (T&C)

Data from the BOSS is displayed in two operations control rooms, (Tracking and Control rooms ALPHA and BRAVO), with similar display equipment. The display equipment consist of: four each 30 x 30 inch vertical plotboards (ALPHA also has a 45 x 60 inch plotboard), strip chart recorders, MDAU, CRT terminals (ODG) and BODS. System Control CRT's (SCC), which interface with BOSS, in each T&C room allows operators to select the types and source of data to be displayed on plotting boards and strip charts. The ODG provides for the display of real-time alphanumeric information during range operations. A Remote Radar Display Processor, located in T&C Alpha, provides the capability to display remote site weather data on a 19 inch color monitor.

Plotboards and Stripcharts.

Each of the X-Y plotters, manned by an operator, can continuously record and display tracks of two vehicles being tracked by instrumentation sensors. Target height, or depth, data can be displayed and recorded on single pen, one dimensional, strip chart recorders. Height data may also be plotted on the X-Y plotters.

System Control Console. (SCC)

The SCC console, which consists of a Keyboard-CRT and a Function Generator, is used to input control commands, tabular information and events to the BOSS. The Keyboard-Crt also displays tracking status of the sensors, current plot assignments, and system feedback. The system feedback is outputted to a printer attached to the CRT. Commands, events or other information which can be inputted from the SCC can also be inputted from the Z-120 Console in the Real-Time Computer Center. This provides a backup in case of a failure.

Operations Display Group (ODG)

The Operations Display Group provide the capability of obtaining, from the BOSS, continuously updated real-time alphanumeric read-outs of functions, such as range, bearing, altitude, heading and closing velocity which are displayed on CRT monitors. Hard copies of the displayed functions are available from printers attached to each monitor. A Zenith Z-248 PC with printer, located in each T&C room, is used to drive the CRTs.

Barking Sands Optical Display System (BODS)

The Barking Sands Optical Display System is a computer-driven, large screen rear projection, display system. A Honeywell DDP-516 digital computer, a control console in each T&C room, and three display projection system and large screens (one for ALPHA and two for BRAVO) comprise the total system. The function of the DDP-516 is to receive data from BOSS, convert and scale coordinate information to a compatible format and output this information as analog signals to the appropriate projection system. An alphanumeric keyboard allows the operators to annotate track or to print messages on the displays. In addition to the original BODS system three BARCO projectors are used to project images from various displays onto the Large Screens in Alpha and Bravo.

(3) Naval Tactical Data System (NTDS)

(a) System Description.

The Naval Tactical Data System interfaces with the BOSS or ROCS and/or APIS for the exchange of data that is displayed on three NTDS consoles located in RFCO. The NTDS system consists of a pulse amplifier, a symbol generator, two radar azimuth converters, a signal distribution switchboard, one Data Input console, two Data Utilization consoles and a system monitoring panel. A Univac 1230 computer with its associated peripherals and a extended memory unit provides the software support. The system is also configured with a Link-11 data terminal set.

The existing NTDS system is being upgraded (IOC Sept 94) with modern fleet compatible equipment, consisting of eleven AN/UYQ-21 console emulators and two AN/UYK-43 computers with associated peripherals. The new consoles will be installed in all three OCR's, RFCO, BMIC and old T & C Bravo.

(4) Sensor Positioning and Readback System (SPARS).

The Sensor Positioning and Readback System (SPARS) Input/Output Buffer serves as a digital interface between the real-time computer system and remote sensor systems and range instrumentation. SPARS enables the real-time computer systems to simultaneously receive data from multiple range sensors and allows target acquisition data to be sent to each sensor. The I/O buffer is fully redundant with a primary and a backup unit. Communications with the remote sensors are via full duplex synchronous serial channels. Communications with the computers is via full duplex NTDS parallel channels. Each I/O buffer also provides status indicators for each SPARS sensor channel, CRT displays for operator display and control, and test data generation for system check-out.

(5) Video Tactical Analysis and Critiques System (VTACS.)

The Video Tactical Analysis and Critique System provides video production facilities to create VHS and or BETA format color video and audio tapes from fleet exercises displayed in the T&C rooms. A VTACS system is installed in each T&C room. One DCX-M3 Sony Color Video Camera is wall- mounted in ALPHA and two in BRAVO. Each camera is centered in front of a BODS display screen. A VTACS console contains a remote zoom/focus and pan/tilt controller, 4-inch black and white monitor, two 8-inch color monitors plus a 19-inch color monitor external to the console, a special effects generator, time /date inserter, and a TASCAM audio mixer.

(6) BMIC and MDAU/SPADS

(a) Battle Management Interoperability Center (BMIC)

BMIC located in Room C-6 of the Range Operations Building, consist of a Generic Front-End Communications Processor (GFCP), two 486 Advanced Tactical Work Station (ATW), MDAU/SPADS consoles, an APIS console, an HP-9020 Joint Operational Tactical System (JOTS), a Large Screen Display, and a ON-143(V)6 Tactical Data Link. The GFCP is a message processor that routes Officer-in-Tactical Command Information Exchange Subsystem (OTCIXS)/Tactical Data Information Exchange Subsystem (TADIXS) message data from the ON-143 (V)6 communications system to the appropriate tactical data processors (TDPs) such as the ATW and JOTS consoles.

(b) MDAU/SPADS.

The Multi-Source Data Acquisition Unit/Scenario Planning and Display System provides a real-time range safety picture for the Range Control Officer and Operations Conductors in the T&C rooms. The system, located in the Range Operations Building, consists primarily of an HP9020 desktop minicomputer (room C-6), a remote MDAU terminal (T&C ALPHA), a large screen display (room C-31), a Tactical Data Processor (room B-4), and cable runs to the BOSS and NTDS computers, the Satellite Communications System and the Message Center.

(7) Remote Radar Data Display Processor (R2D2P).

The Enterprise Electronics Corporation (EEC) Color Remote Radar Data Display Processor Model R2D2P-8000 is designed to access and display, on a 19 inch color monitor, precipitation images from weather radars. These images are transmitted over dial-up telephone lines. The processor utilizes a Z80A running at 4 Mhz.

10. **Mobilization Responsibility and Capability.**

a. Describe any mobilization responsibility officially assigned to this site. Cite the document assigning the responsibility. None.

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

12. **Military Housing**

(a) Family Housing:

(1) Do you have mandatory assignment to on-base housing? (circle) yes no (NO)

(2) For military family housing in your locale provide the following information:

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Type of Quarters	Number of Bedrooms	Total number of units	Number Adequate	Number Substandard	Number Inadequate
Officer	4+	5	5	0	0
Officer	3	7	7	0	0
Officer	1 or 2	4	4	0	0
Enlisted	4+	10	10	0	0
Enlisted	3	18	18	0	0
Enlisted	1 or 2	25	25	0	0
Mobile Homes		0	0	0	0
Mobile Home lots		0	0	0	0

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

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	0	
	2	0	
	3	0	
	4+	1	4 months
O-4/5	1	0	
	2	0	
	3	0	
	4+	0	
O-1/2/3/CWO	1	0	
	2	0	
	3	1	4 months
	4+	0	
E7-E9	1	0	
	2	0	
	3	1	3-4 months
	4+	1	5-6 months
E1-E6	1	0	
	2	4	
	3	0	
	4+	1	5-6 months

[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	Not Applicable - The demand for Base Housing at PMRF was resolved by FY-1993 MILCON Project. The grade category demand was E1-E3 personnel.
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)? 100%

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

Type of Quarters	Utilization Rate
Adequate	100%
Substandard	NA
Inadequate	NA

(8) As of 31 March 1994, have you experienced much of a change since FY 1993? If so, why? If occupancy is under 98% (or vacancy over 2%), is there a reason? No. New housing units came on line and the demand was resolved.

(b) BEQ:

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

Type of Quarters	Utilization Rate
Adequate	95%
Substandard	NA
Inadequate	NA

(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? NONE.

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

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

$$\frac{7 \times 365}{365} = 7$$

(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.)	1	11%	none
Spouse Employment (non-military)	6	67%	none
Other	2	22%	none
TOTAL	9	100	

(5) How many geographic bachelors do not live on base? 2

(c) BOQ:N/A - PMRF does not have a BOQ

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

Type of Quarters	Utilization Rate
Adequate	NA
Substandard	NA
Inadequate	NA

(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?
Increase in married members. Less deployments of transient personnel. Billets were reduced. 95% due to male/female mix.

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

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

3 $\quad \frac{3X365}{365} = 3$

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

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Reason for Separation from Family	Number of GB	Percent of GB	Comments
Family Commitments (children in school, financial, etc.)	1	33	NONE
Spouse Employment (non-military)	2	67	NONE
Other	0	00	NONE
TOTAL	3	100	

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

None.

R

(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.

Change N4644-CPF MAY 94

Facility Type, Bldg. # & CCN	Total No. of Beds	Total No. of Rooms	Adequate		Substandard		Inadequate	
			Beds	Sq Ft	Beds	Sq Ft	Beds	Sq Ft
721-11 BEQ, BLDG 1261, E1-E4	20	10	20	255 per Room	N/A	N/A	N/A	N/A
721-12 BEQ, BLDG 1261, E5-E6	13	13	13	255 per Room	N/A	N/A	N/A	N/A

R

(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?

(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.

Change N4644-CPF MAY 94

Facility Type, Bldg. # & CCN	Total No. of Beds	Total No. of Rooms	Adequate		Substandard		Inadequate	
			Beds	Sq Ft	Beds	Sq Ft	Beds	Sq Ft
721-11 BEQ, BLDG 1261, E1-E4	18	9	18	255 per Room	N/A	N/A	N/A	N/A
721-12 BEQ, BLDG 1261, E5-E6	14	14	14	255 per Room	N/A	N/A	N/A	N/A

(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.

PMRF does not have a BOQ

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

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

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

R

(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	
722-10/BLDG 1262	756	120	756	0	0	0	0	70
740-04/BLDG 201	1000	60	1000	0	0	0	0	90
740-64/BLDG 1308	3150	116	3150	0	0	0	0	0

R

(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?

(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	
722-10/BLDG 1262	756	72	756	0	0	0	0	70
740-04/BLDG 201	1000	60	1000	0	0	0	0	90
740-64/BLDG 1308	3150	116	3150	0	0	0	0	0

(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	
722-10/BLDG 1262	756	72	756	0	0	0	0	740
740-04/BLDG 201	1000	60	1000	0	0	0	0	90
740-64/BLDG 1308	3150	116	3150	0	0	0	0	0

(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: PMRF - Barking Sands DISTANCE: N/A

Facility	Unit of Measure	Total	Profitable (Y,N,N/A)
Auto Hobby	Indoor Bays	0	N/A
	Outdoor Bays	8	Y
Arts/Crafts	SF	1800	Y
Wood Hobby	SF	2000	N/A
Bowling	Lanes	2	Y
Enlisted Club	SF	3000	N
Officer's Club	SF	1960	N
Library	SF	NONE	N/A
Library	Books	NONE	N/A
Theater (Outdoor)	Seats	200	N
ITT	SF	872	N
Museum/Memorial	SF	NONE	N/A
Pool (indoor)	Lanes	NONE	N/A
Pool (outdoor)	Lanes	6	N
Beach	LF	NONE	N/A
Swimming Ponds	Each	NONE	N/A
Tennis CT	Each	3	N/A

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

Facility	Unit of Measure	Total	Profitable (Y,N,N/A)
Volleyball CT (outdoor)	Each	2	N/A
Basketball CT (outdoor)	Each	2	N/A
Racquetball CT	Each	1	N/A
Golf Course	Holes	NONE	N/A
Driving Range	Tee Boxes	10	N
Gymnasium	SF	N/A	N/A
Fitness Center	SF	3780	N/A
Marina	Berths	N/A	NONE
Stables	Stalls	N/A	NONE
Softball Fld	Each	1	N/A
Football Fld	Each	NONE	N/A
Soccer Fld	Each	1	N/A
Youth Center	SF	N/A	NONE
Mini Golf	Holes	18	N
Beach Cottages	Each	10	Y
CPO Club	SF	2068	N/A
Fitness Trail	Stations	12	N/A

(a) Is your library part of a regional interlibrary loan program? No.

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

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

Age Category	Capacity (Children)	SF			Number on Wait List	Change N4644-CPF MAY 94 Average Wait (Days)
		Adequate	Substandard	Inadequate		
0-6 Mos	0				0	0
6-12 Mos	0				0	0
12-24 Mos	10	480			4	120
24-36 Mos	10	480			6	120
3-5 Yrs	18	960			6	180

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: N/A

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. None.

d. How many "certified home care providers" are registered at your base? None.

e. Are there other military child care facilities within 30 minutes of the base? State owner and capacity (i.e., 60 children, 0-5 yrs). No.

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	8360
Gas Station	SF	420
Auto Repair	SF	2325
Auto Parts Store	SF	1000
Commissary	SF	N/A
Mini-Mart	SF	N/A
Package Store	SF	500
Fast Food Restaurants	Each	2
Bank/Credit Union	Each	N/A
Family Service Center	SF	N/A
Laundromat	SF	N/A
Dry Cleaners	Each	N/A
ARC	PN	N/A
Chapel	PN	N/A
FSC Classrm/Auditorium	PN	N/A

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

City	Distance (Miles)
Honolulu	95
Lihue	25
Kekaha	7

16. **Standard Rate VHA Data for Cost of Living:**

Paygrade	With Dependents	Without Dependents
E1	513.17	287.12
E2	496.14	312.01
E3	496.96	366.18
E4	548.28	382.66
E5	563.70	393.58
E6	613.58	417.68
E7	655.81	455.57
E8	651.05	492.19
E9	817.47	620.56
W1	660.61	501.71
W2	729.46	572.14
W3	712.03	587.76
W4	696.74	617.76
O1E	651.10	482.96
O2E	647.81	516.48
O3E	719.82	608.97
O1	706.02	520.25
O2	671.19	524.61
O3	687.63	578.94
O4	667.94	580.85
O5	681.79	563.83
O6	744.57	616.29
O7	684.31	555.99

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

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

Type Rental	Average Monthly Rent		Average Monthly Utilities Cost
	Annual High	Annual Low	
Efficiency	N/A	N/A	N/A
Apartment (1-2 Bedroom)	600.00	400.00	75.00
Apartment (3+ Bedroom)	800.00	600.00	100.00
Single Family Home (3 Bedroom)	1200.00	1000.00	200.00
Single Family Home (4+ Bedroom)	1600.00	1400.00	250.00
Town House (2 Bedroom)	1200.00	1000.00	100.00
Town House (3+ Bedroom)	1400.00	1000.00	150.00
Condominium (2 Bedroom)	1200.00	1000.00	100.00
Condominium (3+ Bedroom)	1400.00	1100.00	150.00

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

Type Rental	Percent Occupancy Rate
Efficiency	N/A
Apartment (1-2 Bedroom)	90%
Apartment (3+ Bedroom)	90%
Single Family Home (3 Bedroom)	50%
Single Family Home (4+ Bedroom)	90%
Town House (2 Bedroom)	N/A
Town House (3+ Bedroom)	N/A
Condominium (2 Bedroom)	N/A
Condominium (3+ Bedroom)	N/A

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

Type of Home	Median Cost
Single Family Home (3 Bedroom)	$ 250K
Single Family Home (4+ Bedroom)	$ 300K
Town House (2 Bedroom)	$ 200K
Town House (3+ Bedroom)	$ 250K
Condominium (2 Bedroom)	$ 200K
Condominium (3+ Bedroom)	$ 225K

(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	N/A	N/A	N/A
February	N/A	N/A	N/A
March	N/A	N/A	N/A
April	N/A	N/A	N/A
May	N/A	N/A	N/A
June	N/A	N/A	N/A
July	N/A	N/A	N/A
August	N/A	N/A	N/A
September	N/A	N/A	N/A
October	N/A	N/A	N/A
November	N/A	N/A	N/A
December	N/A	N/A	N/A

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

Limited available housing, the material and labor cost for construction and the limited supply of construction material.

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

Rating	Number Sea Billets in the Local Area	Number of Shore billets in the Local Area
Officer (all)	26	None
Enlisted (all)	89	None

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

Location	% Employees	Distance (mi)	Time(min)
Kekaha	20	7	10
Waimea	10	11	20
Hanapepe	20	17	30
Kalaheo	25	22	45

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

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

Institution	Type	Grade Level(s)	Special Ed Available	Annual Enrollment Cost per Student	1993 Avg SAT/ ACT Score	% HS Grad to Higher Ed	Source of Info
Eleele School	Public	K-6	Yes	N/A	N/A	N/A	Dept. of Ed. Hawaii
Hanalei School	Public	K-6	Yes	N/A	N/A	N/A	N/A
Kalaheo School	Public	K-6	Yes	N/A	N/A	N/A	N/A
Kapaa School	Public	K-6	Yes	N/A	N/A	N/A	N/A
Kapaa High-Intermediate	Public	7-12	Yes	N/A	V. 356 M. 449	Not Avail-able	N/A
Kauai High-Intermediate	Public	7-12	Yes	N/A	V. 376 M. 462	80%	N/A

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Kekaha School	Public	K-6	Yes	N/A	N/A	N/A	N/A
Kilauea School	Public	K-6	Yes	N/A	N/A	N/A	N/A
King Kaumualii School	Public	K-6	Yes	N/A	N/A	N/A	N/A
Koloa School	Public	K-6	Yes	N/A	N/A	N/A	N/A
Niihau School	Public	K-8	Yes	N/A	N/A	N/A	N/A
Waimea Canyon School	Public	K-8	Yes	N/A	N/A	N/A	N/A
Waimea High	Public	9-12	Yes	N/A	V. 356 M. 442	69%	N/A
Elsie H. Wilcox School	Public	K-6	Yes	N/A	N/A	N/A	N/A
Island School	Private	K-8	No	$5,150.00	Not Avail-able	Not Avail-able	N/A
Kahili Adventist School	Private	K-8 9-10	No	$2,860.00 $3,100.00	Not Avail-able	Not Avail-able	N/A
St. Theresa School	Private	K-8	No	$ 700.00	N/A	N/A	N/A

(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	
KAUAI COMMUNITY COLLEGE	Day	NO	YES	YES	YES	NO
	Night	NO	YES	YES	YES	NO
HAWAII STATE DEPT OF EDUCATION	Day	YES	NO	NO	NO	NO
	Night	YES	NO	NO	NO	GED
	Day					
	Night					
	Day					
	Night					

(c) List the educational institutions which offer programs on-base available to service members and their adult dependents. Indicate the extent of their programs by placing a "Yes" or "No" in all boxes as applies. None

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

21. **Spousal Employment Opportunities.**

Provide the following data on spousal employment opportunities. N/A - Barking Sands not serviced by a PSC.

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

22. **Medical/Dental.**

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

No. PMRF maintains an Emergency Medical Team through the O&M Contractor, and limited Naval Medical Facility with an Independent Duty Corpsman on duty for referrals. The Naval Dental Clinic, Pearl Harbor makes a quarterly visit to the base for all active duty military. Kauai has a full service hospital approximately 20 minutes drive from Barking Sands and a medical clinic approximately 20 minutes drive. There are several medical clinics on island within a 20-minute to one hour drive. There are several dental offices within a 20-minute to one hour drive. Active duty personnel that require extensive medical or dental care are sent to Pearl Harbor, Hickam, or Tripler Medical Center on Oahu via our own aircraft or by civilian aircraft.

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. Kauai has two full service hospitals. One is approximately 20 minutes drive from Barking Sands and the other is approximately a one hour drive. There are several medical clinics on island within a 20-minute to one hour drive from Barking Sands. There are several dental offices within a 20-minute to one hour drive.

No. PMRF maintains an Emergency Medical Team through the O&M contractor, and a limited Naval Medical Facility with an Independent Duty Corpsman on duty for referrals.

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

Crime Definitions	FY 1991	FY 1992	FY 1993
1. Arson (6A)			
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	1	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None
2. Blackmarket (6C)			
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	None	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None
3. Counterfeiting (6G)			
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	None	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None

Crime Definitions	FY 1991	FY 1992	FY 1993
4. Postal (6L)			
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	None	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None
5. Customs (6M)			
Base Personnel - military	N/A	N/A	N/A
Base Personnel - civilian	N/A	N/A	N/A
Off Base Personnel - military	N/A	N/A	N/A
Off Base Personnel - civilian	N/A	N/A	N/A
6. Burglary (6N)	No Record.	None	None
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	None	1
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	3	None
7. Larceny - Ordnance (6R)	No Record.	None	None
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	None	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None
8. Larceny - Government (6S)	No Record.	None	None
Base Personnel - military	No Record.	4	4
Base Personnel - civilian	No Record.	15	18
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None

Crime Definitions	FY 1991	FY 1992	FY 1993
9. Larceny - Personal (6T)			
Base Personnel - military	No Record.	2	5
Base Personnel - civilian	No Record.	4	4
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	2	1
10. Wrongful Destruction (6U)			
Base Personnel - military	No Record.	5	3
Base Personnel - civilian	No Record.	9	5
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	5	4
11. Larceny - Vehicle (6V)			
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	None	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None
12. Bomb Threat (7B)			
Base Personnel - military	No Record	None	None
Base Personnel - civilian	No Record.	None	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None

Crime Definitions	FY 1991	FY 1992	FY 1993
13. Extortion (7E)			
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	None	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None
14. Assault (7G)			
Base Personnel - military	No Record.	1	4
Base Personnel - civilian	No Record.	None	1
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None
15. Death (7H)			
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	None	None
Off Base Personnel - military	No Record.	1	1
Off Base Personnel - civilian	No Record.	None	None
16. Kidnapping (7K)			
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	None	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None

Crime Definitions	FY 1991	FY 1992	FY 1993
18. Narcotics (7N)			
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	1	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None
19. Perjury (7P)			
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	None	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None
20. Robbery (7R)			
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	None	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None
21. Traffic Accident (7T)			
Base Personnel - military	No Record.	4	3
Base Personnel - civilian	No Record.	12	6
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	3	1

Crime Definitions	FY 1991	FY 1992	FY 1993
22. Sex Abuse - Child (8B)			
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	None	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None
23. Indecent Assault (8D)			
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	None	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None
24. Rape (8F)			
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	None	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None
25. Sodomy (8G)			
Base Personnel - military	No Record.	None	None
Base Personnel - civilian	No Record.	None	None
Off Base Personnel - military	No Record.	None	None
Off Base Personnel - civilian	No Record.	None	None

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	PMRF
Functional Support Area	10.7
Life Cycle Work Area	17

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

1. **In-House Work Years.** Provide the number of in-house government employee (civilian and military) work years for FY1993 that were performed in this functional support area - life cycle work area. Workyears are to be consistent with those used in the preparation of inputs to the President's budget. ___244___WYs

2. **Expenditures.**

a. **In-House Expenditures.** Provide the total in-house cost in FY1993 for this functional support area - life cycle work area. $(K)36,674__

b. **Out-of-House Expenditures**. Provide the total funds expended during FY1993 for this functional support area - life cycle work area. **Do not** include direct cite funding. $(K)11,379__

c. **Direct Cites.** Provide total direct cite funds expended on contract during FY1993 for this functional support area - life cycle work area. $(K)624____

Note:

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

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

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TAB B

SPECIAL FACILITIES AND EQUIPMENT

FACILITIES/EQUIPMENT CAPABILITY FORM

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF MAKAHA RIDGE
Facility/Equipment Nomenclature or Title	ELECTRONIC WARFARE, BLDG 770

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

Facility is primarily used for fleet training in electronics warfare and also in testing and evaluation of electronic warfare equipment.

