



Office of the Deputy Under Secretary of Defense

Installations

BRAC Knowledge Base

Data Call Examples from BRAC 1995

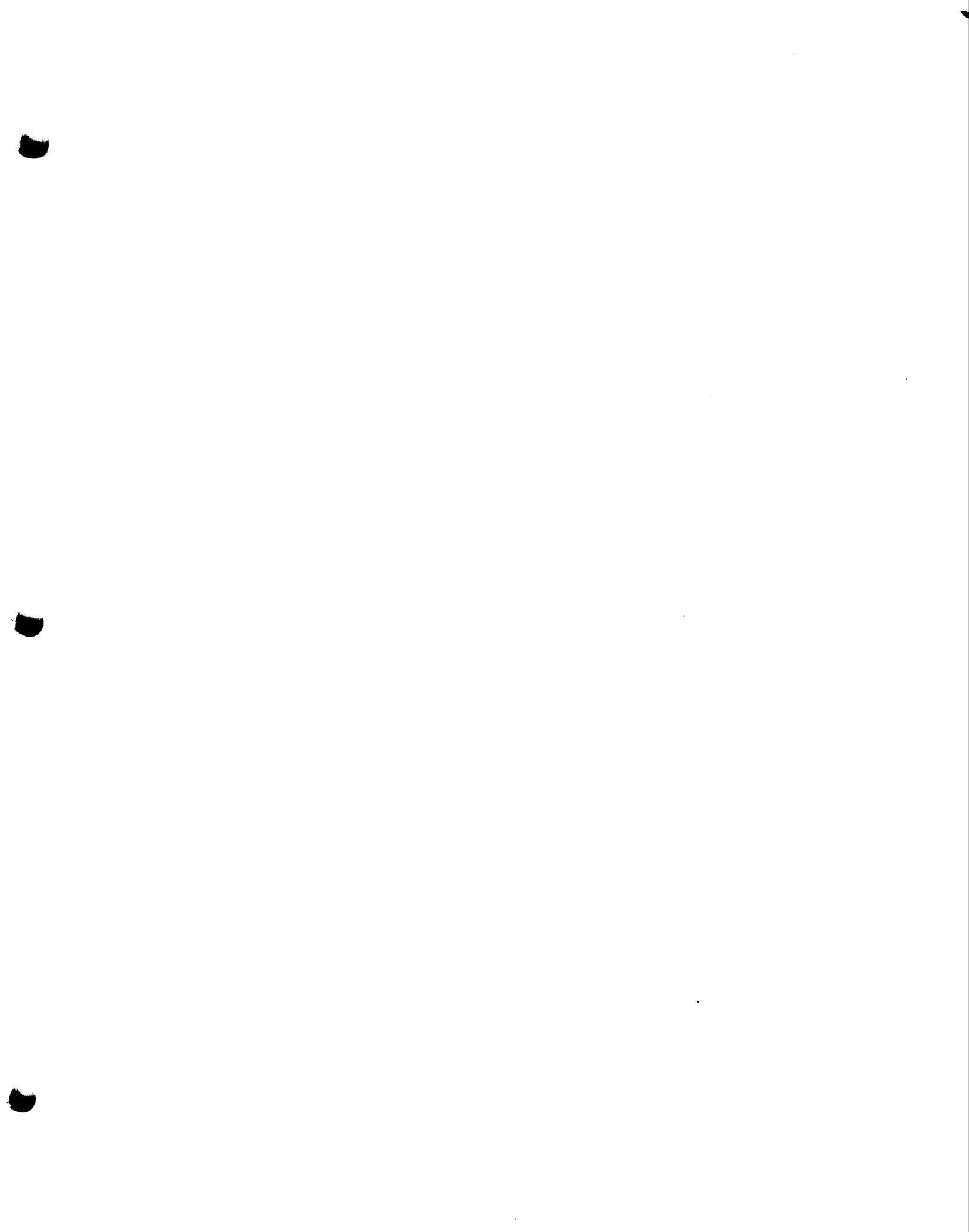
Naval Air Station, Oceana, VA

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- 1. Measures of Merit**
- 2. Capacity Analysis Data Call Worksheet**
- 3. Capacity Analysis, Oceana**
- 4. Environmental Data Call**
- 5. Military Value Data Call**

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BRAC Knowledge Base No. H9527

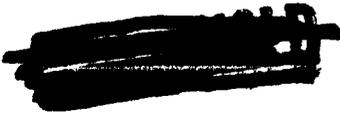




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SECTION 8



DRAFT

**CAPACITY ANALYSIS:
DATA CALL WORK SHEET**

24 March, 1994

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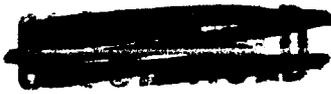
*****If any responses are classified, attach separate classified annex.*****



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PILOT TRAINING BASE LISTING:



Title	Location
COLUMBUS	COLUMBUS MS
CORPUS CHRISTI	CORPUS CHRISTI TX
FT RUCKER	FT RUCKER AL
KINGSVILLE	KINGSVILLE TX
LAUGHLIN	DEL RIO TX
MERIDAN	MERIDAN MS
PENSACOLA	PENSACOLA FL
RANDOLPH *	UNIVERSAL CITY TX
REESE	LUBBOCK TX
SHEPPARD	WITCHITA FALLS TX
VANCE	ENID OK
WHITING FIELD	MILTON FL

* Included under Randolph are its T-3 Screening OLFs Hondo Apt, Hondo Tx and the Air Force Academy's airfield used for USAFA screening.

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Data For Capacity Analysis

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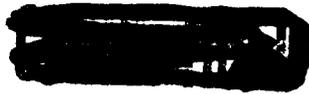
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Mission Requirements

a. Undergraduate Flight Training (UFT) Throughput/Graduates

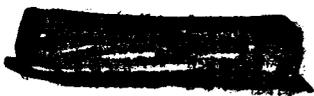
1. Using the Base Force Structure as outlined in the JCS memo dated 7 February 1994, re: 1995 Base Realignment and Closures Force Structure Plan, and projected retention rates, give the projected yearly Pilot Training Rate (PTR)/Program Guidance Letter (PGL) requirements by installation for each of the next seven years.

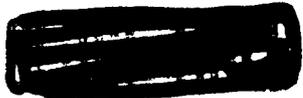
Airfield: _____

Type of Pilot Training by Syllabus * (EXAMPLES)		Output Requirements , Attrition Factors, and Average Daily Student Load (ADSL) (include attrition factors used to establish entries to achieve output) (Output/Attrition Factor(%)/ADSL) By Fiscal Year							
		1994	1995	1996	1997	1998	1999	2000	2001
		Strike (Intermediate/ Advanced)	USN	960/15%/240**	etc.				
USMC									
USCG									
FMS									
Primary	USN								
	USMC								
	USCG								
	FMS								
	USAF								
Etc.									

* Use appropriate Navy, Air Force, or Army chart see Appendix 1.

** Example Entry





Mission requirements

a. Undergraduate Flight Training (UFT) Throughput/Graduates (cont.)

2. Using the Base Force Structure as outlined in the JCS memo dated 7 February 1994, re: 1995 Base Realignments and Closures Force Structure Plan and projected retention rates, give the projected yearly NFO Training Rate (NFOTR)/Program Guidance Letter (PGL) Navigator Training requirements by installation for each of the next seven years. Provide any additional sources of NFO/Nav trainees.

Airfield: _____

Type of Navigator Training By Syllabus * (EXAMPLES)		Output Requirements, Attrition Factors, and Average Daily Student Load (ADSL) (include attrition factors used to establish entries to achieve output) (Output/Attrition Factor/ADSL) By Fiscal Year							
		1994	1995	1996	1997	1998	1999	2000	2001
Adv. Navigator (NAV)	USN	960/15%/240**							
	FMS								
	NOAA								
SUNT Core	USAF								
	ANG								
	AFRES								
	FMS								
Etc.									

* Use appropriate Navy, Air Force, or Army chart see Appendix 1.
 ** Example Entry

3. Provide the historical attrition data for undergraduate pilot training by syllabus for FY 91-93:

Type of Pilot Training by Syllabus * (EXAMPLES)		Historical Attrition By Fiscal Year		
		1991	1992	1993
Strike (Intermediate/advance)	USN	20%**		
	USMC			
	USCG			
	FMS			
Primary	USN			
	USMC			
	USCG			
	FMS			
	USAF			
Etc.				

* Use appropriate Navy, Air Force, or Army chart see Appendix 1.
 ** Example Entry



Mission Requirements

a. Undergraduate Flight Training Throughput/Graduates (cont.)

4. Provide the historical attrition data for undergraduate Navigator training by syllabus for FY 91-93:

Type of Navigator Training By Syllabus * (EXAMPLES)		Historical Attrition By Fiscal Year		
		1991	1992	1993
Adv Navigator (NAV)	USN	21%**		
	FMS			
	NOAA			
SUNT Core	USAF			
	ANG			
	AFRES			
	FMS			
Etc.				

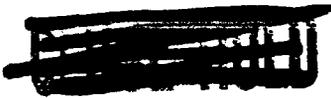
* Use appropriate Navy, Air Force, or Army chart see Appendix 1.

** Example Entry

5. Indicate in the table below the types of undergraduate pilot and NFO training currently conducted at your installation. Also give the number of pilots and NFOs trained in FY 1991, FY 1992, and FY 1993 at your installation.

Syllabus of Training *	Level of Training*	Graduates		
		FY 91	FY 92	FY 93
General	Primary			
Strike	Intermediate			
	Advanced			
SUPT	Primary			
	BF			
	AT			
Etc/				

* Use appropriate Navy, Air Force, or Army chart see Appendix 1.



6. List all other officer training (i.e., non-undergraduate pilot/NFO/Navigator training) by activity conducted at your installation. For each type training, give the actual figure for FY 1993 throughput in terms of the number of students that year, and give the projected figures for FY 94-01. Also give the average daily student load (ADSL) for each activity.

Other Officer Training (Graduates)										
Activity	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	ADSL for FY 1993

Use the following formula to calculate ADSL:

$$\frac{\text{Activity Throughput} \times \text{Average Number of days each student was aboard}}{\text{Number of Training Days}}$$

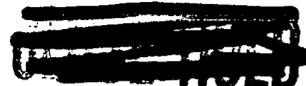
7. List all enlisted training conducted at your installation. For each type training, give the actual figure for FY 1993 throughput in terms of the number of students that year, and the projected figures for FY 94-01. Also give the average daily student load (ADSL) for each activity.

Enlisted Training (Graduates)										
Activity	FY 1993	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	ADSL for FY 1993

Use the following formula to calculate ADSL:

$$\frac{\text{Activity Throughput} \times \text{Average Number of days each student was aboard}}{\text{Number of Training Days}}$$





Mission Requirements

b. Flight Training

1. For each syllabus of undergraduate pilot and/or NFO/Navigator flight training and aircraft type required for that training, give the number of required sorties per graduate, flight time in the airspace/sortie, the dimensions, and the total number of flight hours required for each type of airspace listed that is used for training in that particular syllabus[Total flight hours = # Sorties x (Flight time per sortie)]. Also include additional types of airspace that could accommodate this training.

Note: For helicopter training, airspace dimensions are given as available airspace.

Syllabus of Training*: _____ Type Aircraft: _____

Type of Airspace	# Sorties per Graduate	Flight Time in Airspace / Sortie	Vertical Altitude (1000 ft)	Other Types of Usable Airspace	Ave Size (nm ²)	Total Flight Hours per Graduate
MOA						
PAT						
AW						
ATCAA						
OWA						
OWAW						
WA						
AA						
RA						
RR						
MTR						

Key to types of airspace:

MOAs -- Military Operating Areas

WA -- Warning Areas

AA -- Alert Areas

RA -- Restricted Areas

ATCAA -- Air Traffic Control Assigned Airspace

OWAW -- Overwater Airways

RR -- Restricted Areas with Ranges

MTR -- Military Training Routes

AW-- Airways (e.g. corridors to and from training areas)

PAT -- Pattern (e.g. airspace above runways)

OWA -- Overwater Airspace

CLG -- Uncontrolled Airspace

* Use appropriate Navy, Air Force, or Army chart see Appendix 1.





Mission Requirements

b. Flight Training (cont.)

2. Give the total number of day and night sorties required for each undergraduate/graduate pilot and/or NFO/Navigator training syllabus and trainer aircraft (and level of training) for student training, overhead, and the total requirement.

Syllabus of Training *	Level (Track) of Pilot Training *	Trainer Aircraft *	Sorties required per graduate					
			Student (syllabus)		Overhead ¹		Total	
			Day	Night	Day	Night	Day	Night
General	Primary	T-34C						
		JPATS						
Strike	Intermediate	T-2						
		T-45 ²						
	Advanced	TA-4J						
		T-45						
SUPT	Primary	T-37						
	BF	T-38						
	AT	T-1A						
Etc.								

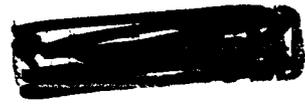
* Use appropriate Navy, Air Force, or Army chart see Appendix 1.

3. Indicate your training weather minimums (ceiling/visibility & crosswinds) by aircraft type and syllabus.

¹ Overhead includes extra flights due to unsatisfactory performance, maintenance flights, incomplete flights, instructor training, flights, warm-up flights, and instrument check flights.

² If requirements for the T-45 are still being derived, give best estimate.





Mission Requirements

c. Flight Training Ground School

1. Provide the ground school training requirements for undergraduate/graduate Pilot and NFO/Navigator training facilities (classrooms, simulators, labs, life support facilities, etc.) by Facility Category Code Number (CCN). Include all applicable 171-xx, 179-xx CCN's and any other CCN where Undergraduate Pilot or NFO/Navigator training occurs. Ensure that the requirements for all types of simulators (cockpit (UTD), instrument (IFT), and motion-based/visual (OFT), etc.) are indicated.

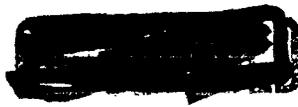
Facility Category Code (CCN): _____

Syllabus of Training * (EXAMPLES)	Level of Training *	Facility Type(s)	Requirement (Hrs/Grad)
General	Primary		
Strike	Intermediate		
	Advanced		
SUPT	Primary		
	Bomber/ Fighter (BF)		
	Airlift/ Tanker (AT)		
Etc.			

* Use appropriate Navy, Air Force, or Army chart see Appendix 1.

2. List any additional constraints or limitations to the flight training ground school facilities that impact the training mission.





Mission Requirements

d. Other Ground Training

1. By facility Category Code Number (CCN), for facilities in which student pilot or NFO/Navigator training is conducted, provide the usage requirements for other than student pilot or NFO/Navigator training. Include all applicable 171-xx, 179-xx CCN's. Other use made of the facilities must be derived either from course requirements and student throughput (for formal schools/courses of instruction) or that required to maintain readiness (for permanent/support personnel, reserves, etc.).

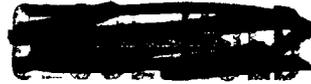
CCN: _____

Type of Training Facility	User	Type of Training	FY 1993 Requirements		FY 2001 Requirements	
			Hrs/Student	Hrs/Yr	Hrs/Student	Hrs/Yr

2. By facility Category Code Number (CCN), provide the usage requirements for facilities in which student pilot or NFO/Navigator training is not conducted. Include all applicable 171-xx, 179-xx CCN's. This usage must be derived either from course requirements and student throughput (for formal schools/courses of instruction) or that required to maintain readiness (for permanent/support personnel, reserves, etc.).

CCN: _____

Type of Training Facility	User	Type of Training	FY 1993 Requirements		FY 2001 Requirements	
			Hrs/Student	Hrs/Yr	Hrs/Student	Hrs/Yr



Mission Requirements

e. Training Airframes

1. Provide the number of aircraft (by type) that will be based at each base for use in undergraduate/graduate pilot and NFO/Navigator training programs in the Fiscal Year indicated; and the number of other aircraft not used for training. Project requirements if necessary.

(a) Base:

AIRCRAFT USED FOR TRAINING

Aircraft*	FY 1994	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
EXAMPLE	25	25	25	25	25	20	10	0
T-34/JPATS						(JPATS 4)	(JPATS 10)	(JPATS 15)
T-2								
TA-4J								
T-34C								
T-39								
T-43								
T-44								
T-45								
TH-57								
JPATS								

AIRCRAFT NOT USED FOR TRAINING

C-12/C-21								
H-60								

* Use appropriate Navy, Air Force, or Army chart see Appendix 1.



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Mission Requirements

c. Training Airframes

2. Provide the following information for each training airframe used for pilot and NFO/Navigator training:

AIRCRAFT TYPE: _____

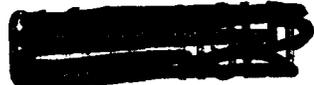
FACTOR	VALUE
Utilization Rate (UTE Rate--sorties or hours per month)	
Average Sortie Duration (ASD) (hrs)	
Planned Turn Time (hrs) (Time from landing to takeoff)	
Min Runway Length (ft)	
Preferred Runway Length (ft)	
Min Runway Length for Touch And Go (T/G) (ft)	
Runway Width (ft)	
Required Taxiway Width (ft)	
Weight Bearing Requirement (kips)	
Apron Space Required (ft•/Aircraft)	
Hangar Space Required (ft•/Aircraft)	
Navigation Equipment On-Board (GPS?--when?)	

3. List any additional constraints or limitations to the training airframes that impact the training mission.

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Facilities

a. Airfield

1. Provide the following information for the home field and each OLF that supports undergraduate flight training. (Following 20 Questions.)

Airfield/OLF Name: _____ Location (Lat/Long and nearest town): _____

Syllabi and Level of Training Supported: _____

Ownership: _____ (Air Force/Army/Navy/Civilian)

For OLF: Distance (nm) from home field _____

2. Complete the table below to describe the airfield's annual operations (sorties flown) by type of aircraft. Give best estimate of the number of sorties if exact data not available. If sortie totals are derived from estimates, list assumptions.

TYPE AIRCRAFT: _____

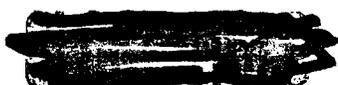
		FY 1991	FY 1992	FY 1993
Operational Sorties	Undergraduate Training Sorties			
	Graduate Training Sorties			
	Training Support Sorties*			
	Other Sorties			
	TOTAL SORTIES:			
Non-Operational Hours ³	Standdowns			
	Maintenance			
	Other Events			

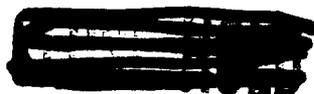
*..Training Support Sorties include maintenance flights, instructor proficiency/checkrides, etc.

List below the "other sorties" and "other events" included in the table above:

³ Hours when the airfield was closed for flight operations.

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Facilities

a. Airfield (cont.)

3. Indicate in the table below the number of undergraduate/graduate pilots and NFO/Navigators trained in FY 1991, FY 1992, and FY 1993 at your installation by syllabus, by level of training. In the blank FY column select the FY with the greatest output within the last 10 years and indicate the year and show data.

Syllabus of Training *	Level of Training *	Pilots and NFO/Navigators Trained			
		FY ____	FY 1991	FY 1992	FY 1993
Strike	Intermediate				
	Advanced				
Etc.					

* Use appropriate Navy, Air Force, or Army chart see Appendix 1.

4. Under normal operations, give the average number of daylight/night flying hours per day, and the number of days per year the airfield/OLF is scheduled for undergraduate pilot and/or NFO/Navigator training. (Do not include weekends.)

	FY 1991	FY 1992	FY 1993
Average hours (day/night)			
Days per year:			





Facilities

a. Airfield (cont.)

5. Enter the percentage of daylight undergraduate/graduate pilot and/or NFO/Navigator training sorties lost during each of the last three years due to weather, maintenance, operations, other military flights, commercial/civilian flights, or other reasons by aircraft type. Indicate if the sorties lost were from an undergraduate or graduate program.

Aircraft Type: _____

Undergraduate Training: (Yes/No)

Factor		Percentage Lost		
		FY 91	FY 92	FY 93
Weather	Primary			
	Intermediate			
	Advanced			
	Etc.*			
Maintenance				
Operations				
Other Military Flights				
Civilian/Commercial Flights				
Other				
Total				

* Use appropriate Navy, Air Force, or Army chart see Appendix 1.

6. List the major factors in the "other" category in the above table.

7. Weather (WX): During the period of record (at least ten years), what was the yearly average:

- a. Percentage of time WX at or above 200/1?
- b. Percentage of time WX at or above 300/1?
- c. Percentage of time WX at or above 500/1?
- d. Percentage of time WX at or above 1000/3?
- e. Percentage of time WX 3000/5 and above?
- f. Percentage of time WX 3000/3 and above?
- g. Percentage of time WX 1500/3 and above?
- h. Percentage of time crosswind component to the primary runway at or below 15 knots?
- i. Percentage of time crosswind component to the primary runway at or above 25 knots?
- j. Mean number of days of icing in the local flying area?





Facilities

1. Airfield (cont.)

8. For each independent runway complex at home field and all OLFs, provide a breakdown of daytime and nighttime airfield usage by type of training (include overhead sorties) for undergraduate flight training over the past year. Use a separate table for each runway complex. (Note: The percentages in each column are of sorties flown and should sum to 100.) (Not applicable for helicopter training.)

Runway Complex Name: _____

Syllabus of Training *	Level of Training * (Aircraft Type)	FY 1993 Airfield Use (Percent)	
		Day	Night
Flight Screening	T-3		
General	Primary (T-34/T-37)		
Strike	Intermediate (T-2/T-45)		
	Advanced (TA-4/T-45)		
Etc.			
Total		100	100

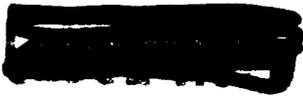
* Use appropriate Navy, Air Force, or Army chart see Appendix 1.

9. Given the current mix of aircraft assigned to your air station, what is the average number of operations per hour this airfield and each OLF can support for each runway complex over a one year period (use the number of training days/year used by your service). This number should take in account reductions in operations due to weather and the times the airfield is closed to undergraduate/graduate pilot and/or NFO/Navigator training (i.e., calculations should be based on the methodology in the FAA's Airport Capacity and Delay manual). Show how this number was derived.

10. Complete the table below to describe the runway activity to each runway at the home field and all OLFs. Use the FAA Airport Operations Count (traffic count) to determine departures and arrivals:

	FY 1991	FY 1992	FY 1993
Runway ____ Traffic Count			
Runway ____ Traffic Count			





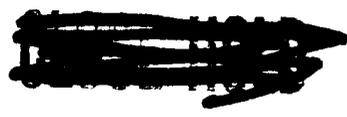
Facilities

a. Airfield (cont.)

11. Give the percent of VFR and IFR flight operations (departures and arrivals) at each airfield and OLF (use the flight operations data for FY91 - FY93):

	FY 1991	FY 1992	FY 1993
VFR			
IFR			
Total	100%	100%	100%





Facilities

a. Airfield (cont.)

12. Discuss the factors that constrain the number of available student flying hours per day (e.g., AICUZ agreements).

13. Assuming that airfield operations are not constrained by operational funding (personnel support, increased overhead costs, etc.), with the present equipment, physical plant, etc., what additional capacity (in flight operations (traffic count) per hour) could be gained? Provide details and assumptions for all calculations⁴.

14. Assuming that airfield operations are not constrained by construction/equipment funds, what additional capacity (in flight operations (traffic count) per hour) could be gained? Provide details, estimated costs, and assumptions for all calculations⁵

15. List and explain the limiting factors that further funding for personnel, equipment, facilities, etc. cannot overcome (e.g., airspace size/availability, AICUZ restrictions, environmental restrictions, land areas).

16. Give the maximum sortie generating capacity per year of your installation given the current aircraft mix and type at your installation, and consistent with the training mission.

Syllabus of Training *	Level (Track) of Pilot Training *	Trainer Aircraft *	Maximum Sorties
General	Primary	T-34C	
		JPATS	
Strike	Intermediate	T-2	
		T-45 ⁶	
	Advanced	TA-4J	
		T-45	
SUPT	Primary	T-37	
	BF	T-38	
	AT	T-1A	
Etc.			

* Use appropriate Navy, Air Force, or Army chart see Appendix 1.

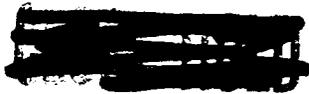
17. Are there any recommendations on how to increase sortie generating capacity and reduce the number of training installations? If so please explain.

⁴ Answer for each independent runway complex at the home field and all OLFs and by aircraft type.

⁵ Answer for each independent runway complex at the home field and all OLFs and by aircraft type.

⁶ If requirements for the T-45 are still being derived, give best estimate.





Facilities

a. Airfield (cont.)

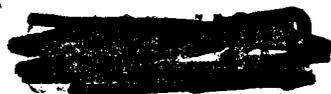
18. Give the designation, length, width, load bearing capacity, lighting configurations, and landing constraints for each runway at the home field and all OLFs.

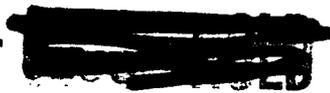
Runway/Lane/Pad (Airfield Name & Runway Designation)	Length (ft)	Width (ft)	Load Bearing Capacity (lbs/ft ²)	Lighting					Arresting gear type and location	IFR or VFR (I or V) Capable? Night (N) Capable?	Approach Aids (IFR/VFR)
				F	P	C	N	G			

- F -- Full Lighting (approach, runway edge, center, and threshold)
- P -- Partial Lighting (less than full)
- C -- Carrier Deck Lighting Simulated (embedded)
- N -- No lighting
- G -- NVG Lighting

19. In the table below list the available NAVAIDS with published approaches that support the main airfield and/or OLFs. Note any additions/upgrades to be added between now and FY 1997.

Runway Designation	NAVAID	Published Approaches





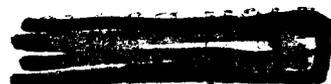
Facilities

a. Airfield (cont.)

20. For the following category codes, provide the unit measure requested and any appropriate comments about the usability of the facility for undergraduate flying training.

CAT CODE	Facility Type	Unit Measure	Quantity	Comments
111	Runways Fixed Wing	SY		
111	Runways Rotor Wing	SY		
111	Landing Pads	SY		
113	Parking Aprons	SY		
113	Access Aprons	SY		
121	Direct Fueling	OL / GM		
121	Truck Fueling	OL / GM		
121	Defueling	OL / GM		
124	Fuel Storage	GA		
136-36 (USN)	Carrier Lighting	EA		
149	Arresting Gear	EA		
421 422(AF)	Ammunition Storage	CF		
425	Open Ammunition Storage	SY		

21. List any additional constraints or limitations to the airfield that impact the training mission.



Facilities

b. Airspace

1. Give the number of workable blocks of airspace and type of airspace used by your installation, the average dimensions (n.mi. x n.mi. x ft), and availability in daylight hours/year of these blocks for each syllabus and level of pilot and/or NFO/Navigator training and trainer aircraft. Note that a workable block of airspace must be large enough to support the required training maneuvers/evolutions without encroaching on another block and have an ingress/egress route that does not go through other airspace blocks. (This question is not applicable to helicopter training.)

Syllabus of Training *	Level of Training *	Trainer Aircraft	# Workable Blocks of Airspace	Type of Airspace	Average Block Dimensions	Availability (Hrs/Yr)/Block
General	Primary	T-34C				
		JPATS				
Strike	Intermediate	T-2C				
		T-45				
		JPATS				
	Advanced	TA-4J				
		T-45				
Etc.						
Total						

* Use appropriate Navy, Air Force, or Army chart see Appendix 1.

Key to types of airspace:

- MOAs -- Military Operating Areas
- WA -- Warning Areas
- AA -- Alert Areas
- RA -- Restricted Areas
- ATCAA -- Air Traffic Control Assigned Airspace
- OWAW -- Overwater Airways

- RR -- Restricted Areas with Ranges
- MTR -- Military Training Routes
- AW-- Airways (e.g. corridors to and from training areas)
- PAT -- Pattern (e.g. airspace above runways)
- OWA -- Overwater Airspace
- CLG -- Uncontrolled Airspace

2. If the transit corridors between training areas and air station limits the number of aircraft that can train concurrently (i.e. can't safely use all blocks) give this limitation and explain what this number is based on. Break this information out by type and level of training if appropriate.

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Facilities

b. Airspace (cont.)

3. List all the Special Use Airspace (SUA) (e.g., alert areas, restricted areas, warning areas, and MOAs) and airspace-for-special-use (e.g., ranges and low level training routes) within 100 n.mi. of the installation that are used for flight training. For each airspace provide the following information (seven questions):

(a) Provide the type, name, location, size (nmi. x nmi. x ft), available times, airspace controlling activity, scheduling activity, method of scoring/recording, and proximity to airport traffic areas.

(b) Is the airspace under radar and/or communications coverage/control? If so, who provides the services?

(c) Does the Navy/Air Force/Army own the land below the training airspace under your cognizance? If not, do you control any real property interest? If so, describe the agreements and when these agreements are up for renewal?

(d) What is the distance en route?

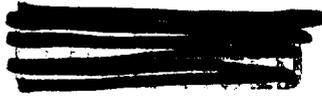
(e) Are there any environmental limitations in or surrounding any of the training areas (air, land or sea) that impede the mission? If so, provide details.

(f) Is land, sea, or air encroachment an issue which endangers long term availability of any training areas? If so, provide details.

(g) 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 in usable airspace. Provide the basis/calculations for these estimates.

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Facilities

b. Airspace (cont.)

4. Is the available SUA/airspace-for-special-use within 100 n.mi. of your installation sufficient to satisfy all training requirements?

5. If deployments/detachments to other domestic locations are required to satisfy training requirements, provide the following information for each location:

(a) Where do these units/squadrons deploy?

(b) How far from your installation?

(c) Frequency?

(d) Reasons for deployment (e.g., adverse weather, airspace saturation, training, versatility, etc.)

(e) Annual costs incurred for deployments due to adverse weather?

(f) Annual costs incurred for deployments due to airspace non-availability?

(g) Annual costs incurred for deployments due to insufficient training versatility (e.g., lack of low level training routes etc.)?

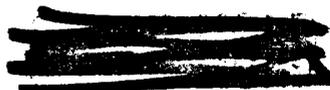
6. List all airspace control measures used for flight training that do not qualify as SUA/airspace-for-special-use and describe the limitations and capabilities of those control measures.

7. For each syllabus of undergraduate/graduate pilot and/or NFO/Navigator flight training, state whether you require any specific terrain feature or overwater access for training.

Syllabus of Training *	Terrain Feature or Overwater Requirement

* Use appropriate Navy, Air Force, or Army syllabus of training list

8. List any additional constraints or limitations to the airspace that impact the training mission.



Facilities

c. Ground Training

1. By Facility Category Code , complete the following table for all training facilities at the installation in which undergraduate pilot and/or NFO/Navigator training is conducted. Include all 171-xx, 179-xx category codes, and any other applicable category codes.

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.

Cat Code: _____

Type Training Facility	Total Number	Design Capacity (PN) ⁷	Capacity (Student HRS/YR)

2. For the Student HRS/YR value in the preceding table, describe how that entry was derived.

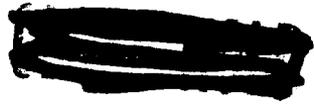
3. Assuming that the ground school training facility is not constrained by operational funding (personnel support, increased overhead costs, etc.), with the present equipment, physical plant, etc., what additional capacity (in student hours) could be gained? Provide details and assumptions for all calculations.

4. Assuming that ground school training facility is not constrained by additional construction/equipment funds, what additional capacity (in student hours) could be gained? Provide details, estimated costs, and assumptions for all calculations⁸

5. List and explain the limiting factors that further funding for personnel, equipment, facilities, etc. cannot overcome.

⁷ Design Capacity (PN) is the total number of seats available for students in spaces used for academic instruction; applied instruction; and seats or positions for operational trainer spaces and training facilities other than buildings, i.e., ranges. Design Capacity (PN) must reflect current use of the facilities.

⁸ Answer for each independent runway complex at the home field and all OLFs and by aircraft type.



Facilities

c. Ground Training (cont.)

6. By Category Code , complete the following table for all training facilities at the installation in which undergraduate pilot and/or NFO/Navigator training is not conducted. Include all 171-xx, 179-xx category codes, and any other applicable category codes.

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.

Cat Code: _____

Type Training Facility	Total Number	Design Capacity (PN) ⁹	Capacity (Student HRS/YR)

7. For the Student HRS/YR value in the preceding table, describe how that entry was derived.

⁹ 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.





Facilities

c. Ground Training (cont.)

8. Assuming that the ground school training facility is not constrained by operational funding (personnel support, increased overhead costs, etc.), with the present equipment, physical plant, etc., what additional capacity (in student hours) could be gained? Provide details and assumptions for all calculations.

9. Assuming that ground school training facility is not constrained by additional construction/equipment funds, what additional capacity (in student hours) could be gained? Provide details, estimated costs, and assumptions for all calculations¹⁰

10. List and explain the limiting factors that further funding for personnel, equipment, facilities, etc. cannot overcome.

¹⁰ Answer for each independent runway complex at the home field and all OLFs and by aircraft type.



Facilities

d. Aircraft Parking, Maintenance, and Supply

1. Provide the number of other aircraft (both active and reserve operational squadrons) that are based at your installation. If a squadron has more than one type of aircraft, fill out a separate line for each type.

Squadron	Number of Aircraft (Fiscal Year)							Mission	
	1994	1995	1996	1997	1998	1999	2000		2001

2. Using the types (and mix) of aircraft currently stationed at your installation, project the maximum number of these aircraft that could be based and parked on your current parking aprons. Use your service specific regulations regarding standard measures, (NAVFAC P-80, etc.).

Aircraft Type	# of Aircraft	Comments

3. 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 on the parking apron spaces.

Facilities

d. Aircraft Parking, Maintenance, and Supply (cont.)

4. Using the types (and mix) of aircraft currently stationed at your installation, project the maximum number of these aircraft that could be housed in your hangars. Use your service specific regulations regarding standard measures, (NAVFAC P-80, etc.).

Aircraft Type	# of Aircraft	Comments

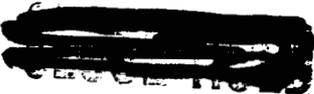
5. Provide the details of your calculations, including your assumptions on the minimum separation between aircraft, folding of aircraft wings and any obstructions that may limit the placement of aircraft in the hangars.

6. Using the types (and mix) of aircraft currently stationed at your installation, project the maximum number of these aircraft that could be maintained at your installation based on availability of maintenance facilities (i.e. , maintenance docks, wash racks, NDI facilities, etc.).

Aircraft Type	# of Aircraft	Comments

7. Provide the basis (including source data) of your calculations in enough detail so they can be reproduced.

8. Describe any maintenance backlogs that your installation currently experiences on a routine basis. List the average backlog times and the reasons for the backlogs (e.g. supply shortfall, insufficient local labor, over tasking of work stations, space limitations).



Facilities

d. Aircraft Parking, Maintenance, and Supply (cont.)

9. Using the types (and mix) of aircraft currently stationed at your installation, project the maximum number of these aircraft that could be supported at your installation based on availability of supply/storage facilities.

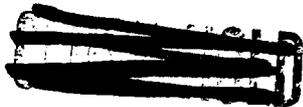
Aircraft Type	# of Aircraft	Comments

10. Provide the basis (including source data) of your calculations in enough detail so they can be reproduced.

11. List any additional constraints or limitations to the parking, maintenance, and supply facilities that impact the training mission.



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Features and Capabilities

b. Housing and Messing

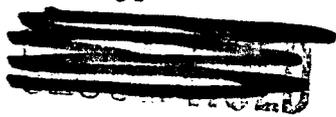
1. Provide data on the BOQs and BEQs assigned to your current plant account. The desired unit of measure for this capacity is people housed. Differentiate between officer/enlisted/civilian, and include if billeting is for students or permanent party.

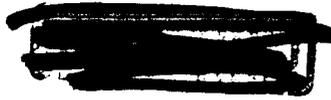
Facility Type, Bldg. # & Cat Code	Total No. of Beds	Total No. of Rooms	Total people housed

2. 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. Differentiate between officer/enlisted/civilian, and include if billeting is for students or permanent party.

Facility Type, Bldg. # & Cat Code	Total No. of Beds	Total No. of Rooms	Total people housed

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3. Provide data on the messing facilities assigned to your current plant account.

Facility Type, Bldg. # & Cat Code	Total No. of Beds	Total No. of Rooms	Total people housed

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

Facility Type, Cat Code and Bldg. #	Total Sq. Ft.	Seats	Avg # Noon Meals Served

5. Based upon your installation's on and off-base housing and messing facilities, what average daily student load (ADSL) could you support from FY95 - FY01? Express the daily student load in terms of enlisted, officer, and civilian.

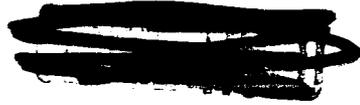
Type Facility	Average Daily Student Load (ADSL)						
	1995	1996	1997	1998	1999	2000	2001
BOQ							
BEO							
On-Base Housing							
Off-Base Housing							
Messing							

6. Provide the basis (including source data) of your calculations in enough detail so they can be reproduced.

7. List any additional constraints or limitations to the housing and messing facilities that impact the training mission.



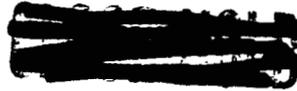
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Appendix 1

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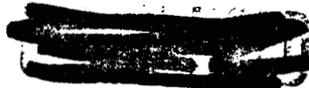
Appendix 1 a

Navy pilot training syllabi with service components trained.

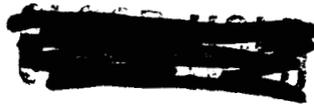
Syllabus of Training	
Strike	USN
	USMC
	FMS
Maritime	USN
	USMC
	USCG
	FMS
	USAF
E2/C2	USN
	USMC
	USCG
	FMS
Rotary	USN
	USMC
	USCG
	FMS

Navy NFO training syllabi with service components trained.

Adv Navigator (NAV)	USN
	FMS
	NOAA
Tact Navigator (TN/BN)	USN
	USMC
Radar Intercept Officer (RIO)	USN
	USMC
Over Water Jet Navigator (OJT)	USN
Airborne Tact Data Systems (ATDS)	USN
	USCG



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Navy pilot training syllabi with levels of training and types of aircraft used.

General	Primary	T-34C
		JPATS
Strike	Intermediate	T-2
		T-45 ¹¹
	Advanced	TA-4J
		T-45
E2/C2	Intermediate	T-44
	Advanced	T-45 ²
		T-2
Maritime	Intermediate	T-34C
		JPATS
	Advanced	T-44
Rotary	Intermediate	T-34C
		JPATS
	Advanced	TH-57

Navy NFO syllabi of training with levels of training and types of aircraft used.

General	Primary	T-34/T-2
		JPATS
General	Intermediate	T-34/T-2
NAV	Advanced	T-43
TN/BN	Advanced	T-2
	Advanced	T-39
RIO	Advanced	T-2
	Advanced	T-39
OJN	Advanced	T-2
	Advanced	T-39
ATDS	Advanced	E-2C

Navy list of aircraft used in undergraduate pilot and NFO training.

T-2
TA-4J
T-34C
T-39
T-43
T-44
T-45
TH-57
JPATS

¹¹If requirements for the T-45 are still being derived, give best estimate.

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Appendix 1 b

Air Force pilot training syllabi with service components trained.