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

Equipment is fixed.

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

Equipment is valued at $1.2 million for replacement. Building is valued at $150,000 replacement cost. Utilities are valued at $75,000.

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

Gross weight of equipment is approximately 20,000 pounds, volume of the facility is approximately 9,000 cubic feet.

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

Communications support is required to interface with the SPARS system, telephone, UHF and VHF communications also required.

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

Special budget requirements for this facility is the 2X to 3X the normal cost of construction at sea level vice mountain ridge where it is located.

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

Environmental requirements include temperature and humidity controls.

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

This facility would be difficult to move because of the high degree of interface and connectivity required with communciations and the SPARS system. The equipment would not be difficult to replicate or obtain.

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

The approximate date of constructed was in the calendar 1987.

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.

Functional support area is 8.3 Electronic Warfare Systems.

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

Historical utilization average for the past five years (1989-1993) was approximately three times a week, for eight hours a day.

12. Provide the projected utilization data out to FY1997.

The projected utilization out to FY97 will remain at three times a week for eight hours a day.

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

Approximately three persons are required to operate this facility.

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

Approximately two persons are required to maintain this facility.

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

Will be provided by separate correspondence directly to the BSAT.

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SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF BARKING SANDS
Facility/Equipment Nomenclature or Title	BARSTUR/BSURE UNDERWATER TRACKING RANGES

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

The primary purpose of the Tracking Ranges is to track underwater vehicles such as submarines, torpedos, and underwater targets as they participate in Navy training and T&E operations on the PMRF underwater ranges. The system consists of underwater hydrophones and uses special purpose signal processing equipment, several computers, and other peripheral electronic equipment to produce the targets underwater location for display in the operation control rooms.

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

The shore-based equipment described above is technically moveable however, the underwater hydrophones that supply the acoustic data to the system are considered fixed. Therefore, the equipment will have no or little value at any other location.

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

The replacement value of the BARSTUR/BSURE underwater tracking ranges is estimated at $45 million. This consists of approx $40M for underwater hydrophones and $4-5M for shore-based signal processors, computers and auxillary equipments.

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

The facility housing the shore-based equipment is approx 800 sq ft. Gross weight is estimated at 4,452 pounds.

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

There is no "special" utility support required other than regulated or instrumentation power.

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

There are no special budget requirements.

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

The shore-based equipment is electronic equipment and has standard environmental control requirements.

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 BARSTUR/BSURE underwater tracking ranges coverage of approx 1,000 SNM is the largest unencroached underwater tracking range in the world. It's existence is integral to providing free play firing opportunities to Fleet combatants on a three dimensional (underwater, surface and air) test and training range. This capability is considered impossible to relocate or duplicate at any other known geographical area and does not exist commercially.

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

The equipment was designed, delivered, installed, and certified at PMRF in 1986 via a Navy contract.

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

10.7

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

Average annual operational utilization is approximately 2700 hours.

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12. Provide the projected utilization data out to FY1997.

Due to anticipated increase due to Attack Submarine move to Pearl Harbor from the West Coast, FY97 operational utilization is estimated at 3200 hours or a 20% increase above FY89-93 2700-hour mean.

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

Four contractor technicians operate the underwater ranges shore-based equipments. ISE, I&M planning and systems software is provided by two government engineers.

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

Maintenance is performed by the same contractor personnel described above.

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

Will be provided by separate correspondence directly to the BSAT.

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SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF MAKAHA RIDGE
Facility/Equipment Nomenclature or Title	TELEMETRY STATION

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

The primary purpose of the Makaha Ridge Telemetry Station is to receive, record and display telemetry data for test missiles. The station supports ballistic missiles launched from Vandenberg, fleet readiness firing from air, surface and sub-surface launch platforms, AEGIS PCCSQT and SDIO STARS programs.

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

The Makaha Ridge Telemetry Station consists of (3) 30 FT and (2) 9 FT antenna w/control consoles, (20) data receivers w/combiners, (8) 4 MHZ/(4) 2 MHZ analog recorders and (7) stream decommutators/discriminators and 12 display recorders. All of this equipment is technically movable however, a MILCON would be needed to house the separation/display, data receivers, tracking consoles and recorder stations. Additionally, significant investment would be required for site preparation for the 30 FT antennas.

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

The replacement value of above equipments is estimated at $12-14M.

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

The facility housing the equipment is approx. 3,800 sq. ft. Gross weight is estimated at 200,000 pounds. Note: 30 FT antenna/pedestals estimated at 60,000 pounds each.

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

There is no "special" utility support required other than regulated or instrumentation power.

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

There are no special budget requirements.

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

The equipment is electronic equipment and has standard environmental control requirements.

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

This equipment technically could be replicated or relocated to another location. However, relocation of this equipments from this geographical area would have significant impact to NAVY AEGIS ships PCCSQT, SDIO and future national priority WAD and TBMD programs.

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

The Makaha Ridge telemetry station was originally established in 1967 and has been upgraded through-out the years to keep abreast of range user test requirements. Transport of equipment, if relocated, would vary due to consideration of weight, etc. and would use both air/surface modes.

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

10.7

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

Average annual operational utilization is approx 650 hours.

12. Provide the projected utilization data out to FY1997.

Due to anticipated increase in RDT&E activity related to WAD and TBMD programs, FY97 operational utilization is estimated at 800 hours or a 23% increase above FY89-93 650 hour mean.

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

Seven contractor personnel operate the Makaha Ridge telemetry station. ISE, I&M planning and systems software is provided by two government personnel.

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

Maintenance is performed by the same contractor personnel described above.

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

Will be provided by separate correspondence directly to the BSAT.

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SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	INTEGRATED TARGET CONTROL SYSTEM

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

The primary purpose of the Intergrated Target Control System is used to track and control airborne and surface targets such as BQM-34/74 drone targets. The system consists local and remote data processors, tracking antennas, peripheral electronic equipment, target control consoles and display graphics monitors.

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

The shore-based equipment described above is technically moveable however, the antenna mounts requires a specially built concrete pad or a steel tower if it is to be relocated.

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

The replacement value of the Intergrated Target Control System is estimated at $7 million when it was installed in 1985. However, a complete replacement is not availble today because of some obsoleteness in spare parts.

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

The facility housing the shore-based equipment is approx 1257 sq ft. Gross weight is estimated at 17,900 pounds.

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

There is no "special" utility support required other than regulated or instrumentation power.

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

There are no special budget requirements

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

The shore-based equipment is electronic equipment and has standard environmental control requirements.

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 Intergrated Target Control System tracking ranges coverage of approx 1,000 SNM is the largest unencroached tracking range in the world. It's existence is integral to providing free play firing opportunities to Fleet combatants on a three dimensional (underwater, surface and air) test and training range. The capability to relocate is considered possible although not recommended. A updated newer system such as the NGTCS would be a replacement consideration.

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

The equipment was designed, delivered, installed, and certified at PMRF in 1985 via a Navy contract. Equipment was surface shipped.

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

10.7

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

Seven hundred hours (700) annually.

12. Provide the projected utilization data out to FY1997.

FY97 utilization is estimated at 700-800 hours due to increased WAD and TBMD workload activity.

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

Four contractor technicians operate the Intergrated Control Systems and equipment. ISE and I & M planning is provided by goverment system manager.

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

Maintenance is performed by the same contractor personnel described above and a sub-contract is provided to a manufacturer qualified field service support for the Data General computer systems, including peripherals.

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

Will be provided by separate correspondence directly to the BSAT.

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

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Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	EMR SYSTEM 90 RANGE SAFETY SYSTEM

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

The primary purpose of the EMR System 90 is Range Safety. The system provides process of real-time telemetry data collected at the Makaha Ridge telemetry station and provide both missile function and TSPI data in support of real-time live-fire operations. The system consists of multiplexers, demultiplexers, bit synchronizers, decommutation units, various processing computers and display workstations on a local area network.

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

The "Class 2" equipment described here is technically moveable.

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

The replacement value is approx $1.0M.

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

The facility housing the equipment is approx 400 sq ft. Gross weight is approx 3,100 pounds.

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

There is no "special" utility support required other than regulated or instrumentation power.

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

There are no special budget requirements.

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

The equipment is electronic equipment and has standard environmental control requirements.

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

This equipment technically could be replicated or relocated at another site. However, if lost, support of SM-II BLK-IV DT/OT, STARS and future WAD and TBMD missile launch programs would be impacted. Range Safety has made the System 90 mandatory for STARS and BLK-IV testing at PMRF.

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

The equipment was delivered, installed, and certified at PMRF in 1990 via a Navy contract. Transport was via commercial air.

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

10.7

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

FY93 annual utilization was approx 250 hours.

12. Provide the projected utilization data out to FY1997.

FY97 utilization is estimated at 300 hours due to increase operational requirements associated with future WAD and TBMD programs.

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

There is 1 contractor assigned to the system. ISE/I&M planning and software development is provided by 1 government person.

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

Maintenance is performed by contractor personnel described above and is supplimented by a manufacturer's maintenance contract.

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

Will be provided by separate correspondence directly to the BSAT.

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SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	AN/FPQ-12

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

The primary utilization of the AN/FPQ-12 is surveillance. The system could track up to 16 low to medium dynamic elements on or near the range operational areas. This track data would be transmitted to the real-time computer center in the Range Operations Center via cable and microwave radio for display and recording.

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

The equipment has reached the end of its logistic support life cycle and will be excessed this FY. An AN/SPS-48E is being shipped to PMRF in FY95 to replace the AN/FPQ-12. As defined, both the AN/FPQ-12 and the AN/SPS-48E are moveable Class 2 installed 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 AN/SPS-48E cost is $25M.

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

Weight = 24,890 pounds. Cube = 1625 cubic feet.

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

System requires chilled water system to provide 28,500 BTU/HR heat dissipation.

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

Special foundation is required for 12 ft. by 13 ft. billboard antenna to prohibit tipping in high winds.

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

Environment must be kept below 60 degrees Farenheit to maintain computer operation.

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.

System could be relocated but would not be maintainable as there is no logistics pipeline for out of manufacture parts. The system can be replicated by either military or civilian equipment. The impact on the Navy is that without this radar there is no organic air surveillance on or near the range operational areas. The task is marginally supported by an Air National Guard AN/FPS-93A.

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

The system was shipped via surface transportation and installed at Makaha Ridge in July 1968.

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

10.7

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

Average annual operational utilization was approximately 2,593 hours in FY91. The system has suffered long term failures during the last three years so the hours utilized do not represent the hours required for support of operations.

12. Provide the projected utilization data out to FY1997.

Due to the scheduled shutdown of the AN/FPQ-12 and replacement with the AN/SPS-48E, and the anticipated increase in RDT&E activity related to WAD and TBMD programs, FY97 operational utilization of the AN/SPS-48E is estimated at 3,112 hours or a 20% increase over the FY91 2,593 hour mean for the AN/FPQ-12.

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

Three contractor technicians operate the system.

14. What is the approximate number of personnel needed to maintain the equipment?
The same three technicians perform maintenance on the system.

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

Will be provided by separate correspondence directly to the BSAT.

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Change N4644-CPF MAY 94

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	AN/SPS-10 SURFACE SURVEILLANCE RADAR

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

The AN/SPS-10 is utilized for surface surveillance to detect non-participant and participant elements on and near the range support areas.

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

Equipment is moveable Class 2 installed 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.

$567K.

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

Weight = 800 pounds. Cube = 48 cubic feet.

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

Requires a source of clean, dry, pressurized air.

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

Requires a tower for the antenna assembly.

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

Normal environment for electronic equipment.

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

This system was designed for installation aboard naval ships and could be replicated or relocated to another site. Impact to the Navy would be the loss of area surveillance capability on and near the range support areas.

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

The system was shipped via surface transportation and installed December 1967.

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

10.7

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

Average annual operational utilization is 2,715 hours.

12. Provide the projected utilization data out to FY1997.

Due to anticipated increase in RDT&E activity related to WAD and TBMD programs, FY97 operational utilization is estimated at 3,258 hours or a 20% increase above FY89-93 2,715-hour mean.

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

The equipment is unmanned after turn-on.

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

Two contract technicians are available for maintenance functions when required.

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

Will be provided by separate correspondence directly to the BSAT.

Change
N4644-
CPF
MAY 94

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	AN/APS-134 NIIHAU ISLAND

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

The AN/APS-134 radar system on Niihau Island is utilized for surface surveillance to detect non-participant and participant elements on and near the range operating areas. The system is unmanned and remote controlled from the Range Operations Center.

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

Equipment is moveable Class 2 installed 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.

$935.5K.

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

Weight = 1,250 pounds. Cube = 175 cubic feet.

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

Requires a source of Freon 116 pressurized gas.

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

Requires a special platform to mount the antenna/pedestal assembly and a remote controlled power plant.

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

Normal environment for electronic equipment.

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

This radar system was designed for installation in the S-3A antisubmarine aircraft. It could be relocated to another site provided the remote control system was included in the relocation. Impact to the Navy would be the loss of area suface surveillance capability on and near the range operating areas.

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

Equipment was shipped via surface transportation and installed in 1986 as part of the Surface Surveillance Radar System (SSRS).

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

10.7

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

Average annual operational utilization is 1,732 hours.

12. Provide the projected utilization data out to FY1997.

Due to anticipated increase in RDT&E activity related to WAD and TBMD programs, FY97 operational utilization is estimated at 2,078 hours or a 20% increase above FY89-93 1,732-hour mean.

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

The equipment is a remote controlled, unmanned site.

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

Two contractor technicians perform maintenance on the radar system. Contractor mechanics and crafts personnel maintain the power plant and utility support equipment.

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

Will by provided by separate correspondence directly to the BSAT.

Change
N4644-
CPF
MAY 94

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	AN/APS-134 MAKAHA RIDGE

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

The AN/APS-134 radar system at Makaha Ridge is utilized for surface surveillance to detect non-participant and participant elements on and near the range operating areas. This system is also utilized as a test and repair facility for the Niihau Island system. During operations the system is unmanned and remote controlled from the Range Operations Center.

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

Equipment is moveable Class 2 installed 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.

$935.5K.

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

Weight = 1,250 pounds. Cube = 175 cubic feet.

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

Requires a source of Freon 116 pressurized gas.

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

Requires a special platform to mount the antenna/pedestal assembly.

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

Normal environment for electronic equipment.

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

This radar system was designed for installation in the S-3A antisubmarine aircraft. It could be relocated to another site provided the remote control system was included in the relocation. Impact to the Navy would be the loss of area suface surveillance capability on and near the range operating areas.

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

Equipment was shipped via surface transportation and installed in 1986 as part of the Surface Surveillance Radar System (SSRS).

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

10.7

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

Average annual operational utilization is 1,110 hours.

12. Provide the projected utilization data out to FY1997.

Due to anticipated increase in RDT&E activity related to WAD and TBMD programs, FY97 operational utilization is estimated at 1,332 hours or a 20% increase above FY89-93 1,110-hour mean.

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

The equipment is a remote controlled, unmanned site.

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

Two contractor technicians, identified in AN/APS-134 (NIIHAU ISLAND) above, perform the maintenance function.

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

Will be provided by separate correspondence directly to the BSAT.

Change
N4644-
CPF
MAY 94

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	AN/FPQ-10 S/N-2

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

The AN/FPQ-10 is a high-power single object C-band precision tracking radar capable of tracking surface, air and exoatmospheric participants to ranges in excess of 4,000 nautical miles and transmitting the position data of that participant to the realtime computer center for display and recording.

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

The system is moveable Class 2 installed equipment and is one of a pair installed in the radar building at Makaha Ridge.

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.

$5M.

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

Weight = 25,000 pounds. Cube = 2,800 cubic feet.

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

Dry, clean, pressurized air is required.

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

A special foundation is required for this system in order to maintain position of the pedestal while the antenna is energized and moving.

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

Normal environment for electronic equipment.

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

This system could be relocated to another site or replicated with equipment procurable from vendors. The impact to the Navy would be the loss of precision position data on range participants and denial of free-play live fire exercises due to range safety considerations.

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

The system was shipped via surface transportation and installed in JULY 1968.

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

10.7

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

Average annual operational utilization is approximately 1,233 hours.

12. Provide the projected utilization data out to FY1997.

Due to anticipated increase in RDT&E activity related to WAD and TBMD programs, FY97 operational utilization is estimated at 1,480 hours or a 20% increase above the FY89-93 1,233 hour mean.

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

Two contractor technicians operate the radar. ISE and I&M planning is provided by two government personnel.

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

The same two contractor technicians perform the maintenance.

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

Will be provided by separate correspondence directly to the BSAT

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	AN/FPQ-10 S/N-3

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

The AN/FPQ-10 is a high-power single object C-band precision tracking radar capable of tracking surface, air and exoatmospheric participants to ranges in excess of 4,000 nautical miles and transmitting the position data of that participant to the realtime computer center for display and recording.

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

The system is moveable Class 2 installed equipment and is one of a pair installed in the radar building at Makaha Ridge.

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.

$5M.

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

Weight = 25,000 pounds. Cube = 2,800 cubic feet.

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

Dry, clean, pressurized air is required.

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

A special foundation is required for this system in order to maintain position of the pedestal while the antenna is energized and moving.

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

Normal environment for electronic equipment.

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

This system could be relocated to another site or replicated with equipment procurable from vendors. The impact to the Navy would be the loss of precision position data on range participants and denial of free-play live fire exercises due to range safety considerations.

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

The system was shipped via surface transportation and installed in JULY 1968.

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

10.7

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

Average annual operational utilization is approximately 1,589 hours.

12. Provide the projected utilization data out to FY1997.

Due to anticipated increase in RDT&E activity related to WAD and TBMD programs, FY97 operational utilization is estimated at 1,907 hours or a 20% increase above the FY89-93 1,589 hour mean.

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

Two contractor technicians operate the radar. ISE and I&M planning is provided by two government personnel.

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

The same two contractor technicians perform the maintenance.

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

Will be provided by separate correspondence directly to the BSAT

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	FPQ-10 S/N-6

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

The AN/FPQ-10 is a high-power single object C-band precision tracking radar capable of tracking surface, air and exoatmospheric participants to ranges in excess of 4,000 nautical miles and transmitting the position data of that participant to the realtime computer center for display and recording.

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

The system is moveable Class 2 installed equipment and is installed in the AN/FPS-16 radar building at Kokee Park.

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.

$5M.

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

Weight = 25,000 pounds. Cube = 2,800 cubic feet.

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

Dry, clean, pressurized air is required.

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

A special foundation is required for this system in order to maintain position of the pedestal while the antenna is energized and moving.

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

Normal environment for electronic equipment.

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

This system could be relocated to another site or replicated with equipment procurable from vendors. The impact to the Navy would be the loss of precision position data on range participants and denial of free-play live fire exercises due to range safety considerations.

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

The system was shipped via surface transportation and installed in August 1988.

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

10.7

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

Average annual operational utilization is approximately 568 hours.

12. Provide the projected utilization data out to FY1997.

Due to anticipated increase in RDT&E activity related to WAD and TBMD programs, FY97 operational utilization is estimated at 682 hours or a 20% increase above the FY89-93 568 hour mean.

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

Two contractor technicians operate the radar. ISE and I&M planning is provided by two government personnel.

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

The same two contractor technicians perform the maintenance.

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

Will be provided by separate correspondence directly to the BSAT

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	AN/MPS-25 S/N-3

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

AN/MPS-25 S/N-3 is a high-accuracy, long-range, monopulse, single object tracking radar capable of tracking surface, air or exoatmospheric targets to a range in excess of 4,000 nautical miles with an accuracy of +/-3 yards RMS. The target position data is transmitted, via cable and microwave radio, to the real time computer center in the Range Operations Center for display and recording.

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

The system is moveable in that the electronics are located in a semi-trailer and the antenna/pedestal assembly can be transported on a specially configured lowboy trailer.

3. Provide 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. $5M.

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

Weight = 36,480 pounds. Cube = 6,830 cubic feet.

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

Dry, clean, pressurized air is required.

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

A special foundation is required for this system in order to maintain position of the pedestal while the antenna is energized and moving.

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

No environmental control requirements exist for this system as the electronic van has a self-contained air conditioning system.

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

This system could be relocated to another site or replicated with equipment procurable from vendors. The impact to the Navy would be the loss of precision position data on range participants and denial of free-play live-fire exercises due to range safety considerations.

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

The equipment was transported by C-5A air transportation from Pt. Mugu, Ca. to PMRF and installed at Makaha Ridge in 1974.

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

10.7

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

Average annual operational utilization is approximately 1,390 hours.

12. Provide the projected utilization data out to FY1997.

Due to anticipated increase in RDT&E activity related to WAD and TBMD programs, FY97 operational utilization is estimated at 1,668 hours or a 20% increase above the FY89-93 1,390 hour mean.

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

Two contractor technicians operate the radar. ISE and I&M planning is provided by two government personnel.

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

The same two contractor technicians perform the maintenance.

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

Will be provided by separate correspondence directly to the BSAT

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	AN/MPS-25 S/N-4

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

AN/MPS-25 S/N-4 is a high-accuracy, long-range, monopulse, single object tracking radar capable of tracking surface, air or exoatmospheric targets to a range in excess of 4,000 nautical miles with an accuracy of +/-3 yardS RMS. The target position data is transmitted, via cable and
microwave radio, to the reat time computer center in the Range Operations Center for display and recording.

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

The system is moveable in that the electronics are located in a semi-trailer and the antenna/pedestal assembly can be transported on a specially configured lowboy trailer.

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.

$5M.

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

Weight = 36,480 pounds. Cube = 6,830 cubic feet.

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

Dry, clean, pressurized air is required.

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

A special foundation is required for this system in order to maintain position of the pedestal while the antenna is energized and moving.

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

No environmental control requirements exist for this system as the electronic van has a self-contained air conditioning system.

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

This system could be relocated to another site or replicated with equipment procurable from vendors. The impact to the Navy would be the loss of precision position data on range participants and denial of free-play live-fire exercises due to range safety considerations.

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

The equipment was transported by C-5A air transportation from Pt. Mugu, Ca. to PMRF and installed at Makaha Ridge in 1978.

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

10.7

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

Average annual operational utilization is approximately 1,554 hours.

12. Provide the projected utilization data out to FY1997.

Due to anticipated increase in RDT&E activity related to WAD and TBMD programs, FY97 operational utilization is estimated at 1,865 hours or a 20% increase above the FY89-93 1,554 hour mean.

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

Two contractor technicians operate the radar. ISE and I&M planning is provided by two government personnel.

14. What is the approximate number of personnel needed to maintain the equipment?
The same two contractor technicians perform the maintenance.

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

Will be provided by separate correspondence directly to the BSAT

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	AN/MPS-25 S/N-5

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

AN/MPS-25 S/N-5 is a high-accuracy, long-range, monopulse, single object tracking radar capable of tracking surface, air or exoatmospheric targets to a range in excess of 32,000 nautical miles with an accuracy of +/-3 yardS RMS. The target position data is transmitted via cable to the real time computer center in the Range Operations Center for display and recording.

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

The system is moveable in that the electronics are located in a semi-trailer and the antenna/pedestal assembly can be transported on a specially configured lowboy trailer.

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.

$5M.

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

Weight = 36,480 pounds. Cube = 6,830 cubic feet.

5. Indicate any "special" utility support required by this facility/equipment other than normal electrical power. Dry, clean, pressurized air is required.

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

A special foundation is required for this system in order to maintain position of the pedestal while the antenna is energized and moving.

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

No environmental control requirements exist for this system as the electronic van has a self-contained air conditioning system.

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

This system could be relocated to another site or replicated with equipment procurable from vendors. The impact to the Navy would be the loss of precision position data on range participants and denial of free-play live-fire exercises due to range safety considerations.

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

The equipment was shipped via surface transportation and installed at Barking Sands in December 1970.

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

10.7

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

Average annual operational utilization is approximately 1,796 hours.

12. Provide the projected utilization data out to FY1997.

Due to anticipated increase in RDT&E activity related to WAD and TBMD programs, FY97 operational utilization is estimated at 2,155 hours or a 20% increase above the FY89-93 1,796 hour mean.

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

Two contractor technicians operate the radar. ISE and I&M planning is provided by two government personnel.

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

The same two contractor technicians perform the maintenance.

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

Will be provided by separate correspondence directly to the BSAT

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	AN/MPS-25 S/N-2

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

AN/MPS-25 S/N-2 is a high-accuracy, long-range, monopulse, single object tracking radar capable of tracking surface, air or exoatmospheric targets to a range in excess of 2,000 nautical miles with an accuracy of +/-3 yardS RMS. The target position data is transmitted via cable to the real time computer center in the Range Operations Center for display and recording.

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

The system is moveable Class 2 installed equipment. Unlike the above identified systems, S/N-2 electronics were removed from the trailer and installed in a building.

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.

$5M.

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

Weight = 35,250 pounds. Cube = 6,830 cubic feet.

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

Dry, clean, pressurized air is required.

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

A special foundation is required for this system in order to maintain position of the pedestal while the antenna is energized and moving.

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

The installation has a separate air conditioning unit for the electronics.

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

This system could be relocated to another site or replicated with equipment procurable from vendors. The impact to the Navy would be the loss of precision position data on range participants and denial of free-play live-fire exercises due to range safety considerations.

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

The equipment was shipped via surface transportation and installed at Barking Sands in December 1982.

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

10.7

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

Average annual operational utilization is approximately 1,653 hours.

12. Provide the projected utilization data out to FY1997.

Due to anticipated increase in RDT&E activity related to WAD and TBMD programs, FY97 operational utilization is estimated at 1,984 hours or a 20% increase above the FY89-93 1,653 hour mean.

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

Two contractor technicians operate the radar. ISE and I&M planning is provided by two government personnel.

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

The same two contractor technicians perform the maintenance.

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

Will be provided by separate correspondence directly to the BSAT

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	AN/FPS-16

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

AN/FPS-16 S/N-30 is a high-accuracy, long-range, monopulse, single object tracking radar capable of tracking surface, air or exoatmospheric targets to a range in excess of 32,000 nautical miles with an accuracy of +/-3 yardS RMS. The target position data is transmitted via cable and microwave radio to the real time computer center in the Range Operations Center for display and recording.

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

The system is moveable Class 2 installed 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.

$5M.

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

Weight = 15,250 pounds. Cube = 5,830 cubic feet.

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

Dry, clean, pressurized air is required.

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

A special foundation is required for this system in order to maintain position of the pedestal while the antenna is energized and moving.

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

Dry, clean, pressurized air is required.

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

This system could be relocated to another site or replicated with equipment procurable from vendors. The impact to the Navy would be the loss of precision position data on range participants and denial of free-play live-fire exercises due to range safety considerations.

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

The equipment was shipped via surface transportation and installed at Kokee Park in December 1961.

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

10.7

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

Average annual operational utilization is approximately 1,076 hours.

12. Provide the projected utilization data out to FY1997.

Due to anticipated increase in RDT&E activity related to WAD and TBMD programs, FY97 operational utilization is estimated at 1,291 hours or a 20% increase above the FY89-93 1,076 hour mean.

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

Two contractor technicians operate the radar. ISE and I&M planning is provided by two government personnel.

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

The same two contractor technicians perform the maintenance.

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

Will be provided by separate correspondence directly to the BSAT

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	COOPERATIVE TRACK SYSTEM

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

The Cooperative Track System (CTS) is utilized to provide positional data on cooperative (transponder equipped) participants. The system can track up 56 augmented elements within RF line-of-sight of Kokee Park.

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

The system is portable in that the control and processor electronics are located in a transportable shelter as well as the environmental control unit.

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.

$5M.

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

Weight = 17,000 pounds. Cube = 1,728 cubic feet.

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

No special utility support requirements.

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

No special budget requirements for this system.

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

No environmental control requirements as the system equipment includes redundant air conditioning systems.

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

This equipment could be replicated or relocated to another site. The impact to the Navy would be that more single object trackers would be required to support operations thereby increasing costs.

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

The equipment was transported by C-130 aircraft and installed at PMRF in September 1991.

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

10.7

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

The system was installed in 1991 and has been going through software modifications and hardware upgrades to the present time therefore no utilization average exists. Prior to installation at PMRF the historical useage was 1,200 hours per year.

12. Provide the projected utilization data out to FY1997.

It is anticipated that the operational hours may increase slightly due to RDT&E programs such as WAS and TBMD.

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

Two contractor technicians operate the CTS.

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

The same two technicians identified above perform maintenance on the CTS.

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

Will be provided by separate correspondence directly to the BSAT

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SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM
DATA ADDED BY CNAP 9405

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	RANGE OPERATIONS AND CONTROL SYSTEM (ROCS)

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

ROCS is a mainframe and workstation computing system which processes and displays all range instrumentation data for the control of PMRF real-time operations and post operational data reduction. The ROCS collects data from range sensor instrumentation, provides acquisition data between instrumentation, records all instrumentation data, processes and displays data in three separate operations control rooms, performs exercise playbacks and provides exercise data products. In general the ROCS suite of equipment includes the entire system (computer, peripherals and software) purchased by the government. Under the ROCS contract and additions made to the system by PMRF. The ROCS is built around computers from the Gould (Encore) CONCEPT series, including four Gould 32/97 central computers, each capable of 4.67 million instrucitons per second (MIPS). Although the computers have different functions for real-time data collection, exercise playback, data products, and software development their idential configuration (eo fo the 4) provides a measure of redundacy that allows non-interruption of higher priority operations in the event of computer failure. Twelve NTDS channels on each computer provides the interface to external systems and sensors including SPARS, TTTS, NTDS, ITCS and APIS. All three central computers are linked via high-speed parallel DMA interface to two Gould 32/67 computers that functions as data servers. Approximately 22 Gbytes of storage are dual-ported through these two processors.

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

The system as a whole is highly specialized to support PMRF operations and would need extensive modifications to be used elsewhere. The actual equipment is considered moveable" without damage to equipment but in need of extensive utility support and assembly of components.

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.

R

The original system cost in 1987 was $14M. This cost reflects computer hardware and specialized computer software. Because of the specialized nature of the software similar costs would be accrued to build a similar processing system. (Note: The system is housed in a new building which cost over $2.5M to build.)

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SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM
DATA ADDED BY CNAP 9405

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	RANGE OPERATIONS AND CONTROL SYSTEM (ROCS)

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

ROCS is a mainframe and workstation computing system which processes and displays all range instrumentation data for the control of PMRF real-time operations and post operational data reduction. The ROCS collects data from range sensor instrumentation, provides acquisition data between instrumentation, records all instrumentation data, processes and displays data in three separate operations control rooms, performs exercise playbacks and provides exercise data products. In general the ROCS suite of equipment includes the entire system (computer, peripherals and software) purchased by the government. Under the ROCS contract and additions made to the system by PMRF. The ROCS is built around computers from the Gould (Encore) CONCEPT series, including four Gould 32/97 central computers, each capable of 4.67 million instrucitons per second (MIPS). Although the computers have different functions for real-time data collection, exercise playback, data products, and software development their idential configuration (eo fo the 4) provides a measure of redundacy that allows non-interruption of higher priority operations in the event of computer failure. Twelve NTDS channels on each computer provides the interface to external systems and sensors including SPARS, TTTS, NTDS, ITCS and APIS. All three central computers are linked via high-speed parallel DMA interface to two Gould 32/67 computers that functions as data servers. Approximately 22 Gbytes of storage are dual-ported through these two processors.

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

The system as a whole is highly specialized to support PMRF operations and would need extensive modifications to be used elsewhere. The actual equipment is considered moveable" without damage to equipment but in need of extensive utility support and assembly of components.

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 original system cost in 1987 was $17M. This cost reflects computer har33dware and specialized computer software. Because of the specialized nature of the software similar costs would be accrued to build a similar processing system. (Note: The system is housed in a new building which cost over $3M to build.)

R

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

The facility housing the system is approximately 9800 sq. ft.

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

There is no "special" utility support required other than regulated or instrumentation power.

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

No special budget requirements.

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

The system is computer based equipment with standard environmental controls for temperature, and humidity.

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

The ROCS system is uniquely built to handle the Range Processing needs of the Pacific Missile Range Facility and it or a similar system is required to perform Range operations at PMRF. The ability of the system to be replicated is directly related to the ability to replicate a range such as PMRF with its current suite of instrumentation and geographical location.

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

System was transported to PMRF in two shipments. Shipment 1 was approximately 2 20x40 Vans barged to Kauai and taking 3 months to install in 1989. The second shipment of three 20x40 Vans were shipped to Kauai and installed between Jan. & May 1992.

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

10.7

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

The average system utilization from 1989 - 1993 is 2578 hours a year. (Note: ROCS system was installed in May 1992, historical data before this time is for the BOSS system which ROCS replaced.)

12. Provide the projected utilization data out to FY1997.

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

The facility housing the system is approximately 9800 sq. ft.

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

There is no "special" utility support required other than regulated or instrumentation power.

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

No special budget requirements.

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

The system is computer based equipment with standard environmental controls for temperature, and humidity.

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

The ROCS system is uniquely built to handle the Range Processing needs of the Pacific Missile Range Facility and it or a similar system is required to perform Range operations at PMRF. The ability of the system to be replicated is directly related to the ability to replicate a range such as PMRF with its current suite of instrumentation and geographical location.

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

System was transported to PMRF in two shipments. Shipment 1 was approximately 2 20x40 Vans barged to Kauai and taking 3 months to install in 1989. The second shipment of three 20x40 Vans were shipped to Kauai and installed between Jan. & May 1992.

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

10.7

11. Provide the historical utilization average for the past five fiscal years (1989-1993).

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R

All other things equal system utilization by hours should stay approximately the same. This still allows for potential increased tempo of submarine operations and Wide Area Defense operations within the same basic hours due to multi-processing capabilities of the system.

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

The system is operated and the hardware is maintained by a group of 21 operator/technicians.

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

Hardware Maintenance described in item 13. Software maintenance and system Improvement & modernization is performed by 16 government personnel and 3 contractors.

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

Will be provided by separate correspondence directly to the BSAT

Define the unit of measure used.

The average system utilization from 1989 - 1993 is 2578 hours a year. (Note: ROCS system was installed in May 1992, historical data before this time is for the BOSS system which ROCS replaced.)

12. Provide the projected utilization data out to FY1997.

All other things equal system utilization by hours should stay approximately the same. This still allows for potential increased tempo of submarine operations and Wide Area Defense operations within the same basic hours due to multi-processing capabilities of the system.

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

The system is operated and the hardware is maintained by a group of 19 operator/technicians.

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

Hardware Maintenance described in item 13. Software maintenance and system Improvement & modernization is performed by 15 government personnel and 2 contractors.

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

Will be provided by separate correspondence directly to the BSAT

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	NAVY TACTICAL DATA SYSTEM (NTDS)

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

The Navy Tactical Data System is the standard shipboard NTDS system with UYK-43 computers and commercial NTDS displays configured to run Aircraft Carrier Block 0 Configuration. The system allows for direct data linking to fleet participants for target firing confirmation, range safety, range surveillance and air controlling.

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

Equipment is considered "moveable" without damage to equipment but in need of extensive utility support and assembly of components. System is water cooled and requires chilled water capabilities.

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

The replacement value is $13M.

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

The system requires approximately 800 sq. ft. Gross weight is estimated at 28,508 pounds.

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

The systems requires regulated power and a water chilling facility for computer cooling.

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

No special budget requirements.

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

Standard environmental controls of temperature and humidity are required. Water cooling ability is required.

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.

Equipment is in use on many Navy ships and could be relocated. Equipment is required for range safety and other functions in order to conduct operations at PMRF. As such it is an integral part of PMRF and can be lost only in the context of not doing operations at PMRF.

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

Equipment was transferred to PMRF by Military aircraft in March 94 and is undergoing installation to be completed by September 94. System replaces older generation NTDS system.

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

10.7

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

The average system utilization from 1989 - 1993 is 2578 hours a year. (Note: Historical data is for old NTDS system being replaced by this system.)

12. Provide the projected utilization data out to FY1997.

All other things equal system utilization by hours should stay approximately the same.

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

Display consoles are manned full time by 3 people with additional personnel used on an operational basis with up to 8 people.

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

Maintenance is performed by 2 technicians. Software updates are provided by FCDSSA, San Diego with local support of approximately 1/2 government man years.

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

Will be provided by separate correspondence directly to the BSAT

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF PORT ALLEN
Facility/Equipment Nomenclature or Title	TWR-833

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

The primary purpose of the TWR-833 is to launch and recover underwater targets and torpedos. It also serves as an oceanographic research and EW support craft.

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

The TWR-833 is a boat and is, therefore, portable.

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

The replacement value of the TWR-833 is $5 million.

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

The TWR-833 displaces 248 tons when fully loaded. It is 120 feet long, has a beam of 25 feet, and a draft of 10 feet.

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

Special utility requirements include: shore power, potable water, diesel fuel, compressed air, and a maintenance shop.

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

Special budget requirements for the TWR-833 include approximately $350K overhaul funding every 3 years.

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

Enviromental control requirements are self contained air conditioning for on board electrical equipment and corrosion control which is covered by standard maintenance and overhauls.

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.

It is possible to replicate or relocate the TWR-833.

9. Indicate how and when the facility/equipment was transported and or constructed at the site. The TWR-833 was driven to PMRF in 1987.

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

10.7

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

On average, the TWR-833 has been used 3 times a week for 18 hours a day for the past five fiscal years (1989-1993).

12. Provide the projected utilization data out to FY1997.

This level of utilization (3 times a week for 18 hours a day) is expected to continue through FY1997.

13. What is the approximate number of personnel used to operate the facility/equipment?
Six people are used to operate the TWR-833.

14. What is the approximate number of personnel needed to maintain the equipment?
A maintenance crew of three assist the crews of PMRF's three boats.

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

Will be provided by separate correspondence directly to the BSAT

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SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF PORT ALLEN
Facility/Equipment Nomenclature or Title	WRB-101

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

The primary purpose of the WRB-101 is to launch and recover underwater targets and torpedos. It also serves as an oceanographic research and EW support craft.

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

The WRB-101 is a boat and is, therefore, portable.

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

The replacement value of the WRB-101 is $3.5 million.

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

The WRB-101 displaces 52 tons when fully loaded. It is 85 feet long, has a beam of 18 feet-8 inches.

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

Special utility requirements include: shore power, potable water, diesel fuel, compressed air, and a maintenance shop.

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

Special budget requirements for the WRB-101 include approximately $250K overhaul funding every 3 years.

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

Environmental control requirements are self contained air conditioning for on board electrical equipment and corrosion control which is covered by standard maintenance and overhauls.

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.

It is possible to replicate or relocate the WRB-101.

9. Indicate how and when the facility/equipment was transported and or constructed at the site. The WRB-101 was delivered to PMRF in 1967.

10. List functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas. 10.7.

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

On average, the WRB-101 has been used 3 times a week for 16 hours a day for the past five fiscal years (1989-1993).

12. Provide the projected utilization data out to FY1997.

This level of utilization (3 times a week for 16 hours a day) is expected to continue through FY1997.

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

Five contractor personnel are used to operate the WRB-101.

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

A maintenance crew of three assist the crews of PMRF's three boats.

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

Will be provided by separate correspondence directly to the BSAT

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF PORT ALLEN
Facility/Equipment Nomenclature or Title	WRB-102

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

The primary purpose of the WRB-102 is to launch and recover underwsate targets and torpedos. It also serves as an oceanographic research and EW support craft.

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

The WRB-102 is a boat and is, therefore, portable.

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

The replacement value of the WRB-102 is $3.5 million.

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

The WRB-102 displaces 52 tons when fully loaded. It is 85 feet long, has a beam of 18 feet-8 inches.

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

Special utility requirements include: shore power, potable water, diesel fuel, compressed air, and a maintenance shop.

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

Special budget requirements for the WRB-102 include approximately $250K overhaul funding every 3 years.

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

Environmental control requirements are self contained air conditioning for on board electrical equipment and corrosion control which is covered by standard maintenance and overhauls.

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.

It is possible to replicate or relocate the WRB-102.

9. Indicate how and when the facility/equipment was transported and or constructed at the site. The WRB-102 was delivered to PMRF in 1967.

10. List functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas. 10.7.

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

On average, the WRB-102 has been used 3 times a week for 16 hours a day for the past five fiscal years (1989-1993).

12. Provide the projected utilization data out to FY1997.

This level of utilization (3 times a week for 16 hours a day) is expected to continue through FY1997.

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

Five contractor personnel are used to operate the WRB-102.

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

A maintenance crew of three assist the crews of PMRF's three boats.

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

Will be provided by separate correspondence directly to the BSAT

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	RANGE COMM SYSTEM (DENRO 400D)

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

The primary purpose and utilization of the Range Communications System, is to provide operational communications for the Tracking and Control facilities required to support Fleet Training and RDT&E programs for the PMRF. The heart of the Range Communications Systems is the DENRO 400D switch, a microprocessor-controlled voice and data switch, that controls 960 voice and data network for distribution to the Range Operations Control Centers, located in Bldg. 105.

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

The facility/equipment is a fixed system installed in 1991. The DENRO 400D is a class 2 system, that was software upgraded in 1993.

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 for the DENRO 400D and its associated 75 individual communications panels is $4.5M.

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

Average gross weight of the DENRO switch and 75 external communications panels is 10,000 pounds and 100 cubic feet.

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

Building air conditioning, 240 amp/hour battery system required for uninterrupted communications services.

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

None.

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

Building environment must be kept at 70 degrees Fahrenheit at 50 percent humidity to maintain reliable communications.

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.

Microwave System/equipment could be relocated, but at extensive cost due to its massive inter-connecting cabling between PMRF facility/equipment that need to be removed and re-constructed. The impact is that without the Rang Communications Systems, fleet training operations, RDT&E programs functions could not be supported.

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

The DENRO 400D system was shipped via surface and installed in at Barking Sands in 1991.

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

10.7

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

Average FY Range Operations use of the systems/equipment was 5,200 hours annually. System/equipment support availability is 24 hours per day, 7 days per week.

12. Provide the projected utilization data out to FY1997.

FY97 systems/equipment utilization is estimated at 5,500 hours, for Range Support.

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

Four contractor technicians operate the facility/equipment.

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

The same four technicians maintain the facility/equipment.

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

Will be provided by separate correspondence directly to the BSAT

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	RANGE RADIO SYSTEMS

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

Range Radio systems are used primarily to provide point-to-point, air-to-ground and ship-to-shore communications for range safety control, air traffic control and range operations coordination with fleet ships, aircraft and submarines. The range radio systems consist of receivers/transmitters/antenna equipment operating the HF,, VHF and UHF frequency bands that are located at Barking Sands, Makaha Ridge, Kokee Park and Mt. Kaala Navy facility on Oahu.