Syllabus of Training	
Flight Screening	USAF
	ANG
	AFRES
	USAFA
	FMS
UPT	USAF
	ANG
	AFRES
	FMS
SUPT	USAF
	ANG
	AFRES
	FMS
	NAVY
SUPT HELO	USAF
	ANG
	AFRES
ENJJPT	USAF
	ANG
	AFRES
	NATO
BANKED REQ T-38	USAF
BANKED REQ T-1	USAF
FIXED WING QUAL TNG	USAF
	ANG
	AFRES
ROTARY WING QUAL	USAF
	ANG
	AFRES
AVIATION LEADERSHIP PROGRAM T-37	FMS
UPT T-38 ADVANCED TNG PGM	FMS

INTRO TO FTR FUND (IFF) AT-38	USAF
	ANG
	AFRES
	NATO
INTRO TO BOMBER FUND (IBF) (NO A/C, SIMS ONLY)	USAF
	AFRES
	ANG
T-43	USAF
	FMS
PILOT INSTR TNG (PIT) T-37	USAF
	FMS
PILOT INSTR TNG (PIT) T-38	USAF
	FMS
PILOT INSTR TNG (PIT) T-1	USAF
T-1 PIT TRANSITION	USAF
PILOT INSTR TNG (PIT) AT-38	USAF
	NATO
ENJJPT PIT T-37	USAF
ENJJPT PIT T-38	USAF
	NATO
JET CURRENCY COURSE T-38	USAF
	ANG
	AFRES
MED OFFICER FLT FAM TNG T-37	USAF

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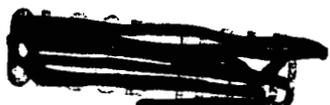
Air Force navigator training syllabi with service components trained.

Syllabus of Training	
SUNT Core Sys Off Tng	USAF
	ANG
	FMS
SUNT Core Topoff Tng	USAF
	ANG
SUNT Core Nav Tng	USAF
	ANG
	AFRES
	FMS
SUNT Core EWO Tng	USAF
	ANG
	AFRES
	USMC
SUNT Core EWO + Topoff	USAF
	ANG
Interservice UNT	USN
	FMS
	NOAA
USMC UNT	USMC
EWO Tng CAF	USAF
Nav Instr Tng T-43	USAF
	USN
Intro to Ftr Fundamentals WSO AT-38	USAF
	ANG
	FMS
IFF Instr WSO Tng AT-38	USAF

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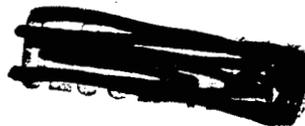
Air Force pilot training syllabi with levels of training and types of aircraft used.

Syllabus	Level of Tng	Aircraft
Screening	Accession	T-3A, T-41
UPT	Primary	T-37
	Advanced	T-38
SUPT	Primary	T-37
		JPATS
	Advanced BF	T-38
	Advanced AT	T-1A
Advanced Helo	UH-1	
ENJJPT	Primary	T-37
		JPATS
Advanced	T-38	
Banked Req	Graduate	T-38
Banked Req	Graduate	T-1A
Fixed Wing Qual	Grad Phase 2	T-37
	Phase 3 or	T-1
	Phase 3	T-38
Rotary Wing Qual	Graduate	UH-1
Aviation Ldrshp Pgm	Primary	T-37
Adv Tng Pgm	Advanced	T-38
IFF	Graduate	AT-38
IBF	Graduate	T-1A Sims Only
T-43 Pilot Tng	Graduate	T-43
PIT T-37	Graduate	T-37
PIT T-38	Graduate	T-38
PIT T-1A	Graduate	T-1A
T-1A Transition	Graduate	T-1A
IFF PIT	Graduate	AT-38
ENJJPT T-37 PIT	Graduate	T-37
ENJJPT T-38 PIT	Graduate	T-38
Jet Currency Course	Graduate	T-38
Med Off Fit Fam Tng	Graduate	T-37

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Air Force navigator syllabi of training with levels of training and types of aircraft used.

Syllabus	Level of Tng	Aircraft
SUNT SO Tng	Primary	T-43
	Advanced	T-38
SUNT Topoff Tng	Advanced	T-37
SUNT Nav Tng	Primary	T-43
	Advanced	T-43
SUNT EWO Tng	Primary	T-37/T-43
	Advanced	T-43
SUNT EWO Topoff	Advanced	T-37
Interservice UNT	Advanced	T-43
USMC UNT	Primary	T-43
EWO Tng CAF	Advanced	T-43
Nav Instr Tng	Graduate	T-43
IFF WSO	Graduate	AT-38
IFF WSO Instr Tng	Graduate	AT-38

Air Force list of aircraft used in undergraduate pilot and navigator training.

T-37
JPATS
T-38
T-1A
AT-38
T-43
UH-1



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Appendix 1 c

Army pilot training syllabi with levels of training and types of aircraft used.

Syllabus	Level of Tng	Aircraft
IERW	Primary	UH-1/TH-67
	Instruments	UH-1/TH-67
	Track	UH-1/OH-58
Graduate	AQC IPC MOI MTP	AH-64
	AQC IPC MOI MTP	CH-47D
	AQC SUP MOI MTP SUP (M)	OH-58D
	AQC IPC MOI MTP	AH-1
	AQC IPC MOI MTP	UH-60
	IPC MOI	OH-58A/C
	IPC NVG RWART RWIC RWQC RWIFEC MOI (CT) MOI (NVG)	UH-1
	FWMEQC FWIPC	U-21
	AQC FLT Refresher	C-12
	Euro/NATO	Primary Instru ADINS ADCON C/S
Spanish	RWQC TQO IERW NVG IPC	UH-1

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Army pilot training syllabi with service components trained.

IERW	USA
	USAF
	USAF (RWOC)
	SPANISH
	EURO/NATO
	FMS
Graduate	OTHER
	USA
	SPANISH
	EURO/NATO
	FMS
OTHER	

UPT JOINT / CROSS-SERVICE GROUP

External Policy Issues with BRAC Implications

- Flight Screening
- Training Aircraft Mix
- Fixed-Wing Training for Helo Pilots
- UHPT Consolidation -- Single Site
- Aircraft Beddown Configuration
- JPATS Syllabus Questions:
 - IFR vs. VFR
 - Class Progression
 - Etc...

Policy Analysis Forum

- **Build on Roles & Mission Study Efforts**
 - Draw on Service / JCS Study Teams
 - Use Existing “Joint Fixed-Wing Training” and “Consolidation of Initial Helicopter Training” Studies as Analytical Base
- **Recommended participation:**
 - Services, JCS, OSD
 - OUSD (P&R) -- Chair
 - Contractor Support (?)

J. WATKINS N.S. DEAN

5

**CAPACITY ANALYSIS:
DATA CALL WORK SHEET FOR
OPERATIONAL/RESERVE AIR STATION/FACILITY: NAS Oceana**

Category.....Shore Support of Operating Forces

Sub-category....Operational Air Stations and Reserve Air Stations

Types.....Navy and Marine Corps Operational and Reserve Air Stations and
Facilities

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

General Notes:

1. Highly recommend coordination of environmental inputs with Regional Environmental Coordinators.
2. For any airspace issues, coordinate with area airspace coordinator.
3. Recommend read-through of entire data call before answering individual questions.
4. Items which are Not Applicable should be noted as such.
5. For any projection provided in the data call response, explain how the projection was calculated (i.e., what changed and how you quantified it).
6. All data requested by fiscal year refers to the end of the fiscal year.
7. In answering throughput and capacity questions, assume that all previous BRAC decisions are implemented on schedule.

**BRAC 1995 CAPACITY ANALYSIS DATA CALL:
Operational/Reserve Air Stations/Facilities**

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BRAC 1995 CAPACITY ANALYSIS DATA CALL:
Operational/Reserve Air Station/Facility

AIR STATION/FACILITY - UIC NAVAL AIR STATION OCEANA/60191

STATION CAPACITY

1a. For the main airfield and each auxiliary airfield, answer the following questions:
R

R

Airfield Name APPOLO SOUCEK FIELD

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 (Pounds)		Lighting ^{6,7}				Arresting Gear Type(s)
			Single ³	Twin Tandem ³	F	P	C	N	
5R/23L ^{1,4}	12000	200	150000	260000	X				E-28 (2 SETS)
5L/23R ^{1,4}	8000	150	74000	290000		X			E-28 (2 SETS)
14L/32R ^{2,4,5}	8000	150	74000	290000		X			E-28 (2 SETS)
14R/32L ^{2,4,5}	8000	150	112000	220000		X			E-28 (2 SETS)

¹5R/5L and 23L/23R are parallel. RWY 5 and 23 are the primary RWYS.

²14L/32R and 14L/32R are parallel.

³Single wheel aircraft: F-14/FA-18/A-6

Twin Tandem aircraft: K-135/E-3A/C-141

⁴Approach obstructions - None

⁵Restrictions on flight patterns - RWY-14--If weather is below circling minimums, approaches must be coordinated with Norfolk approach control. This occurs less than 1% of the time.

⁶All runways marked as partial have no approach light. 32R/14L also lacks centerline lights.

⁷All runways equipped with Fresnel OLS

F -- Full lighting (runway edge, center, and threshold)

P -- Partial lighting

C -- Carrier deck lighting

N -- No lighting

BRAC 1995 CAPACITY ANALYSIS DATA CALL:
Operational/Reserve Air Station/Facility

AIR STATION/FACILITY - UIC NAVAL AIR STATION OCEANA/60191

STATION CAPACITY

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

Airfield Name APPOLO SOUCEK FIELD

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 (Pounds)		Lighting ^{6,7}				Arresting Gear Type(s)
			Single ³	Twin Tandem ³	F	P	C	N	
5R/23L ^{1,4}	12000	200	150000	260000	X				E-28 (2 SETS)
5L/23R ^{1,4}	8000	150	74000	290000		X			E-28 (2 SETS)
14L/32R ² _{4,5}	8000	150	74000	290000		X			E-28 (2 SETS)
14R/32L ² _{4,5}	8000	150	112000	220000		X			E-28 (2 SETS)

¹5R/5L and 23L/23R are parallel. RWY 5 and 23 are the primary RWYS.

²14L/32R and 14L/32R are parallel.

³Single wheel aircraft: F-14/FA-18/A-6

Twin Tandem aircraft: K-135/E-3A/C-141

⁴Approach obstructions - None

⁵Restrictions on flight patterns - RWY-14--If weather is below circling minimums, approaches must be coordinated with Norfolk approach control. This occurs less than 1% of the time.

⁶All runways marked as partial have no approach light. 32R/14L

⁷All runways equipped with Fresnel OLS

F -- Full lighting (runway edge, center, and threshold)

P -- Partial lighting

C -- Carrier deck lighting

N -- No lighting

Airfield Name **NALF FENTRESS/30774**

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 (Pounds)		Lighting				Arresting Gear Type(s)
			Single	Twin Tandem	F	P	C	N	
5/23	8000	175	63000	123000		X	X		E-28 (2 SETS)

Restrictions to flight patterns:

Field is restricted to VFR operations. Both runways operate with standard left hand patterns required for carrier landing practice.

RWY 23 pattern is modified (altitude restriction, wider downwind leg) to minimize noise impact to surrounding area.

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

NAS OCEANA

Apron/ramp/taxiway Location - ID	SF	Comp.	Load Bearing Capacity #’s		Comments
			Single	Twin Tandem	
Parallel Taxiway 5-23	900000	Asphalt/Concrete	137000	418000	75 ft wide
Taxiway 14-32	600000	Asphalt/Concrete	137000	418000	75 ft wide
Perimeter Taxiway	285000	Concrete	92000	338000	75 ft wide
Diagonal Taxiway	180000	Asphalt/Concrete	137000	418000	75 ft wide
Towway	147000	Asphalt	52000	240000	
FITWING Park Apron	3087000	Concrete	147000	440000	
MATWING Park Apron	1170000	Concrete	126000	407000	
SPECWAR Park Apron	157500	Concrete	137000	415000	

NALF FENTRESS

Apron/ramp/taxiway Location - ID	SF	Comp.	Load Bearing Capacity		Comments
			Single	Twin Tandem	
Parallel Taxiway 5-23	600000	Asphalt/Concrete	131000	415000	

Example single gear aircraft-F-14
 Example twin tandem aircraft-C-141

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

NAS Oceana does not have high speed taxiways. NAS Oceana has full length taxiways parallel to Runway 5/23 and 14/32. See attached airport diagram for taxiway layout and helo landing areas.

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

All runways are serviced by full length parallel taxiways.

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

Approach obstructions - None

Restrictions on flight patterns - RWY-14, If weather is below circling minimums, approaches must be coordinated with Norfolk approach control. This occurs less than 1% of the time. Noise abatement procedures are attached.

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?)

NAS Oceana--Primarily designed for fixed wing jet aircraft, capable of handling all types of aircraft

- Dual parallel runways
- Automatic carrier landing system
- In ground power and air starting units
- Hot pit refueling capability
- Fresnel lens optical landing system

NALF Fentress--Primarily designed for fixed wing jet aircraft - accommodated all CV Based A/C

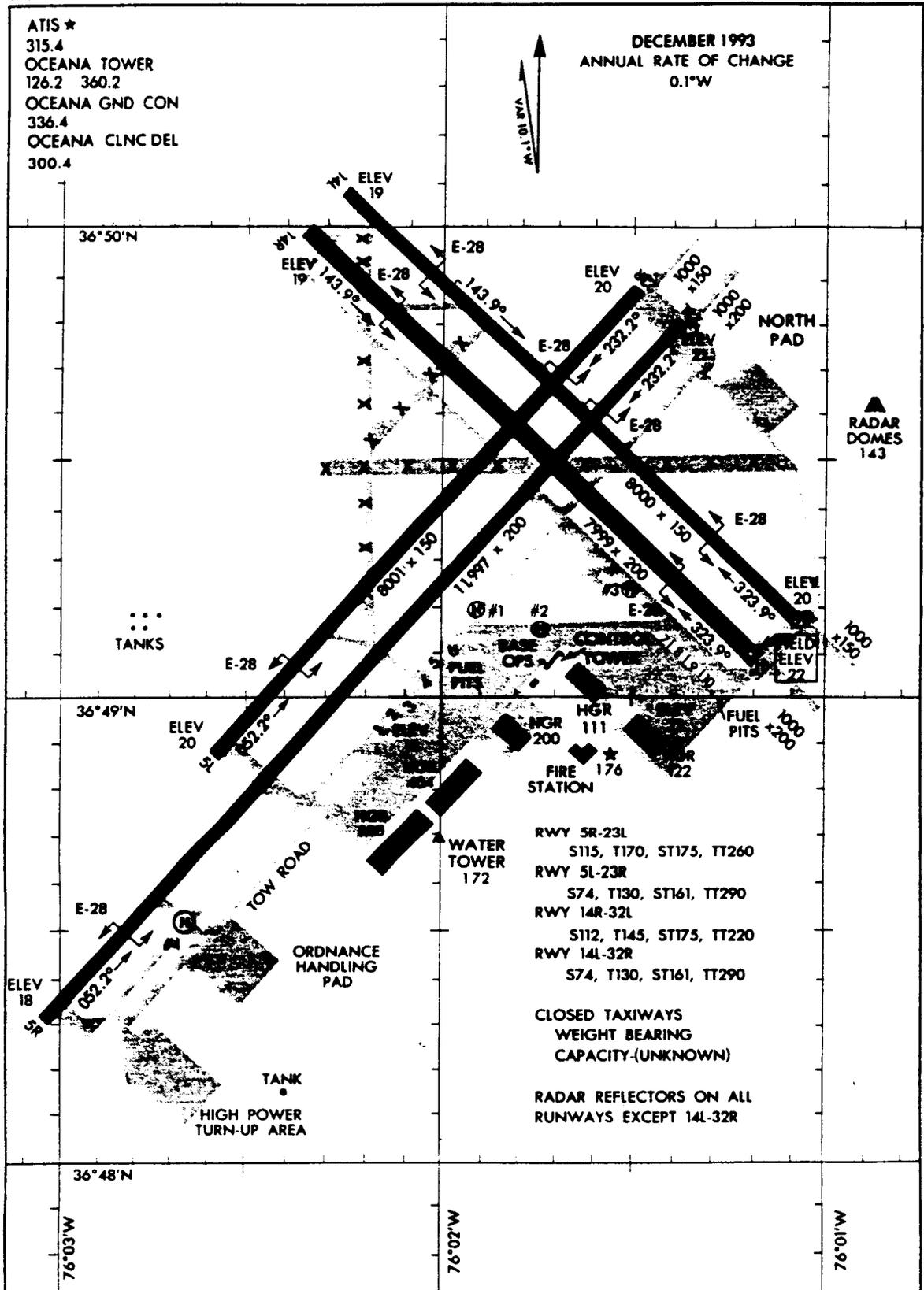
- Carrier deck lighting system
- Fresnel lens optical landing system
- Landing signal officer control facility abeam simulated carrier decks



93343

AIRPORT DIAGRAM

226 OCEANA NAS (APOLLO SOUCEK FIELD)(KNTU)
AFD-934 (USN) VIRGINIA BEACH, VIRGINIA



AIRPORT DIAGRAM

VIRGINIA BEACH, VIRGINIA
OCEANA NAS (APOLLO SOUCEK FIELD)(KNTU)

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 NAS Oceana	120	300 ¹	Traffic pattern saturation/safe interval between aircraft
Auxiliary NALF Fentress	0	150	VFR ops only. Pattern limited to a maximum of 5 aircraft.

¹The daily capacity of NAS Oceana, IMC, exceeds the average daily usage of (Hartsfield) Atlanta and National (Washington, DC) airports combined. In VMC conditions NAS Oceana's capacity is more than twice the usage of Atlanta, National and Dulles combined. Airport usage data provided by FAA Norfolk office.

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 NAS Oceana		Auxiliary Field NALF Fentress		Auxiliary Field _____		Auxiliary Field _____	
	#Ops per mon	# Days per yr	# Ops per mon	# Days per yr	# Ops. per mon	# Days per yr	# Ops. per mon	# Days per yr
1991	18280	365	9585	365				
1992	19890	365	7317	365				
1993	17215	365	7800	365				

2c. What percent of your flight operations at home field are Fleet Carrier Landing Practices (FCLPs)?

Less than 5%. Fleet Carrier Landing Practice is conducted at NAS Oceana only if NALF Fentress is closed or has a full schedule.

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

YES. NAS Oceana is designated an Emergency Landing Site (ELS) for NASA's Space Shuttle Orbiter.

NAS Oceana is a divert field for U.S. Coast Guard aircraft, DEA and other government aircraft.

2e. Is your airfield designated as a joint use airfield (i.e. civilian/military, APOE)? If yes, explain mission and identify any special joint use facilities, equipment, or operational practices.
No.

2f. Are you a NATO designated facility? If yes, explain mission and identify any special NATO facilities, equipment, or operational practices. No

2g. What percentage of total operations are civilian?

Approximately 7% of the aircraft controlled by NAS Oceana air traffic control is civilian. This is mainly overflights where NAS Oceana provides radar and flight service. Less than 1% is a take off, landing or approach.

2h. 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.

NAS Oceana is unique in that no civilian airways restrict operations. All airways are located to the west of NAS Oceana. This allows NAS Oceana aircraft unencumbered access to the primary warning areas and ranges. Operations at Norfolk International only minimally impact, less than 1% of the time, IFR operations on RWY 14. No adverse impact in the future is expected.

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

No.

2j. List the normal hours of operation for the main airfield and each auxiliary airfield. Indicate if this schedule varies by month or season. If not 24 hour a day operation, explain (i.e. noise restricted).

Operating Schedule	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Main Airfield	24HR	24HR	24HR	24HR	24HR	24H R	24HR
Aux. Airfield NALF Fentress	19HR ¹	24HR	24HR	24HR	16HR ²	24H R	24HR

¹Reduced hours for church services.

²Reduced hours for field maintenance.

3a. Assuming that airfield operations are **not constrained** by operational funding (personnel support, increased overhead costs, etc.), what **additional capacity** (in flight operations per hour) could be gained with the current equipment, physical plant, etc.? Provide details and assumptions for all calculations.

NAS Oceana has a high capacity dual parallel runway system which is currently operating at 12% IFR capacity and 31% VFR capacity. NAS Oceana's maximum capacity with current facilities would be 120 operations per hour IFR and 300 operations per hour VFR. This is based on a 24 hour maximum utilization and minimum safe separation for aircraft landing and taking off. NAS Oceana's capacity exceeds twice the daily usage of Atlanta, National and Dulles airports combined. This capacity can be sustained almost indefinitely with manpower and funding.

3b. Assume that all planned MILCON in PB 1995 (Presidential budget submission) through FY 1997 and BRACON is completed as scheduled. What **additional operating capacity** would be realized? Provide cost and details of all additional capacity calculations.

No MILCON for PB 1995 through 1997 or BRACON will affect the operating capacity of NAS Oceana. Data in 3a applies.

3c. What **additional projects** could be added to provide **additional operating capacity**? At what estimated cost? Provide details and assumptions for all calculations.

The dual parallel runway system at NAS Oceana has tremendous capacity which at present is only partially utilized. If it becomes necessary to expand operating capacity, construction of an additional parallel runway with proper separation between centerline could increase IMC operations by 60 per hour, a 50% increase, and VMC operations by 120 per hour, a 40% increase. The cost of the runway is preliminarily estimated to be \$12M, based on the Means Cost Estimate Guide and rough conceptual information.

3d. List and explain the limiting factors that further funding for personnel, equipment, facilities, etc. cannot overcome (e.g. airspace size/availability, AICUZ restrictions, environmental restrictions, land areas). Provide details of calculations.

No limiting factors.

With more than 1000 acres of undeveloped and unencumbered land available for expansion, NAS Oceana has the capacity to expand to handle the addition of several aircraft types simultaneously. Single site F-14 (70 additional AC) \$7.3M (based on single site FRS review 3rd Quarter). These cost estimates are preliminary in nature and due not reflect budget accuracy.

The noise contours generally accepted by the civilian community come from "AIRCRAFT NOISE SURVEY, NAVAL AIR STATION OCEANA AND AUXILIARY LANDING FIELD FENTRESS" (Aircraft Environmental Support Office Report 312-78-01 of October 1978). At that time, the station hosted 304 aircraft from 26 squadrons, approximately twice today's number. The most recent "AIRCRAFT NOISE SURVEY UPDATE" (Harris Miller & Hansen Inc. Report 280400.11 of January 1991) shows the actual noise contours as much smaller than the original, leaving significant room for expansion inside currently accepted noise boundaries. Exact noise profiles for specific home basing options are not available. Introducing new airframes may change the existing noise profiles. Insufficient data exists to determine the extent or shape of profiles for new home basing options.

The Virginia General Assembly has recently amended state code authorizing local governments to regulate land use in airport safe zones and to require acoustical treatments for residential construction in areas impacted by aircraft noise. This amendment resulted from a petition by the City of Virginia Beach. The city has drafted an Airport Ordinance for the municipal code which will adopt, at a minimum, the AICUZ sound attenuation guidelines.

4a. 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
TACAN	CLASS (L) TERMINAL USE 36 DEG 49' 27" N 76 DEG 02' 15" W AT NAS OCEANA

3d. List and explain the **limiting factors** that further funding for personnel, equipment, facilities, etc. cannot overcome (e.g. airspace size/availability, AICUZ restrictions, environmental restrictions, land areas). Provide details of calculations.

No limiting factors.

With more than 1000 acres of undeveloped and unencumbered land available for expansion, NAS Oceana has the capacity to expand to handle the addition of several aircraft types simultaneously. FA-18 aircraft \$132M, E-2 aircraft (46) \$25M (based on S-3 estimate), single site F-14 (70 additional AK) \$7.3M (based on single site FRS review 3rd Quarter). These cost estimates are preliminary in nature and do not reflect budget accuracy.

The noise contours generally accepted by the civilian community come from "AIRCRAFT NOISE SURVEY, NAVAL AIR STATION OCEANA AND AUXILIARY LANDING FIELD FENTRESS" (Aircraft Environmental Support Office Report 312-78-01 of October 1978). At that time, the station hosted 304 aircraft from 26 squadrons, approximately twice today's number. The most recent "AIRCRAFT NOISE SURVEY UPDATE" (Harris Miller & Hansen Inc. Report 280400.11 of January 1991) shows the actual noise contours as much smaller than the original, leaving significant room for expansion inside currently accepted noise boundaries. Exact noise profiles for specific home basing options are not available. Introducing new airframes may change the existing noise profiles. Insufficient data exists to determine the extent or shape of profiles for new home basing options.

The Virginia General Assembly has recently amended state code authorizing local governments to regulate land use in airport safe zones and to require acoustical treatments for residential construction in areas impacted by aircraft noise. This amendment resulted from a petition by the City of Virginia Beach. The City of Virginia Beach, on 23 August 1994, passed a comprehensive amendment to the city code. This airport ordinance incorporates AICUZ sound attenuation guidelines for new construction and modifications to existing structures. The ordinance also mandates disclosure of noise zones for realtors and owners who sell homes in the airport area, incorporates FAA height restrictions for structures near the airport, and incorporates compatible land use (AICUZ) standards as describes in OPNAVINST 11010.36A. This ordinance, coupled with the Navy's purchase of land and easements will halt further encroachment at NAS Oceana.

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NAS OCEANA 60191

4a. 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
TACAN	CLASS (L) TERMINAL USE 36 DEG 49' 27" N 76 DEG 02' 15" W AT NAS OCEANA

Sqdn/Det ²	# of Aircraft (PAA)	Aircraft (T/M/S)	FY 1994	FY 1995	FY 1997	FY 1999	FY 2001
VS-22	8	S-3B	0	0	8	8	8
VS-24	8	S-3B	0	0	8	8	8
VS-30	8	S-3B	0	0	8	8	8
VS-31	8	S-3B	0	0	8	8	8
VS-32	8	S-3B	0	0	8	8	8
VQ-6	8 R	ES-3A	0	0	8	8	8
NATC-RDT&E		FA-18E	0	0	0	6	6

¹PAA increases in FY-95.

²Squadron authorization from APDF: 31

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

MAJOR EXERCISES:

Squadron/Det Size (#A/C)	Apron Space Used	Hangar Space Assigned	Maintenance Support	Ave length of stay
FLEETEX/12	68,040SF	12,084SF	2,400SF	30 days/year
CAG Dets/4	22,680SF	4,300SF	1,400SF	40 days/year
Norfolk Dets/4	22,680SF	4,300SF	1,400SF	10 days/year
Misc/2	11,340SF	4,300SF	1,400SF	30 days/year

BASING

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. R

Sqdn/Der ²	# of Aircraft (PAA)	Aircraft (T/M/S)	FY 1994	FY 1995	FY 1997	FY 1999	FY 2001
VF-14	10/14 ¹	F-14A	10	14	14	14	14
VF-32	14	F-14A	14	14	14	14	14
VF-41	14	F-14A	14	14	14	14	14
VF-84	10/14 ¹	F-14A	10	14	14	14	14
VF-102	14	F-14A/ B	14	14	14	14	14
VF-103	14	F-14B	14	14	0	0	0
VF-142	10	F-14B	10	10	0	0	0
VF-143	10	F-14B	10	10	0	0	0
VF-101	35	F-14A	35	35	17	17	17
VF-101	8	F-14B	10	11	12	12	12
VF-101	8	F-14D	0	0	6	6	6
VF-101	4	T-34C	2	2	2	2	2
VA-34	14	A-6E	14	14	0	0	0
VA-35	14	A-6E	14	14	0	0	0
VA-75	14	A-6E	14	14	0	0	0
VA-85	14	A-6E	14	14	0	0	0

BASING

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.

Sqdn/Det ²	# of Aircraft (PAA)	Aircraft (T/M/S)	FY 1994	FY 1995	FY 1997	FY 1999	FY 2001
VF-14	10/14 ¹	F-14A	10	14	14	14	14
VF-32	14	F-14A	14	14	14	14	14
VF-41	14	F-14A	14	14	14	14	14
VF-84	10/14 ¹	F-14A	10	14	14	14	14
VF-102	14	F-14A/ B	14	14	14	14	14
VF-103	14	F-14B	14	14	0	0	0
VF-142	10	F-14B	10	10	0	0	0
VF-143	10	F-14B	10	10	0	0	0
VF-101	35	F-14A	35	35	17	17	17
VF-101	8	F-14B	10	11	12	12	12
VF-101	8	F-14D	0	0	6	6	6
VF-101	4	T-34C	2	2	2	2	2
VA-34	14	A-6E	14	14	0	0	0
VA-35	14	A-6E	14	14	0	0	0
VA-75	14	A-6E	14	14	0	0	0
VA-85	14	A-6E	14	14	0	0	0

Sqdn/Det ²	# of Aircraft (PAA)	Aircraft (T/M/S)	FY 1994	FY 1995	FY 1997	FY 1999	FY 2001
VS-22	8	S-3B	0	0	8	8	8
VS-24	8	S-3B	0	0	8	8	8
VS-30	8	S-3B	0	0	8	8	8
VS-31	8	S-3B	0	0	8	8	8
VS-32	8	S-3B	0	0	8	8	8
VQ-6	14	ES-3A	0	0	8	8	8
NATC-RDT&E		FA-18E	0	0	0	6	6

¹PAA increases in FY-95.

²Squadron authorization from APDF: 31

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

MAJOR EXERCISES:

Squadron/Det Size (#A/C)	Apron Space Used	Hangar Space Assigned	Maintenance Support	Ave length of stay
FLEETEX/12	68,040SF	12,084SF	2,400SF	30 days/year
CAG Dets/4	22,680SF	4,300SF	1,400SF	40 days/year
Norfolk Dets/4	22,680SF	4,300SF	1,400SF	10 days/year
Misc/2	11,340SF	4,300SF	1,400SF	30 days/year

DETACHMENTS: PAST 12 MONTHS¹

<u>SQUADRON</u>	<u>TYPE AC/# AC</u>	<u>DAYS ONBOARD</u>	<u>MISSION</u>
VAQ-33	3/EA-6A	7 days	Fleet-EX
	1/EP-3J	7 days	Fleet-EX
	1/EP-3J	4 days	Fleet-EX
VFA-204	8/FA-18A	14 days	FFARP
347FW Moody AFB GA	12/F-16	5 days	1st Fighter Wing ORI
FG CANR HY North Bay Canada	3/T-33 1/Challenger	5 days	1st Fighter Wing ORI
69th FTR SQDN	12/F-16	5 days	1st Fighter Wing ORI
VAQ-309	4/EA-6B	3 days	Translant
VAQ-33	1/P-3	5 days	CNO Project
160th Army	3/UH-60	5 days	Joint TRNG
160th Army	3/CH-47	13 days	Joint TRNG
Maryland ANG	1/UH-1 1/U-21	18 days	Annual TRNG
160th Army	4/H-60	4 days	Joint TRNG
166ALG	1/C-130	7 days	Paradrops
150W Air Force	1/C-130	4 days	Joint TRNG
160th Army	2/MH-2	4 days	Joint TRNG
VMFA-451	8/FA-18	26 days	ACM
Phoenix Air	3/LR-24	3 days	Aegis Project

<u>SQUADRON</u>	<u>TYPE AC/# AC</u>	<u>DAYS ONBOARD</u>	<u>MISSION</u>
906th AREFS SD	2/KC-135	14 days	Fleet-EX
VAQ-34	4-EA-6A	16 days	Fleet-EX
509 AREPS	2/KC-135	11 days	Fleet-EX
VAQ-33	2/EA-6A	2 days	Fleet-EX
160th Army	9/AH-6 6/H-60	6 days	Joint TRNG
160th Army	3/CH-47	13 days	Joint TRNG
160th Army	5/MH-6 9/H-60 5/AH-6	12 days	Training
VA-205	5/A-6E	6 days	Fleet-EX
Air Force AWACS	1/E-3	7 days	Fleet-EX
HS-75	3/SH-3	4 days	DLQ
Phoenix Air	2/LR-24	2days	Aegis Project
Army FT Bragg	6/OH-58 2/UH-60	11 days	Joint TRNG
426 SQD Canada	1/C-130	3 days	Training
Chrysler Tech Sys.	1/EC-24	3 days	CNO Project
VMFA-112/MAG-49	12/FA-18	7 days	Missilex
Chrysler Tech Sys	1/EC-24	3 days	CNO Project
Chrysler Tech Sys	1/NKC-135A	4 days	CNO Project
160th Army	3/CH-47	7 days	Joint TRNG

<u>SQUADRON</u>	<u>TYPE AC/# AC</u>	<u>DAYS ONBOARD</u>	<u>MISSION</u>
MAG HQ Halifax	2/FA-18	6 days	Training
NAVFITWEPCOL	9/F-14 4/A-4	9 days	ACM
VMFA-321/MAG 49	7/FA-18	7 days	FFARP
426 SQDN Trenton	1/C-130	3 days	Training
160th Army	4/MH-6 4/UH-6 CH-47/3	8 days	Joint TRNG
VP-11	1/P-3	5 days	Joint TRNG
1SOW Air Force	2/H-53	6 days	Joint TRNG
160th Army	3/CH-47	6 days	Joint TRNG
VA-205	2/A-6	8 days	CQ
1SOW Air Force	3/H-53	6 days	Joint TRNG
1SOW Air Force	2/H-53 2/H-60	9 days	Joint TRNG
1SOW Air Force	1/MC-130	6 days	Joint TRNG
VF-201	7/F-14	12 days	FCQ
VF-202	7/F-14	12 days	FCQ
VMGR-252	5/KC-130	3 days	TKR Support for VF-32
160th Army	5/MH-6	8 days	Joint TRNG
160th Army	3/MH-6	13 days	Joint TRNG

<u>SQUADRON</u>	<u>TYPE AC/# AC</u>	<u>DAYS ONBOARD</u>	<u>MISSION</u>
160th Army	3/H-47	7 days	Joint TRNG
VP-23	6/P-3	5 days	Fleet-EX
433 SQD ETAC Canada	5/FA-18	13 days	Fleet-EX
VA-205	5/A-6	9 days	Fleet-EX
905 AREFS NC	2/NKC-135	11 days	Fleet-EX
MAG-42	1/C-130	1 day	TKR Training
VAQ-209	2/EA-6B	3 days	Fleet-EX
Chrysler Tech Sys	1/EC-24	5 days	Fleet-EX
Phoenix Air	2/LR-36	6 days	Aegis Project
437 SQD ETAC Canada	1/KC-130	5 days	Joint TRNG
Chrysler Tech Sys	1/NKC-135	5 days	Fleet-EX
1SOW Air Force	2/H-60	6 days	Joint TRNG
Phoenix Air	1/LR-35	3 days	Aegis Project
1SOW Air Force	4/H-53 1/C-130	8 days	Joint TRNG
VF-201	7/F-14	10 days	FCQ
VMFA-451	6/FA-18	5 days	Training
160th Army	4/MH-6	5 days	Joint TRNG
FLETACREADGRU	1/NKC-135	3 days	Combat TRNG OPS
Phoenix Air	1/LR-36	2 days	Aegis Project

<u>SQUADRON</u>	<u>TYPE AC/# AC</u>	<u>DAYS ONBOARD</u>	<u>MISSION</u>
XVIIIABN Corp	6/UH-1 5/AH-64 1/OH-58	3 days	Joint TRNG
Phoenix Air	1/LR-36	4 days	Aegis Project
Phoenix Air	1/LR-36	5 days	Fleet-EX
DET 2 452TS	1/NKC-135	5 days	Fleet-EX
Chrysler Tech Sys	1/NKC-135	5 days	CEC OPS
OC RAF Kinloss	1/NIMROD (MR2)	4 days	Fleet-EX
1SOW Air Force	3/MH-53	5 days	Joint TRNG
Phoenix Air	1/LR-36	3 days	Fleet-EX
509 RS	1/KC-135	5 days	Fleet-EX
16th SOW AF	2/MH-60	6 days	Joint TRNG
160th Army	8/MH-6 12/MH-60 6/AH-6 3/CH-47	13 days	Joint TRNG
16th SOW Air Force	3/MH-53	4 days	Joint TRNG
VMAQ2	2/EA-6B	4 days	Joint TRNG
963rd Air Force	1/E-3	7 days	Joint TRNG
Chrysler Tech Sys	1/NKC-135	4 days	Fleet-EX
433 SQD Quebec	4/FA-18	5 days	Fleet-EX
160th Army	2/MH-47 3/MH-60	6 days	Joint TRNG

<u>SQUADRON</u>	<u>TYPE AC/# AC</u>	<u>DAYS ONBOARD</u>	<u>MISSION</u>
VMGR 452	2/KC-130	2 days	TKR Training
16SOG Air Force	1/MC-130	6 days	Joint TRNG
VAQ-130	1/EA-6B	6 days	Agile Provider
HC-6	3/CH-46	5 days	VOD NGU CLSD
Chrysler Tech Sys	1/EC-24	8 days	Agile Provider
Portuguese AF	1/C-130	7 days	CINCLANT
HC-2	2/H-53	6 days	VOD NGD CLSD
VAW-120	3/E-2 2/C-2	6 days	CQ NGD CLSD
VRC-40	4/C2	6 days	COD NGD CLSD
VR-56 CLSD	2/C-9	6 days	Logistics NGD
161 ARG	1/KC-135	7 days	Fleet-EX
380AREFS	1/KC-135	7 days	Fleet-EX
310 ARS	1/KC-135	7 days	Fleet-EX
166 ARS	1/KC-135	7 days	Fleet-EX
16 SOW HR7	3/MH-60 1/HC-130 2/MH-130	11 days	Joint TRNG
160th Army	3/MH-60	10 days	Agile Provider
16 SOW	3/MH-60	10 days	Agile Provider
119SOW Air Force	1/C-130	10 days	Agile Provider

<u>SQUADRON</u>	<u>TYPE AC/# AC</u>	<u>DAYS ONBOARD</u>	<u>MISSION</u>
Chrysler Tech Sys	2/NKC-135	11 days	Agile Provider
Det 2 452TS	1/NKC-135	3 days	CEC OPS
Chrysler Tech Sys	1/NKC-135	3 days	CEC OPS
160th Army	3/MH-60	6 days	Joint TRNG

¹Average loading 9.1 aircraft per day, 3141 aircraft days per year. 57% of detachments are joint or foreign military operations.

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

Traffic count does not differentiate between permanently assigned aircraft and detachment aircraft, however, it is estimated that detachment aircraft account for approximately 10% of annual flight operations. NAS Oceana's location, next to the fleet, makes it the major air station for staging fleet exercises and joint operations. As a result, in the last 12 months, NAS Oceana hosted 110 detachments with 55 being from other services or allied forces. NAS Oceana was the aircraft staging site for three major fleet exercises in the past year. In 1989 and 1991, when Langley Air Force Base was undergoing runway repair, the Air Force used NAS Oceana to stage their coastal defense alert aircraft. The 1989 detachment consisted of 25 aircraft, in 1991, 18 aircraft. Both detachments were approximately 60 days.

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
VFC-12	10	FA-18A	12	12	12	12	12

6b. For each reserve squadron at your air station, provide the number of authorized billets and the number of personnel actually assigned to the squadron for the past three fiscal years. Provide this information in the format below for both Selected Reservists (SELRES) and Training and Administration of Reserves (TAR) Navy Reservists/Full-Time Support (FTS) Marine Corps reservists. Explain differences between authorized and actual manning in the remarks section (i.e. not enough qualified reservists in the area).

Squadron: VFC-12	FY 1991				FY 1992				FY 1993			
	Auth		Actual		Auth		Actual		Auth		Actual	
	SELRES	TAR/FTS	SELRES	TAR/FTS	SELRES	TAR/FTS	SELRES	TAR/FTS	SELRES	TAR/FTS	SELRES	TAR/FTS
Pilot	34	7	28	9	34	7	28	9	34	7	28	9
NFO	0	0	0	1	0	0	0	1	0	0	0	1
Other Officer	2	1	2	1	2	1	2	1	2	1	2	1
Enlisted	84	101	79	114	84	101	79	114	84	101	79	114

Remarks: For FY-93, pilot manning authorized was intentionally not filled due to transition to FA-18 aircraft scheduled for FY-94. Enlisted manning overage due to TAR personnel temporarily assigned duty to VFC-12 from NAS Norfolk. This excess was held onboard due to upcoming increase in manning authorization in FY-94 due to FA-18 transition.