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

The range radio equipment is approaching its logistic life support and will be replaced/upgraded in FY-96, under the CCN-2 approved/funded project. Transmitters, receivers and antenna systems are class 2 installed 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 cost for the range radio systems (total of 70 installed radio units (GRT-22/24, GRC-171, GRC-11, F-350/R-2368, RF-154, AND FM-3) is $8M.

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

The gross weight of the radio systems is 7,000 pounds and 1150 cubic feet.

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

Building air conditioning is required, 50 KW backup generator system required for facility/equipment.

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

Special foundations/guying required for antenna towers at Barking Sands, Makaha Ridge, Kokee Park and Mt. Kaala to withstand winds up to 120 mph.

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

Building environment must be kept at 65 degrees Fahrenheit, and 50 percent humidity to maintain receiver and transmitter operations.

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.

Range Radio System/equipment could be relocated, but at extensive cost due to its associated antenna/towers that need to be moved or re-constructed. If Range radio system is lost, PMRF could not conduct fleet training operations or support RDT&E programs.

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

Equipment was shipped via surface and installed at Barking Sands and Makaha Ridge in 1980, Kokee Park and Mt. Kaala in 1984.

10. List functional support areas (previously provided in Tab A) that this facility/equipment support. Refer to Appendix A for the list of functional support areas. 10.7

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

Average FY use of the Range radio systems/equipment was 5,200 hours annually. System/equipment support is available 7 days per week, 24 hours per day to support operational and safety requirements.

12. Provide the projected utilization data out to FY1997.

FY97 systems/equipment utilization is estimated at 5,500 hours, based on 16 hours per day required for operational support.

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

Five contractor technicians operate the facility/equipment.

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

The same five technicians maintain the facility/equipment.

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

Will be provided by separate correspondence directly to the BSAT.

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	MICROWAVE SYSTEMS ANALOG AND DIGITAL

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

Primary utilization of the old analog and new digital Microwave Systems is to provide the communications connectivity for voice and data circuits, radar, telemetry, surveillance video alarm status monitoring, and intrusion detection from the PMRF remote instrumentation sites to Barking Sands to support the Range and Base Operations requirements. The analog and digital microwave equipment/facilities consist of five independent sites, located at Barking Sands, Makaha Ridge, Kokee Park, Kokee HIANG, and Niihau Island.

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

The analog microwave radio equipment is approaching its logistic life support and will be excessed in FY-95. The new digital microwave and its associated antenna systems are class 2/3 installed 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 for the microwave equipment/facility and its associated antenna systems is $12M.

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

The average gross weight per microwave/antenna system is 2,000 pounds and 20 cubic feet.

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

Building air conditioning, 240 amp/hour battery system required for uninterrupted communications services.

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

Special foundations/guying required for antenna towers at Barking Sands, Makaha Ridge, Kokee Park and Mt. Kaala to withstand winds up to 120 mph.

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

Building environment must be kept at 70 degrees Fahrenheit, and 50 percent humidity to maintain receiver and transmitter operations.

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.

Microwave System/equipment could be relocated, but at extensive cost due to its associated antenna/towers that need to be moved or re-constructed. Without microwave radio system, PMRF could not support fleet training operations, RDT&E programs and Base support functions at the remote site..

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

The analog microwave systems was shipped and installed in 1981. The new digital microwave system was installed at Barking Sands, Makaha Ridge, Kokee Park, Kokee HIANG and Mt. Kaala in 1992. All PMRF microwave systems/equipment was shipped via surface.

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

10.7

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

Average FY Range Operations use of the systems/equipment was 5,200 hours annually. Analog and digital system/equipment support availability is 24 hours per day, 7 days per week.

12. Provide the projected utilization data out to FY1997.

FY97 systems/equipment utilization is estimated at 5,500 hours, for Range and Base support.

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

Three contractor technicians operate the facility/equipment.

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

The same three technicians maintain the facility/equipment.

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

Will be provided by separate correspondence directly to the BSAT

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	LOCAL AREA NETWORK (LAN)/WIDE AREA NETWORK (WAN)

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

Primary utilization of LAN/WAN is the distribution of data, E-mail, message traffic, and Internet/Ehternet communications.

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

The equipment is movable, class 3 equipment. Distributive cabling is fixed in place and can be moved with great difficulty and expense.

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.

Total value of equipment is $1.2M.

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

Gross weight is 3000 lbs and 200 cubic feet.

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

System requires backbone distribution systems, and uninterruptable power source (UPS).

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

Special funding of $1.5M is required to modernize and upgrade network operations.

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

Air conditioning must maintain 72 degree Fahrenheit.

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.

Equipment would be impossible to relocate without total breakdown to the component level. The impact to the Navy would be the cessation of data communications for ethernet, E-mail, and on-base communications.

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

Facility initially constructed in 1986 with backbone fiber installation. Newest generations of equipment installed from 1986 through 1993.

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

10.7

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

3COM network utilization - 41000 messages per month.

12. Provide the projected utilization data out to FY1997.

With Gateguard distribution of unclassified message traffic via LAN projected to be completed in FY95, all Naval Message traffic distribution will be via LAN. This alone will add approximately 800-1000 messages to each message office code. LAN utilization estimated to increase to 225,000 messages per month. WAN use will incorporate other commands to provide data requirements and communication.

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

Six contractor personnel are required to operate the system.

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UIC: _____

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

Four contractor personnel are required to maintain the system.

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

N/A LAN IS DISPERSED WIDELY THROUGHOUT THE COMMAND AND CANNOT BE PHOTOGRAPHED AS A SINGLE UNIT

TAB B
Page ___ of ___
UIC: _____

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	ALARM SYSTEMS

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

Primary utilization of Alarm Systems is the protection of PMRF facilities for fire, security and intrusion detection. The alarm system is also used for other forms of facility monitoring, e.g. freezer/water alarms.

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call. The equipment is movable, class 2 and 3 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.

Total value of equipment is $2.2M.

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

Gross of equipment is 6000 lbs and 475 cubic feet.

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

Systems requires protected distribution, and uninterruptable power source (UPS). Systems operation requires EMI/RFI analysis.

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

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

Air conditioning must maintain 72 degree Fahrenheit.

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Page ___ of ___
UIC: _____

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.

Equipment would be impossible to relocate without total breakdown to the component level. The impact to the Navy would be negligible.

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

Facility initially constructed in 1959/1960. Newest generations of alarm equipment installed since 1989.

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

10.7

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

Fire alarm indications - 15 per month; Intrusion detection indications - 37 per month; and facility monitoring indications - 9 per month.

12. Provide the projected utilization data out to FY1997.

Fire alarm indications - 15 per month; intrusion detection indications - 15 per month; and facility monitoring indications - 5 per month.

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

One contractor electronic technician, 5.4 security dispatchers.

14. What is the approximate number of personnel needed to maintain the equipment?
The same electronic technician is required to maintain the equipment.

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

N/A ALARM SYSTEMS ARE WIDELY DISPERSED THROUGHOUT THE STATION AND CANNOT BE PHOTOGRAPHED AS A UNIT

TAB B
Page ___ of ___
UIC: _____

SPECIAL FACILITIES AND EQUIPMENT
FACILITIES/EQUIPMENT CAPABILITY FORM

Technical Center Site	PMRF
Facility/Equipment Nomenclature or Title	MESSAGE TRAFFIC AND SECURE COMM CENTER

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

Primary utilization of message traffic secure communications is the protection of classified voice and data communications. The secure voice operations include HF/UHF/FLTSERVOCOM/STU III. The secure data includes point to point, bulk encryption, NTDS, FLTSATCOM, and secure telemetry. All secure communications is digitally switched.

2. Indicate whether the facility/equipment is portable, moveable or fixed as defined by paragraph 6, page 12 of this data call. The equipment is movable, class 3 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.

Total value $3.1M.

4. Provide the gross weight and cube of the facility/equipment. 6000 lbs, 275 cubic feet.

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

Systems requires special security, Class "B" vaults, TEMPEST approved systems, protected distribution systems, uninterruptable power source (UPS) and filtered power.

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

Special security requirement for vaults, TEMPEST approved systems.

7. State any environmental control requirements for the facility/equipment (i.e., temperature, humidity, air scrubbing). Air conditioning must maintain 72 degree Fahrenheit.

TAB B
Page ___ of ___
UIC: _____

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.

Equipment would be impossible to relocate without total breakdown to the component level. The impact to the Navy would be the cessation of secure communications.

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

Facility initially constructed in 1959/1960. Newest generations of cryptographic equipment installed since 1989.

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

10.7

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

Message traffic - 4500 messages per month and secure communications - 24 days per month.

12. Provide the projected utilization data out to FY1997.

With Gateguard distribution of unclassified message traffic via LAN projected to be completed in FY95, the manual distribution of message traffic will reduce to 1250 classified messages per month. Secure voice/data operational support will continue to be directly linked to Range Operations at 24 days per month.

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

Four contractor technical operators.

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

Two contractor electronic technicians.

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

N/A

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Page ___ of ___
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TAB C

RANGE RESOURCES

RANGE CAPABILITY FORM

RANGE RESOURCES
RANGE CAPABILITY FORM

Technical Center Site	PACIFIC MISSILE RANGE FACILITY
Range Nomenclature or Title	PACIFIC MISSILE RANGE FACILITY

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.

Since its beginning in the 1960's, PMRF has been a T&E range that also conducts training operations. Beginning it FY-92, through a transfer of claimancy to the fleet, PMRF became a training range that also does T&E operations. PMRF is a live fire ocean range that supports training and testing missions assigned to submarines, ships, aircraft and spacecraft of the U.S. and friendly foreign governments. Weapon systems of many types, from torpedoes to ICBMs are operated in, around and over the PMRF range. The range provides ground truth data for exercise reconstruction and/or weapon system/tactics performance verification and analysis. Range sensors include precision tracking radars, cooperative tracking systems, surveillance/safety systems, telemetry receive/separation/display/record systems, underwater tracking, communications, data distribution and transmission, and optical tracking and recording. Several track and control centers are available to conduct multiple operations simultaneously. The range provides a variety of underwater, surface and air targets and maintains rotary and fixed wing aircraft to support range missions. Electronic warfare stimulations are provided as required for exercise realism and to maximize training and testing value. PMRF is the only range in the world where multithreat, multiparticipant underwater, surface, air and space operations can be conducted simultaneously from the same geographical location under the control of a single OCE/OTC.

b. Geographic location of the range.

PMRF is located on the west end of the island of Kauai, the westernmost island in the state of Hawaii. The land area surrounding PMRF to the east is agriculture marsh land that by its nature can never be developed in an economically feasible way. To the west, there in nothing but international water. PMRF has scheduling authority for warning and restricted airspace that covers over 40,000 square miles and extends from the surface to unlimited altitude. There are no sea lanes running through PMRFs sea range. With no major population centers within 125 miles of PMRF, the electromagnetic spectrum is reasonably clear. There are no encroachment concerns, from PMRF or to PMRF, either now or anticipated in the future.

c. Distance from the range to the activities headquarters facility (main site).

The PMRF headquarters is collocated with the range area.

d. Range size in square miles.

The instrumented underwater ranges BARSTUR (120 sq mi) and BSURE (800 sq mi) combine for a total of nearly 1000 square miles of ASW tracking range (see attached figure). This range is located entirely within the PMRF controlled warning area W-188 that covers over 40,000 square miles when combined with PMRFs W-186. Additional area to the east (W-189) is available to PMRF range operations through scheduling. Many of PMRFs customers require air and sea space beyond W-188 to the south, west and north for missile overflight and debris impact or payload impact and recovery. These missions are accommodated through scheduling and by issuing NOTAMs for the areas required. For all practical purposes, the air and sea space available to the west and north is limitless for the occasional mission that requires it. Examples of these missions are satellite recovery, exoatmospheric sounding rockets, missile defence tests, long range missile intercept development tests and missions requiring high and low altitude supersonic flight.

e. Scheduling authority.

The scheduling authority for warning areas W-188 and W-186 is the Commanding Officer, Pacific Missile Range Facility.

f. Air space available/restrictions.

As discussed in paragraphs (b) and (d) above, there are no restrictions to the vast air space extending from the surface to unlimited altitudes to the west and north of PMRF. Coordination with the FAA in keeping at least one air corridor open for east/west air traffic has never been a problem in the history of PMRF. However, we are required to keep chaff clear of the open air corridor. Other than that, there is more than enough air space around PMRF to accommodate our missions and the FAA's.

g. Maximum water depth available/restrictions.

The maximum water depth in the underwater tracking area is 2580 fathoms (15,480 feet). There are no published restrictions for these waters.

h. Instrumentation capability.

PMRFs instrumentation includes tracking radars, telemetry, underwater tracking, cooperative tracking systems, surveillance systems, control centers, communications systems, video systems, launching facilities, satellite and land line voice/data links, safety centers, target systems (air, surface and underwater), and recovery boats and aircraft. See the Range Users Handbook, attached.

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UIC: _____

i. Accuracy of tracking.

Tracking radars are maintained to a 5 yard accuracy without additional processing. Underwater tracking is accurate to within 6 - 10 feet.

j. Data collection/replay capability.

IRIG standard data products are provided by PMRF as required. Metric and telemetry data (including underwater) is provided in a number of formats including listings, tapes, video, plots, view graphs and film. Data can also be transmitted off site via secure land line or satellite in real time or in a post operation raw or reduced format. Replays can be provided in near real time or post-op as required and data for debriefs/hot wash-up can be provided anywhere required via satellite or land line. User data can be merged with range data for comparison/analysis and PMRFs data can be formatted to meet customer requirements.

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).

Given the personnel resources to operate on a three shift basis, the maximum range availability for PMRF would be 24 hours per day, 365 days per year, or 8760 hours per year. However, PMRF is staffed for an 8 hour 5 day work week excluding holidays. Therefore, the maximum hours per year for PMRF activities is limited to 2000 hours without overtime. Because of the multiple dimensional capability of PMRF, the range is never completely shut down for maintenance or reconfiguration. Additionally, PMRF is frequently required to support long duration operations on an overtime basis, often operating 24 hours per day. And, because PMRF operates multiple control centers, more than one operation is usually being conducted at any time. Nevertheless, given the single shift nature of the PMRF range, range time availability is stated to be 2000 hours annually. During FY-93, the range was actually open for business for 3618 hours (2000 normal working hours plus 1618 overtime hours). Actual hours of range activity during FY-93 were 3258 (1640 regular time plus 1618 overtime). Total hours of customer support provided during FY-93 were 5264 (includes simultaneous operations). Also, during FY-93 there were 271 normal working hours that were not scheduled, 68 cancelled hours and 18 hours were not used because of weather.

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

	FY89	FY90	FY91	FY92	FY93
OPS SKED	3073	2258	2850	2401	2564
OPS COMP	2455	1809	2330	1880*	2138
HRS SKED	6397	4408	6128	5367	6307
HRS COMP	5026	3399	4875	4175	5264
HRS OPEN	3624	3792	3649	3385*	3618
HRS USED	3348	3552	3356	3062*	3258
WX CNX HRS	0008	0003	0002	0058*	0018
USER CNX	0050	0051	0079	0080*	0068
NO SKED	0218	0187	0228	0387*	0271

* Impact of hurricane Iniki

m. What were the actual hours that this range was utilized in FY-1993?

3258 hours used supporting 5264 customer hours in FY93.

n. Who are the customers of the range?

PMRF customers include Navy training (air, surface and submarine), NAVSEA, NRL, Other Navy, Army, Air Force, DOD, NASA and Foreign Military Sales.

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

Navy Training	65%
SUBPAC	46%
SURFPAC	23%
AIRPAC	15%
OTHER	16%
RDT&E	35%
NAVSEA	37%
NRL	19%
OTHER NAVY	08%
ARMY	04%
AIR FORCE	02%
DOD	20%
NASA	06%
FMS	04%

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

Will be provided by separate correspondence directly to the BSAT

2. Are any of your ranges part of the DoD Major Range and Test Facility Base (MRTFB)?

No.

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

No. See paragraphs (b), (d) and (f) above.

APPENDIX A

I. FUNCTIONAL SUPPORT AREAS

1. PLATFORMS
   - 1.1 Undersea
   - 1.2 Aircraft
   - 1.3 Surface Ship
   - 1.4 Space Satellites
   - 1.5 Ground Vehicles

2. WEAPONS SYSTEMS
   - 2.1 Gun Systems
   - 2.2 Guided Missiles
   - 2.3 Free Fall Weapons and Rockets
   - 2.4 Torpedoes
   - 2.5 Mines
   - 2.6 Directed Energy Systems
   - 2.7 Explosives
   - 2.8 Launchers
   - 2.9 Fire Control
   - 2.10 Weapons Data Links
   - 2.11 Weapons Fuzing
   - 2.12 Weapons Propulsion
   - 2.13 Other Ordnance
   - 2.14 Explosive Ordnance Disposal

3. COMBAT SYSTEM INTEGRATION
   - 3.1 Subsurface
   - 3.2 Air
   - 3.3 Surface
   - 3.4 Multiplatform

4. SPECIAL OPERATIONS SUPPORT
   - 4.1 Landing Force Equipment and Systems
   - 4.2 Coastal/Special Warfare Support

5. SENSORS & SURVEILLANCE SYSTEMS
   - 5.1 Sonar Systems
   - 5.2 Radar Systems
   - 5.3 Special Sensors
   - 5.4 Space Sensor/Surveillance Systems
   - 5.5 Ocean Surveillance

6. NAVIGATION
   - 6.1 Submarine Navigation Systems
   - 6.2 Aircraft Navigation Systems
   - 6.3 Surface Ship Navigation Systems
   - 6.4 Weapons Navigation Systems
   - 6.5 Satellite Navigation Systems

Appendix A

7. COMMAND, CONTROL, COMMUNICATIONS AND INTELLIGENCE (C^3I)
   - 7.1 Submarine
   - 7.2 Airborne
   - 7.3 Shipboard
   - 7.4 Land-Based
   - 7.5 Space Communications Systems
   - 7.6 Non-Tactical Data Systems
   - 7.7 Air Traffic Control Systems
   - 7.8 Intelligence Information Systems

8. DEFENSE SYSTEMS
   - 8.1 Ballistic Missile Defense
   - 8.2 Countermeasures (CM)
   - 8.3 Electronic Warfare (EW) Systems

9. STRATEGIC PROGRAMS
   - 9.1 Navy Strategic Systems
   - 9.2 Nuclear Weapons and Effects

10. GENERAL MISSION SUPPORT
   - 10.1 Personnel and Training
     - 10.1.1 Submarine-Related Training Systems
     - 10.1.2 Aircraft-Related Training Systems
     - 10.1.3 Surface Ship-Related Training Systems
     - 10.1.4 Weapons-Related Training Systems
     - 10.1.5 Human Resources Research and Development
   - 10.2 Logistics Planning and Implementation
   - 10.3 Facilities Engineering
   - 10.4 Diving, Salvage and Ocean Engineering
   - 10.5 Environmental Description, Prediction, and Effects
   - 10.6 Crew Equipment and Life Support
     - 10.6.1 Submarine
     - 10.6.2 Aircraft
     - 10.6.3 Surface Ship
     - 10.6.4 Medical Research and Combat Casualty Care
     - 10.6.5 Clothing and Textiles
   - 10.7 Major Range Development and Operation
   - 10.8 Other Subsidiary Systems or Components
   - 10.9 Activity Mission and Function Support

Appendix A

11. GENERIC TECHNOLOGY BASE. [Includes basic research and exploratory development (Budget Categories 6.1 & 6.2) projects that do not fit under the more warfare-focused functional support areas.]

- 11.1 Computers.
- 11.2 Software.
- 11.3 Communications Networking.
- 11.4 Electronic Devices.
- 11.5 Materials and Processes.
- 11.6 Energy Storage.
- 11.7 Propulsion and Energy Conversion.
- 11.8 Design Automation.
- 11.9 Human-System Interfaces.
- 11.10 Other Technology Base Programs.

II. LIFE-CYCLE WORK AREAS

RDT&E

1. BASIC RESEARCH
2. EXPLORATORY DEVELOPMENT
3. ADVANCED DEVELOPMENT
4. ENGINEERING AND MANUFACTURING DEVELOPMENT
5. RDT&E MANAGEMENT SUPPORT
6. OPERATIONAL SYSTEMS DEVELOPMENT

ACQUISITION

7. PRODUCTION
8. ACCEPTANCE TESTING
9. MODERNIZATION
10. PROGRAM SUPPORT

LIFE -TIME SUPPORT

11. MAINTENANCE
12. REPAIR
13. TESTING
14. IN-SERVICE ENGINEERING
15. PROGRAM SUPPORT
16. RETIREMENT

GENERAL

17. TRAINING/OPERATIONAL SUPPORT
18. SIMULATION, MODELING AND ANALYSIS

APPENDIX B

I. FUNCTIONAL SUPPORT AREA DEFINITIONS

1. PLATFORMS. Those self-propelled, boosted or towed conveyances used for the strategic and tactical deployment of forces, weapons, materials and supplies in support of naval warfare. Projects within this area are limited to those in which the principal objective is to provide technological wherewithal to develop Navy aerospace craft, ships, submarines, boats, and amphibians.

1.1 *Undersea.* Self-propelled, boosted, or towed conveyances for transporting a burden under the sea. The vehicle package includes the design, structures, materials, non-nuclear propulsion, power and auxiliary equipment, transmissions and propulsors, fuels and lubricants, energy conservation and pollution abatement equipment, control systems, and silencing inherent in its construction and operation, but excluding mission oriented systems. Included are submarines and other submersibles including their application as unmanned autonomous vehicles (UAV) and targets.

1.2 *Aircraft.* Self-propelled, boosted, or towed conveyances for transporting a burden through the air. The vehicle package includes the design, structures, materials, non-nuclear propulsion, power and auxiliary equipment, transmissions and propulsors, fuels and control systems and silencing inherent in its construction and operation, but excluding mission oriented systems. Included are all air vehicles including their application as UAVs and targets.