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
NAS Oceana	3	SH-3H	3	3	3	3	3
NAS Oceana	1	UC-12B	1	1	2	2	2

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							

9a. List other operational command or support units (ie. air wing staffs, MWSSG, 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 ²	Equipment Laydown ² Requirement (covered/ uncovered in SF)
CAWL/ 09254	A-6 Type Wing Staff	11,767 SF Ops, Admin, Staff	7414SF Covered 1887SF Uncovered
CFWL/ 0921 6	F-14 Type Wing Staff	10,183 SF Officer	None
SWATS- LANT/47157	Weapons training	29,287 SF Office	12,525SF Training Hangar (Covered)
CARRIER AIR GROUP (CVW) 1/09732	Operational control squadrons	3,600 SF Office	None
CVW 3 09731	Operational control squadrons	3,600 SF Office	None
CVW 7 09736	Operational control squadrons	3,600 SF Office	None

CVW 8 09748	Operational control squadrons	3,800 SF Office	None
TACTS 64267	Training support	10,183 SF Office	None
FACSFAC 42239	Air Traffic Control	30,912 SF Office	None

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.

GAINS

LOSSES

CVW-17 FY94
 SINGLE SITE F-14FRS FY95
 COMSEASTRKWING-1 FY97
 CSSW-1 DET ASWOC FY97
 FASOTRAGRULANT FY97
 CECIL FIELD
 5 VS SQUADRONS FY97
 1 VQ SQUADRON FY97
 AMTGD CECIL FIELD FY97
 NETS FY97
 NAVPRO BURBANK FY97
 NATC RDT&E 6 FA-18 FY99

ATWINGLANT FY95
 4 A-6 SQUADRONS FY95/96
 A-6 FRS FY95
 4 F-14 SQUADRONS FY95-97¹
 VF-43 FY94

¹A-6/F-14 losses not due to BRAC - Result of FY94 Programmatic decision.

²Facility requirements based on current use

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
Fleet Specialized Operational Training Group/09810	Active	X	X	X	X	X
Naval Aviation Engineering Service Unit/30328	Active	X	X	X	X	X
Naval Medical Clinic/32528	Active	X	X	X	X	X
Naval Computer & Telecommunications Command/33225	Active	X	X	X	X	X
Naval Dental Clinic/35047	Active	X	X	X	X	X
Naval Legal Service Office/35494	Active	X	X	X	X	X
Naval Criminal Investigative Service/35625	Active	X	X	X	X	X
Personnel Support Activity Det./43350	Active	X	X	X	X	X
Navy Facilities Engineering Command (Resident OIC of Construction/45809	Active	X	X	X	X	X
Fleet Imaging Command/45976	Active	X	X	X	X	X
COMNAVRECRUIT COM DET 5 /47767	Active	X	X	X	X	X
Defense Commissary Agency/49032	Active	X	X	X	X	X
Marine Corps Cadre/53530	Active	X	X	X	X	X
Naval Air Maintenance Training Det./60445	Active	X	X	X	X	X
Naval Training Systems Center/61339	Active	X	X	X	X	X

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Naval Air Warfare Center/63126	Active	X	X	X	X	X
Naval Oceanography Command Det./65876	Active	X	X	X	X	X
Naval Command, Control Ocean Surveillance Center/66001	Active	X	X	X	X	X
Naval Exchange Oceana/66045	Active	X	X	X	X	X
Naval Construction Battalion Unit 415/66923	Active	X	X	X	X	X
Naval Education & Training Support Program Management Support Activity/68322	Active	X	X	X	X	X
Human Resources Office/68845	Active	X	X	X	X	X
Public Works Center Norfolk, VA Beach Site/00187	Active	X	X	X	X	X
Law Enforcement/83056	Reserve	X	X	X	X	X
Medical/Dental/89860	Reserve	X	X	X	X	X

10b. For each of these other reserve Navy/Marine Corps units at your air station, provide the number of authorized billets and the number of personnel actually assigned to the squadron for the past three fiscal years. Provide this information in the format below for both Selected Reservists (SELRES) and Training and Administration of Reserves (TAR) Navy reservists/Full-Time Support (FTS) Marine Corps reservists. Explain differences between authorized and actual manning in the remarks section.

NR Activity/Unit: LEPSU 0186	FY 1991				FY 1992				FY 1993			
	Auth		Actual		Auth		Actual		Auth		Actual	
	SELRES	TAR/FTS	SELRES	TAR/FTS	SELRES	TAR/FTS	SELRES	TAR/FTS	SELRES	TAR/FTS	SELRES	TAR/FTS
Officer	2	0	2	0	2	0	2	0	2	0	2	0
Enlisted	45	0	45	0	44	0	44	0	42	0	42	0

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 indicate

	Average Personnel on Waiting List		
	FY 1991	FY 1992	FY 1993
Pilot	6	5	12
NFO	0	0	0
Other Officers	0	0	0
Enlisted	4	5	4

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.

Note - Flight operations are not tracked by individual squadrons or type aircraft. The approximate total number of flight operations at NAS Oceana for FY 93 was 207,000. Because of deployment schedules and fluctuations in squadron manning estimating an annual figure by squadron depends on the year. It is estimated that each sortie will include 3 to 4 flight operations.

Squadron/ Unit	Aircraft Type	Number of Flight Operations/Yr	Comments
VA-34	A-6E	2340 sorties/yr	CNAL T/R Matrix
VA-35	A-6E	2340 sorties/yr	CNAL T/R Matrix
VA-75	A-6E	2340 sorties/yr	CNAL T/R Matrix
VA-85	A-6E	2340 sorties/yr	CNAL T/R Matrix
VA-42	A-6E	2340 sorties/yr	CNAL T/R Matrix
VF-101	F-14A/B	8640 sorties/yr	CNAL T/R Matrix
VF-101	T-34C	1500 sorties/yr	CNAL T/R Matrix
VF-14	F-14A	3500 sorties/yr	CNAL T/R Matrix
VF-32	F-14A	3500 sorties/yr	CNAL T/R Matrix
VF-41	F-14A	3500 sorties/yr	CNAL T/R Matrix
VF-84	F-14A	3500 sorties/yr	CNAL T/R Matrix
VF-102	F-14A	3500 sorties/yr	CNAL T/R Matrix
VF-74	F-14B	3500 sorties/yr	CNAL T/R Matrix
VF-103	F-14B	3500 sorties/yr	CNAL T/R Matrix
VF-142	F-14B	3500 sorties/yr	CNAL T/R Matrix
VF-143	F-14B	3500 sorties/yr	CNAL T/R Matrix
VFC-12	FA-18	3405 sorties/yr	Currency Rqmts
NASO	UC-12	440 sorties/yr	880 hrs/yr Optar
NASO	SH-3	288 sorties/yr	576 hrs/yr Optar

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.

¹Include RON/domestic deployment training

FACSFAC VACAPES, a NAS Oceana tenant, controls the airspace from south of Massachusetts to North Carolina, a surface area of approximately 94,000 square miles, roughly the size of the state of Oregon. Their data on the following note and chart provides a summary on the utilization of special use airspace by number and category of aircraft.

SPECIAL USE AIRSPACE¹

SUA	LOCATION ³	SCHED AGENCY/UIC	FY	TOTAL ²	CIVILIAN	GENERAL AVIATION	NAVY/MARINE	OTHER MILITARY
ALL ⁴		42239	91	115872	1616	6194	57499	50567
ALL ⁴		42239	92	119721	3472	5702	61297	49250
W-105	NTU 060/269	42239	93	30172	622	1449	11657	16444
W-107	NTU 042/150	42239	93	4906	213	615	811	3712
W-108	NTU 040/80	42239	93	5279	60	48	1300	4189
W-386	NTU 056/36	42239	93	19832	119	313	4041	15359
W-72	NTU 105/26	42239	93	31472	114	2420	21489	4749
W-122	NTU 172/88	42239	93	24545	122	424	12984	11015
HAT B	NTU 193/70	42239	93	863	0	3	598	262
AR 8	NTU 165/60	42239	93	830	121	5	478	226
AR 9	NTU 101/26	42239	93	3110	629	74	856	1551

¹Information provided pertains to general use of airspace and is listed by service. Traffic count information has been provided for Warning Areas and VR/IR routes vice hours utilized. From our perspective, "hours utilized" is misleading due to concurrent usage of airspace. Turnover of special use airspace to FAA in terms of hours is also misleading and complex since portions of airspace, by location or altitude block, may be turned over vice the entire Warning Areas. Traffic count depicts the volume of use. Airspace data was not documented for Warning Areas prior to 1993.

²Traffic totals include Civilian Air Carrier (C), General Aviation (G), Navy/Marine (N), and Other Military (O); includes Air Force. Traffic totals do not include assets from Surface units or CV Ops.

³Bearing (degree) and Range (statute miles) from NAS Oceana (NTU) TACAN.

⁴Data on individual warning areas was not kept. Numbers represent the yearly total for all areas.

AREAS NORMALLY USED BY NAS OCEANA SQUADRONS FOR TRAINING

SUA	Location/ Distance	Types/Uses	Scheduling Authority (UIC)	Squadron/Unit	Training Requirement (types of training)	Yearly Usage Rate (Hrs)
R-5314	NTU 190/60	Air-Gnd	42239	CAWL	Proficiency/AARP	
R-5313A	NTU 175/80	Air-Gnd	42239	CAWL	Proficiency	
R-5306	NTU 190/85	Air-Gnd EW	42239	CAWL	Proficiency/AARP	
R-5302	NTU 195/50	Air-Gnd	42239	CAWL	Proficiency/AARP	
R-5802	200nm	Air-Gnd	42239	Swatslant	AARP	
R-5002A	180nm	Air-Gnd	42239	Swatslant	AARP	
Hatteras MOA	NTU 170/80	Air-Air	42239	Swatslant	AARP	
IR MTR'S	within 30nm	Low Level	42239	CAWL	Proficiency	
VR MTR'S	within 30nm	Low Level	42239	CAWL	Proficiency	
W-72 A/B	NTU 120/ 30	Warning Area	42239	FITWING	AIC/MSLX/CQ/ EW/ACM/PMCF	
W-386	NTU 070/40	Warning Area	42239	FITWING	A/AGUNS/Bomb/ CQ/Strafe/ACM	
W-122	NTU 190/100	Warning Area	42239	FITWING	AIC/ACM/CQ/ PMCF	
TACTS RANGE	NTU 150/50	Restricted Area	42239	FITWING	AIC/ACM	
R-5314	NTU 190/60	Air-Gnd	42239	FITWING	Bomb/Strafe/AIC	
R-5306 A-E	NTU 190/85	Restricted Area	42239	FITWING	Bomb/Strafe/ EW/ ACM	
R-5302	NTU 195/50	Restricted Area	42239	FITWING	AIC/ PMCF	
Farmville MOA	NTU 270/100	MOA	42239	FITWING	AIC/LAT	
R- 4816/4803 4804/4802/ 4810	NAS Fallon, NV	Restricted Area	NAS Fallon	FITWING	AIC/EW/ACM/ Bomb/Strafe	
R- 2510/2521 2512	Nas El Centro, CA	Restricted Area	NAS El Centro	FITWING	Bomb/Strafe	

W-368/369 370/371/372 428	NSRR, P.R.	Warning/ Restricted Area	C2F	FITWING	ACM/MSLX/ Bomb/Strafe/AIC	'
R- 4806/4807 4808/4809	Nellis AFB	Restricted Area	Nellis AFB	FITWING	ACM/EW/Bomb/ Strafe	'
R-2301	MCAS Yuma	Restricted Area	MCAS Yuma	FITWING	Bomb/Strafe/ACM	'
W-174,465	Nas Key West	Warning Area	Nas Key West	FITWING	AIC/ACM	'

¹A SUA is not established for a specific type of mission. Because there is a wide variety of SUAs, warning areas and restricted areas in the NAS Oceana vicinity, more than one of these areas can be used to complete a mission requirement. Therefore, it is impossible to determine how many hours are required for each SUA per user.

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

SUA	Location/ Distance	Types/Uses	Scheduling Authority 0(UIC)	Fiscal Year	Scheduled	Utilized	Operating Limitations ²	
					# Hours	# Hours		
R-5306	NTU 190/85	AARP	42239	1991	61	55		
				1992	67	57		
				1993	96	89		
HAT B R-5002	NTU 170/80	Air/Air	42239	1991	6	6		
				1992	18	18		
				1993	15	15		
TACTS	NTU 150/50	ACM	42239	1991	1972	1113	Daylight only	
				1992	1993	1091		
				1993	1863	1029		
R-5301	NTU 205/50	Testing	42239	1991	8760	8760		
				1992	8760	8760		
				1993	8760	8760		
R-5302	NTU 195/50	Air/Air Air/Gnd	42239	1991	12	12		
				1992	83	38		
				1993	129	51		
R-5313	NTU 175/80	Air/Gnd Air/Air	42239	1991	234	113		
				1992	359	139		
				1993	414	117		
R-5314	NTU 190/60	Air/Gnd Air/Air	42239	1991	3118	1828		

				1992	3411	2016	
				1993	3011	2024	
R-6606	Tangier	Air/Gnd	42239	1991	510	140	
				1992	424	266	
				1993	460	407	
9 IR MTR	Less than 30 nm	Low Level RTI	47157	1991	2451	2259	
				1992	3304	2570	
				1993	4003	3650	
9VR MTR	Less than 30 nm	Low Level RTI	47157	1991	8560	7891	
				1992	8150	6749	
				1993	7016	6080	

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.

³Special Use Airspace is scheduled in maximum time blocks to allow units to complete required training prior to next unit checking in. This prevents costly holding time (fuel) . Most units complete missions in less time than scheduled.

⁴FACSFAC tracks utilization but does not track the reason for a cancellation.

⁵FITWING/Squadrons only track utilization data for TACTS.

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.

FACSFAC Air Control Tracking System has a tracking capacity of 4,000 contacts. Increase in aircraft usage for Warnings Areas is theoretically possible to that level without additional equipment support. However, Air Controller human limitations cannot be accurately established without maximum loading simulation. Human factors would determine equipment support necessary.

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 would be realized? Provide cost and details of all additional capacity calculations.

None. No MILCON or BRACON projects are planned that affect capacity.

12f. What additional projects could be added to provide additional operating capacity? At what estimated cost? Provide details and assumptions for all calculations.

Phelps MOA proposal has been submitted to Federal Aviation Administration (joint Navy/Air Force) to provide additional maneuvering airspace for aircraft operating in R-5314 Dare County Range. The higher altitude will increase the capability to perform weapons training high altitude tactics. No equipment cost incurred.

12g. List and explain the limiting factors that further funding for personnel, equipment, facilities, etc., cannot overcome (e.g., airspace size/availability, AICUZ restrictions, environmental restrictions, land areas).

1) 1996- 12NM limit will cause loss of 9NM of airspace available for training along the entire East Coast (approx 3,321 square miles). Proposal for airspace (MOAs, Restricted Areas) modification to counter this loss have been submitted to Navy Representative, FAA Southern and Northeast Regions, Proposed airspace will allow users to activate necessary airspace to permit training that would otherwise be adversely impacted or need to be relocated.

2) Live ordnance, flares, tracer ammunition and pyrotechnics are prohibited on Navy Dare County targets due to fire hazard. Only inert practice type weapons can be deployed. Squadrons obtain their live air-to-ground ordnance training at NAS Fallon or NAVSTA Roosevelt Roads. This training is generally conducted in conjunction with Orange Air detachments or scheduled air wing exercises. These detachments provide ample opportunity for squadrons to complete their live ordnance delivery training requirements at no additional TAD costs.

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

YES. The limiting factor on the airspace is safe separation during IMC weather, a 60 second interval between landing aircraft. NAS Oceana has the capacity to handle 120 IMC operations per hour. Currently we have approximately 27 flight operations per hour. Based on this, NAS Oceana could increase the airspace usage surrounding the airport slightly more than four times the present tempo.

13a. For each **ground/water training facilities/ranges/training areas** 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 readiness?

¹ include RON/domestic deployment training

Ground Training Facility	Location/Distance	Types/Uses	Scheduling Authority (UIC)	Squadron/Unit	Training Requirement (types of training)	Yearly Usage Rate (Hrs)
NAS Fallon Complex	Fallon, NV	Airwing Weapons Det.	09520	A-6 sqds. F-14 sqds	Integrated Airwing Weapons Training	1728
AFTWTF Complex	NSRR, P.R.	Orange Air	00060	A-6 sqds. F-14 sqds.	Battle Group Ops	1056
SERE School	Maine	Survival/ Evasion	44408	CAWL	Survival, Evasion, Resistance Trng.	4800
Aviation Physiology	Nas Norfolk	Swim	30686	CAWL	Swim Qual	1225
Firefight School	Nas Norfolk	Fire-fighting	42090	CAWL	Shipboard Firefighting	1600
2F156	Nas Oceana	Weapons Sys. Trainer	09524	CAWL	A-6 Flight Sim.	1451
2H111	Nas Oceana	LSO Sim.	09524	CAWL	Landing Signal Officer Trng	480
G-Tip	War-minster, PA	Physiology	NADC 62269	CAWL	G-Tolerance Trng.	720
Simulator	Nas Oceana	15C9	VF101	Fitwing	RIO Training	5063
Simulator	Oceana	2F95	VF101	Fitwing	NATOPS/Emerg/ INST CQ Training	7067
Simulator	Oceana	2E6	VF101	Fitwing	ACM Training	4030
SERE School	Maine	Survival	VF101 09067	Fitwing	POW Survival Training	7200
NADC Centrifuge	War-minster, PA	Physiology	NADC 62269	Fitwing	G-Tolerance	960
CSSP	Fort Story	Classified	Fitwing	Fitwing	Classified	360
Aviation Physiology	NAS Norfolk	Swim/Physiol ogy	NAS Norfolk	Fitwing	Once every 4 years	1360

Ground Training Facility	Location/Distance	Types/Uses	Scheduling Authority (UIC)	Squadron/Unit	Training Requirement (types of training)	Yearly Usage Rate (Hrs)
Fire Fighting School	NAS Norfolk	Fire Fighting	NAS Norfolk	Fitwing	Once/Sea Tour	4240
Tactra-grulant	Dam Neck	Strike WCC	Tactra-grulant	Fitwing	Strike warfare training	600
Nuclear Weapons	Norfolk	JMEM School	Swatslant	Fitwing	Strike weapon Engineering	1600
MAWTS-1	MCAS Yuma	WTI School	Fitwing	Fitwing	WTO School strike warfare	4320
Intel School NMITC	Dam Neck	Intel Officer School	Dam Neck	Fitwing	Intel Training/IS	1920
NFWS	San Diego CA	TOPGUN	Fitwing	Fitwing	Air Superiority	4000

Remarks:

1. Detachment length 18 days/4 Dets per year.
2. Detachment length 21 days/6 Dets per year.
3. Detachment length 11 days/4 Dets per year.

13b. For each ground/water training facility/range/training area listed above, complete the following table:

Ground Training Facility	Location/ Distance	Types/Uses	Scheduling Authority (UIC)	Fiscal Year	Scheduled	Utilized
					# Hours	# Hours
Fallon Complex	Nevada	Airwing	09520	1991	1728	1728
				1992	1728	1728
				1993	1728	1728
AFWTF Complex	Puerto Rico	Orange Det	00060	1991	1056	1056
				1992	1056	1056
				1993	1056	1056
SERE	Maine	Survival	4408	1991	1200	1200
				1992	1200	1200
				1993	1200	1200
Aviation Physiology	Norfolk	Physiology swim	30686	1991	2600	2550
				1992	2500	2450
				1993	2500	2450
Fire Fighting	Norfolk	Fire fighting	42090	1991	1440	1200
				1992	1440	1200
				1993	1440	1200

29b. Identify the features of this air station that make it a strong candidate for basing/training other types of aircraft/aircrews and other operational units in the future. R

LOCATION:

- East of all commercial airways.
- Unimpeded access to over 94,000 sq. miles of warning area airspace for training. Controlled by FACSFAC VACAPES, an Oceana tenant.
- Restricted areas, special use airspace and training routes controlled by Oceana commands.
- Located close to Atlantic Fleet units stationed in the Norfolk complex. Location facilitated squadron on load and off load.
- Co-location with major Fleet assets, schools, and shore rotational billets.

CAPABILITY TODAY:

- Dual parallel runway system at NAS Oceana.
- Daily flight operations exceeds 590 events.
- Hangar space, parking aprons and support facilities are available for increase in aircraft/aircrew without additional cost.
- NALF Fentress is a fully operational facility with 8000 ft. of runway and modern bi-directional arresting gear.
- Dare County Bombing complex, operated by Oceana, is a fully instrumented range complex.
- TACTS, a fully instrumented air-to-air combat training range is operated by NAS Oceana.

CAPACITY IN THE FUTURE:

- Expansion into over 1000 acres of undeveloped and unrestricted land would allow a vast array of additional aviation, training, and administrative units to operate from Oceana.
- Space for future construction of large hangars and aprons is available adjacent to existing ramps and taxiways.
- Proximity and access to the four bombing ranges listed in 29a above, Range TACTS and warning areas provide training capability for increasing operations.
- The Navy purchased land in the late 1970's - early 1980's to minimize incompatible development around NAS Oceana and Fentress. Noise complaints have been flat since 1983. The restrictive easements and fee title purchases of almost 12,000 acres protect the current high noise zone. Commonwealth of Virginia zoning regulations incorporate sound attenuation construction standards. The city of Virginia Beach has proposed an airport zoning ordinance based on noise contours developed in 1978. The ordinance is projected for enactment in the summer 1994.

29b. Identify the features of this air station that make it a strong candidate for basing/training other types of aircraft/aircrews and other operational units in the future.

LOCATION:

- East of all commercial airways.
- Unimpeded access to over 94,000 sq. miles of warning area airspace for training. Controlled by FACSFAC VACAPES, an Oceana tenant.
- Restricted areas, special use airspace and training routes controlled by Oceana commands.
- Located close to Atlantic Fleet units stationed in the Norfolk complex. Location facilitated squadron on load and off load.
- Co-location with major Fleet assets, schools, and shore rotational billets.

CAPABILITY TODAY:

- Dual parallel runway system at NAS Oceana.
- Daily flight operations exceeds 590 events.
- Hangar space, parking aprons and support facilities are available for increase in aircraft/aircrew without additional cost.
- NALF Fentress is a fully operational facility with 8000 ft. of runway and modern bi-directional arresting gear.
- Dare County Bombing complex, operated by Oceana, is a fully instrumented range complex.
- TACTS, a fully instrumented air-to-air combat training range is operated by NAS Oceana.

CAPACITY IN THE FUTURE:

- Expansion into almost 2000 acres of undeveloped and unrestricted land would allow a vast array of additional aviation, training, and administrative units to operate from Oceana.
- Space for future construction of large hangars and aprons is available adjacent to existing ramps and taxiways.
- Proximity and access to the four bombing ranges listed in 29a above, Range TACTS and warning areas provide training capability for increasing operations.
- The Navy purchased land in the late 1970's - early 1980's to minimize incompatible development around NAS Oceana and Fentress. Noise complaints have been flat since 1983. The restrictive easements and fee title purchases of almost 12,000 acres protect the current high noise zone. Commonwealth of Virginia zoning regulations incorporate sound attenuation construction standards. The city of Virginia Beach has proposed an airport zoning ordinance based on noise contours developed in 1978. The ordinance is projected for enactment in the summer 1994.

QUALITY OF LIFE:

- Oceana's billet structure and location in the Norfolk Naval Hub supports sea/shore rotation - stability, lower PCS costs, and may improve retention.
- The Virginia Beach area is a large community with numerous opportunities for jobs, technical and advanced education, recreation, cultural and sports activities.
- Community infrastructure. Schools, hospitals, etc. have or can develop additional capacity. Desirable living and retirement community with ample and affordable housing.
- NAS Oceana's MWR programs provides a wide array of team sports, gyms, an 18 hole golf course, 24 bowling lanes, facilities, boating, camping, stables, etc.
- The relationship between NAS Oceana and Virginia Beach has evolved to one of mutual support and trust. From fire department services to community projects, the two organizations work together to meet common goals.

In short, NAS Oceana is a superb facility, located close to the fleet hub in Norfolk and capable of supporting additional aircraft, missions, or operational units.

30. WEAPONS AND MUNITIONS: 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

TORPEDOES

INERT

AIR LAUNCHED
THREAT

CADS/PADS

SURFACE LAUNCHED
THREAT

STRATEGIC NUCLEAR

OTHER THREAT

TACTICAL NUCLEAR

30a. 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).

Total Facility Ordnance Stowage Summary

Facility Number	PRESENT INVENTORY		PREDICTED INVENTORY FY 2001		MAXIMUM RATED CAPABILITY	
	TONS	SQ FT	TONS	SQ FT	TONS	SQ FT
2000	4.00	800	6.00	1000	7.00	1120
2001	138.00	2112	276.00	4224	414.00	6400
2002	75.00	3000	75.00	3000	75.00	3000
2003	48.00	5890	58.00	6000	60.40	6200
2004	21.50	3828	30.00	5000	50.00	6000
2007	2.00	70	4.00	112	6.00	140
2008	1.10	15	1.00	15	6.00	140
2009	0.00	0	4.00	15	6.00	140
2010	1.00	140	1.00	140	6.00	140
2011	0.10	35	1.00	140	6.00	140
2012	0.20	52	1.00	140	6.00	40
2013	0.00	0	8.00	824	12.00	1250
2014	82.40	538	100.00	762	170.00	1250
2015	75.00	650	150.00	1250	150.00	1250
2016	3.50	325	14.00	1250	14.00	1250
2020	0.00	0	25.00	684	25.00	684
2025	100.00	4040	100.00	4040	100.00	4040
2026	100.00	3030	100.00	4040	100.00	4040
2500	0.10	54	0.10	54	1.50	54
2501	0.10	54	0.10	54	1.50	54

Facility Number	PRESENT INVENTORY		PREDICTED INVENTORY FY 2001		MAXIMUM RATED CAPABILITY	
	TONS	SQ FT	TONS	SQ FT	TONS	SQ FT
2502	0.10	54	0.10	54	1.50	54
2503	0.10	54	0.10	54	1.50	54
2504	0.10	54	0.10	54	1.50	54
2506	0.10	54	0.10	54	1.50	54
2507	0.10	54	0.10	54	1.50	54
2508	0.10	54	0.10	54	1.50	54
2509	0.10	54	0.10	54	1.50	54
2510	0.10	54	0.10	54	1.50	54
2511	0.10	54	0.10	54	1.50	54
2512	0.10	54	0.10	54	1.50	54
2513	0.10	54	0.10	54	1.50	54
2514	0.10	54	0.10	54	1.50	54
2515	0.10	54	0.10	54	1.50	54
2516	0.10	54	0.10	54	1.50	54
2517	0.10	54	0.10	54	1.50	54
2518	0.10	54	0.10	54	1.50	54
2519	0.10	54	0.10	54	1.50	54
2520	2.00	100	2.00	100	2.00	840
1Y1A	0.00	0	0.00	0	1.00	36
1Y1B	0.00	0	0.00	0	1.00	36
1Y1C	0.00	0	0.00	0	1.00	36
1Y2A	0.00	0	0.00	0	1.00	36

Facility Number	PRESENT INVENTORY		PREDICTED INVENTORY FY 2001		MAXIMUM RATED CAPABILITY	
	TONS	SQ FT	TONS	SQ FT	TONS	SQ FT
1Y2B	0.00	0	0.00	0	1.00	36
1Y2C	0.00	0	0.00	0	1.00	36
Bomb/ Rocket Assy	0.00	0	0.00	0	25.00	23571
Ordn Handlg Pad	0.00	0	0.00	0	30.00	110200
TOTAL	655.7	25,651.0	957.9	33762.0	1304.9	13077.0

30b. For each Stowage facility identified in question 1.1 above, identify the type of facility (specify if "igloo", "box", etc.). Identify the type of ordnance commodity (from the list above) which are currently stowed in that facility and all other ordnance types which, given existing restrictions, could be physically accommodated in that stowage facility. Specify below if such additional accommodation would require a modification of the facility (e.g. enhanced environmental controls, ESQD waiver).

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

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
2000/NONSTD	20mm HEI	TRNG/OPS	1.1 ¹
2001/NONSTD	CBU	TRNG/OPS	1.1 ¹
2002/NONSTD	Msls/Decoys	TRNG/OPS	1.1 ¹
2003/NONSTD	Cads/20mm	TRNG/OPS	1.3 ³
2004/NONSTD	Rkts/AQM37	TRNG/OPS	1.3 ³
2007/IGLOO	Bmb Fuzes	TRNG/OPS	1.1 ¹
2008/IGLOO	Rkt Wrhd/WP	TRNG/OPS	1.1 ¹
2009/IGLOO	Empty	TRNG/OPS	1.1 ¹
2010/IGLOO	Cads"H"Cond	TRNG/OPS	1.1 ¹
2011/IGLOO	40mm/5mk Grenade	TRNG/OPS	1.1 ¹
2012/IGLOO	40mm HE	TRNG/OPS	1.1 ¹
2013/S-Arch HE	Empty	TRNG/OPS	1.1 ¹
2014/S-Arch HE	Sonobuoys	TRNG/OPS	1.1 ¹
2015/S-Arch HE	GP Bmbs	TRNG/OPS	1.1 ¹
2016/S-Arch HE	GP Bmb/Rkt Warheads	TRNG/OPS	1.1 ¹

Facility Number/Type	Currently Stowed Commodity Type(s)	Reason for Stowage at your Activity	Commodity Type(s) Which Can Be Stowed
2020/Warehouse	None	TRNG/OPS	1.3 ³
2025/Warehouse	Inert	TRNG/OPS	Inert
2026/Warehouse	Inert	TRNG/OPS	Inert
2500/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2501/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2502/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2503/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2504/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2505/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2506/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2507/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2508/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2509/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2510/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2511/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2512/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2513/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2514/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2515/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2516/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2517/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2518/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹
2519/Keyport	CADS/AEPS	TRNG/OPS	1.1 ¹

Facility Number/Type	Currently Stowed Commodity Type(s)	Reason for Stowage at your Activity	Commodity Type(s) Which Can Be Stowed
2520/Warehous	AQM37 Maintenance	Service AQM37	1.3 ³
1Y1A	CADS/AEPS	TRNG/OPS	1.4 ⁴
1Y1B	CADS/AEPS	TRNG/OPS	1.4 ⁴
1Y1C	CADS/AEPS	TRNG/OPS	1.4 ⁴
1Y2A	CADS/AEPS	TRNG/OPS	1.4 ⁴
1Y2B	CADS/AEPS	TRNG/OPS	1.4 ⁴
1Y2C	CADS/AEPS	TRNG/OPS	1.4 ⁴
Bmb/Rkt Assy	Bmb/Rkt/Cbu/ Msl	Safe Haven/Trng Ops	1.1 ¹
Ord Hndlg Pad	Bmb/Rkt/Cbu/ Msl	Loading Evolution	1.1 ¹

Additional comments:

¹Mass detonating (bombs, fuzes, boosters, rocket warheads)

²Non-mass detonating, fragment producing (practice wall eye, FAE, igniters, antipersonnel mines)

³Mass fire (rocket motors, flares, missile motors, APM37A)

⁴Moderate fire (small arms ammo, cartridges and cartridge actuated devices)

30c. Identify the rated category, rated NEW and status of ESQD arc for each stowage facility listed above.

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
2000/NONSTD	1.1	125K	Y	Y	SEPT 98
201/NONSTD	1.1	125K	Y	Y	SEPT 98
2002/NONSTD	1.3	95K	Y	Y	SEPT 98
2003/NONSTD	1.3	PC	Y	Y	SEPT 98
2004/NONSTD	1.1	PC	Y	Y	SEPT 98
2007/IGLOO	1.1	15K	Y	Y	SEPT 98
2008/IGLOO	1.1	15K	Y	Y	SEPT 98
2009/IGLOO	1.1	15K	Y	Y	SEPT 98
2010/IGLOO	1.1	15K	Y	Y	SEPT 98
2011/IGLOO	1.1	15K	Y	Y	SEPT 98
2012/IGLOO	1.1	15K	Y	Y	SEPT 98
2013/S-Arch HE	1.1	150K	Y	Y	SEPT 98
2014/S-Arch HE	1.1	125K	Y	Y	SEPT 98
2015/S-Arch HE	1.1	250K	Y	Y	SEPY 98
2016/S-Arch HE	1.1	250K	Y	Y	SEPT 98
2020/Warehouse	1.3	1K	Y	Y	SEPT 98
2025/Warehous	Inert	N/A	Y	N/A	
2026/Warehouse	Inert	N/A	Y	N/A	
2500/Keyport	1.1	0.3K	Y	N	

Facility Number / Type	Hazard Rating (1.1-1.4)	Rated NEW	ESQD Arc		
			Established (Y / N)	Waiver (Y / N)	Waiver Expiration Date
2501/Keyport	1.1	0.3K	Y	N	
2502/Keyport	1.1	0.3K	Y	N	
2503/Keyport	1.1	0.3K	Y	N	
2504/Keyport	1.1	0.3K	Y	N	
2505/Keyport	1.1	0.3K	Y	N	
2506/Keyport	1.1	0.3K	Y	N	
2507/Keyport	1.1	0.3K	Y	N	
2508/Keyport	1.1	0.3K	Y	N	
2509/Keyport	1.1	0.3K	Y	N	
2510/Keyport	1.1	0.3K	Y	N	
2511/Keyport	1.1	0.3K	Y	N	
2512/Keyport	1.1	0.3K	Y	N	
2513/Keyport	1.1	0.3K	Y	N	
2414/Keyport	1.1	0.3K	Y	N	
2515/Keyport	1.1	0.3K	Y	N	
2516/Keyport	1.1	0.3K	Y	N	
2517/Keyport	1.1	0.3K	Y	N	
2518/Keyport	1.1	0.3K	Y	N	
2519/Keyport	1.1	0.3K	Y	N	
2520/Warehouse	1.1	1K	Y	Y	SEPT 98
1Y1A	1.4	PC	Y	N	
1Y1B	1.4	PC	Y	N	
1Y1C	1.4	PC	Y	N	

Facility Number / Type	Hazard Rating (1.1-1.4)	Rated NEW	ESQD Arc		
			Established (Y / N)	Waiver (Y / N)	Waiver Expiration Date
1Y2A	1.4	PC	Y	N	
1Y2B	1.4	PC	Y	N	
1Y2C	1.4	PC	Y	N	
Bmb/Rkt Assy	1.1	0	Y	Y	SEPT 98
Ord Hndlg Pad	1.1	30K	Y	N	

30d. 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.

SUSPECT VEHICLE. HOLDING AREA REQUIRED.
 ESTIMATED COST TO CONSTRUCT APPROX \$125K.
 SITE APPROVAL FOR PROJECT CURRENTLY IN WORKS.

30e. 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.

Related Ordnance Support

Related Functions	Performed ? (Y / N)	Type of Commodity	DLMHs
Maintenance (specify level)	Y / 0 LEVEL MAINT.	MISSILES	900
Testing	Y	DECOY	400
Manufacturing	N		
Outload	Y	MISSILES/ COMPONENTS	1200
Technical Support	Y	AIR LAUNCHED	600

AIR STATION	TITLE	LOCATION
AIR STATION	NORFOLK	NORFOLK, VA
AIR STATION	JACKSONVILLE	JACKSONVILLE, FL
AIR STATION	OCEANA	VA BEACH VA
AIR STATION	KEY WEST	KEY WEST FL
AIR STATION	BRUNSWICK	BRUNSWICK ME
MC AIR STATION	CHERRY POINT	CHERRY POINT NC
MC AIR STATION	YUMA	YUMA AZ
MC AIR STATION	BEAUFORT	BEAUFORT SC
MC AIR STATION	NEW RIVER JAX	JACKSONVILLE NC
MC BASE	HAWAII	KANEOHE HI
MC AIR STATION	CAMP PENDLETON	CP PENDLETON CA
NAS/MCAS	MIRAMAR	SAN DEIGO CA
MC AIR STATION	KANEOHE	KANEOHE HI
AIR STATION	NORTH ISLAND	SAN DIEGO CA
AIR STATION	WHIDBEY ISLAND	OAK HARBOR WA
AIR STATION	LEMOORE	LEMOORE CA
AIR STATION	FALLON	FALLON NV
AIR STATION	ADAK	ADAK AL
NAVAL STATION	ROOSEVELT ROADS	ROOSEVELT ROADS PR
NAVAL STATION	MAYPORT	MAYPORT FL
AIR FACILITY	EL CENTRO	EL CENTRO CA
RESERVE AIR STATION	S. WEYMOUTH	S.WEYMOUTH MA
RESERVE AIR STATION	NEW ORLEANS	NEW ORLEANS LA
RESERVE AIR FACILITY	WASHINGTON	WASHINGTON DC
RESERVE AIR STATION	ATLANTA	ATLANTA GA
RESERVE AIR STATION	FORT WORTH	FT WORTH TX
RESERVE AIR STATION	WILLOW GROVE	WILLOW GROVE PA

NAS OCEANA OIC N60191
DATA CALL SIXTEEN

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print)

Signature

Title

Date

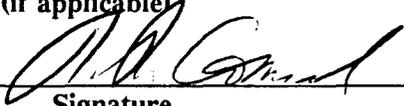
Activity

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

NEXT ECHELON LEVEL (if applicable)

CAPT R. P. CONRAD

NAME (Please type or print)



Signature

Acting

Title Commander

Naval Shore Activities

U.S. Atlantic Fleet

10 June 1994

Date

Activity

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

MAJOR CLAIMANT LEVEL

RADM ARCHIE CLEMINS

NAME (Please type or print)



Signature

Acting

Title Commander in Chief

U.S. Atlantic Fleet

10 June 1994

Date

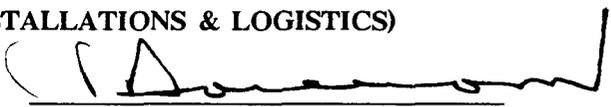
Activity

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)

R. R. SAREERAM

NAME (Please type or print)



Signature

ACT 106

Title

28 JUN 1994

Date

DATA CALL 16 CERTIFICATION

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

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

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

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

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

ACTIVITY COMMANDER

WILLIAM H. SHURTLEFF
NAME (Please type or print)

William H. Shurtleff
Signature

COMMANDING OFFICER
Title

25 MAY 94
Date

NAVAL AIR STATION OCEANA
Activity

NAS OCEANA UIC N60191

DATA CALL SIXTEEN Revised Pages 2, 11-12, 63, 65 and 93

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print)

Signature

Title

Date

Activity

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

NEXT ECHELON LEVEL (if applicable)

K. F. DELANEY

NAME (Please type or print)

K. F. Delaney
Signature

Rear Admiral

Title Commander

Naval Shore Activities

U.S. Atlantic Fleet

Date

30 JUN 1994

Activity

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

MAJOR CLAIMANT LEVEL

RADM ARCHIE CLEMINS

NAME (Please type or print)

Archie Clemens
Signature

Acting

Title Commander in Chief

U.S. Atlantic Fleet

Date

7/1/94

Activity

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

DEPUTY CHIEF OF NAVAL OPERATIONS (LOGISTICS)

DEPUTY CHIEF OF STAFF (INSTALLATIONS & LOGISTICS)

J. B. GREENE, JR.

NAME (Please type or print)

ACTING

J. B. Greene, Jr.
Signature

06 JUL 1994

Title

Date

MILITARY VALUE ANALYSIS

NAS OCEANA UIC N60191

DATA CALL SIXTEEN Revised Pages 2, 11-12, 63, 65, and 93

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

M R Shephard
NAME (Please type or print)

M R Shephard

Signature

Head, BRAC 95 Team
Title

30 June 1994

Date

Division

Department

CINCLANTFLT
Activity

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print)

Signature

Title

Date

Activity

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

NEXT ECHELON LEVEL (if applicable)

J. W. CRAINE, JR.

NAME (Please type or print)

J. W. Craine Jr.
Signature

Captain

Title Commander

8/12/94
Date

Naval Shore Activities

U.S. Atlantic Fleet

Activity

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

MAJOR CLAIMANT LEVEL

RADM H. W. GEHMAN, JR.

NAME (Please type or print)

H. W. Gehman Jr.
Signature

Acting

Title Commander in Chief

15 AUG 15 AUG 1994
Date

U.S. Atlantic 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)

J. B. Greene Jr.
Signature

ACTING

18 AUG 1994
Date

Title

Date

S R

DATA CALL 64
CONSTRUCTION COST AVOIDANCES

Table 1: Military Construction (MILCON) Projects (Excluding Family Housing Construction Projects)

Installation Name:		OCEANA VA NAS		
Unit Identification Code (UIC):		N60191		
Major Claimant:		LANTFLT		
Project FY	Project No.	Description	Appn	Project Cost Avoid (\$000)
1994	412	FUEL STORAGE TANKS REPLACEMENT *	MCON	781
		Sub-Total - 1994		781
1997	186T	TRAINING & OPS FACILITY	BRAC	3,650
1997	187T	ACADEMIC INSTRUCT BLDG	BRAC	3,430
1997	188T	A/C ENGINE & AVIONICS MAINT FAC ADDN'S	BRAC	2,650
1997	457T	ENGINE MAINTENANCE SHOP ADD'NS	BRAC	490
		Sub-Total - 1997		10,220
1998	722	CHILD DEV CENTER ADDITION	MCON	2,250
		Sub-Total - 1998		2,250
1999	712	BACHELOR ENLISTED QUARTERS	MCON	21,450
		Sub-Total - 1999		21,450
2000	209	FXD ACFT START SYS-H 200	MCON	4,900
		Sub-Total - 2000		4,900
2001	330	RELIGIOUS EDUCATION CTR	MCON	600
2001	633	LIBRARY/EDUCATION CTR	MCON	1,750

BRAC-95 CERTIFICATION

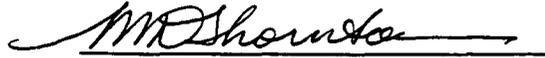
I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MICHAEL D. THORNTON
NAME (Please type or print)

CDR, CEC, USN
Title

MILCON PROGRAMMING DIVISION
Division

NAVAL FACILITIES ENGINEERING COMMAND
Activity



Signature



Date

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

MAJOR CLAIMANT LEVEL

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

COMMANDER
Title

NAVAL FACILITIES ENGINEERING COMMAND
Activity


Signature

12/9/94
Date

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

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

W. A. EARNER

NAME (Please type or print)

Title


Signature

12/11/94
Date

5

DATA CALL 66
INSTALLATION RESOURCES

UIC: 60191

Activity Information:

Activity Name:	Naval Air Station Oceana
UIC:	60191
Host Activity Name (if response is for a tenant activity):	NA; Host Activity
Host Activity UIC:	NA; Host Activity

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

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

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

DATA CALL 66
INSTALLATION RESOURCES

UIC: 60191

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: NAS Oceana		UIC: 60191	
Category	FY 1996 BOS Costs (\$000)		
	Non-Labor	Labor	Total
1. Real Property Maintenance Costs:			
1a. Maintenance and Repair	8644	518	9162
1b. Minor Construction	338	0	338
1c. Sub-total 1a. and 1b.	8982	518	9500
2. Other Base Operating Support Costs:			
2a. Utilities	10038	0	10038
2b. Transportation	1480	0	1480
2c. Environmental	6371	479	6850
2d. Facility Leases	1	0	1
2e. Morale, Welfare & Recreation	346	722	1068
2f. Bachelor Quarters	3427	709	4136
2g. Child Care Centers	95	454	549
2h. Family Service Centers	603	129	732
2i. Administration	65	1971	2036
2j. Other (Specify) ¹	3887	27283	31170
2k. Sub-total 2a. through 2j.:	26313	31747	58060
3. Grand Total (sum of 1c. and 2k.):	35295	32265	67560

DATA CALL 66
INSTALLATION RESOURCES

UIC: 60191

¹ Other: Retail Supply, Other Engineering Support, Dare County Bombing Range Fire Suppression, Other Base Support, Galley, Chaplain, Counseling & Assistance, Data Processing, Physical Security, Base Communications, FECA.

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

<u>Appropriation</u>	<u>Amount (\$000)</u>
O&MN	46,817
MPN	20,743

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

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

**DATA CALL 66
INSTALLATION RESOURCES**

UIC: 60191

Table 1B - Base Operating Support Costs (DBOF Overhead)			
Activity Name: NA; Not a DBOF Activity		UIC: 60191	
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.) :			

**DATA CALL 66
INSTALLATION RESOURCES**

UIC: 60191

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

Table 2 - Services/Supplies Cost Data	
Activity Name: NAS Oceana	UIC: 60191
Cost Category	FY 1996 Projected Costs (\$000)
Travel:	205
Material and Supplies (including equipment):	5559
Industrial Fund Purchases (other DBOF purchases):	18713
Transportation:	140
Other Purchases (Contract support, etc.):	10678
Total:	35295

DATA CALL 66
INSTALLATION RESOURCES

UIC: 60191

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: NAS Oceana	UIC: 60191
Contract Type	FY 1996 Estimated Number of Workyears On-Base
Construction:	290
Facilities Support:	35
Mission Support:	173
Procurement:	0
Other:*	51
Total Workyears:	549

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

DATA CALL 66
INSTALLATION RESOURCES

UIC: 60191

Military and Civilian Training	2
MWR Support Contracts	8
Mess Attendant Contract	17
Chapel Contracts	2
Family Services Contract	18
Maintenance Contracts	2
Repair Equipment (not under maint. contract)	1
Telephone Repairman	1

There are an additional 8 FSC reimbursable contract workyears.

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)):

118 as well as the 8 reimbursable FSC contract workyears

2) Estimated number of workyears which would be eliminated:

431

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

0

**DATA CALL 66
INSTALLATION RESOURCES**

UIC: 60191

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

No. of Additional Contract Workyears Which Would Be Eliminated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
2	Training

No. of Additional Contract Workyears Which Would Be Relocated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
11	3 Keypunch contract 8 Dare County Bombing Range Fire Suppression

BRAC-95 CERTIFICATION

DATA CALL #66

Reference: SECNAVNOTE 11000 of 08 December 1993

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

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

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

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

ACTIVITY COMMANDER

WILLIAM H. SHURTLEFF
NAME (Please type or print)

COMMANDING OFFICER
Title

NAVAL AIR STATION OCEANA
Activity


Signature

14 JULY 1994
Date

NAVAL AIR STATION OCEANA UIC N60191
DATA CALL SIXTY-SIX

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print)

Signature

Title

Date

Activity

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

NEXT ECHELON LEVEL (if applicable)

J. W. CRAINE, JR.

NAME (Please type or print)

J. W. Craine Jr.
Signature

Captain

Title Commander

Naval Shore Activities

U.S. Atlantic Fleet

8/11/94
Date

Activity

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

MAJOR CLAIMANT LEVEL

H. W. GEHMAN, JR.

NAME (Please type or print)

H. W. Gehman Jr.
Signature

Rear Admiral, Acting

Title Commander in Chief

U.S. Atlantic Fleet

15 AUG 1994

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)

J. B. GREENE, JR.

NAME (Please type or print)

J. B. Greene Jr.
Signature

ACTING

Title

22 AUG 1994
Date

5

**DATA CALL 66
INSTALLATION RESOURCES**

Activity Information:

Activity Name:	Naval Legal Service Office Detachment Oceana VA
UIC:	35494
Host Activity Name (if response is for a tenant activity):	Naval Air Station Oceana VA
Host Activity UIC:	60191

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

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

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

**DATA CALL 66
INSTALLATION RESOURCES**

Table 1A - Base Operating Support Costs (Other Than DBOF Overhead)			
Activity Name: Naval Legal Service Office Detachment Oceana VA		UIC: 35494	
Category	FY 1996 BOS Costs (\$000)		
	Non-Labor	Labor	Total
1. Real Property Maintenance Costs:			
1a. Maintenance and Repair			
1b. Minor Construction			
1c. Sub-total 1a. and 1b.			
2. Other Base Operating Support Costs:			
2a. Utilities	18.4		18.4
2b. Transportation			
2c. Environmental			
2d. Facility Leases			
2e. Morale, Welfare & Recreation			
2f. Bachelor Quarters			
2g. Child Care Centers			
2h. Family Service Centers			
2i. Administration			
2j. Other (Specify) Oth Eng Supp/Comm	2.8		2.8
2k. Sub-total 2a. through 2j:	21.2		21.2
3. Grand Total (sum of 1c. and 2k.):	21.2		21.2

**DATA CALL 66
INSTALLATION RESOURCES**

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

<u>Appropriation</u>	<u>Amount (\$000)</u>
O&M,N	21.2

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 2l., as necessary, to identify any additional cost elements not currently shown). Leave shaded areas of table blank.

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

**DATA CALL 66
INSTALLATION RESOURCES**

Table 1B - Base Operating Support Costs (DBOF Overhead)			
Activity Name: Naval Legal Service Office Detachment Oceana VA		UIC: 35494	
Category	FY 1996 Net Cost From UC/FUND-4 (\$000)		
	Non-Labor	Labor	Total
1. Real Property Maintenance Costs:			
1a. Real Property Maintenance (>\$15K)	0	0	0
1b. Real Property Maintenance (<\$15K)	0	0	0
1c. Minor Construction (Expensed)	0	0	0
1d. Minor Construction (Capital Budget)	0	0	0
1c. Sub-total 1a. through 1d.	0	0	0
2. Other Base Operating Support Costs:			
2a. Command Office	0	0	0
2b. ADP Support	0	0	0
2c. Equipment Maintenance	0	0	0
2d. Civilian Personnel Services	0	0	0
2e. Accounting/Finance	0	0	0
2f. Utilities	0	0	0
2g. Environmental Compliance	0	0	0
2h. Police and Fire	0	0	0
2i. Safety	0	0	0
2j. Supply and Storage Operations	0	0	0
2k. Major Range Test Facility Base Costs	0	0	0
2l. Other (Specify)	0	0	0
2m. Sub-total 2a. through 2l:	0	0	0
3. Depreciation	0	0	0

**DATA CALL 66
INSTALLATION RESOURCES**

4. Grand Total (sum of 1c., 2m., and 3.) :	0	0	0
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2. Services/Supplies Cost Data. The purpose of Table 2 is to provide information about projected FY 1996 costs for the purchase of services and supplies by the activity. (Note: Unlike Question 1 and Tables 1A and 1B, above, this question is not limited to overhead costs.) The source for this information, where possible, should be either the NAVCOMPT OP-32 Budget Exhibit for O&M activities or the NAVCOMPT UC/FUND-1/IF-4 exhibit for DBOF activities. Information must reflect FY 1996 budget data supporting the FY 1996 NAVCOMPT Budget Submit. Break out cost data by the major sub-headings identified on the OP-32 or UC/FUND-1/IF-4 exhibit, disregarding the sub-headings on the exhibit which apply to civilian and military salary costs and depreciation. Please note that while the OP-32 exhibit aggregates information by budget activity, this data call requests OP-32 data for the activity responding to the data call. Refer to NAVCOMPTINST 7102.2B of 23 April 1990, Subj: Guidance for the Preparation, Submission and Review of the Department of the Navy (DON) Budget Estimates (DON Budget Guidance Manual) with Changes 1 and 2 for more information on categories of costs identified. Any rows that do not apply to your activity may be left blank. However, totals reported should reflect all costs, exclusive of salary and depreciation.

Table 2 - Services/Supplies Cost Data	
Activity Name: Naval Legal Service Office Detachment Oceana VA	UIC: 35494
Cost Category	FY 1996 Projected Costs (\$000)
Travel:	
Material and Supplies (including equipment):	0.6
Industrial Fund Purchases (other DBOF purchases):	21.2
Transportation:	
Other Purchases (Contract support, etc.):	
Total:	21.8

**DATA CALL 66
INSTALLATION RESOURCES**

3. Contractor Workyears.

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

Table 3 - Contract Workyears	
Activity Name: Naval Legal Service Office Detachment Oceana VA	UIC: 35494
Contract Type	FY 1996 Estimated Number of Workyears On-Base
Construction:	0
Facilities Support:	0
Mission Support:	0
Procurement:	0
Other:*	0
Total Workyears:	0

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

**DATA CALL 66
INSTALLATION RESOURCES**

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

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

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

**DATA CALL 66
INSTALLATION RESOURCES**

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

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

N/A

2) Estimated number of workyears which would be eliminated:

N/A

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

N/A

**DATA CALL 66
INSTALLATION RESOURCES**

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

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

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

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."

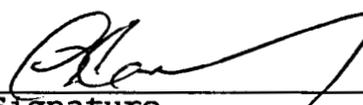
The signing of this certification constitutes a representation that the certifying official has reviewed the information and either (1) personally vouches for its accuracy and completeness or (2) has possession of, and is relying upon, a certification executed by a competent subordinate.

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

C. M. Legrand, RADM, JAGC
NAME (Please type or print)


Signature

Commander, NAVLEGSVCCOM
Title

18 JULY 94
Date

Naval Legal Service Command
Activity

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print)

Signature

Title

Date

Activity

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print)

Signature

Title

Date

Activity

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

MAJOR CLAIMANT LEVEL

Mr. Robert W. Thornett
NAME (Please type or print)


Signature

Director

8/2/94
Date

Title

Field Support Activity

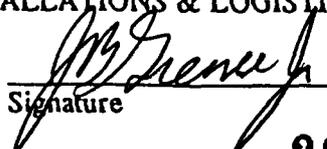
Activity

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

Date

22 AUG 1994

DATA CALL 66
INSTALLATION RESOURCES

UIC: 68845

Activity Information:

Activity Name:	Human Resources Office, Norfolk (Satellite Office)
UIC:	68845
Host Activity Name (if response is for a tenant activity):	Naval Air Station, Oceana
Host Activity UIC:	60191

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

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

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

DATA CALL 66
INSTALLATION RESOURCES

UIC: 68845

Table 1A - Base Operating Support Costs (Other Than DBOF Overhead)			
Activity Name: Human Resources Office, Norfolk			UIC: 68845
Category	FY 1996 BOS Costs (\$000)		
	Non-Labor	Labor	Total
1. Real Property Maintenance Costs:			
1a. Maintenance and Repair			
1b. Minor Construction			
1c. Sub-total 1a. and 1b.			
2. Other Base Operating Support Costs:			
2a. Utilities	27		27
2b. Transportation			
2c. Environmental			
2d. Facility Leases			
2e. Morale, Welfare & Recreation			
2f. Bachelor Quarters			
2g. Child Care Centers			
2h. Family Service Centers			
2i. Administration	15	524	539
2j. Other (Specify)			
2k. Sub-total 2a. through 2j:	42	524	566
3. Grand Total (sum of 1c. and 2k.):	42	524	566

DATA CALL 66
INSTALLATION RESOURCES

UIC: 68845

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

<u>Appropriation</u>	<u>Amount (\$000)</u>
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NA; all O&MN appropriation

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

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

**DATA CALL 66
INSTALLATION RESOURCES**

UIC: 68845

Table 1B - Base Operating Support Costs (DBOF Overhead)			
Activity Name: Human Resources Office, Norfolk; N/A Not a DBOF Activity			UIC: 68845
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)			
1e. 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.) :			

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INSTALLATION RESOURCES

UIC: 68845

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

Table 2 - Services/Supplies Cost Data	
Activity Name: Human Resources Office, Norfolk	UIC: 68845
Cost Category	FY 1996 Projected Costs (\$000)
Travel:	3
Material and Supplies (including equipment):	0
Industrial Fund Purchases (other DBOF purchases):	27
Transportation:	0
Other Purchases (Contract support, etc.):	12
Total:	42

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INSTALLATION RESOURCES

UIC: 68845

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: Human Resources Office, Norfolk	UIC: 68845
Contract Type	FY 1996 Estimated Number of Workyears On-Base
Construction:	
Facilities Support:	
Mission Support:	
Procurement:	
Other:*	
Total Workyears:	0

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

DATA CALL 66
INSTALLATION RESOURCES

UIC: 68845

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)):

NA; no contract workyears

2) Estimated number of workyears which would be eliminated:

NA; no contract workyears

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

NA; no contract workyears

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INSTALLATION RESOURCES

UIC: 68845

c. "Off-Base" Contract Workyear Data. Are there any contract workyears located in the local community, but not on-base, which would either be eliminated or relocated if your activity were to be closed or relocated? If so, then provide the following information (ensure that numbers reported below do not double count numbers included in 3.a. and 3.b., above): No.

No. of Additional Contract Workyears Which Would Be Eliminated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
None	

No. of Additional Contract Workyears Which Would Be Relocated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
None	

DATA CALL 66
INSTALLATION RESOURCES

5

Activity Information:

Activity Name:	Naval Telecommunications Center (NTCC), Oceana, VA
UIC:	33225
Host Activity Name (if response is for a tenant activity):	Naval Air Station, Oceana, VA
Host Activity UIC:	60191

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

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

a. Table 1A - Base Operating Support Costs (Other Than DBOF Overhead).

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

**DATA CALL 66
INSTALLATION RESOURCES**

Table 1A - Base Operating Support Costs (Other Than DBOF Overhead)			
Activity Name: NTCC Oceana, VA			UIC: 33225
Category	FY 1996 BOS Costs (\$000)		
	Non-Labor	Labor	Total
1. Real Property Maintenance Costs:			
1a. Maintenance and Repair			
1b. Minor Construction			
1c. Sub-total 1a. and 1b.			
2. Other Base Operating Support Costs:			
2a. Utilities	.7		.7
2b. Transportation	2.6		2.6
2c. Environmental			
2d. Facility Leases			
2e. Morale, Welfare & Recreation			
2f. Bachelor Quarters			
2g. Child Care Centers			
2h. Family Service Centers			
2i. Administration			
2j. Other (Specify)			
2k. Sub-total 2a. through 2j:	3.3		3.3
3. Grand Total (sum of 1c. and 2k.):	3.3		3.3

**DATA CALL 66
INSTALLATION RESOURCES**

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

<u>Appropriation</u>	<u>Amount (\$000)</u>
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c. Table 1B - Base Operating Support Costs (DBOF Overhead). This Table should be submitted for all current DBOF activities. Costs reported should reflect BOS costs supporting the DBOF activity itself (usually included in the G&A cost of the activity). For DBOF activities which are tenants on another installation, total cost of BOS incurred by the tenant activity for itself should be shown on this table. It is recognized that differences exist among DBOF activity groups regarding the costing of base operating support: some groups reflect all such costs only in general and administrative (G&A), while others spread them between G&A and production overhead. Regardless of the costing process, all such costs should be included on Table 1B. The Minor Construction portion of the FY 1996 capital budget should be included on the appropriate line. Military personnel costs (at civilian equivalency rates) should also be included on the appropriate lines of the table. Please ensure that individual lines of the table do not include duplicate costs. Also ensure that there is no duplication between data provided on Table 1A. and 1B. These two tables must be mutually exclusive, since in those cases where both tables are submitted for an activity, the two tables will be added together to estimate total BOS costs at the activity. Add additional lines to the table (following line 21., as necessary, to identify any additional cost elements not currently shown). **Leave shaded areas of table blank.**

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

**DATA CALL 66
INSTALLATION RESOURCES**

Table 1B - Base Operating Support Costs (DBOF Overhead)			
Activity Name: NTCC Oceana, VA		UIC: 33225	
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.) :	0	0	0

**DATA CALL 66
INSTALLATION RESOURCES**

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

Table 2 - Services/Supplies Cost Data	
Activity Name: NTCC Oceana	UIC: 33225
Cost Category	FY 1996 Projected Costs (\$000)
Travel:	
Material and Supplies (including equipment):	
Industrial Fund Purchases (other DBOF purchases):	
Transportation:	2.6
Other Purchases (Contract support, etc.):	.7
Total:	3.3

**DATA CALL 66
INSTALLATION RESOURCES**

3. Contractor Workyears.

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

Table 3 - Contract Workyears	
Activity Name:	UIC:
Contract Type	FY 1996 Estimated Number of Workyears On-Base
Construction:	
Facilities Support:	
Mission Support:	
Procurement:	
Other:*	
Total Workyears:	

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

**DATA CALL 66
INSTALLATION RESOURCES**

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

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

N/A

2) Estimated number of workyears which would be eliminated:

N/A

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

N/A

**DATA CALL 66
INSTALLATION RESOURCES**

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

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

No. of Additional Contract Workyears Which Would Be Relocated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
0	

INSTALLATION RESOURCES, DATA CALL 66 for COMNAVCOMTELCOM

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print)

Signature

Title

Date

Activity

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

NEXT ECHELON LEVEL (if applicable)

(Please type or print)

Signature

Name

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

T. A. STARK

Name (Please type or print)

T. A. Stark

Signature

Commander,

Title

25 Aug 1994

Date

Naval Computer and

Telecommunications Command

Activity

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

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

W. A. EARNER

NAME (Please type or print)

W. A. Earner

Signature

Title

9/6/94

Date

Enclosures (2)

5

DATA CALL 66
INSTALLATION RESOURCES

UIC: 68550

Activity Information:

Activity Name:	PSD NAS OCEANA
UIC:	68550
Host Activity Name (if response is for a tenant activity):	NAS OCEANA
Host Activity UIC:	60191

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

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

a. Table 1A - Base Operating Support Costs (Other Than DBOF Overhead).

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

DATA CALL 66
INSTALLATION RESOURCES

UIC: 68550

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: PSD NAS OCEANA		UIC: 68550	
Category	FY 1996 BOS Costs (\$000)		
	Non-Labor	Labor	Total
1. Real Property Maintenance Costs:			
1a. Maintenance and Repair			
1b. Minor Construction			
1c. Sub-total 1a. and 1b.			
2. Other Base Operating Support Costs:			
2a. Utilities			
2b. Transportation	3		3
2c. Environmental			
2d. Facility Leases			
2e. Morale, Welfare & Recreation			
2f. Bachelor Quarters			
2g. Child Care Centers			
2h. Family Service Centers			
2i. Administration	81	2218	2299
2j. Other (Specify)			
2k. Sub-total 2a. through 2j:	84	2218	2302
3. Grand Total (sum of 1c. and 2k.):	84	2218	2302

DATA CALL 66
INSTALLATION RESOURCES

UIC: 68550

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

<u>Appropriation</u>	<u>Amount (\$000)</u>
MPN	1407
O&MN	800
RPN	95

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..

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INSTALLATION RESOURCES

UIC: 68550

Table 1B - Base Operating Support Costs (DBOF Overhead)			
Activity Name: N/A; not a DBOF Activity		UIC: 68550	
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			

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INSTALLATION RESOURCES**

UIC: 68550

4. Grand Total (sum of 1c., 2m., and 3.) :			
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2. Services/Supplies Cost Data. The purpose of Table 2 is to provide information about projected FY 1996 costs for the purchase of services and supplies by the activity. (Note: Unlike Question 1 and Tables 1A and 1B, above, this question is not limited to overhead costs.) The source for this information, where possible, should be either the NAVCOMPT OP-32 Budget Exhibit for O&M activities or the NAVCOMPT UC/FUND-1/IF-4 exhibit for DBOF activities. Information must reflect FY 1996 budget data supporting the FY 1996 NAVCOMPT Budget Submit. Break out cost data by the major sub-headings identified on the OP-32 or UC/FUND-1/IF-4 exhibit, disregarding the sub-headings on the exhibit which apply to civilian and military salary costs and depreciation. Please note that while the OP-32 exhibit aggregates information by budget activity, this data call requests OP-32 data for the activity responding to the data call. Refer to NAVCOMPTINST 7102.2B of 23 April 1990, Subj: Guidance for the Preparation, Submission and Review of the Department of the Navy (DON) Budget Estimates (DON Budget Guidance Manual) with Changes 1 and 2 for more information on categories of costs identified. Any rows that do not apply to your activity may be left blank. However, totals reported should reflect all costs, exclusive of salary and depreciation.

Table 2 - Services/Supplies Cost Data	
Activity Name: PSD NAS OCEANA	UIC: 68550
Cost Category	FY 1996 Projected Costs (\$000)
Travel:	0
Material and Supplies (including equipment):	42
Industrial Fund Purchases (other DBOF purchases):	3
Transportation:	0
Other Purchases (Contract support, etc.):	39
Total:	84

DATA CALL 66
INSTALLATION RESOURCES

UIC: 68550

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: PSD OCEANA	UIC: 68550
Contract Type	FY 1996 Estimated Number of Workyears On-Base
Construction:	
Facilities Support:	
Mission Support:	
Procurement:	
Other:*	
Total Workyears:	0

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

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INSTALLATION RESOURCES

UIC: 68550

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

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

N/A; no contract workyears

2) Estimated number of workyears which would be eliminated:

N/A; no contract workyears

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

N/A; no contract workyears

DATA CALL 66
INSTALLATION RESOURCES

UIC: 68550

c. "Off-Base" Contract Workyear Data. Are there any contract workyears located in the local community, but not on-base, which would either be eliminated or relocated if your activity were to be closed or relocated? If so, then provide the following information (ensure that numbers reported below do not double count numbers included in 3.a. and 3.b., above): No.

No. of Additional Contract Workyears Which Would Be Eliminated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
None	

No. of Additional Contract Workyears Which Would Be Relocated	General Type of Work Performed on Contract (e.g., engineering support, technical services, etc.)
None	

PSA NORFOLK UIC N68654
DATA CALL SIXTY-SIX

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print)

Signature

Title

Date

Activity

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print)

Signature

Title

Date

Activity

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

MAJOR CLAIMANT LEVEL

RADM H. W. GEHMAN, JR.

NAME (Please type or print)

H.W. Gehman, Jr.
Signature

15 AUG 1994

Acting

Title Commander in Chief

Date

U.S. Atlantic 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)

W.A. Earner
Signature

8/30/94

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. E. LANDICK, CDR, USN
NAME (Please type or print)



Signature

ACTING
Title

13 July 1994
Date

PSA NORFOLK
Activity

DATA CALL

5

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

NAVAL AIR STATION OCEANA 60191

Maps w/ original

20 APRIL 1994

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

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ENVIRONMENTAL DATA CALL

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

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

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

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

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

Tenants covered by this response are:

60191, 30774, 35672,44327, 46963, 47213, 48674, 69788, 86794, 83056, 83092, 00187, 09062, 09067, 09072, 09216, 09254, 09810, 30328, 32528, 33225, 35047, 35494, 35625, 42239, 43350, 45809, 45976, 47157, 47767, 49032, 52994, 53530, 60445, 61339, 63126, 64267, 65552, 65876, 66001, 66045, 66923, 68322, 68845, 09053, 09070, 09084, 09097, 09224, 09225, 09281, 09628, 09717, 09718, 09728, 09731, 09732, 09736, 09748, 09774, 55197.

1. ENDANGERED/THREATENED SPECIES AND BIOLOGICAL HABITAT

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

SPECIES (plant or animal)	Designation (Threatened/ Endangered)	Federal/ State	Critical / Designated Habitat (Acres)	Important Habitat (acres)
<i>example: Haliaeetus leucocephalus - bald eagle</i>	<i>threatened</i>	<i>Federal</i>	<i>25</i>	<i>0</i>
Picoides borealis - Red-cockade woodpecker¹	endangered	Federal	0	0
Alligator mississippiensis - American¹ alligator	threatened	Federal	0	0
Canis rufus - Red wolf¹	endangered expmnt'l population	Federal	0	0
Crotalis horridus atricaudatus - Canebrake² rattlesnake	endangered	State	0	626

According to the 1990 Inventory of Rare, Threatened and Endangered Species of NAS Oceana and NALF Fentress, no federally listed T & E species are known to exist on NAS Oceana or NALF Fentress. Best professional judgement is that T & E species are not indigenous to private property under restrictive AICUZ covenants surrounding NAS Oceana and NALF Fentress.

¹Although a Threatened/Endangered Species Survey has not been conducted on Navy Dare Bombing Range, Manteo, North Carolina these species are known to exist on adjacent USFWS and Air Force properties.

²This species is indigenous to NALF Fentress only. Site maps of areas delineated as important habitat are attached.

Source Citation: Alligator River National Wildlife Refuge Biologist. 1990 Inventory of Rare, Threatened and Endangered Species of NAS Oceana and NALF Fentress.

1b.

<p>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.</p>	<p>NO</p>
<p>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.</p>	<p>NO</p>

Source Citation: Alligator River National Wildlife Refuge Biologist. 1990 Inventory of Rare, Threatened and Endangered Species of NAS Oceana and NALF Fentress.

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.

Attached

1d.

<p>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.</p>	<p>NO</p>
---	-----------

Lack of endangered species on NAS Oceana or NALF Fentress preclude mitigation.

Source citation: 1990 Inventory of Rare, Threatened and Endangered Species of NAS Oceana and NALF Fentress.

1e.

<p>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.</p>	<p>NO</p>
--	-----------

No state regulations are in force which would constrain operations. State listed endangered species are not located in areas identified in facility operations or development plans.

Source citation: 1990 Inventory of Rare, Threatened and Endangered Species of NAS Oceana and NALF Fentress. NAS Oceana Master Plan.

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.

<p>Does your base possess federal jurisdictional wetlands?</p>	<p>YES</p>
<p>Has a wetlands survey in accordance with established standards been conducted for your base?</p>	<p>YES</p>
<p>When was the survey conducted or when will it be conducted?</p>	<p>04/02/92</p>
<p>What percent of the base has been surveyed? (100% aerial survey of NAS Oceana and NALF Fentress has been completed. Field verification is made on an "as needed basis.")</p>	<p>100%</p>
<p>What is the total acreage of jurisdictional wetlands present on your base? (NAS Oceana contains 897 acres (15%) and NALF Fentress contains 1039 acres (37%) of potentially jurisdictional wetlands)</p>	<p>1936/ac</p>

A survey of the 23,000 acre Navy Dare County Bombing Range has not been done, however, best professional estimates are 90-95% of the total land area on this range is jurisdictional wetland.

Source Citation: 1992 USFWS/Geonex aerial survey.

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.

Attached

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? If YES, summarize the results of such modifications or constraints.

No modification or constraints to base operations or development plans have been imposed. 2.01 acres of wetlands, however, are being mitigated to meet compensatory regulatory requirements for unavoidable wetlands losses due to construction of Squadron Trainer Building 223 (MCON P-718) in accordance with 404B1 Guidelines.

Source Citation: FY92 MCON Project P-718

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.	YES
--	-----

Only one historic structure, the Bell-Taylor House (circa 1810), is considered eligible or potentially eligible for listing on the National Register of Historic Places. It is important to note that no historic or archaeological resources were noted on the 666 acres immediately surrounding the airfield.

A Phase I Survey has been conducted on approximately 2,666 acres of the 5,667 acres of unimproved land on NAS Oceana and NALF Fentress. Combined with the 2,538 acres of improved land this accounts for approximately 63% of the land area on these installations. Dare County Bombing Range has not been surveyed, but best professional judgement is that few, if any, historical/cultural resources exist on this range. 17 archaeological sites have been identified as warranting further evaluation on NAS Oceana or NALF Fentress.

Source citation: 1993. Phase I Archaeological Investigation for Proposed Vegetation Maintenance/Management Areas and a Proposed Wetlands Restoration Project, NAS Oceana. 1994. Draft Phase I Archaeological Survey of Approximately 2000 acres at NAS Oceana and NALF Fentress.

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.	NO
---	----

4. ENVIRONMENTAL FACILITIES

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

4a.

Does your base have an operating landfill?				YES	
ID/Location of Landfill	Permitted Capacity (CYD)		Maximum Capacity (CYD)	Contents ¹	Permit Status
	TOTAL	Remaining			
	L	g			
INERT LANDFILL/ POTTERS ROAD	N/A ²	N/A	UNKNOWN	CONCRETE	NOT REQ.

¹Contents (e.g. building demolition, asbestos, sanitary debris, etc.) Present volume is an estimated 144,000CY.

²Landfill is on 5.4 acres, only half of which is presently used. There is no legal height restriction, or established capacity limit.

Are there any current or programmed projects to correct deficiencies or improve the facility?
 N/A

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

N/A

4c.

Does your base have any disposal, recycling, or incineration facilities for solid waste?					YES
Facility/Type of Operation	Permitted Capacity	Ave Daily Throughput	Maximum Capacity	Permit Status	Comments
Recycling Center	N/A	1 net ton	N/A	N/A	Drop off center
Metal Recycling Yard	N/A	2.7 net tons	N/A	N/A	Metals are segregated and shipped to local market continuously

List any permit violations and projects to correct deficiencies or improve the facility.
 None

Source Citation: Director of Morale, Welfare and Recreation, NAS Oceana

4d.

Does your base own/operate a Domestic Wastewater Treatment Plant (WWTP) ?					NO
ID/Location of WWTP	Permitted Capacity	Ave Daily Discharge Rate	Maximum Capacity	Permit Status	Level of Treatment/Year Built

List permit violations and discuss any projects to correct deficiencies.

All wastewater from NAS Oceana proper is treated by the Hampton Roads Sanitation District facilities. Public Works Center (PWC) Norfolk owns and operates a WWT facility at NALF Fentress. Virginia Pollution Abatement Permit No. VPA01003 regulates this land application wastewater treatment facility. The permit was effective 1 March 1991, and expires 1 March 2001. The total design capacity of the facility is 6500 GPD and wastewater is applied to six acres of planted fields. No violations have been issued in 1994.

Source Citation: Deputy Site Manager, Public Works Center - Virginia Beach Site; Supervisory Environmental Engineer, Environmental Compliance Division, NAS Oceana

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.

NAS Oceana holds a Hampton Roads Sanitation District (HRSD) Industrial Waste Permit, permit number 0100. The permit became effective March 1, 1992, and will expire on March 1, 1995. The permit limits NAS Oceana to discharge a maximum monthly average of 654,000 GPD and a maximum calendar day discharge of 900,000 GPD. The HRSD permit (No. 0100) also regulates discharges from two photo processing labs, one AIMD facility, and pump and haul operations. Routine inspections of 24 oil/water separators and 16 grease traps are additional permit requirements. The parameters routinely monitored include: arsenic, cadmium, total chromium, copper, cyanide, lead, mercury, nickel, phenolic compounds, silver, zinc, oil & grease (non-saponifiable), pH, flow, and total toxic organics. See attachments I and II for discharge limits and compliance history.

Source Citation: Supervisory Environmental Engineer, Environmental Compliance Division, NAS Oceana

4f.

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

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

N/A

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

No

Source Citation: Supervisory Environmental Engineer, Environmental Compliance Division, NAS Oceana

4h.

Does your base operate drinking Water Treatment Plants (WTP)?				NO	
ID/Location of WTP	Operating (GPD)		Method of Treatment	Maximum Capacity	Permit Status
	Permitted Capacity	Daily Rate			

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

N/A

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.

The source of potable water for NAS Oceana is the City of Norfolk supplied through the City of Virginia Beach lines. PWC Norfolk owns and operates, permit No. 3810430, the waterworks distribution system for NAS Oceana. PWC Norfolk owns and operates the waterworks system at NALF Fentress, permit No. 3550615. No violations to either system occurred in 1993 or in 1994 to date.

Source Citation: Deputy Site Manager, Public Works Center - Virginia Beach Site

4j.

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

Source Citation: Base Civil Engineering Department, NAS Oceana

4k.

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

NAS Oceana holds VPDES permit no. VA0005266 which was renewed on April 15, 1994, and will expire on April 15, 1999. Permit monitors non-point source discharges (including stormwater) which leaves NAS Oceana boundaries at four external outfalls and three internal outfalls. Periodic inspections are required monthly, quarterly, semi-annually, and annually. Required monitoring parameters include: oil & grease, total organic, carbons, total petroleum hydrocarbons, pH, flow, water quality parameters, biological and chemical monitoring. Permit requires preparation of a Stormwater Pollution Prevention Plan and Best Management Practices (BMPs).

Source Citation: Supervisory Environmental Engineer, Environmental Compliance Division, NAS Oceana

4l.

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

Explain:

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.

PWC Norfolk operates and maintains the utility systems for NAS Oceana. Expansion capability of the utility systems is virtually unlimited given adequate funding.

The water system is operating at 50% capacity.

The steam system is operating at 40% capacity .

The electrical system is operating at 60% capacity.

The natural gas system is operating at 70% capacity.

The sewage system is currently operating at near capacity.

Previous BRAC decisions will not require expansion of environmental facilities.

Programmed projects will increase sewage capacity by approximately 15%.

Source Citation: Deputy Site Manager, Public Works Center - Virginia Beach Site

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

No, NAS Oceana has no capacity limitations which pose a hinderance to current or future operations.

Source Citation: Deputy Site Manager, Public Works Center - Virginia Beach Site

5. AIR POLLUTION

5a.

What is the name of the Air Quality Control Areas (AQCAs) in which the base is located?

Hampton Roads Intrastate, Region 6

Is the installation or any of its OLFs or non-contiguous base properties located in different AQCAs? **Yes** . List site, location and name of AQCA.

1. Dare County Bombing Range, Dare County, North Carolina is in the Dare County AQCA

Source Documentation: Department of Environmental Quality, Commonwealth of Virginia. North Carolina Department of Environment, Health and Natural Resources, Division of Environmental Management.

5b. For each parcel in a separate AQCA fill in the following table. Identify with an "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: NAS Oceana, Virginia Beach, Virginia
 NALF Fentress, Chesapeake, Virginia
 AQCA: Hampton Roads Intrastate

Pollutant	Attainment	Non-Attainment	Maintenance	Target Attainment Year ¹	Comments ²
CO	X	--	--	--	--
Ozone	--	Marginal ³	--	Nov 15, 1993	Under EPA review
PM-10	X	--	--	--	--
SO ₂	X	--	--	--	--
NO ₂	X	--	--	--	--
Pb	X	--	--	--	--

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

²Indicate if attainment is dependent upon BRACON, MILCON or Special Projects. Also indicate if the project is currently programmed within the President's FY1997 budget.

³The EPA has classified the Hampton Roads area as a marginal nonattainment area for ozone. In accordance with EPA regulations, Hampton Roads did not meet marginal requirements by November 15, 1993. The Hampton Roads AQCA area is currently under review by the EPA.

Source Documentation: Department of Environmental Quality, Commonwealth of Virginia.

Site: Dare County Bombing Range, Dare County, North Carolina

AQCA: Dare County

Pollutant	Attainment	Non-Attainment	Maintenance	Target Attainment Year ¹	Comments ²
CO	X	--	--	--	--
Ozone	³	--	--	--	--
PM-10	X	--	--	--	--
SO ₂	X	--	--	--	--
NO ₂	X	--	--	--	--
Pb	X	--	--	--	--

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

²Indicate if attainment is dependent upon BRACON, MILCON or Special Projects. Also indicate if the project is currently programmed within the Presidents FY1997 budget.

³Dare County is classified by the EPA as an "unclassified/attainment" area

Source Documentation: North Carolina Department of Environment, Health and Natural Resources, Division of Environmental Management.

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, NO_x, 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.

NAS Oceana 1992 Data		1992 Emission Sources (Tons/Year) ¹			
Pollutant	Permitted Stationary ² (tpy)	Personal Automobiles ³ (tpy)	Aircraft Emissions ⁴ (tpy)	Other Mobile ⁵ (tpy)	Total
CO	7.1	unavailable	6,109	184.37	6300
NO _x	28.80	unavailable	1,897	667.67	2593
VOC	0.52	unavailable	2,110	67.37	2177
PM10	4.48	unavailable	2,216	65.28	2285

Source Document: Various sources. Please see source documentation for individual notes.

¹Mobile sources are not currently regulated by the Commonwealth of Virginia. Test cell operations are classified as mobile sources since engines being tested are not permanently attached to facility.

²The following is a listing of stationary sources at NAS Oceana which are currently permitted by the Commonwealth of Virginia.