1.3 *Surface Ship.* Self-propelled, boosted, or towed conveyances for transporting a burden on land or sea. The vehicle package includes the design, structures, materials, non-nuclear propulsion, power and auxiliary equipment, transmissions and propulsors, fuels and lubricants, energy conservation and pollution abatement equipment, control systems, and silencing inherent in its construction and operation, but excluding mission oriented systems. Included are ships and craft including their application as UAVs and targets.

1.4 *Space Satellites.* A device or spacecraft in orbit. The vehicle package includes the design, structures, materials, non-nuclear propulsion, power and auxiliary equipment, and control systems, inherent in its construction and operation.

1.5 *Ground Vehicles.* Self-propelled, boosted, or towed conveyances for transporting a burden on land. The vehicle package includes the design, structures, materials, non-nuclear propulsion, power and auxiliary equipment, transmissions and propulsors, fuels and lubricants, energy conservation and pollution abatement equipment, control systems, and silencing inherent in its construction and operation, but excluding mission oriented systems.

2. WEAPONS SYSTEMS. A system that provides the capability to defeat naval and military targets by destructive means. Included are counter-countermeasures and other design features to reduce the susceptibility of the weapon to counter actions, but excluded are those projects in which the principal objective is to counter a weapons system or those efforts to make a system (other than weapons) less vulnerable to enemy weapons.

2.1 *Gun Systems.* Ordnance which fires projectiles; includes related ammunition (guided projectiles are included in "guided missiles". Included are gun systems aboard aircraft and ships, and gun systems used by personnel.

2.2 *Guided Missiles.* Weapons, either self-propelled, (i.e., reaction launched) or impulse driven (i.e., gun/tube impulse launched) capable of homing on, or following a beam or command signals through theair to a target (includes guided projectiles). Included are missiles that are launched by submarine, aircraft, and ship.

Appendix B

2.3 *Free Fall Weapons and Rockets.* Free fall weapons are those air-delivered weapons, including components and subsystems, which follow a ballistic trajectory after gravity launch without any guidance other than that from the initial orientation and velocity of the launching aircraft. A rocket is a self-propelled airborne vehicle whose trajectory or course, while in flight, cannot be controlled.

2.4 *Torpedoes.* Self-propelled, guided or unguided underwater weapons. Included are torpedoes launched by submarine, aircraft, and ship.

2.5 *Mines.* Self-activating standoff or contact explosive devices that are designed to destroy or damage ground vehicles, boats, ships, or aircraft, or designed to wound, kill, or otherwise incapacitate personnel.

2.6 *Directed Energy Systems.* Devices and techniques for generating and focusing high-intensity beams of electromagnetic energy or charged particles upon targets with lethal effects.

2.7 *Explosives.* Metastable compounds which can rapidly release large quantities of energy mostly in the form of hot, high-pressure gases. Explosives are used in naval munitions such as mines, torpedoes, missiles, etc., and also in other Navy products such as aircraft escape systems, fuse trains, etc.

2.8 *Launchers.* That group of devices, components, or subsystems needed to support, hold, and launch expendable weapons, countermeasure devices, or other stores; the control systems for managing these systems and the stores they carry.

2.9 *Fire Control.* Those platform-based systems which provide data for and/or control the launch platform/weapon/weapon-target interaction in all phases required by a weapons system (e.g., acquisition, track, commit-to-fire-pre-launch, post-launch, mid-course, terminal intercept, and assessment). Included are systems that are based undersea, aboard aircraft, shipboard, and on land.

2.10 *Weapons Data Links.* Efforts include the data links that are part of the weapon's command, control and communications systems.

2.11 *Weapons Fuzing.* Efforts leading to the design of systems to sense a target or the result of other prescribed conditions such as time, barometric pressure, command, etc., and initiate a train of fire. Safing and arming are primary functions performed by a fuse to preclude initiation of the ammunition before the desired position or time.

2.12 *Weapons Propulsion.* Included are propellants, subsystems and systems that comprise the means by which a weapons system moves through the air or sea.

2.13 *Other Ordnance.* Includes efforts that do not fit in the above categories (e.g., pyrotechnics, gas generators, CAD/PAD/AEPS).

2.14 *Explosive Ordnance Disposal.* Efforts relating to the technical support of explosive ordnance disposal technology and training.

3. COMBAT SYSTEM INTEGRATION. That effort required to introduce a new system into the operating forces. It involves the integration and evaluation of a new hardware or software subsystem installed in a Navy platform. It includes the mating, installation, and operational support of the resulting higher level system to ensure optimum operating performance.

3.1 *Subsurface.* The integration and evaluation of the various hardware and software subsystems that make up a higher level system, and the mating, installation, and operational support of this higher levelsystem, including its operational software and training systems into undersea platforms.

3.2 *Air.* The integration and evaluation of the various hardware and software subsystems that make up a higher level system, and the mating, installation, and operational support of this higher level system, including its operational software and training systems into air platforms.

3.3 *Surface.* The integration and evaluation of the various hardware and software subsystems that make up a higher level system, and the mating, installation, and operational support of this higher level system, including its operational software and training systems into surface platforms.

3.4 *Multiplatform.* The integration of multiplatform hardware and software subsystems to make up a higher level system, including the mating, installation, and operational support (including training systems) of this higher level system.

4. SPECIAL OPERATIONS SUPPORT. Those efforts which are in support of amphibious landing, Marine Corps operations, special warfare and other unique operations. It includes weapons, countermeasures, surveillance and a command support which are developed specifically for the projection of forces ashore and that do not have an application by the Navy general forces in the role of sea control.

4.1 *Landing Force Equipment and Systems.* Involved is that RDT&E effort which is not functionally a part of the amphibious platform. Specifically, this includes reconnaissance of amphibious objective areas, environmental support of amphibious operations, amphibious logistics and the integration of the amphibious and Marine Corps systems required to land amphibious forces on a hostile shore and establish a beachhead. (Contingency facilities in support of forces ashore are included in "facilities".)

4.2 *Coastal/Special Warfare Support.* Techniques and systems required to defend coastal, inshore and harbor facilities as well as those needed to conduct operations such as reconnaissance, deception, coastal or offshore interdiction and assault, counterinsurgency, intelligence gathering, remote sensor operation and waterborne intrusion detection. Special warfare systems include systems, techniques, and concepts utilized by specifically cross-trained personnel in unconventional warfare and coastal/riverine operations.

5. SENSORS & SURVEILLANCE SYSTEMS. Those systems used to systematically observe air, space, surface and subsurface areas to detect, classify, localize and identify real or potential military targets. Excluded are those projects in which the principal objective is navigation, weapon fire control or broadbased investigation of the properties of the media or the propagation of energy therein.

5.1 *Sonar Systems.* Those sonar systems and devices used to conduct search, reconnaissance, and surveillance operations to detect, classify, locate, and/or track targets. Included are those systems and devices that are mobile aboard undersea, air, and surface platforms, and those that are fixed.

5.2 *Radar Systems.* Those radar systems and devices used to conduct search, reconnaissance, or surveillance operations to detect, classify, locate, and/or track targets. Included are those systems and devices that are mobile aboard undersea, air, and surface platforms, and those that are fixed.

5.3 *Special Sensors.* Those systems and devices which utilize unique phenomena or methods or combinations of methods to conduct search, reconnaissance, or surveillance operations to detect, classify, locate, and/or track targets. Included are active sensors, passive sensors (e.g., thermal imagers, low light level TV, and infrared search and track systems), and the associated signal and image processing.

5.4 *Space Sensor/Surveillance Systems.* Those devices and systems in Earth orbit that are used to conduct search, reconnaissance, or surveillance operations to detect, classify, locate and/or track targets.

5.5 *Ocean Surveillance.* Systems and equipment for systematic observation of ocean areas for identification and localization of ships, submarines, and aircraft from fixed and mobile platforms including operational software development, and integration of multi-sensor, coordinated detection data and its display at appropriate sites.

6. NAVIGATION. Those systems which utilize electromagnetic, acoustic, or inertial means to guide or navigate surface, subsurface, or aerospace platforms. Included are those systems deployed aboard submarines, aircraft, surface ships and satellites, as well as those used in weapons systems.

6.1 *Submarine Navigation Systems.* Navigation systems deployed aboard submarines, or other undersea vehicles.

6.2 *Aircraft Navigation Systems.* Navigation systems deployed aboard aircraft.

6.3 *Surface Ship Navigation Systems.* Navigation systems deployed aboard surface ships.

6.4 *Weapons Navigation Systems.* Navigation systems installed within weapon systems, such as guided missiles.

6.5 *Satellite Navigation Systems.* Navigation systems deployed aboard satellites.

7. COMMAND, CONTROL, COMMUNICATIONS AND INTELLIGENCE (C^3I). The acquisition, processing and dissemination of information required to plan, direct, and control operations. Included are those projects in command and control, communications and intelligence. Excluded are surveillance systems, and guidance and control of vehicles and weapons. These C^3 systems may be internal or external to submarine, airborne, surface, and land-based platforms.

7.1 *Submarine.* C3 systems deployed aboard submarines, or other undersea vehicles.

7.2 *Airborne.* C3 systems deployed aboard aircraft.

7.3 *Shipboard.* C3 systems deployed aboard surface ships.

7.4 *Land-Based.* C3 systems deployed at shore facilities.

7.5 *Space Communications.* Communications systems in Earth orbit used to convey information.

Appendix B

7.6 *Non-Tactical Data Systems.* Data systems utilized aboard the Navy's operating forces and at shore sites that support ship, submarine and aircraft maintenance, configuration and asset management, supply, inventory, finance, medical, dental, manpower management, administration, food services (ship's mess), and resale operations (ship's stores).

7.7 *Air Traffic Control Systems.* Systems used to promote the safe, orderly, and expeditious movement of air traffic.

7.8 *Intelligence Information Systems.* The systems necessary to conduct the naval warfare task of intelligence. This task involves the assessment and management of information obtained via surveillance, reconnaissance, and other means to produce timely indications and warning, location, identification, intentions, technical capabilities, and tactics of potential enemies and other countries of interest.

8. DEFENSE SYSTEMS. Those systems that are principally designed to defeat a particular weapon system; those systems that are designed to reduce the effectiveness of an enemy's surveillance, communications, navigation and command and control; as well as those efforts directed toward gathering information on the emissions of enemy systems. It does not include those projects in which the principal objective is to incorporate design features in vehicles, surveillance, communication, navigation and other support systems which reduce their vulnerability to enemy action. It also does not include chemical/biological defense for personnel.

8.1 *Ballistic Missile Defense.* Systems designed to protect civilian population centers, military forces, and territory from ballistic missile attack.

8.2 *Countermeasures (CM).* Those systems that are principally designed to defeat a particular weapon system; reduce the effectiveness of an enemy's surveillance, communications, navigation and command and control; as well as gather information on the emissions of enemy systems. Included are those projects to develop systems deployed aboard submarine, aircraft, and surface ship, and those for countering enemy mine warfare through the destruction or neutralization of minefields.

8.3 *Electronic Warfare (EW) Systems.* Those systems, techniques, and devices utilized to determine, exploit, reduce, or prevent hostile use of the electromagnetic spectrum. Included are those projects to develop systems deployed aboard submarine, aircraft, and surface ship, as well as those to develop EW simulators.

9. STRATEGIC PROGRAMS. Programs conducted to support the deployment and use of the Navy's strategic deterrence force, as well as those programs conducted on nuclear weapons and effects.

9.1 *Navy Strategic Systems.* Those ships and weapon systems, subsystems, devices, techniques, trainers and facilities required specifically for the deployment and use of the Navy's strategic deterrence force.

9.2 *Nuclear Weapons and Effects.* Nuclear weapons effects and countermeasures, including thermal and nuclear radiation effects and the hardening of components and of weapons systems both nuclear and non-nuclear.

10. GENERAL MISSION SUPPORT. Those major areas of support required by Navy general forces that are not included under platforms, weapons systems, combat system integration, special operations support, sensors and surveillance systems, navigation, C^3I, defense systems, strategic programs, and technology base programs.

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

10.1.1 Submarine-Related Training Systems
10.1.2 Aircraft-Related Training Systems
10.1.3 Surface Ship-Related Training Systems
10.1.4 Weapons-Related Training Systems
10.1.5 Human Resources Research and Development

10.2 *Logistics Planning and Implementation.* Projects for those aspects of military operations which deal with the movement, maintenance, supply, and support of Naval forces afloat and ashore, including underway replenishment, warehousing and mobile logistics maintenance and repair activities; material acquisition, control, handling, distribution and disposal processes; and logistics planning, control, and information processing functions.

10.3 *Facilities Engineering.* Products for (a) ocean facilities including the siting, design, construction/implant, and maintenance of facilities attached to the sea floor such as cable structures, pipelines, communications/power cables and Fleet moorings; (b) contingency facilities and equipment to support Navy and Marine Corps forces ashore in amphibious objective areas and at advanced naval bases; (c) permanent shore facilities such as buildings, piers, drydocks, airfields, POL and weapons storage, and utilities; (d) energy systems ashore including conservation, synthetic fuels, energy self-sufficiency; and (e) environmental protection systems ashore such as industrial wastewater treatment plants, air and noise pollution control devices, and solid waste management systems.

10.4 *Diving, Salvage and Ocean Engineering.* Those support systems and equipment that are required by the Navy in the performance of ocean bottom search, diving, rescue, recovery, salvage operations, and siting, design, construction/implantment, inspection, maintenance and recovery of underwater facilities and associated systems.

10.5 *Environmental Description, Prediction, and Effects.* The study, modeling, and simulation of atmospheric, oceanic, terrestrial, and space environmental effects, both natural and man-made, including the interaction of a weapon system with its operating medium and man-produced phenomena such as obscurants found on the battlefield.

10.6 *Crew Equipment and Life Support.* Techniques, equipment and devices to provide protection for and support of Navy operating personnel, including chemical/biological defense. Included are systems aboard submarines, aircraft, and surface ships, as well as medical research and combat casualty care, and clothing and textiles.

10.6.1 Submarine
10.6.2 Aircraft
10.6.3 Surface Ship
10.6.4 Medical Research and Combat Casualty Care
10.6.5 Clothing and Textiles

10.7 *Major Range Development and Operation.* The design, equipping, and operation of ranges offering diverse and accurate measurement and reconstruction capabilities to establish performance profile data on newly designed, as well as existing, naval vehicles and systems operating in a realistic environment.

10.8 *Other Subsidiary Systems or Components.* Subsidiary systems or components that do not fitwithin the above product areas (e.g., batteries).

10.9 *Activity Mission and Function Support.* Efforts that clearly support the Activity's responsibilitiesbut which cannot be uniquely assigned to a specific functional area.

11. GENERIC TECHNOLOGY BASE. Includes basic research and exploratory development (Budget Categories 6.1 & 6.2) projects that do not fit under the more warfare-focused functional support areas. These areas include computers, software, communications networking, electronic devices, materials and processes, energy storage, propulsion and energy conversion, design automation, human-system interfaces, and other technology base areas.

11.1 *Computers.* High performance computing systems (and their software operating systems) providing orders-of-magnitude improvements in computational and communications capabilities as a result of improvements in hardware, architectural designs, networking, and computational methods.

11.2 *Software.* The tools and techniques that facilitate the timely generation, maintenance, andenhancement of affordable and reliable applications software, including software for distributed systems, data base software, artificial intelligence, and neural nets.

11.3 *Communications Networking.* The timely, reliable, and secure production and worldwide dissemination of information, using shared communications media and common hardware and applications software from originators to DoD consumers, in support of joint-Service mission planning, simulation, rehearsal, and execution.

11.4 *Electronic Devices.* Ultra-small (nanoscale) electronic and optoelectronic devices, combined with electronic packaging and photonics, for high speed computers, data storage modules, communications systems, advanced sensors, signal processing, radar, imaging systems, and automatic control.

11.5 *Materials and Processes.* Development of man-made materials (e.g., composites, electronic and photonic materials, smart materials) for improved structures, higher temperature engines, signature reduction, and electronics, and the synthesis and processing required for their application.

11.6 *Energy Storage.* The safe, compact storage of electrical or chemical energy, including energetic materials for military systems.

11.7 *Propulsion and Energy Conversion.* The efficient conversion of stored energy into usable forms,as in fuel efficient aircraft turbine engines and hypersonic systems.

11.8 *Design Automation.* Computer-aided design, concurrent engineering, simulation, and modeling; including the computational aspects of fluid dynamics, electromagnetics, advanced structures, structural dynamics, and other automated design processes.

11.9 *Human-System Interfaces.* The machine integration and interpretation of data and its presentation in a form convenient to the human operator; displays; human intelligence emulated in computational devices; and simulation and synthetic environments.

11.10 *Other Technology Base Programs.* All technology base programs (Budget Categories 6.1 and 6.2 only) that do not fit into the above warfare-focused functional support areas (#1 - #10), or within the above generic technology base areas (#11.1 - #11.9).

II. LIFE-CYCLE WORK AREA DEFINITIONS

RDT&E

1. **BASIC RESEARCH.** (Budget Category 6.1 only) This area includes scientific study and experimentation to increase knowledge and understanding in the physical, engineering, environmental and life sciences related to long-term national security needs.

2. **EXPLORATORY DEVELOPMENT.** (Budget Category 6.2 only) This area includes efforts to solve specific military problems, short of major development. Exploratory development may vary from fairly fundamental applied research to sophisticated breadboard hardware, study programming and planning efforts.

3. **ADVANCED DEVELOPMENT.** (Budget Category 6.3 only) This area includes efforts on projects which have moved into the development of hardware for test. The prime objective is proof of design concept rather than the development of hardware for service use.

4. **ENGINEERING AND MANUFACTURING DEVELOPMENT.** (Budget Category 6.4 only) This area includes programs in full scale development, but which have not received approval for production or had production funds included in the DoD budget submission for the budget or subsequent fiscal year.

5. **RDT&E MANAGEMENT SUPPORT.** (Budget Category 6.5 only) This area includes support of installations or operations required for general research and development use. Included would be test ranges, military construction, maintenance support of laboratories, operations and maintenance of test aircraft and ships, and studies and analyses in support of the R&D program.

6. **OPERATIONAL SYSTEMS DEVELOPMENT.** (Budget Category 6.6 only) This area includes projects still in full-scale development, but which have received approval for production through Defense Acquisition Board or other action, or for which production funds have been included in the DoD budget submission for the budget or subsequent fiscal year. All work in this area is identified by major line item projects that appear as "RDT&E Costs of Weapon System Elements" in other programs.

ACQUISITION

7. **PRODUCTION.** During this phase, the system, including training equipment, spares, etc., is produced for operational use.

8. **ACCEPTANCE TESTING.** This phase involves the test and evaluation of production items to demonstrate that the items procured fulfill the requirements and specifications of the procuring contract on agreement

9. **MODERNIZATION.** This phase of the work involves the modification, upgrade, or improvement of a system or subsystem.

10. **PROGRAM SUPPORT**. This phase involves al work not fully under the category of production (#7), acceptance testing (#8), or modernization (#9), that occurs during the acquisition of new systems or subsystems.

LIFE-TIME SUPPORT

11. **MAINTENANCE**. This phase of work involves the maintenance of systems and subsystems.

12. **REPAIR**. This phase of work involves the repair of systems or subsystems.

13. **TESTING**. This phase is typically funded from Budget Category 6.5 or procurement program elements. Work in this area supports developmental and/or operational testing and focuses on the evaluation od system safety, technical performance, environmental (climatic, electromagnetic, etc.) effects, sustainability and operational suitability, maturity of production processes, and compliance with the specifications and quality standards.

14. **IN-SERVICE ENGINEERING**. This phase is typically funded from Budget Category 6.6 or operations and maintenance (O&M) program elements. In-service engineering tends to focus on system peculiar capabilities in order to conduct check-out of the system and/or subsystem after they have undergone a modification, upgrade or improvement.

15. **PROGRAM SUPPORT**. This phase involves all work ant falling under the categories of maintenance (#11), repair (#12), testing (#13), in-service engineering (#14) and retirement (#16) that occur during the life-time support of new systems and/or subsystems.

16. **RETIREMENT**. This phase includes the retirement and disposal of obsolete systems and/or subsystems.

GENERAL

17. **TRAINING/OPERATIONAL SUPPORT**. Efforts in this area, involve the training of operational forces in the use of new techniques, equipment and systems, tactics or doctrine. Training and operational support is typically funded from O&M program elements.

18. **SIMULATION, MODELING AND ANALYSIS**. This phase of work provides a simulated test environment or representation of systems, components and platforms. This work can be carried out throughout the development and test process as analytical tools, as well as tools to drive or control electronic and other environmental stimuli.

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

NEXT ECHELON LEVEL (if applicable)

Captain James E. Eckart
NAME (Please type or print)

Signature

Acting
Title

11 May 1994
Date

COMNAVAIRPAC
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

J. R. FITZGERALD
NAME (Please type or print)

Signature

COMMANDER IN CHIEF
Title (Acting)

27 May 1994
Date

U.S. PACIFIC FLEET
Activity

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

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

J. B. GREENE JR
NAME (please type or print

Signature

Acting
Title

6/8/94
Date

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

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

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

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

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

ACTIVITY COMMANDER

JON E. THIELE, CDR/USN
NAME (Please type or print)

Jon E. Thiele
Signature

ACTING COMMANDING OFFICER
Title

04 MAY 1994
Date

PACIFIC MISSILE RANGE FACILITY
Activity

K

177

BRAC-95 CERTIFICATION

DATA CALL FIVE

PACIFIC MISSILE RANGE FACILITY

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
NAME

Signature

Commander In Chief
Title

17 December 1994
Date

U. S. Pacific Fleet
Activity

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

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

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

Signature

Title

1/18/95
Date

R

DATA CALL #5

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.