NAS Oceana's Permitted Stationary Sources
Emissions Based on 1992 Baseline Survey

SOURCE	CO (tpy)	NOX (tpy)	VOC (tpy)	PM10 (tpy)	COMMENTS
14.6 MMBTU/HR, C-B NAT. GAS OR #2 HOUSING BOILER (BOIL-002)	0.19 (cal a)	0.77 (cal b)	0.01 (cal c)	0.07 (cal d)	No #2 burned. Boiler deactivated 8/93.
14.6 MMBTU/HR, C-B NAT. GAS OR #2 HOUSING BOILER (BOIL-003)	0.19 (cal a)	0.77 (cal b)	0.01 (cal c)	0.07 (cal d)	No #2 burned. Boiler deactivated 8/93. Assume same usage as BOIL-002
14.6 MMBTU/HR, C-B NAT. GAS OR #2 HOUSING BOILER (BOIL-004)	0.19 (cal a)	0.77 (cal b)	0.01 (cal c)	0.07 (cal d)	No #2 burned. Boiler deactivated 8/93. Assume same usage as BOIL-003
70 MMBTU/HR, NATURAL GAS BASE HEATING BOILER (BOIL-005)	N/A	N/A	N/A	N/A	Boiler not activated until 3/94.
70 MMBTU/HR, NAT. GAS OR #4 BASE HEATING BOILER (BOIL-006)	2.61 (cal e)	10.47 (cal f)	0.19 (cal g)	1.44 (cal h)	#4 and NG burned.
70 MMBTU/HR, NAT. GAS OR #4 BASE HEATING BOILER (BOIL-007)	1.94 (cal i)	7.77 (cal j)	0.15 (cal k)	0.99 (cal l)	#4 and NG burned.
70 MMBTU/HR, NAT. GAS OR #4 BASE HEATING BOILER (BOIL-008)	2.06 (cal m)	8.25 (cal n)	0.15 (cal o)	1.04 (cal p)	#4 and NG burned.
PLASTIC MEDIA BLASTING BOOTH (ABRA-001)	N/A	N/A	N/A	0.80 (cal q)	
TOTAL	7.18	28.80	0.52	4.48	

All calculations based on fuel consumed and AP-42 emission factors for 1992 except for the plastic media blasting booth which is calculated using a mass balance equation.

Emissions based on amt of fuel burned (lb/mmcf or lb/mgal) (x) emission factor (-) 2000 lb/ton

Cal a: (Natural Gas) 11.01 mmcf (x) 35 lb/mmcf (-) 2000 = 0.19 tpy.	Cal i: (Natural Gas) 98.071 mmcf (x) 35 lb/mmcf (-) 2000 = 1.72 tpy
Cal b: (Natural Gas) 11.01 mmcf (x) 140 lb/mmcf (-) 2000 = 0.77 tpy.	(#4 Oil) 90.564 mgal (x) 5 lb/mgal (-) 2000 = 0.22 tpy
Cal c: (Natural Gas) 11.01 mmcf (x) 2.8 lb/mmcf (-) 2000 = 0.01 tpy.	Cal j: (Natural Gas) 98.071 mmcf (x) 140 lb/mmcf (-) 2000 = 6.86 tpy
Cal d: (Natural Gas) 11.01 mmcf (x) 13.7 lb/mmcf (-) 2000 = 0.07 tpy.	(#4 Oil) 90.564 mgal (x) 20 lb/mgal (-) 2000 = 0.90 tpy
Cal e: (Natural Gas) 125.99 mmcf (x) 35 lb/mmcf (-) 2000 = 2.20 tpy	Cal k: (Natural Gas) 98.071 mmcf (x) 2.8 lb/mmcf (-) 2000 = 0.14 tpy
(#4 Oil) 165.135 mgal (x) 5 lb/mgal (-) 2000 = 0.41 tpy.	(#4 Oil) 90.564 mgal (x) 0.2 lb/mgal (-) 2000 = 0.01 tpy
Cal f: (Natural Gas) 125.99 mmcf (x) 140 lb/mmcf (-) 2000 = 8.82 tpy	Cal l: (Natural Gas) 98.071 mmcf (x) 13.7 lb/mmcf (-) 2000 = 0.67 tpy
(#4 Oil) 165.135 (x) 20 lb/mgal (-) 2000 = 1.65 tpy	(#4 Oil) 90.564 mgal (x) 7 lb/mgal (-) 2000 = 0.32 tpy
Cal g: (Natural Gas) 125.99 mmcf (x) 2.8 lb/mmcf (-) 2000 = 0.17 tpy	Cal m: (Natural Gas) 104.623 mmcf (x) 35 lb/mmcf (-) 2000 = 1.83 tpy
(#4 Oil) 165.135 mgal (x) 0.2 lb/mgal (-) 2000 = 0.02 tpy.	(#4 Oil) 92.92 mgal (x) 5 lb/mgal (-) 2000 = 0.23 tpy
Cal h: (Natural Gas) 125.99 mmcf (x) 13.7 lb/mmcf (-) 2000 = 0.86 tpy	Cal n: (Natural Gas) 104.623 mmcf (x) 140 lb/mmcf (-) 2000 = 7.32 tpy
(#4 Oil) 165.135 mgal (x) 7 lb/mgal (-) 2000 = 0.58 tpy.	(#4 Oil) 92.92 mgal (x) 20 lb/mgal (-) 2000 = 0.93 tpy
Cal q: (Plastic Media Blast Booth w/filer efficiency of 99%)	Cal o: (Natural Gas) 104.623 mmcf (x) 2.8 lb/mmcf (-) 2000 = 0.15 tpy
(x) 1% = 0.800 tpy	(#4 Oil) 92.92 mgal (x) 0.2 lb/mgal (-) 2000 = 0.01 tpy. 80tpy
	Cal p: (Natural Gas) 104.623 mmcf (x) 13.7 lb/mmcf (-) 2000 = 0.72 tpy
	(#4 Oil) 92.92 mgal (x) 7 lb/mgal (-) 2000 = 0.32 tpy.

Source Document: Phase II Emission Inventory, Draft Report by Roy F. Weston. This is NAS Oceana's baseline survey for Title V permitting.

³Neither the Commonwealth of Virginia nor the EPA required NAS Oceana to track personal vehicle usage in 1990. State Implementation Plans (SIPs) for the reduction of ozone did not require mileage reduction/trip reduction plans. Information for personal automobile usage is unavailable at NAS Oceana for 1990 since current database structure does not allow excess to specific yearly data. See additional info on 5D Note 6.

⁴The following is a listing of aircraft emission sources and emissions data for NAS Oceana and NALF Fentress.

**NAS Oceana's Aircraft Emission Sources
Emissions Based on 1990 Aircraft Landing/Takeoff Cycles**

AIRCRAFT TYPE	TOTAL # OF LTO CYCLES *	CO (tpy)	NOX (tpy)	VOC (tpy)	PM10 (tpy)	COMMENTS
F-14	179,096	3,571 (cal 1)	682 (cal 1)	1,554 (cal 1)	2,170 (cal 1)	1990 estimates are 196 F-14's
A-6	116,442	2,172 (cal 2)	1150 (cal 2)	552 (cal 2)	54 (cal 2)	1990 estimates are 119 A-6's
A-4	11,127	92 (cal 3)	12 (cal 3)	6 (cal 3)	N/A	
F-16	6,461	88 (cal 4)	48 (cal 4)	4 (cal 4)	0.7 (cal 4)	
F-5	4,864	186 (cal 5)	5 (cal 5)	24 (cal 5)	N/A	
TOTAL	N/A	6,109	1,897	2,110	2,216	

* NAS Oceana currently does not track LTO cycles per individual aircraft. Number of LTO Cycles has to be estimated based upon total LTO cycles at NAS Oceana multiplied by the approximate percentage of aircraft type. This information was provided by NAS Oceana Air Operations Division. Note that since LTO cycles per aircraft type are estimated, so are specific emissions.

All aircraft emission calculations are based on AP-42 emission factors except for the A-6 aircraft. AP-42 does not contain emission factors for the A-6 so emission factors for the Boeing 737 Model JT8D-17 was utilized to determine estimated emissions since the A-6 and Boeing 737 have similar engine types.

Emissions based on LTOs per year (x) emission factor (-) 2000 lb/ton

Cal 1:

(CO) 179096 LTO (x) 39.88 lb (-) 2000 = 3571 tpy
 (NOX) 179096 LTO (x) 7.62 lb (-) 2000 = 682 tpy
 (VOC) 179096 LTO (x) 17.36 lb (-) 2000 = 1554 tpy
 (PM) 179096 LTO (x) 24.24 lb (-) 2000 = 2170 tpy

Cal 3:

(CO) 11127 LTO (x) 16.62 lb (-) 2000 = 92.46 tpy
 (NOX) 11127 LTO (x) 2.15 lb (-) 2000 = 11.96 tpy
 (VOC) 11127 LTO (x) 1.10 lb (-) 2000 = 6.11 tpy
 (PM) No emissions data in AP-42

Cal 2:

(Based on Boeing 737 aircraft not A-6 aircraft)
 (CO) 116442 LTO (x) 37.3 lb (-) 2000 = 2172 tpy
 (NOX) 116442 LTO (x) 19.76 lb (-) 2000 = 1150 tpy
 (VOC) 116442 LTO (x) 8.96 lb (-) 2000 = 522 tpy
 (PM) 116442 LTO (x) 0.78 lb (-) 2000 = 45 tpy

Cal 4:

(CO) 6461 LTO (x) 27.20 lb (-) 2000 = 87.87 tpy
 (NOX) 6461 LTO (x) 14.98 lb (-) 2000 = 48.39 tpy
 (VOC) 6461 LTO (x) 1.34 lb (-) 2000 = 4.33 tpy
 (PM) 6461 LTO (x) 0.22 lb (-) 2000 = 0.7 tpy

Source Document: Phase II Emission Inventory, Draft report by Roy F. Weston.

Cal 5:

(CO) 4864 LTO (x) 76.64 lb (-) 2000 = 186 tpy
 (NOX) 4864 LTO (x) 2.10 lb (-) 2000 = 5.1 tpy
 (VOC) 4864 LTO (x) 10.04 lb (-) 2000 = 24.41 tpy
 (PM) No emissions data in AP-42

⁵The following is a listing of mobile sources (Ground Support Equipment) at NAS Oceana.

NAS Oceana's Mobile Sources (Ground Support Equipment)

Emissions Based on 1992 Baseline Survey

SOURCE	VOC (tpy)	NOX (tpy)	CO (tpy)	PM10 (tpy)	COMMENTS
GTC-85 (21 Units) (ICGM-001)	4.52 (cal a)	55.43 (cal a)	11.94 (cal a)	3.90 (cal a)	
NCPP-105/A/M47A (29 Units) (ICGM-002)	6.25 (cal b)	76.54 (cal b)	16.49 (cal b)	5.38 (cal b)	
MB-2/TA-35 (2 Units) (ICGM-003)	0.43 (cal c)	5.28 (cal c)	1.14 (cal c)	0.37 (cal c)	
A-75 (21 Units) (ICGM-004)	4.52 (cal d)	55.43 (cal d)	11.94 (cal d)	3.90 (cal d)	
D-3 (23 Units) (ICGM-005)	4.96 (cal e)	60.71 (cal e)	13.08 (cal e)	4.27 (cal e)	
SA32P16/A/S32A (29 Units) (ICGM-006)	6.25 (cal f)	76.54 (cal f)	16.49 (cal f)	5.38 (cal f)	
HLU-196 (42 Units) (ICGM-007)	9.05 (cal g)	110.85 (cal g)	23.88 (cal g)	7.79 (cal g)	
LITE CART (15 Units) (ICGM-008)	3.23 (cal h)	39.59 (cal h)	8.53 (cal h)	2.78 (cal h)	
A/M27T-5 (15 Units) (ICGM-009)	3.23 (cal i)	39.59 (cal i)	8.53 (cal i)	2.78 (cal i)	
NC-8/NC-8A1 (34 Units) (ICGM-010)	7.33 (cal j)	89.74 (cal j)	19.33 (cal j)	6.31 (cal j)	
NC-10 (12 Units) (ICGM-011)	2.59 (cal k)	31.69 (cal k)	6.82 (cal k)	2.23 (cal k)	
TOTAL	52.36	641.39	138.17	45.09	

AP-42 does not address emissions from airport service equipment. AP-42 emission factors for small diesel engines were used for calculation purposes. Actual fuel consumption data for ground support equipment is currently not available at NAS Oceana. Emission estimates are based on an assumption that all equipment consumes, on an average, approximately 8 gal fuel per hour with operating parameters of 3 hour per day, 7 days per week, and 52 weeks per year for each piece of equipment. This assumption is based on an estimate usage and fuel consumption for an NC-8 and has been applied to all other GSE for the purpose of emission estimates.

Emission factors based on amount of fuel burned (MMBtu/yr) (x) emission factor (-) 2000 lb/ton (x) number of units available.

Cal a:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 21 units = 4.52 tpy
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 21 units = 55.43
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 21 units = 11.94

Cal g:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 42 units = 9.05
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 42 units = 110.85
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 42 units = 23.88

(PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 21 units = 3.90

(PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 42 units = 7.79

Cal b:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 29 units = 6.25
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 29 units = 76.54
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 29 units = 16.49
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 29 units = 5.38

Cal h:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 15 units = 3.23
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 15 units = 39.59
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 15 units = 8.53
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 15 units = 2.78

Cal c:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 2 units = 0.43
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 2 units = 5.28
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 2 units = 1.14
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 2 units = 0.37

Cal i:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 15 units = 3.23
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 15 units = 39.59
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 15 units = 8.53
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 15 units = 2.78

Cal d:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 21 units = 4.52
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 21 units = 55.43
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 21 units = 11.94
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 21 units = 3.90

Cal j:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 34 units = 7.33
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 34 units = 89.74
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 34 units = 19.33
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 34 units = 6.31

Cal e:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 23 units = 4.96
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 23 units = 60.71
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 23 units = 13.08
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 23 units = 4.27

Cal k:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 12 units = 2.59
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 12 units = 31.69
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 12 units = 6.82
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 12 units = 2.23

Cal f:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 29 units = 6.25
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 29 units = 76.54
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 29 units = 16.49
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 29 units = 5.38

Source Document: Phase II Emission Inventory, Draft Report by Roy F. Weston.

The following is a listing of mobile sources (Portable Generators/Fleet Vehicles/Test Cell Operations) at NAS Oceana.

NAS Oceana's Mobile Sources (Portable Generators/Fleet Vehicles/Test Cell)
Emissions Based on 1992 Baseline Survey

SOURCE	CO (tpy)	NOX (tpy)	VOC (tpy)	PM10 (tpy)	COMMENTS
Cummings/White Portable Generator (10 Units)	7.23 (cal l)	3.36 (cal l)	0.23 (cal l)	0.27 (cal l)	10 portable generators available.
Fleet Vehicles (PWC Automobiles)	un-available	un-available	un-available	un-available	
Fleet Vehicles (PWC Heavy Equipment)	un-available	un-available	un-available	un-available	
Turbojet Engine Testing J-52	8.37 (cal m)	2.93 (cal m)	2.67 (cal m)	N/A (cal m)	
Turbojet Engine Testing F-110	2.05 (cal n)	8.44 (cal n)	0.56 (cal n)	N/A (cal n)	
Turbojet Engine Testing TF-30	28.55 (cal o)	11.55 (cal o)	11.55 (cal o)	19.92 (cal o)	
TOTAL	46.20	26.28	15.01	20.19	

Emission estimates are not available for fleet vehicles for 1993 calendar year. PWC, Va. Beach Site. Transportation Division has a current inventory of fleet vehicles but does not have the capability to perform record checks for type of vehicles and mileage available from previous years. Fleet vehicle information prior to 1992 is not available due to an incomplete database. Emission estimates for portable generators are based on average MMBtu/yr for an estimated 10 portable generators with varying operational schedules. Emission estimates for engine testing operations are obtained from actual fuel consumption inventories.

Emission factor for portable generators based on amt of fuel burned (mmbtu) (x) emission factor (-) 2000 lb/ton
Emission factor for turbojet engines based on amt of fuel burned (mgal) (x) emission factor (x) density JP-5 (-) 2000 lb/ton

Cal l:
(CO) 1522.27 mmbtu (x) 0.95 (-) 2000 (x) 10 = 7.23 tpy
(NOX) 1522.27 mmbtu (x) 4.41 (-) 2000 (x) 10 = 3.36 tpy
(VOC) 1522.27 mmbtu (x) 0.31 (-) 2000 (x) 10 = 0.23 tpy
(PM) 1522.27 mmbtu (x) 0.36 (-) 2000 (x) 10 = 0.27 tpy

Cal m:
(CO) 111.92 mgal (x) 22.02 (x) 6.79 (-) 2000 = 8.37 tpy
(NOX) 111.97 mgal (x) 7.71 (x) 6.79 (-) 2000 = 2.93 tpy
(VOC) 111.97 mgal (x) 7.02 (x) 6.79 (-) 2000 = 2.67 tpy
(PM) No emissions data in AP-42

Cal n:
(CO) 152.36 mgal (x) 3.96 (x) 6.79 (-) 2000 = 2.05 tpy
(NOX) 152.36 mgal (x) 16.32 (x) 6.79 (-) 2000 = 8.44 tpy
(VOC) 152.36 mgal (x) 1.08 (x) 6.79 (-) 2000 = 0.56 tpy
(PM) No emissions data in AP-42

Cal o:
(CO) 334.74 mgal (x) 25.12 (x) 6.79 (-) 2000 = 28.55 tpy
(NOX) 334.74 mgal (x) 10.16 (x) 6.79 (-) 2000 = 11.55 tpy
(VOC) 334.74 mgal (x) 10.16 (x) 6.79 (-) 2000 = 11.55 tpy
(PM) 334.74 mgal (x) 17.53 (x) 6.79 (-) 2000 = 19.92 tpy

Source Document: Phase II Emission Inventory, Draft Report by Roy F. Weston. Portable generator fuel consumption information obtained from PWC, Va. Beach Site, Transportation Division. Fleet vehicle information obtained from PWC, Va. Beach Site, Transportation Division. Fuel consumption for engine test cell operations obtained from NAS Oceana, AIMD, Test Cell Division.

5d. For your base, determine the total FY 1993 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.

Pollutant	1993 Emission Sources (Tons/Year) ¹				
	Permitted Stationary (tpy) ²	Personal Automobiles (tpy) ³	Aircraft Emissions (tpy) ⁴	Other Mobile (tpy) ⁵	Total
CO	6.81	531.5	5501	368	6407.31
NOx	27.24	65.1	1639	1057	2788.34
VOC	0.57	47.5	1955	106	2109.07
PM10	3.70	N/A	2141	97	2241.70

¹Mobile sources are not currently regulated by the Commonwealth of Virginia. Test cell operations are classified as mobile sources since engines being tested are not permanently attached to facility.

Personal Automobiles

Assumptions

- average trip to/from work = 30 mi/day
- average age of personal vehicle = 4 yrs.
- average odometer reading = 50,000 mi
- average work year = 240 days
- 9170 vehicles/day (estimate from Base Engineering Dept.)

From AP42 II Table 1.1.1.b.

Emission factors

VOC = 0.653 g/mi

CO = 7.310 g/mi
NOx = 0.895 g/mi
PM10 = N/A

(9170 veh) (240 day) (30 mi) (1 lb) (1 ton) (emission factor) =
(day) (yr) (day) (454 yr) (2000 lb)

VOC = 47.5
CO = 531.5
NOx = 65.1

²The following is a listing of stationary sources at NAS Oceana which are currently permitted by the Commonwealth of Virginia.

NAS Oceana's Permitted Stationary Sources
Emissions Based on 1993 Inventories

SOURCE	CO (tpy)	NOX (tpy)	VOC (tpy)	PM10 (tpy)	COMMENTS
14.6 MMBTU/HR, C-B NAT. GAS OR #2 HOUSING BOILER (BOIL-002)	0.05 (calc a)	0.21 (calc b)	0.02 (calc c)	0.03 (calc d)	#2 and NG burned. Boiler deactivated 8/93.
14.6 MMBTU/HR, C-B NAT. GAS OR #2 HOUSING BOILER (BOIL-003)	0.05 (calc a)	0.21 (calc b)	0.02 (calc c)	0.03 (calc d)	#2 and NG burned. Boiler deactivated 8/93. Assume same usage as BOIL-002
14.6 MMBTU/HR, C-B NAT. GAS OR #2 HOUSING BOILER (BOIL-004)	0.05 (calc a)	0.21 (calc b)	0.02 (calc c)	0.03 (calc d)	#2 and NG burned. Boiler deactivated 8/93. Assume same usage as BOIL-003
70 MMBTU/HR, NATURAL GAS BASE HEATING BOILER (BOIL-005)	N/A	N/A	N/A	N/A	Boiler not activated until 3/94.
70 MMBTU/HR, NAT. GAS OR #4 BASE HEATING BOILER (BOIL-006)	2.2 (calc e)	8.87 (calc f)	0.17 (calc g)	1.05 (calc h)	#4 and NG burned.
70 MMBTU/HR, NAT. GAS OR #4 BASE HEATING BOILER (BOIL-007)	2.21 (calc e)	8.87 (calc f)	0.17 (calc g)	1.05 (calc h)	#4 and NG burned. Assume same usage as BOIL-006
70 MMBTU/HR, NAT. GAS OR #4 BASE HEATING BOILER (BOIL-008)	2.21 (calc e)	8.87 (calc f)	0.17 (calc g)	1.05 (calc h)	#4 and NG burned. Assume same usage as BOIL-007
PLASTIC MEDIA BLASTING BOOTH (ABRA-001)	N/A	N/A	N/A	0.46 (calc i)	
TOTAL	6.81	27.24	0.57	3.70	

All calculations based on fuel consumed and AP-42 emission factors for 1993 except for the plastic media blasting booth which is calculated using a mass balance equation. Emissions based on amt of fuel burned (lb/mmcf or lb/mgal) (x) emission factor (-) 2000 lb/ton

- Cal a: (Natural Gas) 2.31 mmcf (x) 35 lb/mmcf (-) 2000 = 0.04 tpy.
 (#2 Oil) 5 mgal (x) 5 lb/mgal (-) 2000 = 0.01 tpy.
- Cal b: (Natural Gas) 2.31 mmcf (x) 140 lb/mmcf (-) 2000 = 0.16 tpy.
 (#2 Oil) 5 mgal (x) 20 lb/mgal (-) 2000 = 0.05 tpy.
- Cal c: (Natural Gas) 2.31 mmcf (x) 2.8 lb/mmcf (-) 2000 = 0.01 tpy
 (#2 Oil) 5 mgal (x) .2 lb/mgal (-) 2000 = .01 tpy
- Cal d: (Natural Gas) 2.31 mmcf (x) 13.7 lb/mmcf (-) 2000 = 0.01 tpy.
 (#2 Oil) 5 mgal (x) 10 lb/mgal (-) 2000 = 0.02 tpy
- Cal e: (Natural Gas) 116 mmcf (x) 35 lb/mmcf (-) 2000 = 2.03 tpy
 (#4 Oil) 75.11 mgal (x) 5 lb/mgal (-) 2000 = 0.19 tpy.
- Cal f: (Natural Gas) 116 mmcf (x) 140 lb/mmcf (-) 2000 = 8.12 tpy
 (#4 Oil) 75.11 mgal (x) 20 lb/mgal (-) 2000 = 0.75 tpy.
- Cal g: (Natural Gas) 116 mmcf (x) 2.8 lb/mmcf (-) 2000 = 0.16 tpy
 (#4 Oil) 75.11 mgal (x) 0.2 lb/mgal (-) 2000 = 0.01 tpy.
- Cal h: (Natural Gas) 116 mmcf (x) 13.7 lb/mmcf (-) 2000 = 0.79 tpy
 (#4 Oil) 75.11 mgal (x) 7 lb/mgal (-) 2000 = 0.26 tpy.
- Cal i: (Plastic Media Blast Booth with Filter Efficiency of 99%) 46.20 tpy (x) 1% = 0.462 tpy

Source Document: Commonwealth of Virginia, Department of Environmental Quality, 1993 Emission Statement Form (16 March 94, Ward). Fuel consumption information obtained from PWC, Va. Beach Site, Utilities Division. Plastic media consumption obtained from AIMD, GSE.

³Neither the Commonwealth of Virginia nor the EPA required NAS Oceana to track personal vehicle usage in 1993. State Implementation Plans (SIPs) for the reduction of ozone do not require mileage reduction/trip reduction plans. Information for personal automobile usage is unavailable for 1993.

To properly determine emissions from personal automobiles, AP-42 requires that model year and mileage information be obtained for vehicles traveling to NAS Oceana. In addition, a record of the average number of vehicles traveling to NAS Oceana for FY 93 would have to be obtained so that total emissions could be calculated.

NAS Oceana currently does not keep records in such detail as to allow for specific analysis of vehicle movement. NAS Oceana security keeps track of all vehicles registered at NAS Oceana including civil service personnel, active duty military, retired personnel and contractors. The current FY 94 listing is quite extensive with approximately 30,000 cars registered at NAS Oceana. NAS Oceana is currently unable to distinguish which of the registered vehicles visits NAS Oceana on a regular basis or which visit on an infrequent basis (ie. contractor and retired personnel). In addition, NAS Oceana does not believe that it is feasible to obtain personal vehicle mileage which is needed to accurately determine emissions for specific model years.

Calculations for the emissions of vehicles from personal automobiles for 1993 has not been calculated since emission estimates from current available data would not be realistic or representative of the total personal automobile emissions.

⁴The following is a listing of aircraft emission sources and emissions data for NAS Oceana and NALF Fentress.

**NAS Oceana's Aircraft Emission Sources
Emissions Based on 1993 Aircraft Landing/Takeoff Cycles**

AIRCRAFT TYPE	TOTAL # OF LTO CYCLES *	CO (tpy)	NOX (tpy)	VOC (tpy)	PM10 (tpy)	COMMENTS
F-14	173,654	3,462 (cal 1)	661 (cal 1)	1,507 (cal 1)	2,104 (cal 1)	1993 estimates are 167 F-14's
A-6	94,317	1,759 (cal 2)	932 (cal 2)	422 (cal 2)	37 (cal 2)	1993 estimates are 91 A-6's
A-4	11,155	93 (cal 3)	12 (cal 3)	6 (cal 3)	N/A	
F-16	4,056	55 (cal 4)	30 (cal 4)	3 (cal 4)	0.44 (cal 4)	
F-5	3,448	132 (cal 5)	4 (cal 5)	17 (cal 5)	N/A	
TOTAL	N/A	5,501	1,639	1,955	2,141	

*NAS Oceana currently does not track LTO cycles per individual aircraft. Number of LTO Cycles has to be estimated based upon total LTO cycles at NAS Oceana multiplied by the approximate percentage of aircraft type. This information was provided by NAS Oceana Air Operations Division. Note that since LTO cycles per aircraft type are estimated, so are specific emissions.

All aircraft emission calculations are based on AP-42 emission factors except for the A-6 aircraft. AP-42 does not contain emission factors for the A-6 so emission factors for the Boeing 737 Model JT8D-17 was utilized to determine estimated emissions since the A-6 and the Boeing 737 have similar engine types.

Emissions based on LTO per year (x) emission factor (-) 2000 lb/year

Cal 1:

(CO) 173654 LTO (x) 39.88 lb (-) 2000 = 3462 tpy
 (NOX) 173654 LTO (x) 7.62 lb (-) 2000 = 661 tpy
 (VOC) 173654 LTO (x) 17.36 lb (-) 2000 = 1507 tpy
 (PM) 173654 LTO (x) 24.24 lb (-) 2000 = 2104 tpy

Cal 3:

(CO) 11,155 LTO (x) 16.62 lb (-) 2000 = 92.69 tpy
 (NOX) 11,155 LTO (x) 2.15 lb (-) 2000 = 11.99 tpy
 (VOC) 11,155 LTO (x) 1.10 lb (-) 2000 = 6.13 tpy
 (PM) No emissions data in AP-42

Cal 2:

(Based on the Boeing 747 aircraft not A-6 aircraft)
 (CO) 94317 LTO (x) 37.3 lb (-) 2000 = 1759 tpy
 (NOX) 94317 LTO (x) 19.76 lb (-) 2000 = 932 tpy
 (VOC) 94317 LTO (x) 8.96 lb (-) 2000 = 422 tpy
 (PM) 94317 LTO (x) 0.78 (-) 2000 = 37 tpy

Cal 4:

(CO) 4056 LTO (x) 27.20 lb (-) 2000 = 55.16 tpy
 (NOX) 4056 LTO (x) 14.98 lb (-) 2000 = 30.37 tpy
 (VOC) 4056 LTO (x) 1.34 lb (-) 2000 = 2.72 tpy
 (PM) 4056 LTO (x) 0.22 lb (-) 2000 = 0.44 tpy

Source Document:
 emission factors (Ward).

Cal 5:

(CO) 3448 LTO (x) 76.64 lb (-) 2000 = 132 tpy
 (NOX) 3448 LTO (x) 2.10 lb (-) 2000 = 3.6 tpy
 (VOC) 3448 LTO (x) 10.04 lb (-) 2000 = 17.3 tpy
 (PM) No emissions data in AP-42

AP-42,

⁵The following is a listing of mobile sources (Ground Support Equipment) at NAS Oceana.

**NAS Oceana's Mobile Sources (Ground Support Equipment)
 Emissions Based on 1993 Inventory**

SOURCE	VOC (tpy)	NOX (tpy)	CO (tpy)	PM10 (tpy)	COMMENTS
GTC-85 (21 Units) (ICGM-001)	4.52 (cal a)	55.43 (cal a)	11.94 (cal a)	3.90 (cal a)	
NCPP-105/A/M47A (29 Units) (ICGM-002)	6.25 (cal b)	76.54 (cal b)	16.49 (cal b)	5.38 (cal b)	
MB-2/TA-35 (2 Units) (ICGM-003)	0.43 (cal c)	5.28 (cal c)	1.14 (cal c)	0.37 (cal c)	
A-75 (21 Units) (ICGM-004)	4.52 (cal d)	55.43 (cal d)	11.94 (cal d)	3.90 (cal d)	
D-3 (23 Units) (ICGM-005)	4.96 (cal e)	60.71 (cal e)	13.08 (cal e)	4.27 (cal e)	
SA32P16/A/S32A (29 Units) (ICGM-006)	6.25 (cal f)	76.54 (cal f)	16.49 (cal f)	5.38 (cal f)	

HLU-196 (42 Units) (ICGM-007)	9.05 (cal g)	110.85 (cal g)	23.88 (cal g)	7.79 (cal g)	
LITE CART (15 Units) (ICGM-008)	3.23 (cal h)	39.59 (cal h)	8.53 (cal h)	2.78 (cal h)	
A/M27T-5 (15 Units) (ICGM-009)	3.23 (cal i)	39.59 (cal i)	8.53 (cal i)	2.78 (cal i)	
NC-8/NC-8A1 (34 Units) (ICGM-010)	7.33 (cal j)	89.74 (cal j)	19.33 (cal j)	6.31 (cal j)	
NC-10 (12 Units) (ICGM-011)	2.59 (cal k)	31.69 (cal k)	6.82 (cal k)	2.23 (cal k)	
TOTAL	52.36	641.39	138.17	45.09	

AP-42 does not address emissions from airport service equipment. AP-42 emission factors for small diesel engines were used for calculation purposes. Actual fuel consumption data for ground support equipment is currently not available at NAS Oceana. Emission estimates are based on the 1992 assumption that all equipment consumes, on an average, approximately 8 gal fuel per hour with operating parameters of 3 hour per day, 7 days per week, and 52 weeks per year for each piece of equipment. This assumption is based on an estimate usage and fuel consumption for an NC-8 and has been applied to all other GSE for the purpose of emission estimates.

Emission factors based on amount of fuel burned (MMBtu/yr) (x) emission factor (-) 2000 lb/ton (x) number of units available.

Cal a:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 21 units = 4.52 tpy
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 21 units = 55.43
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 21 units = 11.94
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 21 units = 3.90

Cal g:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 42 units = 9.05
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 42 units = 110.85
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 42 units = 23.88
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 42 units = 7.79

Cal b:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 29 units = 6.25
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 29 units = 76.54
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 29 units = 16.49
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 29 units = 5.38

Cal h:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 15 units = 3.23
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 15 units = 39.59
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 15 units = 8.53
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 15 units = 2.78

Cal c:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 2 units = 0.43
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 2 units = 5.28
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 2 units = 1.14
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 2 units = 0.37

Cal i:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 15 units = 3.23
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 15 units = 39.59
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 15 units = 8.53
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 15 units = 2.78

Cal d:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 21 units = 4.52
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 21 units = 55.43
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 21 units = 11.94
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 21 units = 3.90

Cal j:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 34 units = 7.33
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 34 units = 89.74
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 34 units = 19.33
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 34 units = 6.31

Cal e:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 23 units = 4.96
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 23 units = 60.71
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 23 units = 13.08
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 23 units = 4.27

Cal k:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 12 units = 2.59
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 12 units = 31.69
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 12 units = 6.82
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 12 units = 2.23

Cal f:

(VOC) 1197 MMBtu/yr (x) 0.36 (-) 2000 x 29 units = 6.25
 (NOX) 1197 MMBtu/yr (x) 4.41 (-) 2000 x 29 units = 76.54
 (CO) 1197 MMBtu/yr (x) 0.95 (-) 2000 x 29 units = 16.49
 (PM) 1197 MMBtu/yr (x) 0.31 (-) 2000 x 29 units = 5.38

Source Document: Phase II Emission Inventory, Draft Report by Roy F. Weston.

*The following is a listing of mobile sources (Portable Generators/Fleet Vehicles/Test Cell Operations) at NAS Oceana.

NAS Oceana's Mobile Sources (Portable Generators/Fleet Vehicles/Test Cell)
 Emissions Based on 1993 Inventory

SOURCE	CO (tpy)	NOX (tpy)	VOC (tpy)	PM10 (tpy)	COMMENTS
Cummings/White Portable Generator (10 Units)	7.23 (cal l)	3.36 (cal l)	0.23 (cal l)	0.27 (cal l)	10 portable generators available. Assume operation same as 1993.
Fleet Vehicles (PWC Automobiles)	13.13 see cal m)	1.58 (cal m)	1.15 (cal m)	N/A (cal m)	Assume each vehicle travels 6104 miles/year
Fleet Vehicles (PWC Heavy Equipment)	175.90 (cal n)	447 (cal n)	40.20 (cal n)	36.76 (cal n)	
Turbojet Engine Testing J-52	8.82 (cal o)	3.09 (cal o)	2.81 (cal o)	N/A (cal o)	
Turbojet Engine Testing F-110	2.85 (cal p)	11.76 (cal p)	0.78 (cal p)	N/A (cal p)	
Turbojet Engine Testing TF-30	22.11 (cal q)	8.94 (cal q)	8.94 (cal q)	15.43 (cal q)	
TOTAL	230.04	475.73	54.11	52.46	

Emission estimates for fleet vehicles are based on 1994 inventory with 1993 data extrapolated from database. AP-42 emission data for light duty gasoline powered vehicles were used for all fleet automobiles with an estimation that each vehicle travels 6104 miles per year. Emissions for each type of heavy equipment were not calculated. All equipment was assumed to be in the miscellaneous category in the AP-42 emission data for heavy duty diesel powered construction equipment and therefore calculations are estimated to be conservative. All heavy equipment was assumed to travel 3052 miles per year and burn approximately 0.27 lb/hr of fuel. Emission estimates for portable generators were based on the average MMBtu/yr for an estimated 10 portable generators with varying operational schedules. Emission estimates for engine testing operations were obtained from actual fuel consumption inventories.

Emissions for portable generators are based on fuel burned (mmbtu) (x) emission factor (-) 2000 lb/ton.
 Emissions for fleet vehicles are based on number of miles traveled (miles/year) (x) emission factor (-) 454 grams/lb (-) 2000 lbs/ton (x) number of vehicles.
 Emissions for construction equipment are based on fuel consumed (lb/hr) (x) emission factor (x) conversion factor for lb/hr to tpy (4.38) (x) number of vehicles.
 Emissions for turbo engine testing are based on fuel burned (mgal) (x) emission factor (x) density JP-5 (lb/gal) (-) 2000 lb/ton.

Cal l:

(CO) 1522.27 mmbtu (x) 0.95 (-) 2000 (x) 10 = 7.23 tpy
 (NOX) 1522.27 mmbtu (x) 4.41 (-) 2000 (x) 10 = 3.36 tpy
 (VOC) 1522.27 mmbtu (x) 0.31 (-) 2000 (x) 10 = 0.23 tpy
 (PM) 1522.27 mmbtu (x) 0.36 (-) 2000 (x) 10 = 0.27 tpy

Cal m:

See individual calculations on next page
 (CO)
 (NOX)
 (VOC)
 (PM)

Cal n:

(CO) 0.27 lb/hr (x) 0.67 (x) 4.38 (x) 222 = 175.90 tpy
 (NOX) 0.27 lb/hr (x) 1.69 (x) 4.38 (x) 222 = 446.97 tpy
 (VOC) 0.27 lb/hr (x) 0.15 (x) 4.38 (x) 222 = 40.20 tpy
 (PM) 0.27 lb/hr (x) 0.14 (x) 4.38 (x) 222 = 36.76 tpy

Cal o:

(CO) 118.01 mgal (x) 22.02 (x) 6.79 (-) 2000 = 8.82 tpy
 (NOX) 118.01 mgal (x) 7.71 (x) 6.79 (-) 2000 = 3.09 tpy
 (VOC) 118.01 mgal (x) 7.02 (x) 6.79 (-) 2000 = 2.81 tpy
 (PM) No emissions data in AP-42

Cal p:

(CO) 212.30 mgal (x) 3.96 (x) 6.79 (-) 2000 = 2.85 tpy
 (NOX) 212.30 mgal (x) 16.32 (x) 6.79 (-) 2000 = 11.76 tpy
 (VOC) 212.30 mgal (x) 1.08 (x) 6.79 (-) 2000 = 0.78 tpy
 (PM) No emissions data in AP-42

Cal q:

(CO) 259.23 mgal (x) 25.12 (x) 6.79 (-) 2000 = 22.11 tpy
 (NOX) 259.23 mgal (x) 10.16 (x) 6.79 (-) 2000 = 8.94 tpy
 (VOC) 259.23 mgal (x) 10.16 (x) 6.79 (-) 2000 = 8.94 tpy
 (PM) 259.23 mgal (x) 17.53 (x) 6.79 (-) 2000 = 15.43 tpy

Source Document: Phase II Emission Inventory, Draft Report by Roy F. Weston. Portable generator fuel consumption information obtained from PWC, Va. Beach Site, Transportation Division. Fleet vehicle information obtained from PWC, Va. Beach Site, Transportation Division. Fuel consumption for engine test cell operations obtained from NAS Oceana, AIMD, Test Cell Division.

Cal m:

1977 model with 52056 average miles
 (CO) 6104 (x) 35.05 (-) 454 (-) 2000 (x) 1 = 0.23 tpy
 (NOX) 6104 (x) 2.76 (-) 454 (-) 2000 (x) 1 = 0.02
 (VOC) 6104 (x) 2.97 (-) 454 (-) 2000 (x) 1 = 0.02
 (PM) No emissions data in AP-42

1979 model with 49181 average miles
 (CO) 6104 (x) 35.13 (-) 454 (-) 2000 (x) 1 = 0.23
 (NOX) 6104 (x) 2.76 (-) 454 (-) 2000 (x) 1 = 0.02
 (VOC) 6104 (x) 2.99 (-) 454 (-) 2000 (x) 1 = 0.02
 (PM) No emissions data in AP-42

1982 model with 43056 average miles
 (CO) 6104 (x) 8.15 (-) 454 (-) 2000 (x) 2 = 0.11
 (NOX) 6104 (x) 0.95 (-) 454 (-) 2000 (x) 2 = 0.01
 (VOC) 6104 (x) 0.68 (-) 454 (-) 2000 (x) 2 = 0.01
 (PM) No emissions data in AP-42

1984 model with 60112 average miles
 (CO) 6104 (x) 9.49 (-) 454 (-) 2000 (x) 5 = 0.32
 (NOX) 6104 (x) 1.11 (-) 454 (-) 2000 (x) 5 = 0.04
 (VOC) 6104 (x) 0.84 (-) 454 (-) 2000 (x) 5 = 0.03
 (PM) No emissions data in AP-42

1986 model with 59771 average miles
 (CO) 6104 (x) 9.13 (-) 454 (-) 2000 (x) 33 = 2.03
 (NOX) 6104 (x) 0.83 (-) 454 (-) 2000 (x) 33 = 0.18
 (VOC) 6104 (x) 0.81 (-) 454 (-) 2000 (x) 33 = 0.18
 (PM) No emissions data in AP-42

1988 model with 35589 average miles
 (CO) 6104 (x) 6.14 (-) 454 (-) 2000 (x) 13 = 0.54
 (NOX) 6104 (x) 0.83 (-) 454 (-) 2000 (x) 13 = 0.07
 (VOC) 6104 (x) 0.56 (-) 454 (-) 2000 (x) 13 = 0.05
 (PM) No emissions data in AP-42

1990 model with 14863 average miles
 (CO) 6104 (x) 4.78 (-) 454 (-) 2000 (x) 70 = 2.25
 (NOX) 6104 (x) 0.70 (-) 454 (-) 2000 (x) 70 = 0.33
 (VOC) 6104 (x) 0.37 (-) 454 (-) 2000 (x) 70 = 0.18
 (PM) No emissions data in AP-42

1978 model with 37398 average miles

(CO) 6104 (x) 30.94 (-) 454 (-) 2000 (x) 4 = 0.83
 (NOX) 6104 (x) 2.57 (-) 454 (-) 2000 (x) 4 = 0.07
 (VOC) 6104 (x) 2.53 (-) 454 (-) 2000 (x) 4 = 0.07
 (PM) No emissions data in AP-42

1980 model with 46734 average miles

(CO) 6104 (x) 14.94 (-) 454 (-) 2000 (x) 2 = 0.20
 (NOX) 6104 (x) 2.34 (-) 454 (-) 2000 (x) 2 = 0.03
 (VOC) 6104 (x) 1.39 (-) 454 (-) 2000 (x) 2 = 0.02
 (PM) No emissions data in AP-42

1983 model with 25838 average miles

(CO) 6104 (x) 6.45 (-) 454 (-) 2000 (x) 2 = 0.09
 (NOX) 6104 (x) 0.76 (-) 454 (-) 2000 (x) 2 = 0.01
 (VOC) 6104 (x) 0.67 (-) 454 (-) 2000 (x) 2 = 0.01
 (PM) No emissions data in AP-42

1985 model with 58964 average miles

(CO) 6104 (x) 9.44 (-) 454 (-) 2000 (x) 38 = 2.41
 (NOX) 6104 (x) 0.84 (-) 454 (-) 2000 (x) 38 = 0.21
 (VOC) 6104 (x) 0.83 (-) 454 (-) 2000 (x) 38 = 0.21
 (PM) No emissions data in AP-42

1987 model with 38233 average miles

(CO) 6104 (x) 6.13 (-) 454 (-) 2000 (x) 25 = 1.03
 (NOX) 6104 (x) 0.83 (-) 454 (-) 2000 (x) 25 = 0.14
 (VOC) 6104 (x) 0.56 (-) 454 (-) 2000 (x) 25 = 0.09
 (PM) No emissions data in AP-42

1989 model with 38231 average miles

(CO) 6104 (x) 6.15 (-) 454 (-) 2000 (x) 10 = 0.41
 (NOX) 6104 (x) 0.83 (-) 454 (-) 2000 (x) 10 = 0.06
 (VOC) 6104 (x) 0.56 (-) 454 (-) 2000 (x) 10 = 0.03
 (PM) No emissions data in AP-42

1991 model with 20567 average miles

(CO) 6104 (x) 4.61 (-) 454 (-) 2000 (x) 11 = 0.34
 (NOX) 6104 (x) 0.74 (-) 454 (-) 2000 (x) 11 = 0.05
 (VOC) 6104 (x) 0.43 (-) 454 (-) 2000 (x) 11 = 0.03
 (PM) No emissions data in AP-42

1992 model with 17834 average miles
 (CO) 6104 (x) 4.48 (-) 454 (-) 2000 (x) 63 = 1.90
 (NOX) 6104 (x) 0.72 (-) 454 (-) 2000 (x) 63 = 0.31
 (VOC) 6104 (x) 0.41 (-) 454 (-) 2000 (x) 63 = 0.18
 (PM) No emissions data in AP-42

1993 model with 11051 average miles
 (CO) 6104 (x) 4.48 (-) 454 (-) 2000 (x) 7 = 0.21
 (NOX) 6104 (x) 0.72 (-) 454 (-) 2000 (x) 7 = 0.03
 (VOC) 6104 (x) 0.41 (-) 454 (-) 2000 (x) 7 = 0.02
 (PM) No emissions data in AP-42

Source Document: Phase II Emission Inventory, Draft Report by Roy F. Weston. Portable generator fuel consumption information obtained from PWC, Va. Beach Site, Transportation Division. Fleet vehicle information obtained from PWC, Va. Beach Site, Transportation Division. Fuel consumption for engine test cell operations obtained from NAS Oceana, AIMD, Test Cell Division.

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.

The 1993 Base Closure and Realignment Commission (BRAC III) has recommended relocation of S-3 aircraft and the F-14 FRS to NAS Oceana. An Environmental Assessment is currently being performed by Atlantic Division, Naval Facilities Engineering Command to determine the environmental impact associated with this recommendation. The preliminary review draft has indicated the following:

Impacts to air quality due to the proposed action consists of short-term particulate impacts from construction activities.

The resulting aircraft mix when BRAC 93 decisions are implemented will result in a net decrease in total VOC and NOX emissions.

Net Change in Aircraft Emissions for Proposed Action

Pollutant	Increase Due to S-3 Emissions (TPY)	Decrease Due to F-14 Realignment (TPY)	Decrease Due to A-6 Phase-out (TPY)	Total Decrease in Emissions(TPY)	Net Change (TPY)
VOC (HC)	22.4	223.8	359.8	583.7	-561.3
NOx	7.6	137.5	94.4	231.9	-224.3

Emissions estimates obtained from Table 4-4 of Draft EA report.
 Emissions data compares 1994 values with anticipates 1997 values.
 Net improvement in emissions is expected beginning FY 1998.
 Increases in emissions for CO and PM10 were not included in the draft EA and are currently not available.

Source Documentation: Environmental Assessment For Proposed Construction and Operational Changes Associated with Base Closure and Realignment, Naval Air Station Oceana. Preliminary Review Draft. Contract No. N62470-93-D-4042.

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

Richmond, Virginia is approximately 100 miles from NAS Oceana and is currently identified as a moderate ozone non-attainment area. Richmond obtained this status in 1990 and has until 1996 to meet EPA compliance.

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 restrictions are currently in place nor or any anticipated in the future for the Hampton Roads area.

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, the Commonwealth of Virginia has not implemented Emission Reduction Credits as of May 1994.

2nd Revision

6. ENVIRONMENTAL COMPLIANCE

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

Program	Survey Completed?	Costs in \$K to correct deficiencies						
		FY94	FY95	FY96	FY97	FY98-99	FY00-01	
Air	Yes	90	760	440	200	75	0	R
Hazardous Waste	Yes	650	400					R
Safe Drinking Water Act	N/A ¹							
PCBs	Partial ²	115	250					R
Other (non-PCB) Toxic Substance Control Act	Partial (See 6b.)	870	220	855	100	655	250	R
Lead Based Paint	Yes ³							
Radon	Yes							
Clean Water Act	Partial ⁴	754	195	15	15	332	34	R
Solid Waste	Yes	160						R
Oil Pollution Act	Yes	0	50	45	15	45	30	R
USTs	Yes	1747	205	280	410	447	350	R
Other (SPCC deficiencies)	Yes	1080	15	50	15	30	80	R
Total		5466	2095	1685	755	1584	744	R

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

¹NAS Oceana receives its potable water from the City of Norfolk through the City of Virginia Beach lines. No survey is required.

²On January 10, 1993, ownership of station utilities was transferred from NAS Oceana to PWC Norfolk. Phase I of a two phase survey has been completed. The survey will be complete in FY95 and no deficiencies are expected.

³BUMEDINST 6200.14 requires only housing and childcare facilities be surveyed for lead based paint.

implemented or planned to correct.

No restrictions are currently in place nor or any anticipated in the future for the Hampton Roads area.

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, the Commonwealth of Virginia has not implemented Emission Reduction Credits as of May 1994.

6. ENVIRONMENTAL COMPLIANCE

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

R

Program	Survey Completed?	Costs in \$K to correct deficiencies					
		FY94	FY95	FY96	FY97	FY98-99	FY00-01
Air	Yes	90 R	760 R	440 R	200 R	75 R	0 R
Hazardous Waste	Yes	650 R	400 R				
Safe Drinking Water Act	N/A (1)						
PCBs	Partial (2)	115	250 R				
Other (non-PCB) Toxic Substance Control Act	Partial (See 6b.)	870 R	220 R	855 R	100 R	655 R	250 R
Lead Based Paint	Yes (3)						
Radon	Yes						
Clean Water Act	Partial (4)	754 R	195 R	15 R	15 R	332 R	34 R
Solid Waste	Yes	160 R					
Oil Pollution Act	Yes	0 R	50 R	45 R	15 R	45 R	30 R

6. ENVIRONMENTAL COMPLIANCE

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

Program	Survey Completed?	Costs in \$K to correct deficiencies					
		FY94	FY95	FY96	FY97	FY98-99	FY00-01
Air	Yes						
Hazardous Waste	Yes						
Safe Drinking Water Act	N/A ¹						
PCBs	Partial ²	115					
Other (non-PCB) Toxic Substance Control Act	Partial (See 6b.)	195					
Lead Based Paint	Yes ³						
Radon	Yes						
Clean Water Act	Partial ⁴	100					
Solid Waste	Yes						
Oil Pollution Act	Yes						
USTs	Yes	16 ⁵	35	300	25	50	
Other (SPCC deficiencies)	Yes	100 ⁵					
Total		526	35	300	25	50	

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

¹NAS Oceana receives its potable water from the City of Norfolk through the City of Virginia Beach lines. No survey is required.

²On January 10, 1993, ownership of station utilities was transferred from NAS Oceana to PWC Norfolk. Phase I of a two phase survey has been completed. The survey will be complete in FY95 and no deficiencies are expected.

³BUMEDINST 6200.14 requires only housing and childcare facilities be surveyed for lead based paint.

⁴A Spill Prevention Countermeasures and Control (SPCC) Plan has been completed addressing some of the Clean Water Act (CWA) issues. The remaining issues will be surveyed while preparing the Stormwater Pollution Prevention Plan in FY94 and Industrial Waste Survey in FY94/95. Upon completion of the surveys, it is anticipated that NAS Oceana will be in compliance with the CWA.

Source Citation: LANTNAVFACENGCOM (Code 18)

6b.

Does your base have structures containing asbestos? **Yes**

What % of your base has been surveyed for asbestos? **75% of basewide square footage has been completed.**

Are additional surveys planned? **Yes.**

What is the estimated cost to remediate asbestos (\$K)? **\$ 250K**

NAS Oceana has taken the position that only damaged or potentially damaged areas should be removed and that all other areas managed in place. Claimant policy is to consider funding only remediation of asbestos that is friable, damaged, and accessible and to remediate by management in place rather than by removal.

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

Funding Source	FY92 (\$000)	FY93 (\$000)	FY94 (\$000)	FY95 (\$000)	FY96 (\$000)	FY97 (\$000)	FY98- 99 (\$000)	FY00-01 (\$000)
O&MN	1583	1814	2078	789 ¹	789 ¹	789 ¹	1578 ¹	1578 ¹
HA								
PA	118	4591	3248					
Other (specify) (DFSC/Legacy/ NEESA)	0/0/0	33/15/7 0	54/0/ 0					
TOTAL	1701	6523	5380	789	789	789	1578	1578

¹These are current funding control amounts.

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

USTs	Yes	1747 R	205 R	280 R	410 R	447 R	350 R
Other (SPCC deficiencies)	Yes	1080 R	15 R	50 R	15 R	30 R	80 R
Total		5466 R	2095 R	1685 R	755 R	1584 R	744 R

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

(1) NAS Oceana receives its potable water from the City of Norfolk through the City of Virginia Beach lines. No survey is required.

(2) On January 10, 1993, ownership of station utilities was transferred from NAS Oceana to PWC Norfolk. Phase I of a two phase survey has been completed. The survey will be complete in FY95 and no deficiencies are expected.

(3) BUMEDINST 6200.14 requires only housing and childcare facilities be surveyed for lead based paint.

(4) A Spill Prevention Countermeasures and Control (SPCC) Plan has been completed addressing some of the Clean Water Act (CWA) issues. The remaining issues will be surveyed while preparing the Stormwater Pollution Prevention Plan in FY94 and Industrial Waste Survey in FY94/95. Upon completion of the surveys, it is anticipated that NAS Oceana will be in compliance with the CWA.

* Contracts have been awarded to correct deficiencies. Construction is contracted for completion in FY95.

Source Citation: LANTNAVFACENGCOM (18)

6b.

Does your base have structures containing asbestos? **Yes**

What % of your base has been surveyed for asbestos? **75% of basewide square footage has been completed.**

Are additional surveys planned? **Yes.**

What is the estimated cost to remediate asbestos (\$K)? **\$ 1052K**

NAS Oceana has taken the position that only damaged or potentially damaged areas should be removed and that all other areas managed in place.

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

Funding Source	FY92 (\$000)	FY93 (\$000)	FY94 (\$000)	FY95 (\$000)	FY96 (\$000)	FY97 (\$000)	FY98 -99 (\$000)	FY00- 01 (\$000)
O&MN	1583	1814	2078	789*	789*	789*	1578*	1578*
HA								

⁴A Spill Prevention Countermeasures and Control (SPCC) Plan has been completed addressing some of the Clean Water Act (CWA) issues. The remaining issues will be surveyed while preparing the Stormwater Pollution Prevention Plan in FY94 and Industrial Waste Survey in FY94/95. Upon completion of the surveys, it is anticipated that NAS Oceana will be in compliance with the CWA.

⁵Contracts have been awarded to correct deficiencies. Construction is contracted for completion in FY95.

Source Citation: LANTNAVFACENGCOM (Code 18)

6b.

Does your base have structures containing asbestos? **Yes**

What % of your base has been surveyed for asbestos? **75% of basewide square footage has been completed.**

Are additional surveys planned? **Yes.**

What is the estimated cost to remediate asbestos (\$K)? **\$ 250K**

NAS Oceana has taken the position that only damaged or potentially damaged areas should be removed and that all other areas managed in place. Claimant policy is to consider funding only remediation of asbestos that is friable, damaged, and accessible and to remediate by management in place rather than by removal.

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

Funding Source	FY92 (\$000)	FY93 (\$000)	FY94 (\$000)	FY95 (\$000)	FY96 (\$000)	FY97 (\$000)	FY98-99 (\$000)	FY00-01 (\$000)
O&MN	1583	1814	2078	789 ¹	789 ¹	789 ¹	1578 ¹	1578 ¹
HA								
PA	118	4591	3248					
Other (specify) (DFSC/Legacy/ NEESA)	0/0/0	33/15/7 0	54/0/ 0					
TOTAL	1701	6523	5380	789	789	789	1578	1578

¹These are current funding control amounts.

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

0007/008

NAS OCEANA

BRAC DATA CALL 33

	CLASS	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01
OTHER (SPCC DEFICIENCIES)									
PREPARE SPCC/ODCP/OPA90 PLANS	1	75							
UPDATE SPCC/ODCP/OPA90 PLANS	1			30					50
SPCC (SPILL) TRAINING PROGRAM PHASE I	1	15							
SPCC DEFICIENCIES (CONSTRUCTION)	1	900							
SPCC DEFICIENCIES (DESIGN)	1	90							
SPCC (SPILL) TRAINING PROGRAM PHASE II	2		15						
SPCC (SPILL) TRAINING PROGRAM PHASE III	2			20	15	15	15	15	15
TOTAL		1080	15	50	15	15	15	15	85
UST/AST									
LEVEL GAUGE CALIBRATION PHASE I	1		1						
REPLACE EXISTING ASTs (DESIGN)	1		25						
REPLACE EXISTING ASTs (CONSTRUCTION) PHASE I	1			75					
REPLACE EXISTING ASTs (CONSTRUCTION) PHASE II	1				200				
INTERNAL AST INSPECTIONS PHASE I	2			20					
INTERNAL AST INSPECTIONS PHASE II	2								
INTERNAL AST INSPECTIONS PHASE III	2								
EXTERNAL AST INSPECTIONS PHASE I	2					50			
LEVEL GAUGE CALIBRATION PHASE II	2			10					
LEVEL GAUGE CALIBRATION PHASE III	2				15				
CATHODIC PROTECTION INSPECTION PHASE I	2			10					
CATHODIC PROTECTION INSPECTION PHASE II	2				30				
SECONDARY CONTAINMENT INSPECTION PHASE I	2					40			
REMOVE FUEL FROM ABANDONED LINES (ELOOP/F11)	2	70							
UST REMOVAL	2	500							
UST REPLACEMENT	2	500							
UST UPGRADE	2	10							
UST TESTING	2	70	75	75	75	75	75	75	75
UST UPGRADE	2		10						
CLEAN TANKERS/UST FOR DISPOSAL	2		9			12			
FUEL SPILL RESPONSE MATERIAL/EQUIPMENT	2	50	50	55	55	55	60	60	60
DISPOSAL OF CONTAMINATED SOIL FROM SPILL	2		10	10	10	15	15	15	15
GENERAL COMPLIANCE PROJECTS (E/S & MINOR WORK)	2	25	25	25	25	25	25	25	25
REMEDiate FUEL FARM/DAY TANK AREAS	2	57							
FIFTH ST. UST CAP, PHASE I (DESIGN)	2	40							
FIFTH ST. UST CAP, PHASE II (DESIGN/CONSTRUCT)	2	400							
CONDUCT SITE CHECK - UST 96A	2	25							
TOTAL		1747	208	280	410	272	175	175	175

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05/26/94

NAS Oceana
Data Call 33
Question 6a (1/3)

05-26-94 10:48AM WAW 804 433 2423

Revised pg

R-56%

Revised pg

NAS OCEANA

BRAC DATA CALL 33

	CLASS	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	
OTHER (NON-PCB) TBCA										
CONDUCT ASBESTOS SURVEY	1	190								
REMOVE DAMAGED ASBESTOS PHASE I	2	200								
REMOVE DAMAGED ASBESTOS PHASE II	2		120							
REMOVE DAMAGED ASBESTOS PHASE III	2			100	100	100	100	100	100	
PREPARE ASBESTOS MANAGEMENT PLAN	2		100							
REMEDiate (9TH ST WR, 119, 403)	2	300								
SOURCE REMOVAL & UPGRADE SMALL ARMS RANGE	2			300						
REMIATIONS FROM FUTURE CAPS	2			350			350	25	25	
CONDUCT SITE CHARACTERIZATION - BLOG 119, A/C	2	50								
CONDUCT SITE CHARACTERIZATION - 9TH STREET	2	50								
CONDUCT SITE CHARACTERIZATIONS- 403	2	80								
CONDUCT SITE CHECKS	2			25		25				
CONDUCT SITE CHARACTERIZATIONS/CORRECTIVE ACTION PLAN	2			80		80				
TOTAL		870	220	855	100	205	450	125	125	
CLEAN WATER ACT										
GROUNDWATER CHARACTERIZATION	2	80								
CONDUCT TOXIC REDUCTION EVALUATION	2					300				
PH INVESTIGATION & CORRECTIVE MEASURES (VPDES) (?)	2		30							
DEVELOP NPS WATER QUALITY PLANS (CHES BAY ACT, CWA)	2		150							
INSTALL BOOM NEAR NEW OUTFALL 001	2	20								
STORMWATER MAPPING	2	55								
AIRFIELD DRAINAGE DITCH O/W SEP	2	584								
DREDGE DITCHES (VPDES)	2	10	10	10	10	10	12	12	12	
DISPOSE OF DREDGE SPOILS	2	5	5	5	5	5	5	5	5	
TOTAL		754	195	15	15	315	17	17	17	
SOLID WASTE										
SOLID WASTE MGMT PLAN	2	40								
PREPARE SW SURVEY (BMP,PP INCLUDED)	1	120								
TOTAL		160	0							
OIL POLLUTION ACT										
OPA 90 FACILITY TRAINING PLAN PHASE I	2		30							
OPA 90 FACILITY TRAINING PLAN PHASE II	2			30						
OPA 90 FACILITY TRAINING PLAN PHASE III	2				15	15	15	15	15	
PURCHASE RESPONSE EQUIP TO MEET OPA 90 PHASE I	2		20							
PURCHASE RESPONSE EQUIP TO MEET OPA 90 PHASE II	2			15			15			
TOTAL		0	50	45	15	15	30	15	15	

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NAS OCEANA

BRAC DATA CALL 33

NAS Oceana
Data Call 33
Question 6a (3/3)

05-26-94 10:48AM P005 #27

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	CLASS	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01
AIR POLLUTION ABATEMENT									
AIR EMISSIONS INVENTORY, PHASE III	1	80							
STAGE II VAPOR RECOVERY (DESIGN)	2		15						
STAGE II VAPOR RECOVERY (CONSTRUCTION)	2			120					
VOC EMISSIONS MODIFICATIONS (DESIGN)	2		10						
VOC EMISSIONS MODIFICATIONS (CONSTRUCTION)	2			110					
UPDATE AIR EMISSIONS INVENTORY PHASE I	2						75		
REPLACE/RETROFIT CFC EQUIPMENT (DESIGN)	2	10		10					
REPLACE/RETROFIT CFC EQUIPMENT (CONSTRUCTION)	2		400						
PERFORM SOURCE TESTING ON EMISSIONS SOURCES (DESIGN)	2		20						
PERFORM SOURCE TESTING ON EMISSION SOURCES PHASE I	2			200					
PERFORM SOURCE TESTING ON EMISSION SOURCES PHASE II	2				200				
PREPARE RISK MANAGEMENT INVENTORY & PLAN	2		250						
AIR EMISSIONS INVENTORY, PHASE IV (COMPUTER)	2		85						
TOTAL		90	780	140	200	0	75	0	0
HAZARDOUS WASTE MANAGEMENT & DISPOSAL									
PREPARE HW MANAGEMENT PLAN	1	50							
NEW/UPGRADE HW ACCUMULATION AREA	2		200						
MODIFY HW TSD FACILITY	2		100						
CLOSURE OF HW FACILITY IRAC CONTRACT	1	400							
RFI - NON DERA	2	100	100						
POLLUTION PREVENTION PLAN (STUDY) (EPCRA)	2	100							
TOTAL		650	400	0	0	0	0	0	0
SAFE DRINKING WATER									
N/A									
PCBS									
TESTING LIQUID INSULATED ELECTRICAL EQUIPMENT	2	115							
REPLACEING PCB CONTAMINATED EQUIPMENT	2		250						
TOTAL		115	250	0	0	0	0	0	0

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R=96%

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

Source Citation: Environmental Remediation Manager, NAS Oceana

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 ³
FUEL FARM	UST	Y	N	N	\$.58 FY2005	CONSTR COST \$0.33M (FY94), OPERATION COST \$0.25M (FY95-2005)
DAY TANK	UST	Y	N	N	\$.46 FY2005	CONSTR COST \$0.21M (FY94), OPERATION COST \$0.25M (FY95-2005)
T-LINE	UST	Y	N	N	\$1.1 FY2005	CONSTR COST \$0.85M (FY94), OPERATION COST \$0.25M (FY95-2005)
NEX STATION	UST	Y ⁴	N	N	\$.69 FY2001	CONST COST \$0.56M (FY96), OPERATION COST \$0.125M (FY96-2001)
FITWING FUEL PITS	UST	Y ⁴	N	N	\$.47 FY2000	CONST COST \$0.34M (FY94), OPERATION COST \$0.125M (FY95-2000)

5TH ST TRUCK STAND	UST	Y ⁴	N	N	\$.47 FY2001	CONST COST \$0.34M (FY-96), OPERATION COST \$0.125M (FY96- 2001)
MATWING FUEL PITS	UST	Y ⁴	N	N	\$.47 FY2001	CONST COST \$0.34M (FY96), OPERATION COST \$0.125M (FY96- 2001)
E-LOOP LINE	UST	Y ⁴	N	N	\$.47 FY2000	CONST COST \$0.34M (FY96), OPERATION COST \$0.125M (FY95- 2000)
#3003A	UST	Y	N	N	\$.18 FY1996	EXCAVATION COST \$0.18M (FY96)
#F-19	UST	Y ⁴	N	N	\$.47 FY2001	CONST COST \$0.34M (FY96- 2001), OPERATION COST \$0.125M (FY96-2001)
#20-B	UST	Y ⁴	N	N	\$.47 FY2001	CONST COST \$0.34M (FY96- 2001), OPERATION COST \$0.125M (FY96-2001)
#MT-3	UST	Y	N	N	\$.20 FY1996	EXCAVATION COST \$0.2M (FY1996)
SWMU'S 11, 18, 19, 20, 24	RCRA	N	N	N	\$.55 FY1996	SOIL EXCAVATION AWARD FY95
SWMU'S 1, 2B, 2C	RCRA	Y ⁴	N	N	\$6.3 FY2008	RA COST \$6.0M (FY97), OPERATION COST \$0.25M (FY98-2008)

SWMU'S 20, 2E, 15	RCRA	Y ⁴	N	N	\$3.3 FY2008	RA COST \$3.0M (FY98), OPERATION COST \$0.25M (FY99-2009)
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¹Type site: CERCLA, RCRA corrective action (CA), UST or other (explain)

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

³Dates given in column 7 under operational costs are the expected length of pump and treat operation.

⁴Pump and treatment system planned

Source Citation: LANTNAVFACENGCOM (Code 18), A/E Studies, A/E construction cost estimates

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

No

Source Citation: Environmental Remediation Manager, NAS Oceana

7d.

Is there a groundwater treatment system in place?	YES ¹
Is there a groundwater treatment system planned?	YES ²

State scope and expected length of pump and treat operation.

¹Treatment system in place only at Fuel Farm and day tank UST. site. However, not operational until upgrade completed by 30 June 1995.

²A groundwater treatment system is planned for all items listed as "Groundwater Contaminated", except #3003A and #MT-3. See table 7b.

7e.

Has a RCRA Facilities Assessment been performed for your base?	YES
--	-----

Source Citation: Environmental Remediation Manager, NAS Oceana

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

Yes. Building 826 is 138 feet by 55 feet wide equaling a total of 7,590 square feet. Restrooms, battery charging room, compressor equipment room, office space leave approximately 6,240 square feet of useable storage capacity. The building is ventilated with overhead mounted blower units for providing adequate air circulation. It is also equipped with 2 emergency eye wash stations. The building is equipped with a fire sprinkler system with automatic alarms to the fire department. Entrance/exits include 2 overhead garage doors for receiving and issuing material, 2 personnel entrances and 3 emergency exit doors. No permit is required for Bldg 826.

Source Citation: Base Planner, NAS Oceana

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

YES, building 1110 is 9.5 feet by 18.67 feet with a total of 708 square feet of active storage area; maximum storage capacity is 3,520 gallons. Compatible hazardous waste is stored in bays as identified by reactivity group number (RGN). Wastes with RGN 3, 4, 5, 13, 16, 17, 19, 23, 24, 29, 31, 101, 104, 106, and 107 are permitted for storage in containers in building 1110.

Building 1112 is 16 feet by 24 feet for a total active storage area of 1,540 square feet; maximum storage capacity is 10,560 gallons. Compatible hazardous waste is stored in bays as identified by RGN. Wastes with RGN 1, 2, 4, 5, 7, 10, 13, 16, 17, 19, 23, 24, 29, 31, 101, 106 are permitted for storage in containers in building 1112.

Permit is identified as EPA I.D. #VA2170024606, effective 17 September 1993 through 16 September 2003. Specific waste names and EPA Hazardous Waste Codes are contained in the permit.

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.

Yes: Navy Exchange service station UST site. Cleanup required includes free product removal and air sparging. See table 7b.

Source Citation: Environmental Remediation Manager, NAS Oceana

7i.

Do the results of any radiological surveys conducted indicate limitations on future land use? Explain below.	NO
--	----

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

No operations or development plans have been restricted.

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-NAS Oceana	5331.00	Virginia Beach, Va.
Auxiliary Landing Field Fentress	2556.00	Chesapeake, Va.
Wadsworth Housing	75.00	Virginia Beach, Va.
Remote Bombing Range	95.00	Palmetto Pt., N.C.
Remote Bombing Range	23000.00	Dare County, N.C.
Remote Bombing Range	0.41	Tangier Island, N.C.
Outlying Land/Waterfront Area	412.30	Owl's Creek, VaBch., Va.
Remote Bombing Range	4.50	Stumpy Point, N.C.
Remote Antenna Site	2.30	Cape May, NJ
Remote Antenna Site	11.25	Bodie Is. Cape Hatteras, NC
Remote Antenna Site	0.01	Pea Island, NC
Remote Antenna Site	0.01	Kill Devil Hill, NC
AICUZ Easements (NASO)	4194.00	Virginia Beach, VA
AICUZ Easements (NALF)	6511.00	Chesapeake, VA

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.)		21,683
Total Undeveloped (areas that are left in their natural state but are under specific environmental development constraints, i.e.: wetlands, endangered species, etc.)		Wetlands: 897 acres at NAS Oceana, 1039 acres at NALF Fentress ¹
		All Others: 0
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		5436
Total Undeveloped land considered to be without development constraints		1001 acres at NAS Oceana and 1040 acres at NALF Fentress. 100 acres at Owl Creek.
Total Off-base lands held for easements/lease for specific purposes		10705
Breakout of undeveloped, restricted areas. Some restricted areas may overlap.	ESQD	600
	HERF	2
	HERP	5
	HERO	958
	AICUZ	10705
	Airfield Safety Criteria	2013
	Other	5000 ²

¹Includes Agricultural Outlease property. Does not include wetlands or area under clear-zone restrictions.

²Includes safety area within bombing range at Dare County.

Source Citation: Base Master Plan, 1986.

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. 25,656

8d. What is the date of your last AICUZ update? Jan/91 Are any waivers of airfield safety criteria in effect on your base? Summarize the conditions of the waivers below.

YES

- 0-1 Power for Hangar 200 radar servicing station
- 0-2 Transformer for wheels check lighting runway 5R
- 0-3 To permit existing trees, shown on marked P.W. Dwg 3220 to remain in approach zone for runway 23L and 5R
- 0-7 Various waivers to meet operational requirements; refuelers, personnel shelters, transformer vaults
- 0-8 To permit an Automatic Carrier Landing System to be sited
- 0-9 To permit an AN/FPN-63 to be sited
- 0-10 To permit a skeet range complex

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
1175/VA Beach/NAS Oceana	3	Commercial	Compatible
1368/VA Beach/NAS Oceana	3	Industrial	Compatible
4535/VA Beach/NAS Oceana	3	Residential	Incompatible
1358/VA Beach/NAS Oceana	3	Agricultural	Compatible
17977/VA Beach/NAS Oceana	2	All Types	Compatible
10919/Chesapeake/NALF Fentress	3	agricultural	Compatible
575/Chesapeake/NALF Fentress	3	Residential	Incompatible
8368/Chesapeake/NALF Fentress	2	All Types	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, City of Virginia Beach handles dredging for Owl Creek.

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

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

N/A

8h.

Are there available designated dredge disposal areas for maintenance dredging material? List location, remaining capacity, and future limitations.	N/A ¹
Are there available designated dredge disposal areas for new dredge material? List location, remaining capacity, and future limitations.	N/A ¹
Are the dredged materials considered contaminated? List known contaminants.	N/A ¹

¹City of Virginia Beach handles dredging for Owl Creek.

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

NAS Oceana is unconstrained by the State Coastal Zone Management Plans. The station voluntarily complies with the Chesapeake Bay Preservation Act through adherence to Best Management Practices (BMP's) and Soil Conservation Plans.

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

Erosion on the Owls Creek Parcel will be remediated through a shoreline stabilization project utilizing hard (revetments) and soft (vegetation reestablishment) stabilization methods. This project is scheduled for completion by Fall 1994.

8k.

<p>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.</p>	<p>NO</p>
--	-----------

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.

Approximately 40 acres was designated in 1992 as a Watchable Wildlife Area on the Owls Creek Parcel, NAS Oceana. This agreement restricts development on this acreage.

Source Citation: 23 July 1992 Watchable Wildlife Agreement

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?

NONE

9b. Are there any other environmental permits required for base operations, include any relating to industrial operations.

NONE

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

NONE

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

NONE

AN INVENTORY OF THE
RARE, THREATENED &
ENDANGERED SPECIES
OF THE
NAVAL AUXILLARY LANDING FIELD
FENTRESS
CHESAPEAKE, VIRGINIA



Department of Conservation
and Recreation
Division of Natural Heritage
203 Governor St., Suite 402
Richmond, VA 23219
(804) 786-7951



Natural Heritage Technical Report # 90 - 5 1 September 1990

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PROTECTION RECOMMENDATIONS

Little species-specific management is recommended separate from that necessary to protect the rare species habitats. An exception is the Canebrake rattlesnake. The habitat available for this species has been sharply reduced in the past twenty years. When combined with the rapid encroachment of people into the most rural sections of City of Chesapeake, the numbers of encounters between snakes and humans is increasing. When this happens, the snakes almost invariably lose. To protect some areas for this remarkable species in southeastern Virginia it will take the protection of significant habitat, but also, the management of people to reduce contacts and change the outcomes of encounters.

We recommend that the resource managers and offices of the Commanding Officer work diligently to educate personnel stationed in and around Fentress NALF about the Canebrake rattlesnake, how to avoid it, and how to act when chance encounters occur. It has been demonstrated that in many parts of the world, man and snakes can dwell together. The Department of Game and Inland Fisheries would be a likely partner in developing an education program for personnel, brochures, or signs. In addition, by following the protection recommendations as defined below, the rattlesnake will have habitat available in a remote area of Fentress NALF.

Three Special Interest Areas are recommended based on the results of this study: the Pocatay Creek Special Interest Area, the Tip-of-Runway Special Interest Area, and the North Landing Swamp Special Interest Area. The justifications and management recommendations for these areas follow.

Pocatay Creek Special Interest Area

(Botanical Area)

Figure 6 presents a Special Interest Area designed to protect the Fentress NALF population of Stewartia malacodendron through habitat protection. The boundaries, used in concert with the management recommendations listed below should protect the Stewartia population and the available habitat adjacent to the population.

To manage for the persistence of the species and its habitat, four recommendations are given for the Special Interest Area:

1. The hydrological regime of the woodland should not be altered. This requires that ditching which could effect the hydrology of the Special Interest Area (SIA) not be permitted. This also requires the maintenance of groundwater quantity and quality within the preserve. To protect the hydrology of this

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area will require the evaluation of projects on adjacent tracts of land, but outside of the Special Interest Area.

2. If and when Gypsy Moth control is considered, efforts should be made to correct the problem without negatively impacting the non-target organisms including other moth and butterfly species. A host-specific treatment such as Gyp-check is recommended for use in the SIA, with Bt as a second choice treatment.
3. The unforested areas within the preserve boundaries should be allowed to succeed naturally into forest to create buffer for the Stewartia malacodendron habitat. This will also provide shadier conditions within the species management area, decreasing favorable conditions for exotic vegetation.
4. Finally, cutting of timber within the SIA boundary will directly eliminate the species and its habitat and is strongly discouraged.

In addition to protecting the Stewartia malacodendron and its habitat, this preserve would provide a forested buffer to a small portion of the upper reaches of the Pocaty River. The Pocaty River drains into the North Landing River, where a significant concentration of rare plants and animals sensitive to water quality degradation would benefit from buffering of the feeder streams. This area is a likely site for the occurrence of any Canebrake rattlesnakes that may occur on Fentress NALF and protection for this habitat will benefit any individuals remaining there.

Tip-of-Runway Special Interest Area

(Zoological Area)

Figure 7 represents a SIA designed to protect a population of the southern bog lemming (Snaptomys cooperi helaletes). The boundaries of this area include all of the available habitat. The following management recommendations are provided:

1. The lemming appears to prefer more mesic sites that are in early successional seres. Therefore, the hydrology of the area should not be altered through the digging of ditches or by other means.
2. The early successional stage of this habitat is considered optimal for this species (Rose, 1983). It is in such habitats that the greatest densities have been found. While periodic mowing or selective removal of invading shrubs and trees can effectively maintain favorable conditions for the species, we recommend a

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controlled burn as the preferred method. Such fires quickly recycle nutrients and provide natural conditions for native plant species that may exist in the seed bank currently existing. At present, young pines are interspersed throughout an understory of Arundinaria gigantea. The pines should not be allowed to create a closed canopy. Burning should be done when the ground is wet; a fire in a dry year may remove the organic layer, eliminating an important part of the lemming habitat.

3. Logging that allows the use of heavy equipment should not be used to remove the invading trees. Such heavy vehicular impacts may greatly disturb the wetland soil profile and vegetation.

The proximity of this site to that of the proposed Pocaty Creek Special Interest Area would provide support to any Canebrake rattlesnakes that may occur since small mammal populations in the zoological area would be in a higher density.

North Landing Swamp Special Interest Area
(Ecological Reserve Area)

The North Landing Swamp SIA on the extreme northern area of the Fentress NALF, north of Pleasant Ridge Road (North Landing Road). The swamp was altered by the digging of the Chesapeake and Albermarle Canal, but has retained the characteristics of a swamp habitat. The trees are largely Nyssa sylvatica, N. aquatica, Acer rubrum, and Taxodium distichum. While the forest is still recovering from a logging event in the recent past, given enough time, this swamp forest could revert to an old growth area dominated by natural forces. In that state it would represent valuable habitat for nesting and migratory birds, as well as other organisms native to that habitat. Additionally, some Canebrake rattlesnakes (Crotalus horridus atricaudatus) are known to persist in swamps and other wetland habitats. If so, this could allow a significant area for protection while providing a corridor for the genes of all swamp inhabitants. Management of this SIA would be unnecessary since the goal would be to allow the vegetation to reach old growth proportions.

RECOMMENDATIONS FOR FUTURE WORK

The negative data provided by rare species surveys often do not show that species do not occur, simply that no evidence was found of their presence. In many cases, such as the Red-cockaded Woodpeckers, there is no appropriate habitat or the easily recognized nest trees. There is little likelihood that this

DNH Rare Species Inventory Report - Fentress NALF
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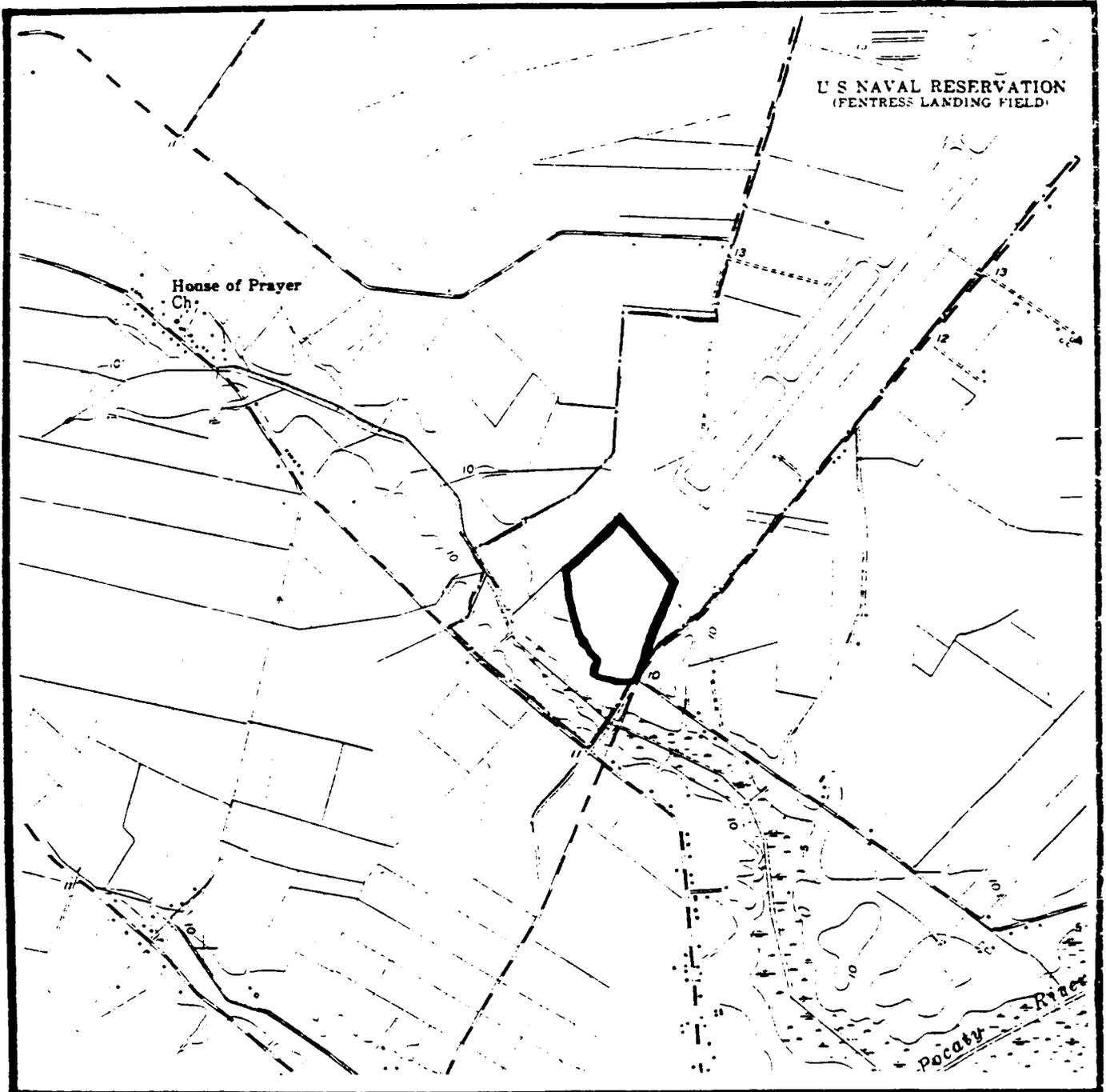


Figure 7. The boundaries for the proposed Tip-of-the-Runway Special Interest Area. This area includes all of the known habitat for the Dismal Swamp southern bog lemming, Synaptomys cooperi halaletus.