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

ACTIVITY COMMANDER

T. L. DANIELS, CAPT/USN
NAME (Please type or print)

T L Daniels
Signature

COMMANDING OFFICER
Title

11/1/94
Date

PACIFIC MISSILE RANGE FACILITY
Activity

ENCLOSURE (2)

R

BRAC-95 CERTIFICATION

DATA CALL 5
Audit Changes
PMRF UIC 0534A

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

NEXT ECHELON LEVEL

_VADM Robert J. Spane, USN____
NAME (Please type or print)

_____
Signature

_Commander_____
Title

_21 November 1994_____
Date

Commander Naval Air Force, U.S. Pacific Fleet
Activity

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

MAJOR CLAIMANT LEVEL

_____
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.

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

_____
NAME (Please type or print)

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Signature

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Title

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Date

177

Department of Defense

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

March 31, 1994

T&E JOINT CROSS-SERVICE GROUP DATA GUIDANCE

BRAC 95 DATA CALL NUMBER 13
T&E JOINT CROSS-SERVICE GROUP

PACIFIC MISSILE RANGE FACILITY

The scope of this data call covers T&E facilities. Additionally, this inquiry is specifically interested in three functional T&E areas; air vehicles, electronic combat, and armaments/weapons for any component, subsystem, system or platform. Also, this data call groups T&E facilities under one of the following categories: modeling and simulation, measurement, integration laboratory, hardware-in-the-loop, installed systems, or open air.

PMRF is a training range that also supports T&E operations. PMRF does not respond to or work from AIR TASKS, SEA TASKS or WEP TASKS. PMRF does not work from TEMPS or ORs and is not involved directly in T&E of any system. Customers of the PMRF range are not resident on the facility and do not involve the facility in testing requirements planning unless there is a specific measurement required for the test that they will provide resources to accomplish. Rather, PMRF customers use existing range capability to conduct testing operations when the range is available. Often, T&E customers will share operational testing activity on board fleet units while the unit is on range conducting training operations. There are no facilities at PMRF to instrument an aircraft, tune/adjust an electronic component under test, or setup/detonate/measure a weapon. These are activities associated with testers, not a range.

Given the possible mismatch (or misunderstanding) of this data call to the function of PMRF, the response hereby provided in terms of capacity, workload, unconstrained capacity and technical resources, and the measures of merit response are all with respect to the mission of PMRF. In other words, the response attempts to measure the operational training work and the T&E work done on the range. The T&E work done on the range is accomplished in a fully operational setting. Tests here involve an operational platform (usually a ship, submarine, aircraft or ballistic/guided missile), a weapon system (sensors, missiles, torpedoes, bombs or research payloads), and an operational target. Often, tactics are an important part of the test and the range's mission is to provide accurate data on the positions of all participants and to receive and record data from the test object for evaluation by the tester. The range does not instrument test objects, write test plans, determine test geometry or analyze/evaluate test data.

Additionally, for range statistical data collection purposes, what a given user is doing on the PMRF range is not as important to the range as is that fact that he is using the range. PMRF statistics record the user sponsor, describe whether the vehicle is a ship, aircraft, submarine, rocket, etc., records whether the mission is a live fire operation, and records which range resources support the operation. Operation completion records are accounts of the success, or lack of it, of the range in supporting its customer without regard to the success of the customers mission. For example, if a ship fires a missile at a target and misses, the range operational records show a successfully completed (range) mission. There is no record kept as to the success or failure of the missile because that is a matter for the tester to determine. Similarly, there is no record kept as to the testers mission (whether he is testing the ship, ship sensors or the missile). This explains why data is not generally available at PMRF as to the group a test belongs in (airframe, electronic combat system, or armament/weapon system) for the purposes of this data call. It is suggested that data call number five is more appropriate for PMRF than this one.

SECTION 1: GUIDANCE, STANDARDS, AND ASSUMPTIONS

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

1.1 GUIDANCE

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

1.1.A.1 Scope

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

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

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

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

1.1.A.2 T&E Facilities / Capabilities

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

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

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

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

1.1.B Guidance for Military Department Data Collection

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

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

1.1.C Guidance for Military Department Data Analysis

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

1.2 ASSUMPTIONS

Cross-service analyses will use the following assumptions:

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

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

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

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

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

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

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

1.3 FUNCTIONAL AREAS

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

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

1.3.A Air Vehicles

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

1.3.B Electronic Combat (EC) Systems

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

1.3.C Armaments / Weapons

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

SECTION 2: CAPACITY & TECHNICAL RESOURCES

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

Input provided on forms attached.

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2.1 WORKLOAD

Annual workload will be reported in units as follows: for open air ranges involving flight testing, report test hours and missions. For all other T&E facilities direct labor hours and test hours must be reported; if available, missions must be reported. If an estimation of test hours based on direct labor hours is necessary, refer to the instructions for Determination of Unconstrained Capacity on page 32.

2.1.A Historical Workload

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

2.1.B Forecasted Workload

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

N/A; SEE PAGE 2

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

N/A; SEE PAGE 2

2.2 UNCONSTRAINED CAPACITY

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

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

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2.3 TECHNICAL RESOURCES

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

NO

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

NO

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

NO

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

NO

SECTION 3: MEASURES OF MERIT

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

CRITERION 1: The current and future mission requirements and the impact on operational readiness of the Department of Defense's total force.

CRITERION 2: The availability and condition of land, facilities and associated airspace at both the existing and potential receiving locations.

CRITERION 3: The ability to accommodate contingency, mobilization, and future total force requirements at both the existing and potential receiving locations.

CRITERION 4: The cost and manpower implications.

3.1 OVER-ARCHING MEASURES OF MERIT

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

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

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

Approximately 10% of PMRF's test workload in FY-93 involved the real-time exchange of data with external facilities other than units under test on the range. The exchange includes telemetry data to NWAC Corona California during AEGIS PCT&T operations, and real-time tracking data exchange between PMRF and Kwajalein Missile Range during U.S. Army SDC STARS launches. Data is frequently exchanged via fleet SATCOM (OTCIX/TADIX and NTDS) between PMRF, fleet units on range and fleet command centers during training operations.

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

No. The assumption is that work currently done here would continue to be done somewhere, and the data would continue to be provided by another facility.

3.1.B Facility Condition (MV II) - Measure of merit: *Current and planned status of the T&E facilities for supporting assigned test missions.*
Fill out the Facility Condition Form in Appendix A in accordance with the instructions.
Form attached.

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

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

No. A major factor in the success of PMRF is location. The land area surrounding PMRF to the East is agriculture marsh land that by its nature can never be developed in an economically feasible way. To the West, there is nothing but thousands of miles of ocean. PMRF has scheduling authority for warning and restricted airspace that covers over 40,000 square miles and extends from the surface to unlimited altitude. There are no sea lanes running through PMRF's sea range. With no major population centers within 125 miles of PMRF, the electromagnetic spectrum is reasonably clear. There are no encroachment concerns, from PMRF or to PMRF, either now or anticipated in the future. The work of PMRF is benign to the local community and provides jobs. There is strong community support for PMRF and its contribution to
the local economy which is considerable.

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

Environmental and/or encroachment issues that might be driven by workload do not exist at PMRF, therefore an increase of 100% (a two shift operation) or 200% (a 24 hour per day operation) would not change the situation. However, environmental issues might be attached to the kind of work done on the range, i.e., new class of fuels or ordnance, or a new type of electromagnetic radiation.

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

Yes.

1. PMRF will be submitting a State of Hawaii "Permit Application for Solid Waste Management Facility." Application will be submitted mid-June 94. Permit is expected to be issued within 30 days of receipt. The State is expected to issue the permit for a 5-year period.

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2. The Navy is currently negotiating "Recycling Program" permit with the State of Hawaii. Permit is expected to be issued by late summer 94 for a 5-year period.

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

There is a population of approximately 55,300 on Kauai (50 mile radius), the same at 100 miles, 918,417 at 150 miles which includes Kauai and Oahu, and 1,026,414 at 200 miles including the population of all the islands except the island of Hawaii.

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

There are no restrictions to the vast air space extending from the surface to unlimited altitudes to the west and north of PMRF. Coordination with the FAA in keeping at least one air corridor open for east/west air traffic has never been a problem in the history of PMRF. However, we are required to keep chaff clear of the open air corridor. Other than that, there is more than enough air space around PMRF to accommodate our missions and the FAA's. There are no commercial sea traffic routes through PMRFs warning areas and there is no issue concerning public access to the PMRF base or restricted sea space. Additionally, none are anticipated in the future.

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

None.

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

None.

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

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

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Yes. PMRF has a torpedo post-run flushing facility and detoxifies the Otto Fuel waste by destroying the cyanide generated by the MK 48/MK 46 torpedoes to reduce health and safety impact of the waste. The facility also has ordnance buildup (missile assembly) buildings and launching facilities. All of the range instrumentation might be considered specialized therefore they are included herein. PMRFs instrumentation includes tracking radars, telemetry, underwater tracking, cooperative tracking systems, surveillance systems, control centers, communications systems, video systems, satellite and land line voice/data links, safety centers, target systems (air, surface and underwater), and recovery boats and aircraft. See data call number five and PMRF Range Users Handbook **is available upon request**.

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

No.

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

N/A; **No specialized targets**.

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

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

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Yes. A major factor in the success of PMRF is location. The land area surrounding PMRF to the East is agriculture marsh land that by its nature can never be developed in an economically feasible way. To the West, there is nothing but thousands of miles of ocean. PMRF has scheduling authority for warning and restricted airspace that covers over 40,000 square miles and extends from the surface to unlimited altitude. There are no sea lanes running through PMRFs sea range. With no major population centers within 125 miles of PMRF, the electromagnetic spectrum is reasonably clear. There are no encroachment concerns, from PMRF or to PMRF, either now or anticipated in the future. The work of PMRF is benign to the local community and provides jobs. There is strong community support for PMRF and its contribution to the local economy which is considerable. Clear weather, lack of encroachment, a sea test range where large missile hazard areas can be readily cleared, deep water, shallow water and Navy controlled airspace are all important to ensure that tests and operations can be completed with minimal impact by factors outside of test parameters. This results in excellent support within scheduled periods and reduced cost of false starts and retests. Additionally, data gathering instrumentation and launch facilities are located in the mountains adjacent to the range at elevations that extend the area of instrumentation coverage and closely simulate the altitudes of tactical aircraft. This provides sites that are particularly suitable for testing airborne systems without having to fly aircraft. This capability extends test time availability, facilitates adjustments to equipment during testing and significantly reduces testing costs. The mid-pacific location of PMRF is ideal for a variety of exoatmospheric/space studies involving satellites and rocketborne experiments, and the location is right for midcourse data gathering on ICBMs launched from the West coast of the CONUS. The location and layout of PMRFs instrumentation and launching facilities are ideal for testing and training missions in a littoral warfare situation and this mid-pacific site is perfect for theater missile defense development, testing and training. Additional area to the east (W-189) is available to PMRF range operations through scheduling. Many of PMRFs customers require air and sea space beyond W-188 to the south, west and north for missile overflight and debris impact or payload impact and recovery. These missions are accommodated through scheduling and by issuing NOTAMs for the areas required. For all practical purposes, the air and sea space available to the west and north is limitless for the occasional mission that requires it. Examples of these missions are satellite recovery, exoatmospheric sounding rockets, missile defense tests, long range missile intercept development tests and missions requiring high and low altitude supersonic flight. Expandability for additional T&E functional test areas is a key aspect of the PMRF range.

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

Yes. In addition to Theater Missile Defense, PMRF can accommodate aircraft testing, new weapons development tests, target systems tests, and new range technology testing. Submarine, ship, air and space testing programs of many disciplines can be conducted at PMRF. Additionally, PMRF is the only range in the world where multi-threat, multi-participant underwater, surface, air and space operations/tests can be conducted simultaneously from the same geographical location under the control of a single OCE/OTC.

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

Yes. See 3.1.E.1 and 3.1.E.1.A above.

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

Yes, currently to the Secret level. A new customer coming on line next year has a requirement to upgrade the facility to Special Access Required.

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

Yes. Communications upgrades, full motion video transmission/reception, over-the-horizon-tracking and control capability for targets, GPS based tracking system, telemetry system improvements, surveillance radar replacement, NTDS replacement/upgrade, underwater tracking system replacement (BARSTUR), shallow water tracking system, fiber optic tie in to the super computer facility on Maui, Battle Management Interoperability Center modernization, Display and control system modernization, remote control of electronic warfare systems improvement and chaff dispensers for range aircraft.

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

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

Yes. Since its beginning in the 1960's, PMRF has been a T&E range that also conducts training operations. Beginning it FY-93, through a transfer of claimancy to the fleet, PMRF became a training range that also does T&E operations. PMRF is a live fire ocean range that supports training and testing missions assigned to submarines, ships, aircraft and spacecraft of the U.S. and friendly foreign governments. Weapon systems of many types, from torpedoes to ICBMs are operated in, around and over the PMRF range. The range provides ground truth data for exercise reconstruction and/or weapon system/tactics performance verification and analysis. PMRF is the only range in the world where multi-threat, multi-participant underwater, surface, air and space operations/tests can be conducted simultaneously from the same geographical location under the control of a single OCE/OTC. See paragraph 3.1.E.1 above.

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

Yes. No other facility has the simultaneously capability of underwater, surface, air and space data gathering from the same geographical location.

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

Yes, same as above.

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

Yes. 7% DOD, 2% Army and 1% Air Force for fiscal years 92 and 93.

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

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

40,000 square miles.

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

Commanding Officer, Pacific Missile Range Facility (U.S. Navy).

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

45 Square miles of Restricted airspace extends from the surface to unlimited altitude. 40,000 square miles of warning area extends from the surface to unlimited altitude.

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

No.

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

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The warning area is over water, the restricted airspace is over water. 42,000 SQUARE MILES.

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

None.

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

275 Nautical Miles.

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

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None, *N/A, N/A*

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

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

PMRF is a sea test range of 40,000 square miles over ocean.

-3.1.H.2 Are there features of the local geology or soil conditions that enhance or inhibit any types of test? No.

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

No. PMRF is not a tester.

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

The temperature at PMRF is always higher than 32 degrees and lower than 95 degrees.

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

The average relative humidity at PMRF is always between 30% and 80%.

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

On the average, only 5-7 missions per year are canceled because of weather. Always because of high seas. Of the canceled missions, all of them reschedule and complete the mission during the following day or two. The exception to this average occurred in FY-92 when hurricane Iniki caused the cancellation of all operations at PMRF for a month.

The information between the timeframe FY85-FY90 is not available. Information has been archived. However, the information from FY95-FY94 is available.

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FY91 - 9
FY92 - 29 (Of which 21 was due to Hurricane Iniki.)
FY93 - 13
FY94 - 10

types of climatic/geographic conditions represent world-wide operational conditions.

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

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No. PMRF is not a tester.

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

The temperature at PMRF is always higher than 32 degrees and lower than 95 degrees.

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

The average relative humidity at PMRF is always between 30% and 80%.

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

On the average, only 5-7 missions per year are canceled because of weather. Always because of high seas. Of the canceled missions, all of them reschedule and complete the mission during the following day or two. The exception to this average occurred in FY-92 when hurricane Iniki caused the cancellation of all operations at PMRF for a month.

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

Same as 3.1.H.6 above. Most missions at PMRF are scheduled in half days or whole days or more. The nature of ships, submarines and patrol aircraft is to remain on range for long periods of time. Therefore, a canceled mission usually means a canceled range day. Additionally, when two or more missions are simultaneously scheduled on range, a weather scrub can cancel the equivalent of 2 or more range days in terms of customer hours of support.

-3.1.H.8 What is the number of days per year the visibility is less than 1 mile? Between 81 and 3 miles? Greater than 3 miles?

The visibility at PMRF is always greater than 3 miles except during a heavy rain squall, which is rare.

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

360 allowing for a few days of exceptionally heavy rain or wind.

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

About 1% or less.

3.2 AIR VEHICLES

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

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

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

Yes.

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

30 Miles to sea when operating below 30,000 ft. Flight must be oriented away from the island when operating above 30,000 feet within 30 miles of Kauai.

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

See 3.2.A.2.

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

The PMRF warning area is all over water. The size is roughly 275 miles by 180 miles. The boundaries are not straight lines but contain arcs, however, the area calculates to about 40,000 sq. mi.

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

Yes. Use of the space must be scheduled by PMRF and communications must be maintained with range control.

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

This depends on what is going on and what the hazards are. With 40,000 square miles to work with, the range can handle many participants. Two or more operations are routinely conducted simultaneously.

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

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

The PMRF runway is on an azimuth of 16/34 (magnetic headings of 158 deg and 338 deg), elevation is 14 feet, 6000 feet in length, 150 feet wide with a 100 foot overrun. There is an optical landing system (MK-8 MOD 0 Fresnel lens). The runway has two E28 arresting systems. The runway is asphalt and there is aircraft parking with tie-down capability on 13,000 square yards of apron. There are four helicopter landing pads, one of which is designated as the primary hot fuel area for helicopters. The Air Operations Center, Building 300, is east of the runway at its north end. The airfield control tower and crash/fire facilities are included in building 300. The height of the tower with antennas is 77 feet MSL.

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

Lihue airport is located 26 miles to the east and has 2 runways, 03/21 and 17/35.

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

The PMRF airfield is adjacent to the range.

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-3.2.B.4 What makes your airfield unique or at least suited for supporting test operations?

The PMRF airfield is part of the range infrastructure. It primarily supports range aircraft. Customer aircraft usually operate from airfields on Oahu, landing here for brief/debrief purposes.

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

No.

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

PMRF has hanger space for stations C-12 and UH-3 helicopters. No additional hanger space available for other aircraft. PMRF has no AIMD or associated support services. As to ramp space there are spots for 12 fighter aircraft on the field. There is a 6000 by 150 foot north taxi strip leading to a red label area that could be used to park another 30 or so fighters. A squadron of P3s could be parked on the field, the runway will handle a C-5 with just enough room to turn around. Two C-141s could use the field and several helicopter squadrons regularly use the PMRF air field. UAVs and Cruise missiles can be accomodated in the numbers they come in.

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

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

Depending on the test requirements, all mentioned vehicles can be tested on the PMRF range. Harpoon Cruise missiles are regularly fired on the range (the range is Tomahawk certified) but these are operational exercises rather than airframe or vehicle tests.

-3.2.C.2 Do ground support facilities exist for pre-flight checkout or rehearsal of test missions? No.

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

The Range can support up to three Harpoon cruise missiles with a simultaneous time on target, four unmanned drone targets, two flights of fighters with safety observers, a SAU or two with LAMPS helos, two or three submarines, two patrol aircraft, one or two AWACs, a strike flight, SEPTAR and hulk surface targets, SAMs, AAMs and an aircraft carrier or other high value unit operating in a multi-threat, freeplay exercise. Or any combination thereof.

-3.2.C.4 Does UAV and or rotary wing operations pose any limitation on other types of missions? If yes, explain. No.

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

PMRF is a full service range.

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

Five, not counting ITCS targets that have their own telemetry system.

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

A carrier battle group evaluation with over 100 participants. PMRF has supported up to four of these per year in the past and is sized to support an opposing carrier battle force (two carrier battle groups).

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

PMRF owns two range C-12 fixed wing aircraft and six range UH-3 helicopters.

3.3 ELECTRONIC COMBAT

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

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

This section does not apply to PMRF. PMRF's electronic warfare resources are used primarily to add the EW dimension to fleet training operations conducted on the range. Additionally, PMRF's EW capability is more appropriate for ships and submarines rather than used against aircraft systems. Finally, PMRF EW is sensor oriented rather than missile defeating. Threat recognition and tactical reaction is the thrust of PMRF's EW resources. PMRF's Range Users Handbook contains a full description of EW systems and capabilities and is available upon request.

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

Current database includes over 800 threats, but there is no real limit as long as signal parameters are within PMRf's capabilities.

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

Simultaneous threats simulated is 14.
Types: AI, AAA, SAM, Fire Control, Surface Search, Air Search, Navigational, Target Track, Target Acquisition, and Missile guidance.
Maximum signal density is 14 simultaneous threats.
Average density in major ops is 5 simultaneous threats.
Power Level ranges from 1kW to 150 kW.
Bands are E, F, H, I, & J.
Radiated.

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

Unknown, however, validation possibly done by NAWCWPNS Pt Mugu.

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

Yes we do conduct open loop testing. Yes, we do reactive testing. Yes we do closed loop.

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

Two of the systems are high fidelity. Maximum threat density of high fidelity signals is 6.

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

Yes, we can simulate radars of landbased aircrat and missile systems.
Yes, we can simulate radars of seabased aircraft, submarines, ships & missiles.
Yes, we can orchestrate integrated signals from both land and sea. We can also simulate airborne radars and integrate it with land/sea based systems.

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

Choke points, coastal areas, open sea, shallow water, mountanous terrain, flat open terrain.

-3.3.A.7.A Threat lay down?

Friendly/hostile threats and commercial ships.

-3.3.A.7.B Representative distance?

Yes.

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

Yes. Three shipmounted systems, three portable systems, and EW pod on RC-12F are movable within a scenario.

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

No, but plans are being carried out to install BFTT (Battle Force Tactical Trainer) link with Oahu and nationwide systems via T1 line.

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

Yes.

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

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

NO

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

N/A; NO COUNTERMEASURE CAPABILITY

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

NONE

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

NONE

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

NO

3.4 ARMAMENTS / WEAPONS

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

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

This includes testing of all types of directed energy weapons.

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

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

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

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

-3.4.B.1 Ground Space

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

40,000 square miles.

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

One warning area of 40,000 square miles can be subdivided as required depending on the foot print of the missile, positioning of the participants and performance of the targets. It is feasible to conduct up to three tests simultaneously. More if salvo firings are involved.

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

Intercept ranges of 100 plus miles are possible for SAMs. Program contemplating longer intercept ranges are currently being planned for and appear to be feasible on the PMRF range. A Polaris boosted test vehicle was launched from PMRF in to the Kwajalein area with data displayed at both PMRF and Kwajalein from launch to splash. With GPS and over the horizon data systems planned for PMRF, almost anything is possible. Theater missile defense testing is planned for the PMRF range.