DNH Rare Species Inventory Report - Fentress NALF

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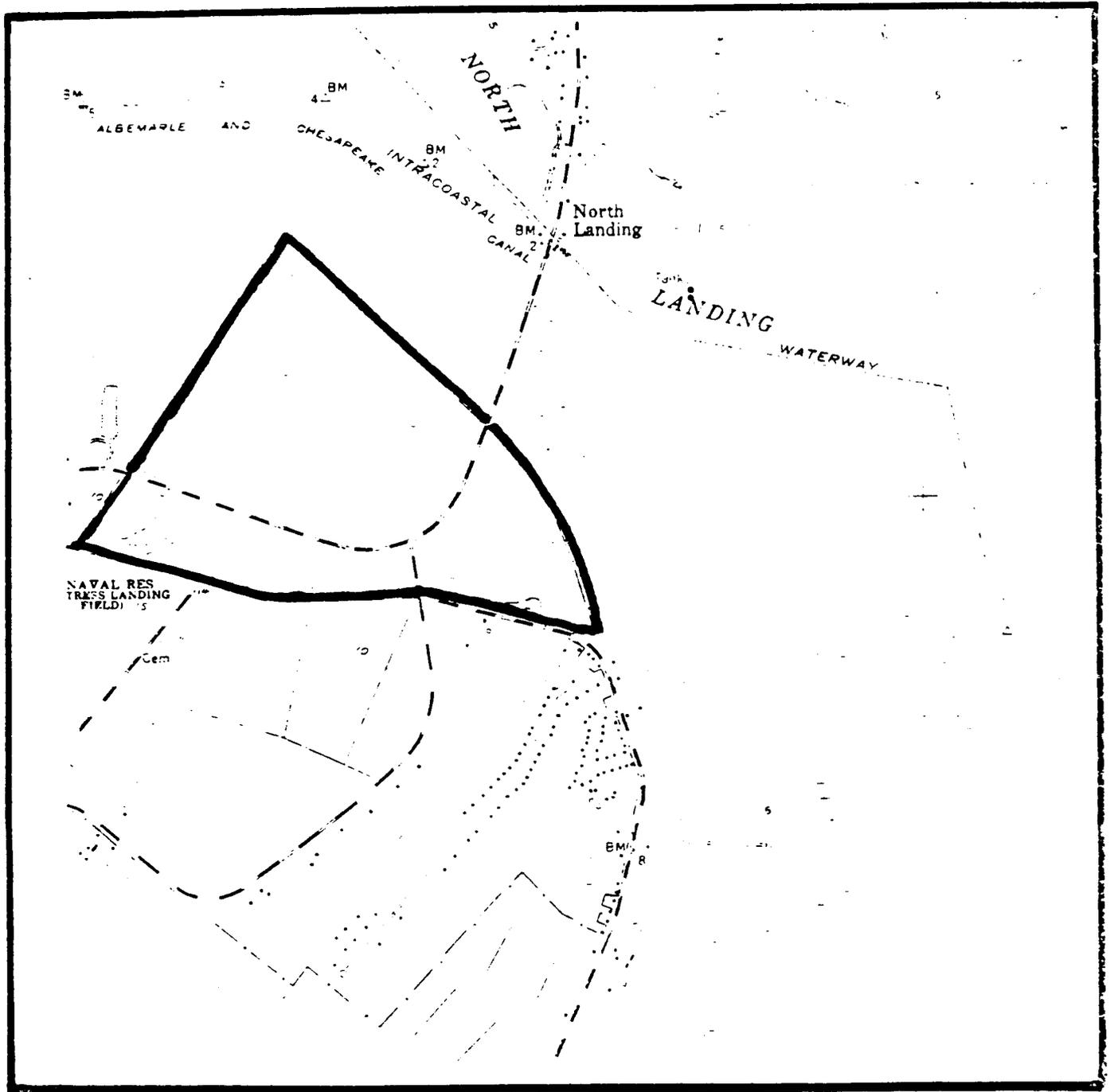


Figure 8. The boundaries for the proposed North Landing Swamp Special Interest Area. This area is proposed as an Ecological Reserve Area and would aid in the protection of the North Landing River drainage.

NAS OCEANA
 VIC 60191
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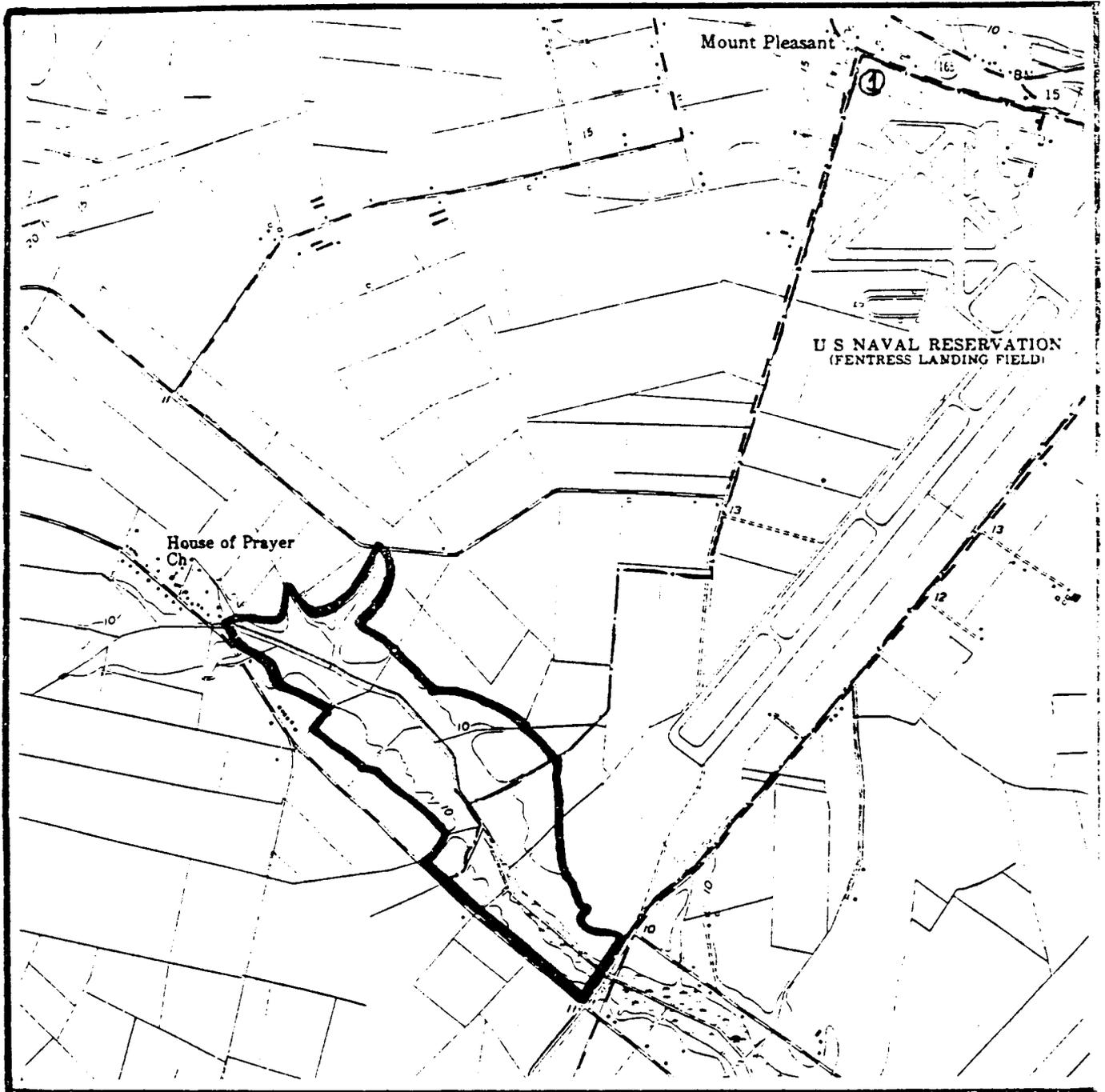


Figure 6. The recommended boundaries for the Pocaty Creek Special Interest Area. This area would protect the Stewartia population and any Crotalus that may dwell on the site.

NAS OCEANA UIC N60191
DATA CALL THIRTY-THREE

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print)

Signature

Title

Date

Activity

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

NEXT ECHELON LEVEL (if applicable)

K. F. DELANEY

NAME (Please type or print)

Signature

Rear Admiral

Title Commander

Naval Shore Activities

U.S. Atlantic Fleet

Activity

Date

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

MAJOR CLAIMANT LEVEL

RADM ARCHIE CLEMINS

NAME (Please type or print)

Signature

Acting

Title Commander in Chief

U.S. Atlantic Fleet

Activity

Date

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

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

J. B. GREENE, JR.

NAME (Please type or print)

Signature

ACTING

Title

Date

06 JUL 1994

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

W. H. SHURTLEFF
NAME (Please type or print)

W H Shurtleff
Signature

Commanding Officer
Title

20 MAY 1994
Date

Naval Air Station Oceana
Activity

NAVAL AIR STATION OCEANA UIC N60191
DATA CALL THIRTY-THREE REVISED PGS 28-29, ATTACHMENT FOR QUESTION 6A

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

NEXT ECHELON LEVEL (if applicable)

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

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

NEXT ECHELON LEVEL (if applicable)

<u>J. W. CRAINE, JR.</u> NAME (Please type or print)	<u><i>J. W. Craine, Jr.</i></u> Signature
<u>Captain</u> Title Commander Naval Shore Activities U.S. Atlantic Fleet	<u>8/12/94</u> Date
_____ Activity	

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

MAJOR CLAIMANT LEVEL

<u>RADM H. W. GEHMAN, JR.</u> NAME (Please type or print)	<u><i>H. W. Gehman, Jr.</i></u> Signature
<u>Acting</u> Title Commander in Chief U.S. Atlantic Fleet	<u>15 AUG 1994</u> 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)

<u>J. B. GREENE, JR.</u> NAME (Please type or print)	<u><i>J. B. Greene, Jr.</i></u> Signature
<u>ACTING</u> Title	<u>19 AUG 1994</u> Date

NAS Oceana N60191
Data Call 33, Revised pages 32, 33

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print)

Signature

Title

Date

Activity

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

NEXT ECHELON LEVEL (if applicable)

J. W. CRAINE, JR.

NAME (Please type or print)

J. W. Craine Jr.

Signature

Captain

Title Commander

Date

8/31/94

Date

Naval Shore Activities
U. S. Atlantic Fleet

Activity

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

MAJOR CLAIMANT LEVEL

H. H. MAUZ, JR.

NAME (Please type or print)

H. H. Mauz Jr.

Signature

Admiral

Title Commander in Chief

Date

9/1/94

Date

U.S. Atlantic 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)

W. A. Earner

Signature

Title

Date

9/12/94

Date

DATA CALL 64

CONSTRUCTION COST AVOIDANCES

Table 1: Military Construction (MILCON) Projects (Excluding Family Housing Construction Projects)

Installation Name:		OCEANA VA NAS		
Unit Identification Code (UIC):		N60191	#5	
Major Claimant:		LANTFLT		
Project FY	Project No.	Description	Appn	Project Cost Avoid (\$000)
1994	186T	TRAINING & OPS FACILITY	BRAC	3,450
1994	187T	ACADEMIC INSTRUCTION BUILDING	BRAC	3,250
		Sub-Total - 1994		6,700
1998	722	CHILD DEV CENTER ADDITION	MCON	2,250
		Sub-Total - 1998		2,250
1999	102	CONTROL TOWER REPLACEMENT	MCON	1,670
1999	712	BACHELOR ENLISTED QUARTERS	MCON	22,280
		Sub-Total - 1999		23,950
2000	209	FXD ACFT START SYS-H 200	MCON	4,900
2000	453	JET ENGINE TEST CELL	MCON	5,300
		Sub-Total - 2000		10,200
2001	330	RELIGIOUS EDUCATION CTR	MCON	600
2001	633	LIBRARY/EDUCATION CTR	MCON	1,750
		Sub-Total - 2001		2,350
		Grand Total		45,450

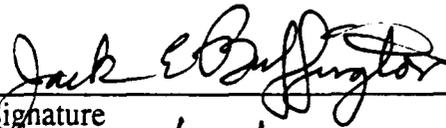
I certify that the information contained herein is accurate and complete to the best of my knowledge and belief.

MAJOR CLAIMANT LEVEL

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

COMMANDER
Title

NAVAL FACILITIES ENGINEERING COMMAND
Activity


Signature
7/13/94
Date

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

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

W. A. EARNER

NAME (Please type or print)

Title


Signature
7/18/94
Date

BRAC-95 CERTIFICATION

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

MARK E. DONALDSON
NAME (Please type or print)


Signature

CDR, CEC, USN
Title

12 July 1994
Date

MILCON PROGRAMMING DIVISION
Division

FACILITIES PROGRAMMING AND CONSTRUCTION DIRECTORATE
Department

NAVAL FACILITIES ENGINEERING COMMAND
Activity

Enclosure (1)

BRAC DATA CALL NUMBER 64
CONSTRUCTION COST AVOIDANCE

Information on cost avoidance which could be realized as the result of cancellation of on-going or programmed construction projects is provided in Tables 1 (MILCON) and 2 (FAMILY HOUSING). These tables list MILCON/FAMILY HOUSING projects which fall within the following categories:

1. all programmed construction projects included in the FY1996 - 2001 MILCON/FAMILY HOUSING Project List,
2. all programmed projects from FY1995 or earlier for which cost avoidance could still be obtained if the project were to be canceled by 1 OCT 1995, and,
3. all programmed BRAC MILCON/FAMILY HOUSING projects for which cost avoidance could still be obtained if the project were to be canceled by 1 OCT 1995.

Projects listed in Tables 1 and 2 with potential cost avoidance were determined as meeting any one of the following criteria:

Projects with projected Work in Place (WIP) less than 75% of the Current Working Estimate (CWE) as of 1 OCT 1995 .

Projects with projected completion dates or Beneficial Occupancy Dates subsequent to 31 March 1996.

Projects with projected CWE amount greater than \$15M.

The estimated cost avoidance for projects terminated after construction award would be approximately one-half of the CWE for the remaining work. Close-out, claims and other termination costs can consume the other half.

DATA CALL

5

**MILITARY VALUE ANALYSIS:
DATA CALL 38 WORK SHEET FOR
OPERATIONAL/RESERVE AIR STATION: NAVAL AIR STATION, OCEANA**

**Category Operational Support
Sub-category Operational and Reserve Air Stations
Types Navy and Marine Corps Operational and Reserve Air Stations and
Facilities**

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

AIR STATION	TITLE	LOCATION
AIR STATION	NORFOLK	NORFOLK, VA
AIR STATION	JACKSONVILLE	JACKSONVILLE, FL
AIR STATION	OCEANA	VA BEACH VA
AIR STATION	KEY WEST	KEY WEST FL
AIR STATION	BRUNSWICK	BRUNSWICK ME
NAS/MCAS	MIRAMAR	SAN DIEGO CA
MC AIR STATION	CHERRY POINT	CHERRY POINT NC
MC AIR FACILITY	KANEOHE BAY	KANEOHE BAY HI
MC AIR STATION	YUMA	YUMA AZ
MC AIR STATION	BEAUFORT	BEAUFORT SC
MC AIR STATION	NEW RIVER JAX	JACKSONVILLE NC
MC AIR STATION	CAMP PENDLETON	CP PENDLETON CA
AIR STATION	NORTH ISLAND	SAN DIEGO CA
AIR STATION	WHIDBEY ISLAND	OAK HARBOR WA
AIR STATION	LEMOORE	LEMOORE CA
AIR STATION	FALLON	FALLON NV
AIR STATION	ADAK	ADAK AL
AIR FACILITY	EL CENTRO	EL CENTRO CA
RESERVE AIR STATION	S. WEYMOUTH	S. WEYMOUTH MA
RESERVE AIR STATION	NEW ORLEANS	NEW ORLEANS LA
RESERVE AIR FACILITY	WASHINGTON	WASHINGTON D.C.
RESERVE AIR STATION	ATLANTA	ATLANTA GA
RESERVE AIR STATION	FORT WORTH	FORT WORTH TX
RESERVE AIR STATION	WILLOW GROVE	WILLOW GROVE PA
NAVAL STATION	MAYPORT	JACKSONVILLE FL
NAVAL STATION	ROOSEVELT ROADS	ROOSEVELT ROADS PR

Data for Military Value Analysis

Mission Requirements	1
Support of transient aircraft	1
Training ranges, outlying and auxiliary fields, and airspace	9
General Military Support	10
Other units	13
Other support requirements	15
Facilities	16
Airspace and flight training areas	16
Airfields	73
Base infrastructure and improvement	75
Personnel Support facilities	79
Training facilities	80
Maintenance Facilities	81
Regional maintenance concept	82
Special military facilities	83
Non-DON support requirements	84
Location	87
Features and Capabilities	92
Weather	92
Encroachment	94
Expansion	100
Reserve demographic level	103
Quality of life	104

Mission Requirements

1. List the types and number of transient aircraft/detachments supported at this air station during FY 93 and describe the training and/or military missions conducted by these aircraft while stationed here. If supporting transient aircraft/detachments is a major mission, attach detailed schedules for the 1st & 2nd quarters FY 94.

Table 1.1 Transient Aircraft

Types of Aircraft/ Unit. Name/T/M/S	Description of Frequency, Quantity and Primary Mission ^{1,2}		
C-2, C-5, C-9, C-12, C-21, C-22, C-23, C-26, C-130, C-141, G-3, P-3, PA-28, T-44, C-20, EC- 24, U-11, CASA-212	Up to 15 flights per day. Frequency varies with support requirements for battlegroup workups, deployments, fleet exercises, CVW movements, etc..	1,508 Trans A/C	Logistic support/ fuel by truck
A-6, AV-8, E- 2, EA-6B, F-4, F-14, F/A-18, H-2, H-3, H- 46, H-47, H-53, H-60, S-3, C-2	Averages 6 per day. Frequency varies with workup and deployment schedules, fleet exercises, carrier qualification requirements	2,016 Trans A/C	Hot pit and go, local and out of area air to ground, air to air naviga- tion, carrier qualification and fleet support training flights.
KC-135, KC-10, KC-130	Frequency varies with training and exercise re- quirements	264 Trans A/C	Tanker exercises, fleet support, air wing training

<p>A-4, A-10, AH-1, F-15, F-16, F-111, H-1, OH-6, OH-58, OV-10, T-2, T-34, T-37, T-38, T-39, T-45, AH-64, T-33, HH-65, B-1, ZR-24, LR-25, LR-35, E-3, B-52</p>	<p>Frequency varies with training and exercise requirements</p>	<p>1,186</p>	<p>Air to air, air to ground joint/fleet exercise adversary etc..</p>

¹Aircraft also transit NAS Oceana in performance of the following missions: emergency divert aircraft, cross-country flights, official meetings and conferences at NAS Oceana and other local military installations, simulator training, medium attack readiness program and fleet fighter air combat readiness program, fleet exercises, and CQ/DQ from NAS Oceana.
²STS-XX space shuttle emergency landing site (3 to 4 times this year).

DETACHMENTS: PAST 12 MONTHS¹

<u>SQUADRON</u>	<u>TYPE AC/# AC</u>	<u>DAYS ONBOARD</u>	<u>MISSION</u>
VAQ-33	3/EA-6A	7 days	Fleet-EX
	1/EP-3J	7 days	Fleet-EX
	1/EP-3J	4 days	Fleet-EX
VFA-204	8/FA-18A	14 days	FFARP
347FW Moody AFB GA	12/F-16	5 days	1st Fighter Wing ORI
FG CANR HY North Bay Canada	3/T-33 1/Challenger	5 days	1st Fighter Wing ORI
69th FTR SQDN	12/F-16	5 days	1st Fighter Wing ORI
VAQ-309	4/EA-6B	3 days	Translant
VAQ-33	1/P-3	5 days	CNO Project
160th Army	3/UH-60	5 days	Joint TRNG
160th Army	3/CH-47	13 days	Joint TRNG
Maryland ANG	1/UH-1 1/U-21	18 days	Annual TRNG
160th Army	4/H-60	4 days	Joint TRNG
166ALG	1/C-130	7 days	Paradrops
150W Air Force	1/C-130	4 days	Joint TRNG
160th Army	2/MH-2	4 days	Joint TRNG
VMFA-451	8/FA-18	26 days	ACM
Phoenix Air	3/LR-24	3 days	Aegis Project

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906th AREFS SD	2/KC-135	14 days	Fleet-EX
VAQ-34	4-EA-6A	16 days	Fleet-EX
509 AREPS	2/KC-135	11 days	Fleet-EX
VAQ-33	2/EA-6A	2 days	Fleet-EX
160th Army	9/AH-6 6/H-60	6 days	Joint TRNG
160th Army	3/CH-47	13 days	Joint TRNG
160th Army	5/MH-6 9/H-60 5/AH-6	12 days	Training
VA-205	5/A-6E	6 days	Fleet-EX
Air Force AWACS	1/E-3	7 days	Fleet-EX
HS-75	3/SH-3	4 days	DLQ
Phoenix Air	2/LR-24	2days	Aegis Project
Army FT Bragg	6/OH-58 2/UH-60	11 days	Joint TRNG
426 SQD Canada	1/C-130	3 days	Training
Chrysler Tech Sys.	1/EC-24	3 days	CNO Project
VMFA-112/MAG-49	12/FA-18	7 days	Missilex
Chrysler Tech Sys	1/EC-24	3 days	CNO Project
Chrysler Tech Sys	1/NKC-135A	4 days	CNO Project
160th Army	3/CH-47	7 days	Joint TRNG
MAG HQ Halifax	2/FA-18	6 days	Training

NAS OCEANA/60191

NAVFITWEPCOL	9/F-14 4/A-4	9 days	ACM
VMFA-321/MAG 49	7/FA-18	7 days	FFARP
426 SQDN Trenton	1/C-130	3 days	Training
160th Army	4/MH-6 4/UH-6 CH-47/3	8 days	Joint TRNG
VP-11	1/P-3	5 days	Joint TRNG
1SOW Air Force	2/H-53	6 days	Joint TRNG
160th Army	3/CH-47	6 days	Joint TRNG
VA-205	2/A-6	8 days	CQ
1SOW Air Force	3/H-53	6 days	Joint TRNG
1SOW Air Force	2/H-53 2/H-60	9 days	Joint TRNG
1SOW Air Force	1/MC-130	6 days	Joint TRNG
VF-201	7/F-14	12 days	FCQ
VF-202	7/F-14	12 days	FCQ
VMGR-252	5/KC-130	3 days	TKR Support for VF-32
160th Army	5/MH-6	8 days	Joint TRNG
160th Army	3/MH-6	13 days	Joint TRNG
160th Army	3/H-47	7 days	Joint TRNG
VP-23	6/P-3	5 days	Fleet-EX

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433 SQD ETAC Canada	5/FA-18	13 days	Fleet-EX
VA-205	5/A-6	9 days	Fleet-EX
905 AREFS NC	2/NKC-135	11 days	Fleet-EX
MAG-42	1/C-130	1 day	TKR Training
VAQ-209	2/EA-6B	3 days	Fleet-EX
Chrysler Tech Sys	1/EC-24	5 days	Fleet-EX
Phoenix Air	2/LR-36	6 days	Aegis Project
437 SQD ETAC Canada	1/KC-130	5 days	Joint TRNG
Chrysler Tech Sys	1/NKC-135	5 days	Fleet-EX
1SOW Air Force	2/H-60	6 days	Joint TRNG
Phoenix Air	1/LR-35	3 days	Aegis Project
1SOW Air Force	4/H-53 1/C-130	8 days	Joint TRNG
VF-201	7/F-14	10 days	FCQ
VMFA-451	6/FA-18	5 days	Training
160th Army	4/MH-6	5 days	Joint TRNG
FLETACREADGRU	1/NKC-135	3 days	Combat TRNG OPS
Phoenix Air	1/LR-36	2 days	Aegis Project
XVIIIABN Corp	6/UH-1 5/AH-64 1/OH-58	3 days	Joint TRNG
Phoenix Air	1/LR-36	4 days	Aegis Project

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Phoenix Air	1/LR-36	5 days	Fleet-EX
DET 2 452TS	1/NKC-135	5 days	Fleet-EX
Chrysler Tech Sys	1/NKC-135	5 days	CEC OPS
OC RAF Kinloss	1/NIMROD (MR2)	4 days	Fleet-EX
1SOW Air Force	3/MH-53	5 days	Joint TRNG
Phoenix Air	1/LR-36	3 days	Fleet-EX
509 RS	1/KC-135	5 days	Fleet-EX
16th SOW AF	2/MH-60	6 days	Joint TRNG
160th Army	8/MH-6 12/MH-60 6/AH-6 3/CH-47	13 days	Joint TRNG
16th SOW Air Force	3/MH-53	4 days	Joint TRNG
VMAQ2	2/EA-6B	4 days	Joint TRNG
963rd Air Force	1/E-3	7 days	Joint TRNG
Chrysler Tech Sys	1/NKC-135	4 days	Fleet-EX
433 SQD Quebec	4/FA-18	5 days	Fleet-EX
160th Army	2/MH-47 3/MH-60	6 days	Joint TRNG
VMGR 452 Training	2/KC-130	2 days	TKR
16SOG Air Force	1/MC-130	6 days	Joint TRNG
VAQ-130	1/EA-6B	6 days	Agile Provider
HC-6	3/CH-46	5 days	VOD NGU CLSD

NAS OCEANA/60191

Chrysler Tech Sys	1/EC-24	8 days	Agile Provider
Portuguese AF	1/C-130	7 days	CINCLANT
HC-2 CLSD	2/H-53	6 days	VOD NGU
VAW-120 CLSD	3/E-2 2/C-2	6 days	CQ NGU
VRC-40 CLSD	4/C2	6 days	COD NGU
VR-56 CLSD	2/C-9	6 days	Logistics NGU
161 ARG	1/KC-135	7 days	Fleet-EX
380AREFS	1/KC-135	7 days	Fleet-EX
310 ARS	1/KC-135	7 days	Fleet-EX
166 ARS	1/KC-135	7 days	Fleet-EX
16 SOW HR7	3/MH-60 1/HC-130 2/MH-130	11 days	Joint TRNG
160th Army	3/MH-60	10 days	Agile Provider
16 SOW	3/MH-60	10 days	Agile Provider
119SOW Air Force	1/C-130	10 days	Agile Provider
Chrysler Tech Sys	2/NKC-135	11 days	Agile Provider
Det 2 452TS	1/NKC-135	3 days	CEC OPS
Chrysler Tech Sys	1/NKC-135	3 days	CEC OPS
160th Army	3/MH-60	6 days	Joint TRNG

¹Average loading 9.1 aircraft per day, 3141 aircraft days per year. 57% of detachments are joint or foreign military operations.

2.a. List the training ranges (including land areas used for tactical or infantry training), outlying airfields, auxiliary airfields and airspace that are actively managed (scheduled or controlled) by the air station.

Table 2.1 Training Management

Managed Training Assets	Management Role
NALF Fentress	Own, operate, maintain
Dare County Bombing Range	Lease, partially operate
TACTS	NAS Oceana owns towers, maintains tenants schedule, control airspace
FACSFAC VACAPES	FACSFAC manages and controls DoD aircraft, ships and submarines in the warning areas and training ranges along the East Coast. This encompasses approximately 94,000 sq mi of surface area. Details on these ranges were provided in data call 16 question 12b and 12c.

2.b. List other candidate installations (DoD and non-DoD) that could be considered for performing these management duties.

Table 2.2 Other Installations

Installation	Agency	Reason for Consideration
NAS Norfolk	DON	Possibility to take over NALF Fentress. Squadrons use field, within driving distance. (45 minutes) from NAS Norfolk.
Seymour Johnson	USAF	Possibility to take over Dare County Bombing Range. AF currently has an adjacent range.
Cherry Point	DON	Possibility to take over Dare and TACTs range. Cherry Point currently uses these facilities.

General Military Support

3.a. Does this air station directly support a military or civilian area control and surveillance mission (i.e., FACSFAC, FAA support)? If so, provide details of your level of support.

Yes, FACSFAC is a major NAS Oceana tenant. NAS Oceana provides facilities maintenance, utilities, medical, dental, housing, MWR, Family Service Center, PSD, religious services, and shares radio transmitters and receivers.

NAS Oceana provides support for Norfolk Approach by providing transition assistance for Langley aircraft to and from the TACTS range.

3.b. Over the foreseeable future, is this mission requirement expected to decrease, increase, or remain the same?

This mission requirement is expected to remain the same.

3.c. List all other installations (DoD and Non-DoD) that could potentially support this mission.

FACSFAC VACAPES - None

Transition assistance could be handled by Norfolk FAA facilities.

4.a. Describe the role this air station plays in the Logistics Support and Mobilization Plan (LSMP)?

NAS Oceana will be in high tempo operations to prepare tactical units for expedient deployment; i.e. upgrade aircraft/ships/units to full mission capable (FMC)/mission capable (MC) status. Supply will be required to outfit aviation equipped ships with AVCAL material. There will be an increase in support requirements due to units/personnel/material transiting NAS Oceana enroute to/from/in conus. Anticipate additional NALO/MAC air support missions for emergency supplies/personnel/aircraft coordinated through NAS Oceana passenger terminal.

The CINCLANTFLT LSMP is currently based upon a prolonged, global war rather than two major regional conflicts.

4.b. Over the foreseeable future, is this mission requirement expected to decrease, increase, or remain the same?

NAS Oceana mission requirements are expected to remain the same, but because of our location, capability and assets the probability of expanding mission requirements is high. If LSMP is changed, this mission may also change accordingly.

4.c. List all other installations (DoD and Non-DoD) that could potentially support this mission.

We have insufficient data available to respond to this question.

5. List any other military support missions currently conducted at/from this air station (i.e., port of embarkation for USMC personnel).

Special operations will be addressed under separate correspondence.

FACSFAC is integrated with the NORAD air defense network.

VF-101 shares the NORAD Air Defense Role with the USAF at Langley AFB.

The Advanced Research Projects Agency's (ARPA) What If Simulation System for Advanced Research and Development (WISSARD) Tactical Research Facility is a Distributed Interactive Simulation (DIS), entity level, combat environment being used for research into the use of intelligent automated forces at various command levels of the combat domain. NAS Oceana's WISSARD site is the only DIS facility located at an operational base in the United States. NAS Oceana's WISSARD facility is a key Navy participant in the 22 site worldwide ARPA/DMSO/US ARMY/USAF/USN Synthetic Theater of War (STOW) series of exercises. STOW is one of the Pentagon's Advanced Concept Technology Demonstrations (ACTDs) for R&D. NAS Oceana will act as the Navy's air component providing combat air patrol assets for the STOW exercises.

NAS Oceana tenants (PSD; Public Works Center, Va. Beach Site; Medical; Dental; Naval Oceanography Command Detachment) provide support for Fleet Combat Training Center.

Naval Oceanography Command Detachment provides weather service to U.S. Coast Guard Air Station, Elizabeth City.

Provide repair and return support and AIMD personnel detachments for east coast carriers.

Provide services/support for all east coast F-14 squadrons.

Provide services/support for all east coast A-6 squadrons.

Provide services/support for a reserve FA-18 squadron.

Provide services/support for two H-3 Search and Rescue aircraft.

Provide services/support to all tenant activities.

Provide training for all Landing Signal Officers (LSOs).

6. Are any new military missions planned for this air station?

YES.

Commander Carrier Air Wing 17 will be operating from NAS Oceana by the end of FY 1994.

As a result of BRAC III 5 S-3 squadrons, 1 ES-3 squadron and their operational support units will relocate to NAS Oceana from NAS Cecil Field. Also relocating is the S-3 functional wing COMSEASTRWING-1.

NAS Oceana becomes the single site for the F-14 FRS in Oct 94.

FA-18's from NATC are relocating to NAS Oceana in FY 1999.

NAS Oceana's role in the training of Battle Groups and Joint Exercises will increase markedly with the completion of the Large Area Tracking Range (LATR), IOC FY-95/96 and the Joint Tactical Combat Training System (JTCTS), IOC FY-01.

7.a. List all ground combat or special operations units (not previously mentioned in your Capacity Data Call) that train at, operate from, or mobilize to this air station.

Table 7.1 Ground Combat or Special Operations Units

Ground Unit	Training Function / Facilities Used
SPECWARGRU 2	Paradrops & Deployment (NAS & NALF)
FMFLANT (various USMC units)	Exercise Airfield Assaults (NAS & NALF)
203rd USAFR	(Airport Emer. Repair Team) deploys FM NAS.
	Special Operations will be addressed under separate correspondence.

7.b. List all other operational units (not previously mentioned in your Capacity Data Call) that train at, operate from, or mobilize to this air station.

Table 7.2 Other Units

Operational Unit	Training Function / Facilities Used
CBU-415	Provides Construction Unit Contingency Augment Capability, trains via on-the-job projects. Occupies BLDGS 840, 842, 843, & 844.
NR NASO 0181	Air OPS, AIMD, ETC., Reserve Unit which augments NAS Oceana in the event of mobilization.
NR NASO 0273	Security Reserve Unit which augments NAS Oceana in the event of mobilization.

7.c. List all Joint (non-DoN) units (not previously mentioned in your Capacity Data Call) that train at, operate from, or mobilize to this air station.

Table 7.3 Joint Units

Operational Unit	Training Function / Facilities Used
	Special Operations will be addressed under separate correspondence.
VA NATIONAL GUARD	Aircrew Proficiency/Airfield, Billeting

8. Does the air station or its tenants have any requirements to support training of other Navy and Marine Corps forces or non-DoN Joint forces (e.g., ground force training, battle group exercise, etc.)

Table 8.1 Forces Supported

Forces	Location / Distance	Type of Support	Frequency
Special OPS		To be addressed by separate correspondence.	
Naval Fleet	VACAPES/Local	Battle Group Ops/Orange Air	Quarterly
Battle Group	VACAPES/Local NSRR/1320NM	Blue/Orange Air	Semi-Annual
Navy/Marine Sqds	NAS Oceana/Local	Aggressor	Monthly
All Services/Civilian	VACAPES/Local	Airspace Coordination	Continuous

NAS Oceana plays host to a myriad of aircraft and their respective units during many East Coast exercises. These include Battle Group Operations, such as, Type Training, Comptuex, And Fleetex. NAS Oceana was one of the primary host airfields for Ocean Venture-92 and Agile Provider-94, extensive Joint Exercises. The majority of units in all these exercises depend on NAS Oceana or its tenants for a myriad of services such as FACSFAC for scheduling of airspace, ranges, control of aircraft, and coordination with FAA for all aspects of the exercise to ensure that the training is as realistic as possible for the aircrew. NAS Oceana supplies critical supply, AIMD, fuels, and host maintenance support. NAS Oceana aircraft are active Blue Force participants and act as Orange Forces against the deployed forces presenting a realistic 24 hour threat .

NAS Oceana squadrons routinely supply aircraft to the other services for training, from aggressors for the USAF to training the Army Forward Air Controllers at Navy Dare Bombing Range.

FACSFAC, an NAS Oceana tenant, provides airspace coordination for all East Coast military training flights from Massachusetts to the Carolinas that utilize the off-shore warning areas and various VR and IR routes. Over the last 2 years FACSFAC has coordinated 17,147 civilian flights and 244,017 military training flights. Of the military training flights 56.3% are Navy or Marine and 43.7% are Air Force, Army, Coast Guard and Air National Guard.

9.a. Does the air station have a role in a disaster assistance plan, search, and rescue or local evacuation plan? If so, describe.

CBU-415 provides recovery assistance in the event of an emergency or disaster, including the construction of essential facilities for shelter and other projects as required. The Naval Air Station fire department operates under a mutual aid agreement with the City of Virginia Beach. Coordination with the Virginia Beach emergency medical services has been established. Emergency search and rescue is provided to the city and surrounding community although no formal agreement exists. The crash fire division at Naval Auxiliary Landing Field Fentress has a mutual aid agreement with the city of Chesapeake. NAS Oceana provides its own SAR/MEDEVAC assets using two SH-3H helicopters. The crews consist of two pilots, a 1st crewman, rescue swimmer and an inflight medical technician. The unit maintains a 30-minute response time from 0700 - 1800 Monday through Friday and a 60-minute alert all other times. It provides primary support for NAS Oceana as well as additional support to all other area military commands, Coast Guard District 5, and The National Inland Search and Rescue Coordination Center located at Langley AFB and local civilian communities. The unit is fully day and night SAR capable over both land and water. The crews are rappel qualified and the inflight medical technicians work on a paramedic level and are advanced cardiac life support (ACLS) technicians. They are trained and equipped for the treatment of critical care patients in the event of a mass casualty incident.

9.b. Does the air station provide any direct meteorological support to local civilian, governmental or military agencies? If so, describe.

In addition to providing complete meteorological support to the Naval Air Station Oceana and attached aviation squadrons, the Naval Oceanography Command Detachment Oceana provides complete weather services for the U.S. Coast Guard Air Station, Elizabeth City, North Carolina, Fleet Training Center, Dam Neck, and Fleet Area Control and Surveillance Facility (FACSFAC), Virginia Capes. Weather services have also been provided for over 17 years to the City of Virginia Beach Office of Emergency Management Services, Public Works Department and Police Department in support of local law enforcement helicopter operations.

10.a. Does this air station currently have any special non-DoD or civilian support missions (i.e., counter-drug, scientific support)? If so, describe.

YES. FACSFAC provides airspace coordination with the Coast Guard, Drug Enforcement Agency and military units involved with counter-drug programs. Also, when properly authorized they can provide surveillance for the program in the approximately 94,000 square miles of air space they monitor. FACSFAC also backs-up FAA facilities (Norfolk Approach & Washington Center) as required during FAA equipment outages. Finally, FACSFAC provides air space clearance and coordination for NASA's Wallops Island facility for rocket launches, and the National Marine Fisheries Commission for aerial sea life migration studies and surveys.

NALF Fentress is the primary practice carrier landing field for VAW squadrons which do have a counter drug role.