3.4.B.2 Test Operations

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

--Unguided 2000 pound-class ballistic weapon
---live?
---inert?
--Guided weapon (e.g., GBU-24 class)
---live?
---inert?
--Stand-off weapon (e.g., AGM-130 class)
---live?
---inert?
--Short-range missile (e.g., AIM-9)
---below 5000 feet MSL
---between 5000 and 20,000 feet MSL
---above 20,000 feet MSL
--Long-range missile (e.g., AIM-120)
---below 5000 feet MSL
---between 5000 and 20,000 feet MSL
---above 20,000 feet MSL

--Unguided 2000 pound-class ballistic weapon.

TYPE	*FY-92*	*FY-93*
Live	*0*	*0*
Inert (Total)	*179*	*178*
MK-25	*30*	*43*
MK-36	*72*	*40*
MK-52	*14*	*0*
MK-76	*0*	*46*
MK-82	*20*	*0*
BDU-45	*42*	*49*
B-57	*1*	*0*

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--Guided weapon/Stand-off weapon/Short-Range/Mid-Range/Long-Range

Missiles of Air-to-Air variety are normally fired between 5,000 and 20,000 MSL but can be fired either lower or higher depending on the scenarios requrested by the squadron or type Commander.

TYPE	***FY-92***	***FY-93***
Live	*10*	*19*
Inert	*7*	*0*
SHORT RANGE		
AIM-7	*4*	*10*
AIM-9	*6*	*9*
ATM-45	*6*	*0*
LONG RANGE		
ATM-84	*1*	*0*

NOTE: *AIM/ATM-9's can extend into the Mid-Range area. AIM prefix indicates "Live Firing". ATM indicates inert/telemetry round.*

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Missiles of the Surface to Surface and Surface-to-Air variety in the Short and Medium Range envelope normally exceed the 20,000 MSL, whereas the Long Range variety remains below the 5,000 MSL.

TYPE	***FY-92***	***FY-93***
Live	*30*	*24*
Inert	*15*	*0*
SHORT RANGE		
RIM-7	*1*	*0*
RTM-7	*4*	*0*
MID-RANGE		
RIM-66	*9*	*21*
RTM-66	*6*	*0*
LONG RANGE		
RIM-67	*20*	*3*
RTM-67	*3*	*0*
RTM-84	*1*	*0*
UTM-84	*1*	*0*

NOTE: *RIM indicates live firings. RTM/UTM indicates inert/telmetry firings.*

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Long Range Non-Navy

TYPE	*NO. LAUNCHED*	*COMMENT*
Terrier-Malamute	*1*	*Exceeds 20,000 MSL*
STARS	*2*	*Exceeds 20,000 MSL*
PWN-12	*13*	*Exceeds 20,000 MSL*
PWN-11D	*1*	*Exceeds 20,000 MSL*

Rocket Thrown Torpedoes (RTT) and Vertical Launched ASROC (VLA) requiring Safety Footprints.

TYPE	*FY-92*	*FY-93*
SHORT RANGE		
RTT	*15*	*6*
VLA	*21*	*2*

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Targets Requiring Safety Footprints.

TYPE	*FY-92*	*FY-93*
AQM-37	*1*	*5*
BQM-34	*3*	*9*
BQM-74	*44*	*30*
TALOS	*4*	*0*
VANDALS	*0*	*2*

NOTES: *AQM and TALOS require at sea Safety Footprints. BQM/VANDALS require land and sea Safety Footprints.*

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Short Range defined as 0-20 miles.
Mid-Range defined as 20-60 miles.
Long Range defined as over 60 miles.

-3.4.B.2.B Were flight termination systems required? Yes/no.

Yes, for cruise missiles, SAMs and Vandal targets. Flight termination systems are also required on aerial target systems.

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

N/A

-3.4.B.2.D Were any scheduled missions canceled before the mission, or terminated/aborted during the mission because of encroachments into the safety footprint? Yes/no. If yes, how many per year.

None were aborted in flight. An average of 2 missions per year are canceled for encroachment, but all are rescheduled or shifted in geometry to accommodate the range fouler and the shooter. There is a lot of flexibility with 40,000 square miles to work with.

APPENDIX A - DATA FORMS AND INSTRUCTIONS

1. Form, General Information

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

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

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

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

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

Unit Identification Code (UIC): Enter the UIC.

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

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

(1) Digital Models and Computer Simulations (DMS)- Those models and simulations which either provide a simulated test environment or representations of systems, components, and platforms. DMSs are used throughout the development and test process, as analytical tools, as well as tools to drive or control electronic and other environmental stimuli provided, the test articles on Open Air Ranges (OARs), Installed Systems Test Facilities (ISTFs), Hardware in the Loop Test Facilities (HITLs), Integration Laboratories (ILs), and Measurement Facilities (MFs).

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

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

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

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

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

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

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

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

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

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

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

(6) Other - Any work outside the above.

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

2. Form, Technical Information

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

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

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

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

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

Provide fact sheets, not to exceed two pages.

Keywords: Enter any keywords (spelled-out with acronyms) associated with functions and capabilities of the facility (e.g., electromagnetic interference/electromagnetic compatibility (EMI/EMC), anechoic chamber, radar cross section (RCS)).

3. Form, Additional Information

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

4. Form, Facility Condition

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

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

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

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

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

Nature of Last Upgrade: Describe the purpose and capability increase from the last major upgrade. Indicate the date this upgrade became available for use.

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

5. Form, Historical Workload

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

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

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

6. Form, Determination of Unconstrained Capacity

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

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

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

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

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

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

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

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

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

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

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

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

GENERAL INFORMATION

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Facility/Capability Title: PACIFIC MISSILE RANGE FACILITY/PMRF

Origin Date: 05/02/94

Service: U. S. NAVY

Organization/Activity: PMRF

Location: KEKAHA, KAUAI, HAWAII

T&E Functional Area: GENERAL MISSION SUPPORT

UIC = N0534A

T&E Test Facility Category MAJOR RANGE DEVELOPMENT AND OPERATION

	T&E	S&T	D&E	IE	T&D	OTHER	=100%
PERCENTAGE USE:	35	0	0	0	65	0	
BREAKOUT BY T&E FUNCTIONAL AREA (%)							
Air Vehicles	N/A						
Armament/Weapons	N/A						
EC	N/A						
Other	35	0	0	0	65	0	

Total in Breakout Must Equal "Percentage Use" on First Line

TECHNICAL INFORMATION

Facility/Capability Title: PACIFIC MISSILE RANGE FACILITY/PMRF

Facility Description; Including mission statement:

The mission of PMRF is to provide major range services which facilitate training, tactics development, and evaluation for air, surface, and subsurface weapons system for PACFLT, other DOD agencies, and Foreign Military Forces. In addition it is to maintain and operate facilities and provide services and material to support operations of aviation activities and units of the operating forces of the Navy, other activities and units designated by the Chief of Naval Operations.

PMRF is a training range that also support T&E operations.

Interconnectivity/Multi-Use of T&E Facility:

PMRF can connect voice/data to any T&E facility in the World by use of a portable system and STU III. PMRF is presently connected to Vandenburg, Huntsville, Kwajalein, and NAWCWD.

Type of Test Supported:

All types of missile, whether launched by surface, air or submarine assets. Also torpedo and electronic warfare.

Summary of Technical Capabilities:

PMRF is a multi-faceted range. With the capability of providing simultaneously operation capabilities. Precision tracking radars, cooperative tracking systems, surveillance/safety systems, telemetry, receive/separation/display/record systems, underwater tracking, communications, data distribution/transmission, optical tracking/recording electronic warfare systems, helicopter and fixed wing aircraft and surface support craft.

Keywords:
Multi-faceted range. T&E: Test and Evaluation; STU III: Secure Telephone Unit.

ADDITIONAL INFORMATION
DATA ADDED, CNAP 9405

Change
NO1CP-
CPF
MAY 94

Facility/Capability Title: PMRF Barking Sands

PERSONNEL

	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Officer	27	26	26	26	26	26	26
Enlisted	96	92	89	88	88	88	88
Civilian	*122*	*140*	*131*	*131*	*131*	*131*	*131*
Contractor	474	474	508	508	508	508	508
Total	719	732	754	753	753	753	753

Total Square Footage: 509,759

Test Area Square Footage: N/A; Area used for FLT TRNG and can accommodate the testing. Office Space Square Footage 62,205

Tonnage of Equipment: 1704 Tons Volume of Equipment: 1.15M Cubic Feet

Annual Maintenance Cost: $7.5M Estimated Moving Cost: $6.1M

CAPITAL EQUIPMENT INVESTMENT

FY93	FY94	FY95	FY96	FY97	FY98	FY99
$34.7M	$32.9M	$33.10M	$13.90M	$6.3M	$3.4M	$2.9M

FACILITY CONDITIONS
DATA ADDED, CNAP 9405

FACILITY/CAPABILITY TITLE: PMRF Barking Sands

AGE: 53 years

REPLACEMENT VALUE: $368M

MAINTENANCE AND REPAIR BACKLOG: $5M (Critical) $7M (Routine)

DATE OF LAST UPGRADE: 03 JUN 88

NATURE OF LAST UPGRADE: $2.5M RANGE OPS CENTER ADDITION. ADDED THREE TRACK CONTROL ROOMS, COMPUTER ROOM, AND OBSERVATION DECK. TO HOUSE NEW COMPUTER MODERNIZATION UPGRADE TO OPERATIONAL CAPABILITY.

MAJOR UPGRADES PROGRAMMED

1. UPGRADE TITLE: NONE

   TOTAL PROGRAMMED AMOUNT:
   SUMMARY DESCRIPTION:

2. UPGRADE TITLE:

   TOTAL PROGRAMMED AMOUNT:
   SUMMARY DESCRIPTION:

HISTORICAL WORKLOAD

FACILITY/CAPABILITY TITLE: PACIFIC MISSILE RANGE FACILITY/PMRF

T&E FUNCTIONAL AREA		FISCAL YEAR 86	87	88	89	90	91	92	93
AIR VEHICLES	DIRECT LABOR								
	TEST HOURS								
	MISSIONS								
EC	DIRECT LABOR								
	TEST HOURS								
	MISSIONS								
ARMAMENT/WEAPONS	DIRECT LABOR								
	TEST HOURS								
	MISSIONS								
OTHER T&E	DIRECT LABOR	*192.2*	*231.0*	*196.6*	*248.3*	*182.3*	*230.3*	*193.9*	*207.0*
	TEST HOURS	1221	1283	1447	1358	1167	1215	897	2117
	MISSIONS	833	146	219	161	161	186	171	298
OTHER	DIRECT LABOR	*259.8*	*346.3*	*272.3*	*345.6*	*254.1*	*320.7*	*270.2*	*288.5*
	TEST HOURS	2512	3950	3226	3231	3503	3393	3127	2946
FLEET TRAINING	MISSIONS	*1501*	*786*	727	661	677	628	543	536

R

Change PMRF - OCT94

Note:

During the data call, PMRF scheduling was undergoing some extensive investigations to determine actual "parent" ops which involved targets, missiles and torpedoes within the parent op number. The figures used did include some missile firing or targets operations as parent ops. The information was obtained from the PMRF Scheduling computer. Based upon the numbers we had for FY 91 - 93, we filled in the colums for FY 86 - 90 based upon a professional educated guess. Our scheduling computer has now crunched out the data and we have modified our input accordingly. (Regretfully FY86 is not available and is still based on a professional educated guess.)

45. R (28 NOV 94)

HISTORICAL WORKLOAD

FACILITY/CAPABILITY TITLE: PACIFIC MISSILE RANGE FACILITY/PMRF

T&E FUNCTIONAL AREA		FISCAL YEAR 86	87	88	89	90	91	92	93
AIR VEHICLES	DIRECT LABOR								
	TEST HOURS								
	MISSIONS								
EC	DIRECT LABOR								
	TEST HOURS								
	MISSIONS								
ARMAMENT/WEAPONS	DIRECT LABOR								
	TEST HOURS								
	MISSIONS								
OTHER T&E	DIRECT LABOR	*192.2*	*231.0*	*196.6*	*248.3*	*182.3*	*230.3*	*193.9*	*207.0*
	TEST HOURS	1221	1801	1322	1759	1190	1706	1461	1842
	MISSIONS	833	1001	852	1076	790	998	840	897
OTHER FLEET TRAINING	DIRECT LABOR	*259.8*	*346.3*	*272.3*	*345.6*	*254.1*	*320.7*	*270.2*	*288.5*
	TEST HOURS	2512	3316	2669	3267	2409	3169	2714	3422
	MISSIONS	1501	2001	1573	1997	1468	1853	1561	1667

Change
N4644-
CPF
MAY 94

DETERMINATION OF UNCONSTRAINED CAPACITY

Change
N45-CPF
MAY 94

FACILITY/CAPABILITY TITLE: PACIFIC MISSILE RANGE FACILITY/PMRF

ANNUAL HOURS OF DOWNTIME	1	0
AVERAGE DOWNTIME PER DAY (LINE 1÷ 365)	2	0
AVERAGE HOURS AVAILABLE PER DAY (24 - LINE 2)	3	24

TEST TYPES	TESTS AT ONE TIME	WORKLOAD PER TEST PER FACILITY HOUR	WORKLOAD PER FACILITY HOUR	UNCONSTRAINED CAPACITY PER DAY (LINE 3 X TOTAL Σ)
4	5	6	7	8
"TYPICAL"	4	100	400	*9600*
				ANNUAL UNCONSTRAINED CAPACITY
				9
				3,504,000
		TOTAL Σ	400	

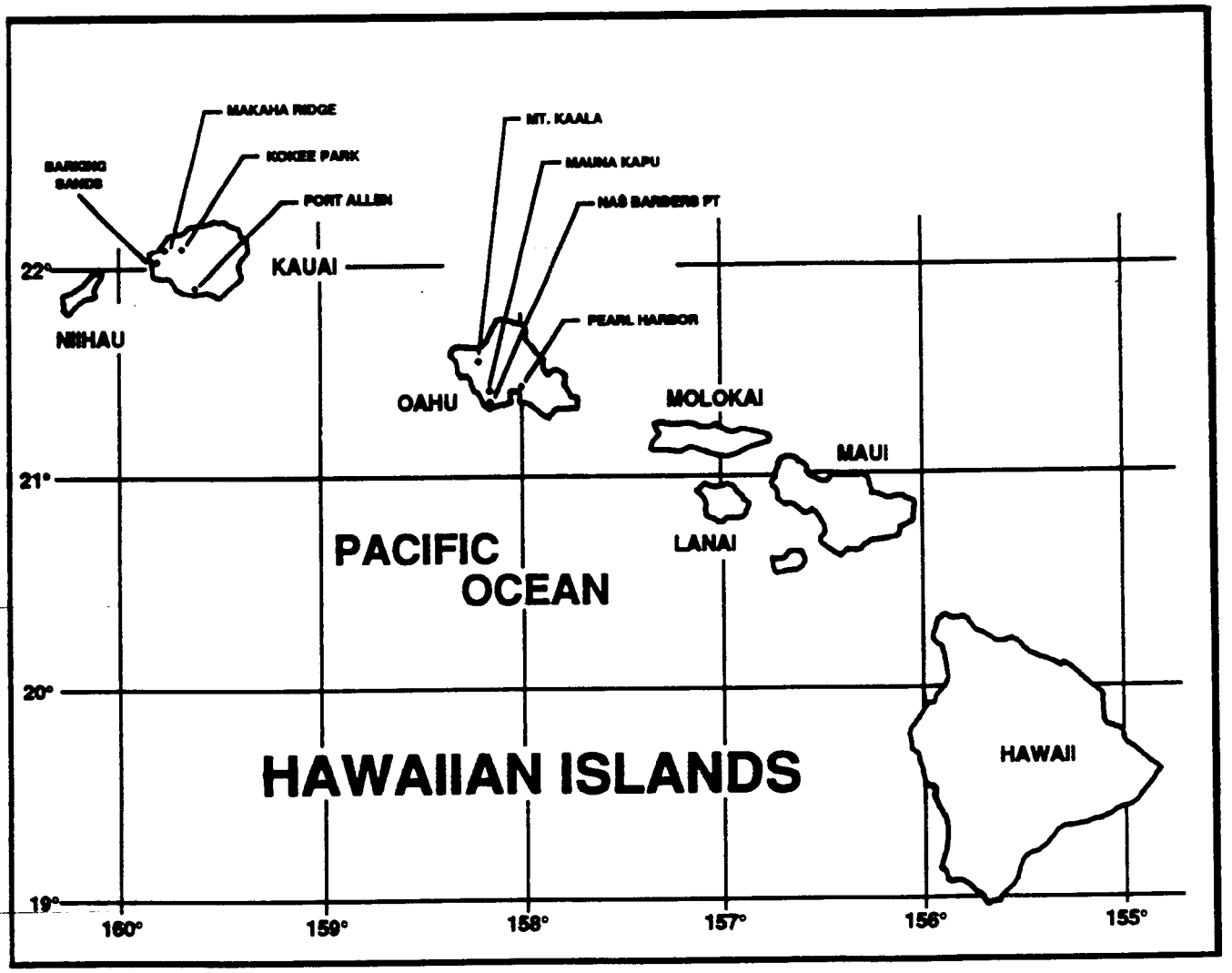

Figure - 1: Locations Of the Pacific Missile Range Facility

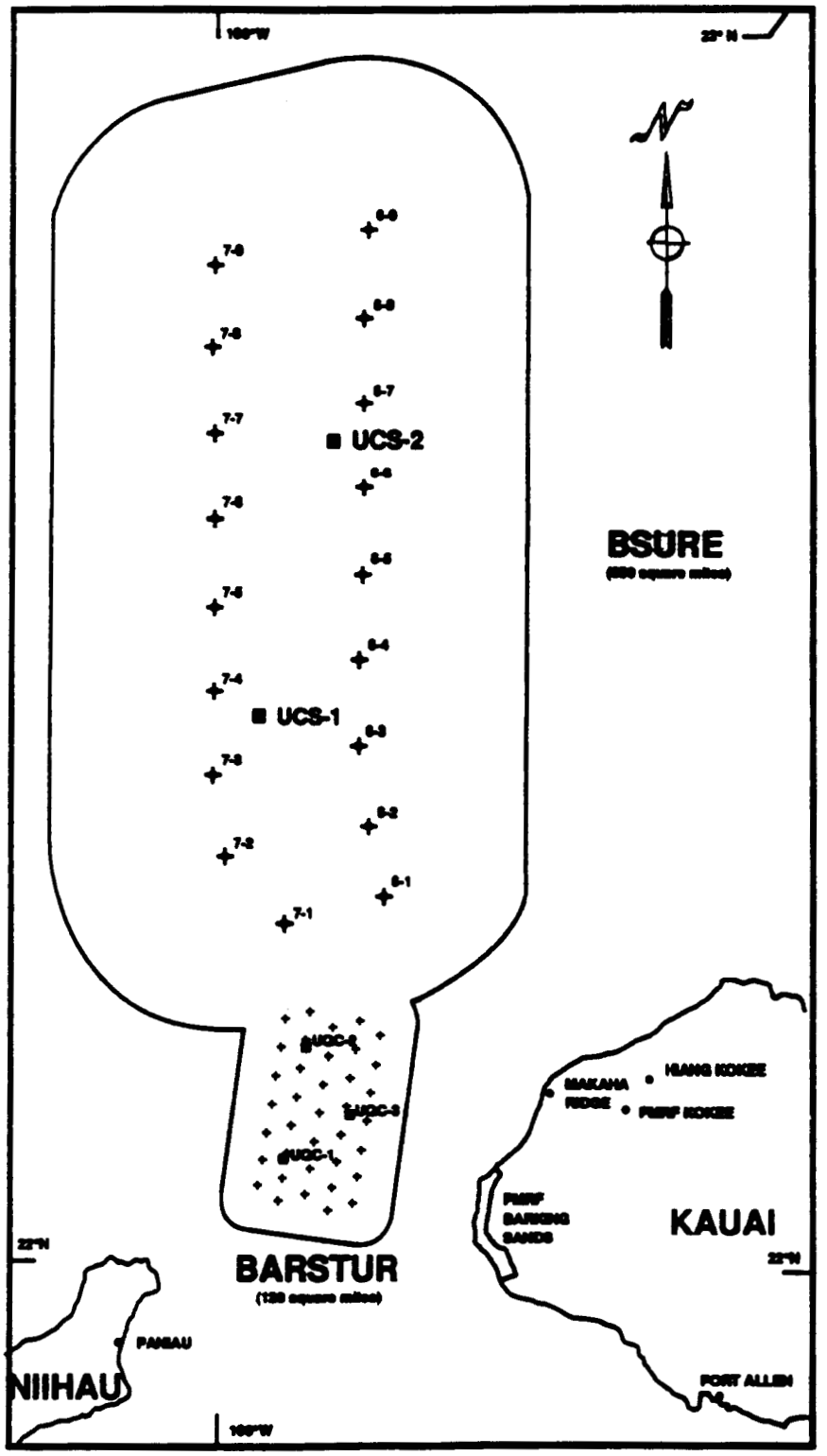

Figure - 2: PMRF Underwater Ranges

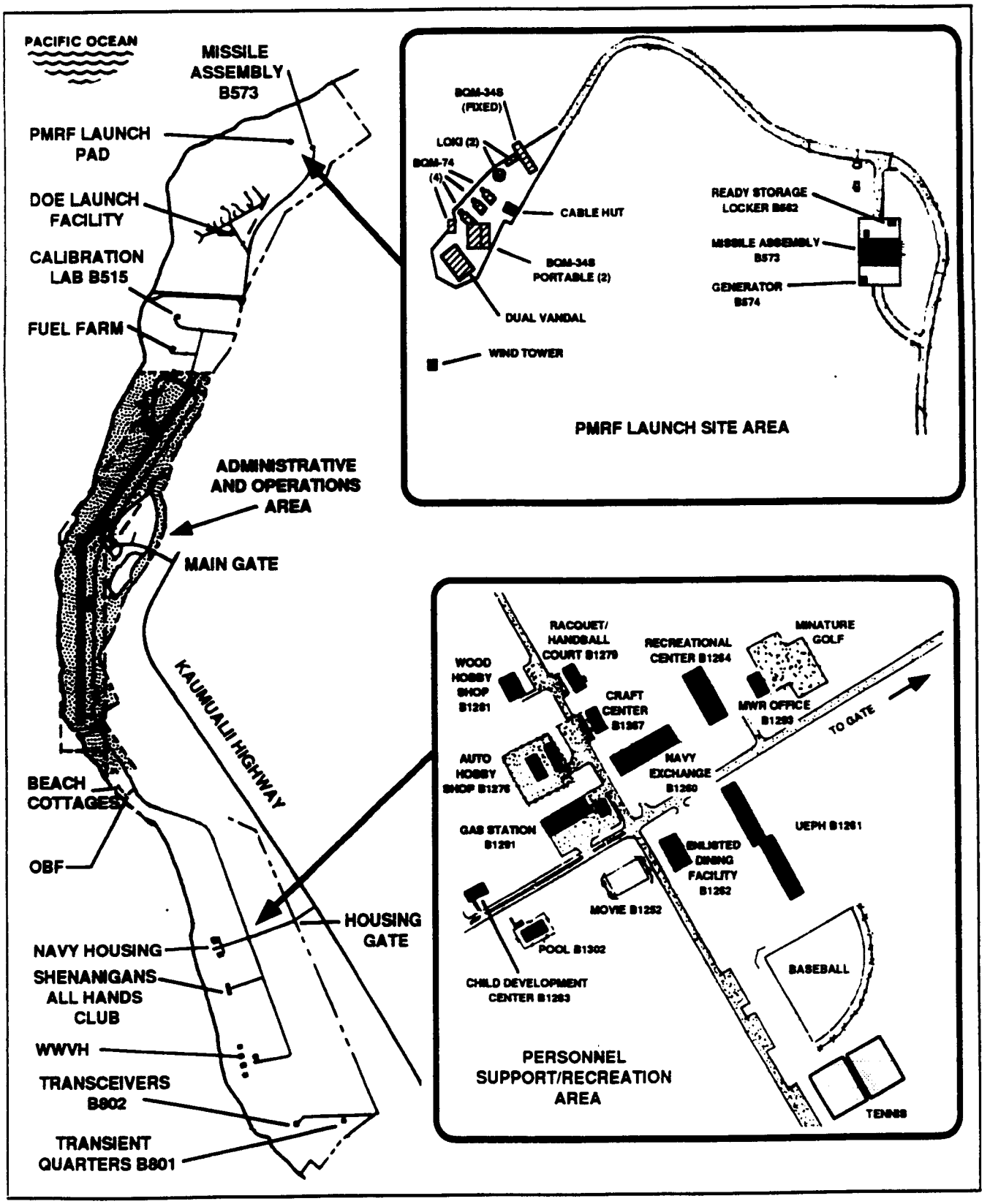

Figure - 3: Barking Sands Area Map

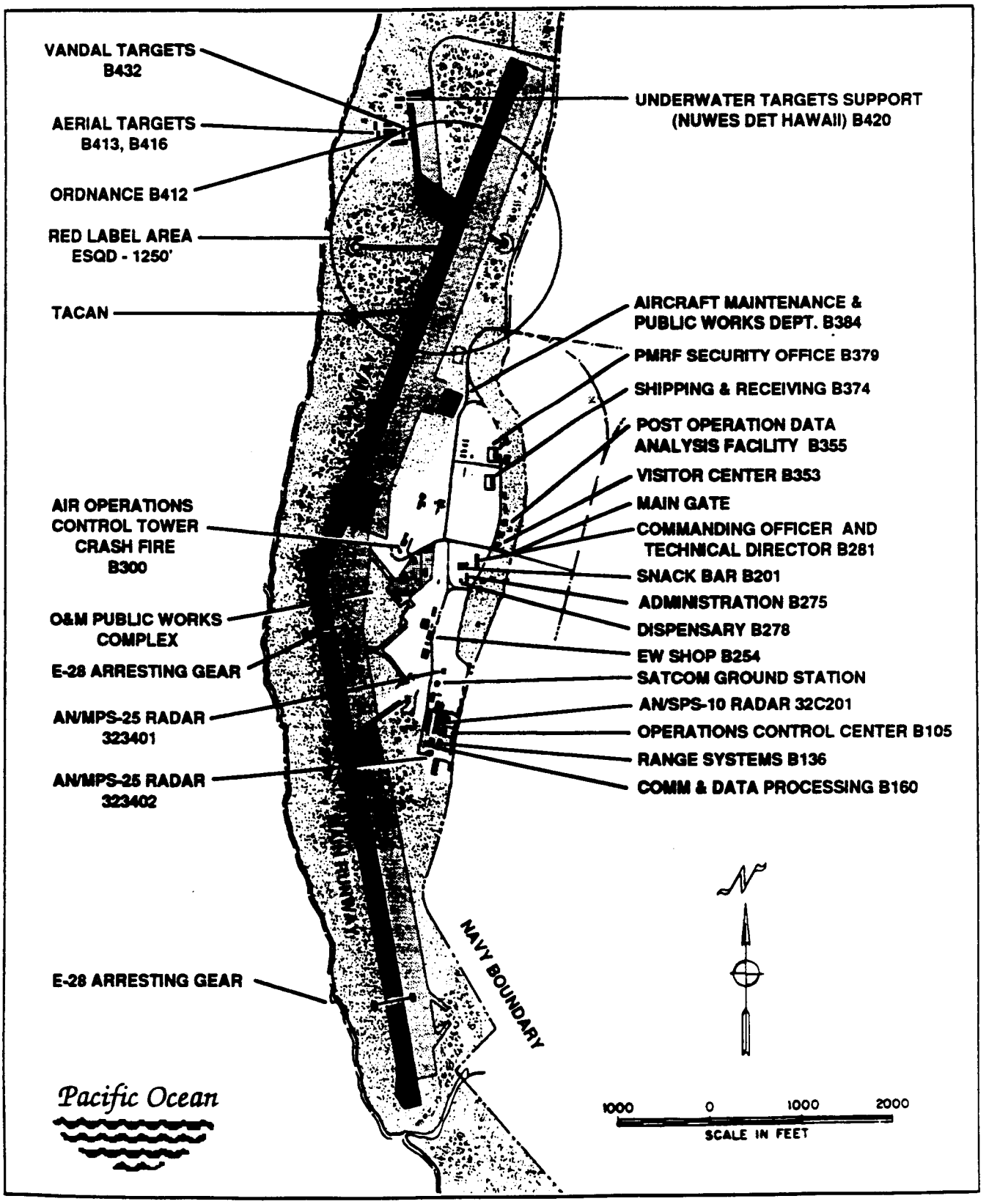

Figure - 4: Administrative and Instrumentation Area Map

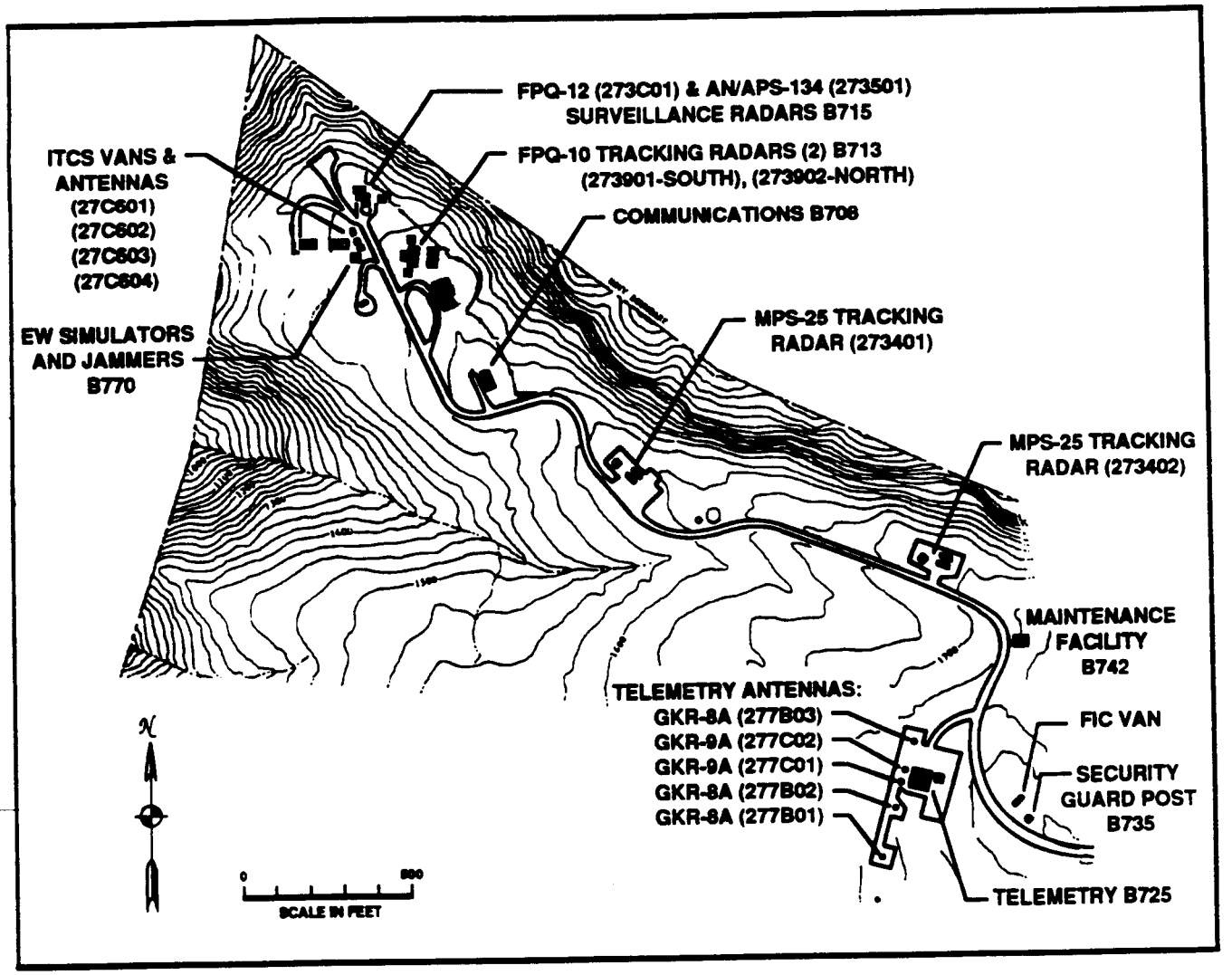

Figure - 5: Makaha Ridge Area Map

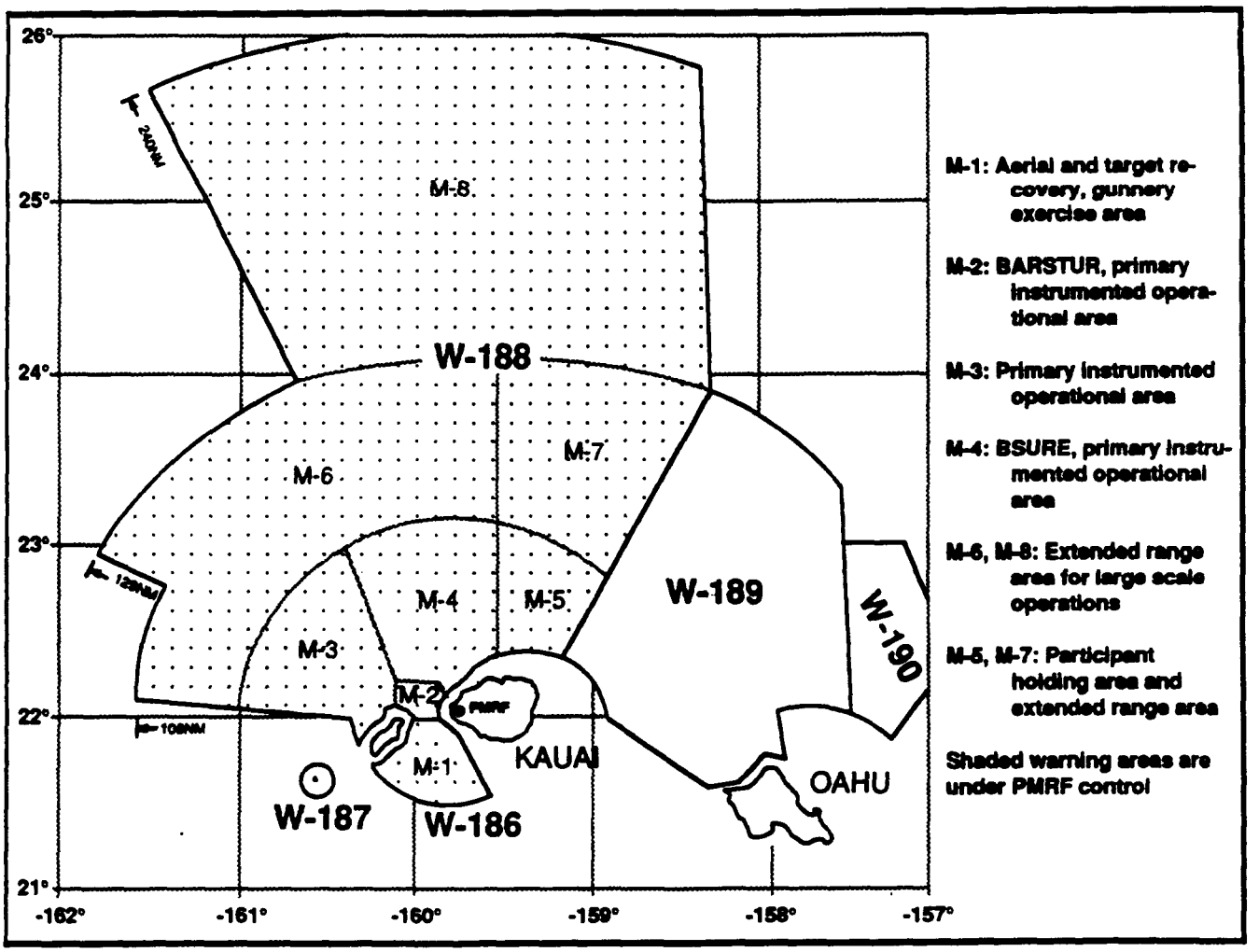

Figure - 8: PMRF Operational Areas

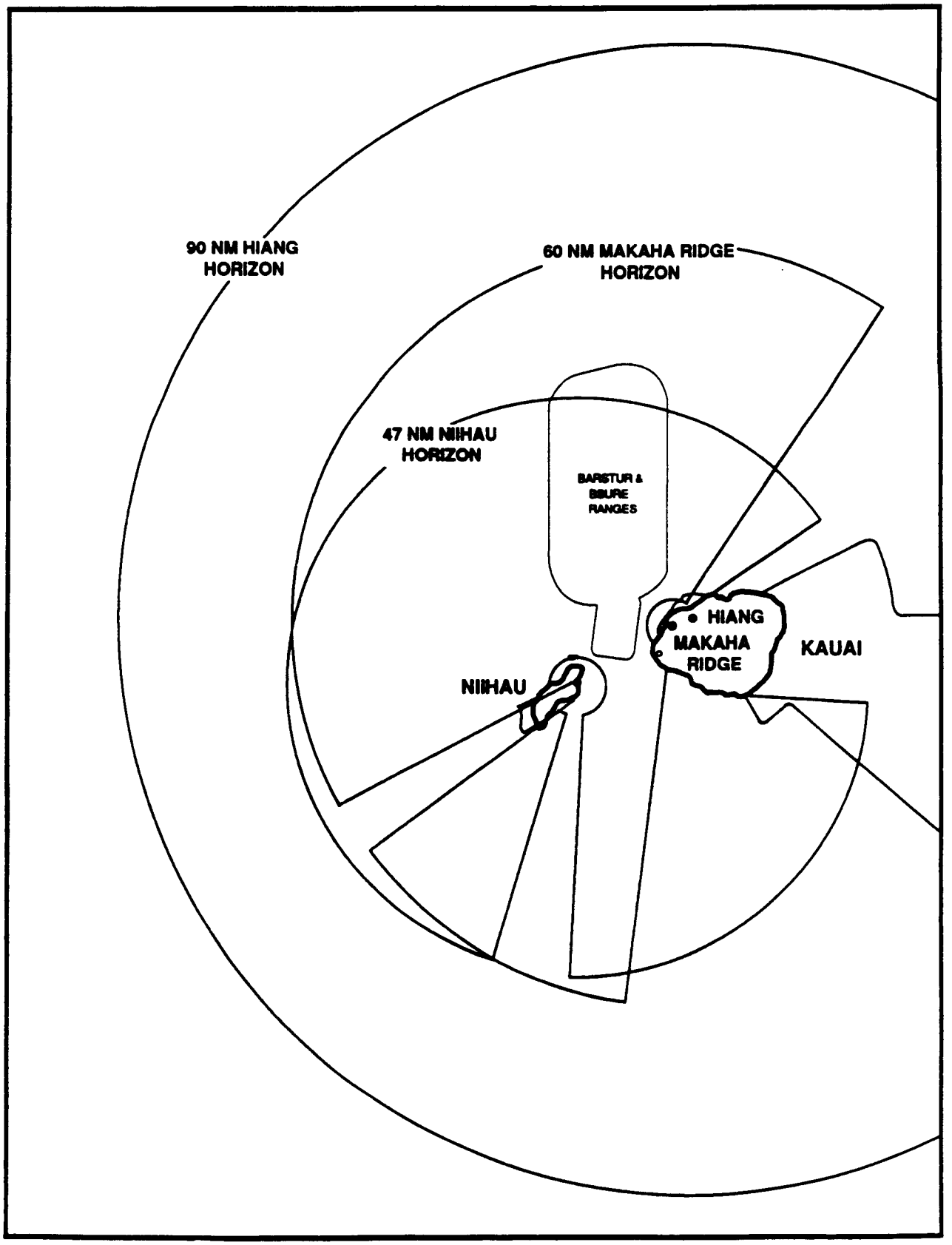

Figure - 10: Surface Search Radar Coverage

DEPARTMENT OF THE NAVY
COMMANDER IN CHIEF
UNITED STATES PACIFIC FLEET
250 MAKALAPA DRIVE
PEARL HARBOR, HAWAII 96860-7000

IN REPLY REFER TO:
11000
Ser N4644/05053
07 JUN 1994

From: Commander in Chief U.S. Pacific Fleet
To: Chief of Naval Operations (N44)

Subj: BASE REALIGNMENT AND CLOSURE 95 DATA CALL NUMBER THIRTEEN

Ref: (a) SECNAV Memo MM-0085-F2 BSAT/MS of 7 Apr 94

Encl: (1) Data Call Thirteen, PMRF Barking Sands

1. In response to reference (a), enclosure (1) is forwarded.

2. The CINCPACFLT point of contact is CDR Lin Wong at DSN 474-6387, COMM (808) 474-6387, Fax DSN 474-5495, COMM (808) 474-5495.

F. P. DiGEORGE, III
Fleet Facilities Officer

Copy to:(w/o encl)
COMNAVAIRPAC
PMRF Barking Sands

BRAC-95 CERTIFICATION

Activity:_____
UIC:_____

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

MAJOR CLAIMANT LEVEL

R. J. KELLY, ADM USN
NAME (Please type or print)

Signature

COMMANDER IN CHIEF
Title

Date

U.S. PACIFIC FLEET
Activity

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

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

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

Signature

ACTING
Title

6/20/94
Date

BRAC-95 CERTIFICATION
PMRF Barking Sands, Data Call 13

NEXT ECHELON LEVEL (if applicable)

Captain James E. Eckart, USN
NAME (Please type or print)

Signature

Acting
Title

11 May 1994
Date

COMNAVAIRPAC
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.

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

JON E. THIELE, CDR/USN
NAME (Please type or print)

Jon E. Thiele
Signature

ACTING COMMANDING OFFICER
Title

04 MAY 1994
Date

PACIFIC MISSILE RANGE FACILITY
Activity

177 R

BRAC-95 CERTIFICATION

DATA CALL THIRTEEN

PACIFIC MISSILE RANGE FACILITY

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
NAME

Signature

Commander In Chief
Title

17 December 1994
Date

U. S. Pacific Fleet
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)

A FARNER
NAME (Please type or print)

Signature

Title

1/11/95
Date

R

DATA CALL #13

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."

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

ACTIVITY COMMANDER

T. L. DANIELS, CAPT/USN
NAME (Please type or print)

T L Daniels
Signature

COMMANDING OFFICER
Title

24 OCT 94
Date

PACIFIC MISSILE RANGE FACILITY
Activity

R

BRAC-95 CERTIFICATION
DATA CALL 13
Change 1
PMRF Barking Sands UIC 0534A

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

NEXT ECHELON LEVEL

_VADM Robert J. Spane, USN____
NAME (Please type or print)

Signature

_Commander_____
Title

_28 October 1994_____
Date

Commander Naval Air Force, U.S. Pacific Fleet
Activity

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

MAJOR CLAIMANT LEVEL

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.

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

NAME (Please type or print)

Signature

Title

Date

R

177

BRAC-95 CERTIFICATION

DATA CALL THIRTEEN

PACIFIC MISSILE RANGE FACILITY

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
NAME

Signature

Commander In Chief
Title

17 December 1994
Date

U. S. Pacific Fleet
Activity

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

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

W. A. EARNER

NAME (Please type or print)

Signature

Title

1/11/95
Date

R

DATA CALL #13

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."

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

ACTIVITY COMMANDER

T. L. DANIELS, CAPT/USN
NAME (Please type or print)

T L Daniels
Signature

COMMANDING OFFICER
Title

11/1/94
Date

PACIFIC MISSILE RANGE FACILITY
Activity

R

BRAC-95 CERTIFICATION

DATA CALL 13
Audit Changes
PMRF UIC 0534A

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

NEXT ECHELON LEVEL

_VADM Robert J. Spane, USN___	_____
NAME (Please type or print)	Signature
_Commander_____	_21 November 1994_____
Title	Date

Commander Naval Air Force, U.S. Pacific Fleet
Activity

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

MAJOR CLAIMANT LEVEL

_____	_____
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.

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

_____	_____
NAME (Please type or print)	Signature
_____	_____
Title	Date