10.b. If applicable, give the type and number of aircraft based at your air station that conduct these operations (10.a.) and the total number of sorties flown during FY 1993 in support of these operations.

No aircraft stationed at NAS Oceana participated in these operations.

Table 10.1 Support Operations

Aircraft Type	Number of Aircraft	# Sorties Flown in FY 1993
None		

10.c. If applicable, list the facilities, special equipment (e.g., radar surveillance systems) and personnel at your air station that directly support these operations.

Table 10.2 Supporting Equipment

Equipment/Facility/Personnel	Function
FACSFAC VACAPES	Air space coordination/surveillance

11. Are any new civilian or other non-DoD missions planned for this air station? If so, describe.

There are no new civilian or non-DoD missions planned for NAS Oceana.

Facilities

Air Space and Flight Training Areas

12. List all areas for special use routinely used by aviation units or squadrons assigned to your air station. For each piece of airspace, provide the following data:

Note 1: Standard Instrument Departures (SIDS) are strongly recommended for departures and Stereo Routes are used for simplicity to depart the local area. NAS Oceana utilizes 68 IFR and 5 VFR departures/stereo flight plans. Five additional departures are published for entrance into the National Airspace System. Apollo SID is utilized for departure into the southern warning areas and SOUCEK SID is used for departure into the northern warning areas. 24 stereo flight plans are used by A-6 Intruder aircraft for departure to VR/IR routes and 15 F-14 Tomcat routes are used.

Note 2: Traffic count information has been provided vice hours. From our perspective, "hours utilized" is misleading due to concurrent use of airspace. Turnover of airspace to FAA in terms of hours is also misleading and complex since portions by location or altitude block may be turned over vice entire Warning Areas. Traffic count most accurately depicts the volume of use.

Note 3: Proposal for airspace (MOAs, Restricted Areas) modification to counter shift of National Airspace border from three to twelve miles in 1996 have been submitted to Navy Representative, FAA Southern and Northeast Regions. Proposed airspace will allow users to activate necessary airspace to permit training that would otherwise be severely impacted or relocated at high cost, (cost data unavailable at this time).

WARNING AREAS

Airspace Designator: W-386

- a. Type of airspace: **warning area**
- b. Dimensions: **60NM X 120NM (APPROX 7,200 SQ MI)**
 - Altitudes. W-386A SFC-UNL**
 - W-386B SFC-UNL**
 - W-386C SFC-20**
 - W-386D SFC-UNL**
 - W-386E SFC-UNL**
- c. Distance from main airfield: **36nm**
- d. Time enroute from main airfield: **10 Minutes**
- e. Controlling agency: **Washington ARTCC**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **None.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **19,832**
 - **By Navy/USMC: 4,041**
 - **By other services: 15,791**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous (8760)**
- o. Number of scheduled hours in FY 1993: **Not tracked for area.**
- p. Number of hours used: **Note 2.**
- q. Types of training permitted: **Rocket firing, flight test programs, gunnery exercises, torpedo exercises, Air Mine Counter Measure Ops, USAF exclusive air Ops.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: W-72/W-50/R6606

- a. Type of airspace: **warning area**
- b. Dimensions: **120NM X 135NM (APPROX 16,200 SQ MI)**
Altitudes. **W-72A SFC-UNL**
W-72B SFC-UNL
- c. Distance from main airfield: **26nm**
- d. Time enroute from main airfield: **10 Minutes**
- e. Controlling agency: **Washington ARTCC**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **None.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **31,472**
 - **By Navy/USMC: 24,189**
 - **By other services: 7,283**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous (8760)**
- o. Number of scheduled hours in FY 1993: **Not tracked for area.**
- p. Number of hours used: **Note 2.**
- q. Types of training permitted: **Special Forces Training, Gunnery training, drone launch/control, air-to-air missile exercises, surface-to-air missile exercises, CIWS gunnery, ACM training, CATAS, VDS, NIXIE, CV operations, AIC training.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: W-122

- a. Type of airspace: **warning area**
- b. Dimensions: **180NM X 120NM (APPROX 18,900 SQ MI)**

Altitudes. W-122A SFC-UNL
W-122B SFC-UNL
W-122C SFC-UNL
W-122D SFC-17999
W-122E FL180-UNL
W-122F SFC-UNL
W-122G SFC-UNL

W-122H SFC-UNL except airspace above FL 240 excluded in the following area: 34 23 15N 77 30W thence northeastward 3NM from and parallel to the shore line to 34 28 40N 77 19W, 33 53 30N 77 26 11W, 33 51N 77 30W to the point of beginning.

W-122I SFC-UNL except airspace above FL 240 excluded in the following area: 33 53 30N 77 26 11W, 33 34N 77 30 25W, 33 34N 77 30 25W, 33 51N 77 30W, to the point of beginning.

W-122J SFC-UNL

- c. Distance from main airfield: **88nm**
- d. Time enroute from main airfield: **12 Minutes**
- e. Controlling agency: **Washington ARTCC**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No, Note 1.**
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **None.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **24,545**
 - By Navy/USMC: **12,984**
 - By other services: **11,561**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous (8760)**
- o. Number of scheduled hours in FY 1993: **Not tracked for area.**
- p. Number of hours used: **Note 2.**
- q. Types of training permitted: **Area is generally used by USN/USAF/USMC for AIC/ACM training, Hawk/Stinger/Patriot Missile exercises, and RPV operations 12 months per year. Aircraft Operations: F-14, F-15, F-16, F-5, A-4, T-38, T-2 conducting ACM training. W-122 is used extensively for various Amphibious Exercises.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: Hatteras B ATCAA

- a. Type of airspace: **warning area**
- b. Dimensions:
Altitudes. FL240 to FL600.
- c. Distance from main airfield: **70nm**
- d. Time enroute from main airfield: **10 Minutes**
- e. Controlling agency: **FAA, ARTCC Washington, DC**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **None.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None.**
- l. Number of sorties flown in FY 1993: **1,262**
 - **By Navy/USMC: Not tracked.**
 - **By other services: Not tracked.**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous (8760)**
- o. Number of scheduled hours in FY 1993: **2,820**
- p. Number of hours used: **2,425**
- q. Types of training permitted: **Area is generally used by USN/USAF/USMC for ACM training.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: Pamlico A and B MOA

- a. Type of airspace: **Military operation area**
- b. Dimensions:
- c. Distance from main airfield: **70nm**
- d. Time enroute from main airfield: **10 Minutes**
- e. Controlling agency: **FAA, ARTCC Washington, DC**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **None.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **1,262 air operations**
 - **By Navy/USMC: Not tracked.**
 - **By other services: Not tracked.**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **8,760**
- o. Number of scheduled hours in FY 1993: **2,830.75**
- p. Number of hours used: **2,425.50**
From our perspective, "hours utilized" is misleading due to concurrent use of airspace.
- q. Types of training permitted: **Air combat maneuvering, air intercept control and air operations**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: AR-8 / W-387

- a. Type of airspace: **warning area**
- b. Dimensions: **135NM X 25NM (APPROX 3300 SQ MI)**
- c. Distance from main airfield: **60nm**
- d. Time enroute from main airfield: **10 Minutes**
- e. Controlling agency: **FACSFAC VACAPES**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No, Note 1.**
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **None.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None.**
- l. Number of sorties flown in FY 1993: **830**
 - **By Navy/USMC: 478**
 - **By other services: 352**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous (8760)**
- o. Number of scheduled hours in FY 1993: **Not tracked for area.**
- p. Number of hours used: **Note 2.**
- q. Types of training permitted: **Area is generally used by USAF for ACM training overflow.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: AR-9 / W-110

- a. Type of airspace: **warning area**
- b. Dimensions: **100NM X 20NM (APPROX 2000 SQ MI)**
- c. Distance from main airfield: **26nm**
- d. Time enroute from main airfield: **10 Minutes**
- e. Controlling agency: **FACSFAC VACAPES**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **None.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **3,110**
 - **By Navy/USMC: 856**
 - **By other services: 2,254**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous (8760)**
- o. Number of scheduled hours in FY 1993: **Not tracked for area.**
- p. Number of hours used: **Note 2.**
- q. Types of training permitted: **Area is generally used by C-130 aircraft for transit to Bermuda and aircraft transit between W72/W122 during CV flyoff operations and long range tracking exercises for surface units involving Commercial Air Services.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: W370¹

- a. Type of airspace (i.e., warning area, MOA, alert area, restricted area, or MTR):
Warning Area
- b. Dimensions (nmi. x nmi. x ft of altitude): 62nm X 41nm, surface to unlimited altitude.
- c. Distance from main airfield: 35nm southwest of NAVSTA Roosevelt Roads.
- d. Time enroute from main airfield: 7 minutes
- e. Controlling agency: San Juan CERAP
- f. Scheduling agency: AFWTF
- g. Are canned/stereo airways needed to access air space?: No
 - If so, how many?
 - If so, what types (i.e., IMC, VMC, or altitude reservation)?
- h. Is the airspace under radar coverage?: Yes
- i. Is the airspace under communications coverage?: Yes
- j. Number of low level airways (below 18,000 ft) that bisect airspace: 1
- k. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- l. Number of sorties flown in FY 1993: Data not collected
 - By Navy/USMC
 - By other services (including Reserves and National Guard)
- m. Percent of sorties canceled due to weather: Data not collected
- n. Number of available hours in FY 1993: 8,760 hours
- o. Number of scheduled hours in FY 1993: 1,348 hours
 - By Navy/USMC Not known.
 - By other services (including Reserves and National Guard): Not known.
- p. Number of hours used:
 - By Navy/USMC 916.7 hours
 - By other services (including reserves and national guard): Other U. S. military - 100.3 hours, Foreign Military - 72 hours.
- q. Types of training permitted: Air-to-air, air-to-ground, surface-to-air and surface-to-surface live firing, missile and gunnery exercises and flight operations.
- r. Is the training within this airspace affected by environmental issues? No.

¹This airspace is used by station aircraft when detached to NAVSTA Roosevelt Roads.

Airspace Designator: W372¹

- a. Type of airspace (i.e., warning area, MOA, alert area, restricted area, or MTR):
Warning Area
- b. Dimensions (nmi. x nmi. x ft of altitude): 85nm X 53nm, surface to unlimited altitude.
- c. Distance from main airfield: 86nm south of NAVSTA Roosevelt Roads.
- d. Time enroute from main airfield: 17 minutes
- e. Controlling agency: San Juan CERAP
- f. Scheduling agency: AFWTF
- g. Are canned/stereo airways needed to access air space?: No
 - If so, how many?
 - If so, what types (i.e., IMC, VMC, or altitude reservation)?
- h. Is the airspace under radar coverage?: Yes
- i. Is the airspace under communications coverage?: Yes
- j. Number of low level airways (below 18,000 ft) that bisect airspace: 1
- k. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- l. Number of sorties flown in FY 1993: Data not collected
 - By Navy/USMC
 - By other services (including Reserves and National Guard)
- m. Percent of sorties canceled due to weather: Data not collected
- n. Number of available hours in FY 1993: 8,760 hours
- o. Number of scheduled hours in FY 1993: 632 hours
 - By Navy/USMC Not known.
 - By other services (including Reserves and National Guard): Not known.
- p. Number of hours used:
 - By Navy/USMC 395.3 hours
 - By other services (including reserves and national guard): Other U. S. military - 1.3 hours, Foreign Military - 104.5 hours.
- q. Types of training permitted: Air-to-air, air-to-ground, surface-to-air and surface-to-surface live firing, missile and gunnery exercises and flight operations.
- r. Is the training within this airspace affected by environmental issues? If so, how?: No.

¹This airspace is used by station aircraft when detached to NAVSTA Roosevelt Roads.

Airspace Designator: W373¹

- a. Type of airspace (i.e., warning area, MOA, alert area, restricted area, or MTR):
Warning Area.
- b. Dimensions (nmi. x nmi. x ft of altitude): 62nm X 67nm, surface to unlimited altitude.
- c. Distance from main airfield: 24nm south of NAVSTA Roosevelt Roads.
- d. Time enroute from main airfield: 5 minutes
- e. Controlling agency: San Juan CERAP
- f. Scheduling agency: AFWTF
- g. Are canned/stereo airways needed to access air space?: No
 - If so, how many?
 - If so, what types (i.e., IMC, VMC, or altitude reservation)?
- h. Is the airspace under radar coverage?: Yes
- i. Is the airspace under communications coverage?: Yes
- j. Number of low level airways (below 18,000 ft) that bisect airspace: 2
- k. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- l. Number of sorties flown in FY 1993: Data not collected
 - By Navy/USMC
 - By other services (including reserves and national guard)
- m. Percent of sorties canceled due to weather: Data not collected
- n. Number of available hours in FY 1993: 8,760 hours
- o. Number of scheduled hours in FY 1993: 1,348 hours
 - By Navy/USMC Not known.
 - By other services (including Reserves and National Guard): Not known.
- p. Number of hours used:
 - By Navy/USMC 916.7 hours
 - By other services (including Reserves and National Guard): Other U. S. military-188.7 hours, Foreign Military - 242.6 hours.
- q. Types of training permitted: Air-to-air, air-to-ground, surface-to-air and surface-to-surface live firing, missile and gunnery exercises and flight operations.
- r. Is the training within this airspace affected by environmental issues? If so, how?: No.

¹This airspace is used by station aircraft when detached to NAVSTA Roosevelt Roads.

Airspace Designator: W374¹

- a. Type of airspace (i.e., warning area, MOA, alert area, restricted area, or MTR):
Warning Area.
- b. Dimensions (nmi. x nmi. x ft of altitude): 45nm X 22nm, surface to unlimited altitude.
- c. Distance from main airfield: 55nm southwest of NAVSTA Roosevelt Roads.
- d. Time enroute from main airfield: 11 minutes
- e. Controlling agency: San Juan CERAP
- f. Scheduling agency: AFWTF
- g. Are canned/stereo airways needed to access air space?: No
 - If so, how many?
 - If so, what types (i.e., IMC, VMC, or altitude reservation)?
- h. Is the airspace under radar coverage?: Yes
- i. Is the airspace under communications coverage?: Yes
- j. Number of low level airways (below 18,000 ft) that bisect airspace: 1
- k. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- l. Number of sorties flown in FY 1993: Data not collected
 - By Navy/USMC
 - By other services (including Reserves and National Guard)
- m. Percent of sorties canceled due to weather: Data not collected
- n. Number of available hours in FY 1993: 8,760 hours
- o. Number of scheduled hours in FY 1993: 105.3 hours
 - By Navy/USMC Not known.
 - By other services (including Reserves and National Guard): Not known.
- p. Number of hours used:
 - By Navy/USMC 86.1 hours
 - By other services (including reserves and national guard): Other U. S. military - 8.9 hours, Foreign Military - 0 hours.
- q. Types of training permitted: Air to air, air to ground, surface to air and surface to surface live firing, missile and gunnery exercises and flight operations.
- r. Is the training within this airspace affected by environmental issues? If so, how?: No.

¹This airspace is used by station aircraft when detached to NAVSTA Roosevelt Roads.

Airspace Designator: W375¹

- a. Type of airspace (i.e., warning area, MOA, alert area, restricted area, or MTR):
Warning Area
- b. Dimensions (nmi. x nmi. x ft of altitude): 30nm X 24nm, surface to unlimited altitude.
- c. Distance from main airfield: 90nm south of NAVSTA Roosevelt Roads.
- d. Time enroute from main airfield: 15 minutes
- e. Controlling agency: San Juan CERAP
- f. Scheduling agency: AFWTF
- g. Are canned/stereo airways needed to access air space?: No
 - If so, how many?
 - If so, what types (i.e., IMC, VMC, or altitude reservation)?
- h. Is the airspace under radar coverage?: Yes
- i. Is the airspace under communications coverage?: Yes
- j. Number of low level airways (below 18,000 ft) that bisect airspace: 1
- k. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- l. Number of sorties flown in FY 1993: Data not collected
 - By Navy/USMC
 - By other services (including Reserves and National Guard)
- m. Percent of sorties canceled due to weather: Data not collected
- n. Number of available hours in FY 1993: 8,760 hours
- o. Number of scheduled hours in FY 1993: 105 hours
 - By Navy/USMC Not known.
 - By other services (including Reserves and National Guard): Not known.
- p. Number of hours used:
 - By Navy/USMC 86.1 hours
 - By other services (including reserves and national guard): Other U. S. military - 18.9 hours, Foreign Military - 0 hours.
- q. Types of training permitted: Air to air, air to ground, surface to air and surface to surface live firing, missile and gunnery exercises and flight operations.
- r. Is the training within this airspace affected by environmental issues? If so, how?: No.

¹This airspace is used by station aircraft when detached to NAVSTA Roosevelt Roads.

Airspace Designator: W376¹

- a. Type of airspace (i.e., warning area, MOA, alert area, restricted area, or MTR):
Warning Area
- b. Dimensions (nmi. x nmi. x ft of altitude): 30nm X 24nm, surface to unlimited altitude.
- c. Distance from main airfield: 90nm southwest of NAVSTA Roosevelt Roads.
- d. Time enroute from main airfield: 15 minutes
- e. Controlling agency: San Juan CERAP
- f. Scheduling agency: AFWTF
- g. Are canned/stereo airways needed to access air space?: No
 - If so, how many?
 - If so, what types (i.e., IMC, VMC, or altitude reservation)?
- h. Is the airspace under radar coverage?: Yes
- i. Is the airspace under communications coverage?: Yes
- j. Number of low level airways (below 18,000 ft) that bisect airspace: 1
- k. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- l. Number of sorties flown in FY 1993: Data not collected
 - By Navy/USMC
 - By other services (including Reserves and National Guard)
- m. Percent of sorties canceled due to weather: Data not collected
- n. Number of available hours in FY 1993: 8,760 hours
- o. Number of scheduled hours in FY 1993: 105 hours
 - By Navy/USMC Not known.
 - By other services (including Reserves and National Guard): Not known.
- p. Number of hours used:
 - By Navy/USMC 86.1 hours
 - By other services (including reserves and national guard): Other U. S. military - 8.9 hours, Foreign Military - 0 hours.
- q. Types of training permitted: Air to air, air to ground, surface to air and surface to surface live firing, missile and gunnery exercises and flight operations.
- r. Is the training within this airspace affected by environmental issues? If so, how?: No.

¹This airspace is used by station aircraft when detached to NAVSTA Roosevelt Roads.

Airspace Designator: R7104¹

- a. Type of airspace (i.e., warning area, MOA, alert area, restricted area, or MTR):
Restricted Area
- b. Dimensions (nmi. x nmi. x ft of altitude): 3 miles out from coastline/boundary of the Vieques target complex.
- c. Distance from main airfield: 15nm east of NAVSTA Roosevelt Roads.
- d. Time enroute from main airfield: 5 minutes
- e. Controlling agency: San Juan CERAP
- f. Scheduling agency: AFWTF
- g. Are canned/stereo airways needed to access air space?: No
 - If so, how many?
 - If so, what types (i.e., IMC, VMC, or altitude reservation)?
- h. Is the airspace under radar coverage?: Yes
- i. Is the airspace under communications coverage?: Yes
- j. Number of low level airways (below 18,000 ft) that bisect airspace: None
- k. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- l. Number of sorties flown in FY 1993: Data not collected
 - By Navy/USMC
 - By other services (including Reserves and National Guard)
- m. Percent of sorties canceled due to weather: Data collected
- n. Number of available hours in FY 1993: 5,648 hours
- o. Number of scheduled hours in FY 1993: 1,600 hours
 - By Navy/USMC Not known.
 - By other services (including Reserves and National Guard): Not known.
- p. Number of hours used:
 - By Navy/USMC 1,088 hours
 - By other services (including reserves and national guard): Other U. S. military - 24 hours, Foreign Military - 288 hours.
- q. Types of training permitted: Air-to-ground, surface-to-surface, live firing, missile and gunnery exercises and flight operations.
- r. Is the training within this airspace affected by environmental issues? No.

¹This airspace is used by station aircraft when detached to NAVSTA Roosevelt Roads.

Airspace Designator: R4816 NORTH¹

- a. Type of airspace (i.e., warning area, MOA, alert area, restricted area, or MTR):
Restricted
- b. Dimensions (nmi. x nmi. x ft of altitude): 1500 sq. miles/1500 AGL - 17,999 MSL
- c. Distance from main airfield: 25nm
- d. Time enroute from main airfield: 4 min.
- e. Controlling agency: Oakland Center FAA
- f. Scheduling agency: NAS Fallon
- g. Are canned/stereo airways needed to access air space?: No
 - If so, how many? NA
 - If so, what types (i.e., IMC, VMC, or altitude reservation)? NA
- h. Is the airspace under radar coverage?: Yes
- i. Is the airspace under communications coverage?: Yes
- j. Number of low level airways (below 18,000 ft) that bisect airspace: None
- k. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- l. Number of sorties flown in FY 1993: Not available
 - By Navy/USMC NA
 - By other services (including Reserves and National Guard) NA
- m. Percent of sorties canceled due to weather: Not available
- n. Number of available hours in FY 1993: 6022.5
- o. Number of scheduled hours in FY 1993: 5638.75²
 - By Navy/USMC Breakout not available
 - By other services (including Reserves and National Guard): Breakout not available
- p. Number of hours used: 965.5²
 - By Navy/USMC Breakout not available
 - By other services (including reserves and national guard): Breakout not available
- q. Types of training permitted: Electronic Warfare, SAR, Air Strikes, TACTS, ACM
- r. Is the training within this airspace affected by environmental issues? No, not at this time.
State agencies are concerned about effects of chaff on animals and environment.

¹This airspace is used by station when detached to NAS Fallon.

²For all aircraft.

Airspace Designator: R4816 SOUTH (EW RANGE)¹

- a. Type of airspace (i.e., warning area, MOA, alert area, restricted area, or MTR):
Restricted
- b. Dimensions (nmi. x nmi. x ft of altitude): 400 sq mile/500 AGL - 17,999 MSL
- c. Distance from main airfield: 18nm
- d. Time enroute from main airfield: 3 min.
- e. Controlling agency: Oakland Center FAA
- f. Scheduling agency: NAS Fallon
- g. Are canned/stereo airways needed to access air space?: No
 - If so, how many? NA
 - If so, what types (i.e., IMC, VMC, or altitude reservation)? NA
- h. Is the airspace under radar coverage?: Yes
- i. Is the airspace under communications coverage?: Yes
- j. Number of low level airways (below 18,000 ft) that bisect airspace: None
- k. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- l. Number of sorties flown in FY 1993: Not available
 - By Navy/USMC NA
 - By other services (including Reserves and National Guard) NA
- m. Percent of sorties canceled due to weather: Not available
- n. Number of available hours in FY 1993: 6022.5
- o. Number of scheduled hours in FY 1993: 5638.75²
 - By Navy/USMC NA
 - By other services (including Reserves and National Guard): NA
- p. Number of hours used: 965.5²
 - By Navy/USMC NA
 - By other services (including reserves and national guard): NA
- q. Types of training permitted: Electronic Warfare, SAR, Air Strikes, TACTS, ACM
- r. Is the training within this airspace affected by environmental issues? No, not at this time.
State agencies are concerned about the effects of chaff on animals and environment.

¹This airspace is used by station aircraft when detached to NAS Fallon.

²For all aircraft.

Airspace Designator: R4804 (B-17E/W)¹

- a. Type of airspace (i.e., warning area, MOA, alert area, restricted area, or MTR):
Restricted
- b. Dimensions (nmi. x nmi. x ft of altitude): 106 sq mile/sfc - 17,999 MSL
- c. Distance from main airfield: 18nm
- d. Time enroute from main airfield: 3 min.
- e. Controlling agency: Oakland Center FAA
- f. Scheduling agency: NAS Fallon
- g. Are canned/stereo airways needed to access air space?: No
 - If so, how many? NA
 - If so, what types (i.e., IMC, VMC, or altitude reservation)? NA
- h. Is the airspace under radar coverage?: Yes
- i. Is the airspace under communications coverage?: Yes
- j. Number of low level airways (below 18,000 ft) that bisect airspace: None
- k. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- l. Number of sorties flown in FY 1993: Not available
 - By Navy/USMC NA
 - By other services (including Reserves and National Guard) NA
- m. Percent of sorties canceled due to weather: Not available
- n. Number of available hours in FY 1993: 6022.5
- o. Number of scheduled hours in FY 1993: 5638.75²
 - By Navy/USMC NA
 - By other services (including Reserves and National Guard): NA
- p. Number of hours used: 2961²
 - By Navy/USMC NA
 - By other services (including reserves and national guard): NA
- q. Types of training permitted: Air/Ground/SAR exercises, ACM, Electronic Warfare
- r. Is the training within this airspace affected by environmental issues? Off range ordnance and mining claims issues.

¹This airspace is used by station aircraft when detached to NAS Fallon.

²For all aircraft.

Airspace Designator: R4810¹

- a. Type of airspace (i.e., warning area, MOA, alert area, restricted area, or MTR):
Restricted
- b. Dimensions (nmi. x nmi. x ft of altitude): 106 sq mile/sfc - 17,999 MSL
- c. Distance from main airfield: 10nm
- d. Time enroute from main airfield: 2 min.
- e. Controlling agency: Oakland Center FAA
- f. Scheduling agency: NAS Fallon
- g. Are canned/stereo airways needed to access air space?: No
 - If so, how many? NA
 - If so, what types (i.e., IMC, VMC, or altitude reservation)? NA
- h. Is the airspace under radar coverage?: Yes
- i. Is the airspace under communications coverage?: Yes
- j. Number of low level airways (below 18,000 ft) that bisect airspace: None
- k. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- l. Number of sorties flown in FY 1993: Not available
 - By Navy/USMC NA
 - By other services (including Reserves and National Guard) NA
- m. Percent of sorties canceled due to weather: Not available
- n. Number of available hours in FY 1993: 6022.5
- o. Number of scheduled hours in FY 1993: 5638.75²
 - By Navy/USMC NA
 - By other services (including Reserves and National Guard): NA
- p. Number of hours used: 1569.2²
 - By Navy/USMC NA
 - By other services (including reserves and national guard): NA
- q. Types of training permitted: Air/Ground, SAR, TACTS, Aerial RECON.
- r. Is the training within this airspace affected by environmental issues? Yes, off range ordnance and Walker River Indian Reservation (just south of R-4810) issues.

¹This airspace is used by station aircraft when detached to NAS Fallon.

²For all aircraft.

Airspace Designator: R4803 NORTH¹

- a. Type of airspace (i.e., warning area, MOA, alert area, restricted area, or MTR):
Restricted
- b. Dimensions (nmi. x nmi. x ft of altitude): 50 sq mile/sfc - 8,000
- c. Distance from main airfield: 7nm
- d. Time enroute from main airfield: 2 min.
- e. Controlling agency: Oakland Center FAA
- f. Scheduling agency: NAS Fallon
- g. Are canned/stereo airways needed to access air space?: No
- If so, how many? NA
- If so, what types (i.e., IMC, VMC, or altitude reservation)? NA
- h. Is the airspace under radar coverage?: Yes
- i. Is the airspace under communications coverage?: Yes
- j. Number of low level airways (below 18,000 ft) that bisect airspace: None
- k. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- l. Number of sorties flown in FY 1993: Not available
- By Navy/USMC NA
- By other services (including Reserves and National Guard) NA
- m. Percent of sorties canceled due to weather: Not available
- n. Number of available hours in FY 1993: 6022.5
- o. Number of scheduled hours in FY 1993: 5638.75²
- By Navy/USMC NA
- By other services (including Reserves and National Guard): NA
- p. Number of hours used: 1317.7²
- By Navy/USMC NA
- By other services (including reserves and national guard): NA
- q. Types of training permitted: Maneuvering and Alignment for Target N4803S.
- r. Is the training within this airspace affected by environmental issues? Yes, noise complaints from a few (four) farmers/ranchers that live near the B-16 target complex.

¹This airspace is used by station aircraft when detached to NAS Fallon.

²For all aircraft.

Airspace Designator: R4803 SOUTH¹

- a. Type of airspace (i.e., warning area, MOA, alert area, restricted area, or MTR):
Restricted
- b. Dimensions (nmi. x nmi. x ft of altitude): 50 sq mile/sfc - FL 180
- c. Distance from main airfield: 9nm
- d. Time enroute from main airfield: 2 min.
- e. Controlling agency: Oakland Center FAA
- f. Scheduling agency: NAS Fallon
- g. Are canned/stereo airways needed to access air space?: No
- If so, how many? NA
- If so, what types (i.e., IMC, VMC, or altitude reservation)? NA
- h. Is the airspace under radar coverage?: Yes
- i. Is the airspace under communications coverage?: Yes
- j. Number of low level airways (below 18,000 ft) that bisect airspace: None
- k. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- l. Number of sorties flown in FY 1993: Not available
- By Navy/USMC NA
- By other services (including Reserves and National Guard) NA
- m. Percent of sorties canceled due to weather: Not available
- n. Number of available hours in FY 1993: 6022.5
- o. Number of scheduled hours in FY 1993: 5638.75²
- By Navy/USMC NA
- By other services (including Reserves and National Guard): NA
- p. Number of hours used: 1317.7²
- By Navy/USMC NA
- By other services (including reserves and national guard): NA
- q. Types of training permitted: Air to Ground, Bombing, Rockets, Scoring
- r. Is the training within this airspace affected by environmental issues? Yes, noise complaints from a few (four) farmers/ranchers that live near the B-16 target complex.

¹This airspace is used by station aircraft when detached to NAS Fallon.

²For all aircraft.

Airspace Designator: R4802¹

- a. Type of airspace (i.e., warning area, MOA, alert area, restricted area, or MTR):
Restricted
- b. Dimensions (nmi. x nmi. x ft of altitude): 3nm radius/sfc-8000 MSL
- c. Distance from main airfield: 30nm
- d. Time enroute from main airfield: 5 min.
- e. Controlling agency: Oakland Center FAA
- f. Scheduling agency: NAS Fallon
- g. Are canned/stereo airways needed to access air space?: No
 - If so, how many? NA
 - If so, what types (i.e., IMC, VMC, or altitude reservation)? NA
- h. Is the airspace under radar coverage?: Yes
- i. Is the airspace under communications coverage?: Yes
- j. Number of low level airways (below 18,000 ft) that bisect airspace: None
- k. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- l. Number of sorties flown in FY 1993: Not available
 - By Navy/USMC NA
 - By other services (including Reserves and National Guard) NA
- m. Percent of sorties canceled due to weather: Not available
- n. Number of available hours in FY 1993: 6022.5
- o. Number of scheduled hours in FY 1993: 4956.25²
 - By Navy/USMC NA
 - By other services (including Reserves and National Guard): NA
- p. Number of hours used: 1772.7²
 - By Navy/USMC NA
 - By other services (including reserves and national guard): NA
- q. Types of training permitted: Air to Ground, ACM, TACTS
- r. Is the training within this airspace affected by environmental issues? No.

¹This airspace is used by station aircraft when detached to NAS Fallon.

²For all aircraft.

Airspace Designator: R4813¹

- a. Type of airspace (i.e., warning area, MOA, alert area, restricted area, or MTR):
Restricted
- b. Dimensions (nmi. x nmi. x ft of altitude): 400 sq miles/sfc - 17,999 MSL
- c. Distance from main airfield: 17nm
- d. Time enroute from main airfield: 3 min.
- e. Controlling agency: Oakland Center FAA
- f. Scheduling agency: NAS Fallon
- g. Are canned/stereo airways needed to access air space?: No
 - If so, how many? NA
 - If so, what types (i.e., IMC, VMC, or altitude reservation)? NA
- h. Is the airspace under radar coverage?: Yes
- i. Is the airspace under communications coverage?: Yes
- j. Number of low level airways (below 18,000 ft) that bisect airspace: None
- k. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- l. Number of sorties flown in FY 1993: Not available
 - By Navy/USMC NA
 - By other services (including Reserves and National Guard) NA
- m. Percent of sorties canceled due to weather: Not available
- n. Number of available hours in FY 1993: 6022.5
- o. Number of scheduled hours in FY 1993: 5638.75²
 - By Navy/USMC NA
 - By other services (including Reserves and National Guard): NA
- p. Number of hours used: 1772.7²
 - By Navy/USMC NA
 - By other services (including reserves and national guard): NA
- q. Types of training permitted: Air to Ground, SAR, Exercises, TACTS, ACM
- r. Is the training within this airspace affected by environmental issues? No.

¹This airspace is used by station aircraft when detached to NAS Fallon.

²For all aircraft.

MILITARY TRAINING ROUTES

General notes: IR routes are mutually developed by DOD and FAA and VR routes are developed by DOD to provide for military operational and training requirements that cannot be met under the terms of FAR 91.117 (Aircraft speed). Accordingly, the FAA has issued a waiver to DoD to permit operation of an aircraft below 10,000 feet MSL in excess of 250 knots indicated airspeed along DoD developed and published VFR/IFR routes.

Environmental impact research is conducted prior to route publication for use.

Airspace Designator: **IR-062**

- a. Type of airspace: **MTR**
- b. Dimensions: **495 NM long, 6-8 NM wide**
- c. Distance from main airfield: **89nm**
- d. Time enroute from main airfield: **20 Minutes**
- e. Controlling agency: **ATKWINGLANT**

- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No, Note 1.**
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **28.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **264**
 - **By Navy/USMC: 264**
 - **By other services: 0**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Radar and inertial navigation.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: IR-714

- a. Type of airspace: **MTR**
- b. Dimensions: **332 NM long, 6-10 NM wide**
- c. Distance from main airfield: **31nm**
- d. Time enroute from main airfield: **10 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **Yes**
 - If so, how many? **Note 1**
 - If so, what types? **Note 1**
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **16.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **942**
 - **By Navy/USMC: 942**
 - **By other services: 0**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Radar navigation, low altitude terrain avoidance and visual navigation (Night Vision Goggles).**
- r. Is the training within this airspace affected by environmental issues? If so, how? **Yes, UHF transmissions restricted near pts G and H (National Astronomy Observatory). Noise sensitive area (3NM) centered on Devil's Knob. N37 58.5 W 078 54.0**

Airspace Designator: **IR-715**

- a. Type of airspace: **MTR**
- b. Dimensions: **395 NM long, 6-10 NM wide**
- c. Distance from main airfield: **43nm**
- d. Time enroute from main airfield: **10 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **Yes.**
 - If so, how many? **Note 1.**
 - If so, what types? **Note 1.**
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **28.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **55**
 - **By Navy/USMC: 55**
 - **By other services: 0**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Radar and inertial navigation.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: IR-718

- a. Type of airspace: **MTR**
- b. Dimensions: **483 NM long, 4-10 NM wide**
- c. Distance from main airfield: **43nm**
- d. Time enroute from main airfield: **10 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No, Note 1.**
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **33.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None.**
- l. Number of sorties flown in FY 1993: **106**
 - **By Navy/USMC: 106**
 - **By other services: 0**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Radar and inertial navigation.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: IR-719

- a. Type of airspace: **MTR**
- b. Dimensions: **410 NM long, 10 NM wide**
- c. Distance from main airfield: **75nm**
- d. Time enroute from main airfield: **20 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No, Note 1.**
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **22.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **98**
 - **By Navy/USMC: 98**
 - **By other services: 0**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Radar and inertial navigation.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: IR-720

- a. Type of airspace: **MTR**
- b. Dimensions: **396 NM long, 10 NM wide**
- c. Distance from main airfield: **74nm**
- d. Time enroute from main airfield: **20 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **23. Also bisects EVERS MOA.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **101**
 - **By Navy/USMC: 101**
 - **By other services: 0**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Radar and inertial navigation.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: IR-760

- a. Type of airspace: **MTR**
- b. Dimensions: **360 NM long, 6 NM wide**
- c. Distance from main airfield: **35nm**
- d. Time enroute from main airfield: **10 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **Yes.**
 - If so, how many? **Note 1.**
 - If so, what types? **Note 1.**
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **22. Also bisects EVERS MOA.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **906**
 - **By Navy/USMC: 905**
 - **By other services: 1**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Radar navigation, low altitude terrain avoidance and visual navigation (Night Vision Goggles).**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: IR-761

- a. Type of airspace: **MTR**
- b. Dimensions: **328 NM long, 6-10 NM wide**
- c. Distance from main airfield: **134nm**
- d. Time enroute from main airfield: **25 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **Yes.**
 - If so, how many? **Note 1.**
 - If so, what types? **Note 1.**
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **14.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **282**
 - **By Navy/USMC: 282**
 - **By other services: 0**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Radar navigation, low altitude terrain avoidance and visual navigation (Night Vision Goggles).**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: IR-762

- a. Type of airspace: **MTR**
- b. Dimensions: **320 NM long, 4-10 NM wide**
- c. Distance from main airfield: **146nm**
- d. Time enroute from main airfield: **25 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **Yes.**
 - If so, how many? **Note 1.**
 - If so, what types? **Note 1.**
- h. Is the airspace under radar coverage? **Yes.**
- i. Is the airspace under communications coverage? **Yes.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **None.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **896**
 - **By Navy/USMC: 895**
 - **By other services: 1**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Radar navigation, low altitude terrain avoidance and visual navigation (Night Vision Goggles).**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: VR-1751

- a. Type of airspace: **MTR**
- b. Dimensions: **425 NM long, 2-10 NM wide**
- c. Distance from main airfield: **138 NM**
- d. Time enroute from main airfield: **25 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No, Note 1.**
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Intermittent.**
- i. Is the airspace under communications coverage? **Yes, but intermittent with multiple Flight Service Stations.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **17.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **270**
 - By Navy/USMC: **196**
 - By other services: **74**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Low altitude terrain avoidance and visual navigation.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: VR-1752

- a. Type of airspace: **MTR**
- b. Dimensions: **397 NM long, 2-8 NM wide**
- c. Distance from main airfield: **46NM**
- d. Time enroute from main airfield: **10 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No, Note 1.**
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Intermittent.**
- i. Is the airspace under communications coverage? **Yes, but intermittent with multiple Flight Service Stations.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **22.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **1,033**
 - By Navy/USMC: **827**
 - By other services: **206**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Low altitude terrain avoidance and visual navigation.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **Yes, noise sensitive areas along the route.**

Airspace Designator: VR-1753

- a. Type of airspace: **MTR**
- b. Dimensions: **170 NM long, 4-10 NM wide**
- c. Distance from main airfield: **32NM**
- d. Time enroute from main airfield: **10 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Intermittent.**
- i. Is the airspace under communications coverage? **Yes, but intermittent with multiple Flight Service Stations.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **11.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **1,742**
 - **By Navy/USMC: 1,425**
 - **By other services: 317**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Low altitude terrain avoidance and visual navigation.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **Yes,**
noise sensitive area N 37 21.5 W 076 43.3

Airspace Designator: VR-1754

- a. Type of airspace: **MTR**
- b. Dimensions: **361 NM long, 6 NM wide**
- c. Distance from main airfield: **32NM**
- d. Time enroute from main airfield: **10 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Intermittent.**
- i. Is the airspace under communications coverage? **Yes, but intermittent with multiple Flight Service Stations.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **19.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **775**
 - By Navy/USMC: **695**
 - By other services: **80**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Low altitude terrain avoidance and visual navigation.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **Yes, multiple noise sensitive areas along entire route.**

Airspace Designator: VR-1755

- a. Type of airspace: **MTR**
- b. Dimensions: **220 NM long, 4-6 NM wide**
- c. Distance from main airfield: **32NM**
- d. Time enroute from main airfield: **10 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No, Note 1.**
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Intermittent.**
- i. Is the airspace under communications coverage? **Yes, but intermittent with multiple Flight Service Stations.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **13.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **152**
 - By Navy/USMC: **128**
 - By other services: **24**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Low altitude terrain avoidance and visual navigation.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **Yes, noise sensitive areas along route and extensive waterfowl migration on first leg of route between Oct-Dec and Feb-Apr.**

Airspace Designator: VR-1756

- a. Type of airspace: **MTR**
- b. Dimensions: **361 NM long, 2-8 NM wide**
- c. Distance from main airfield: **151NM**
- d. Time enroute from main airfield: **26 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Intermittent.**
- i. Is the airspace under communications coverage? **Yes, but intermittent with multiple Flight Service Stations.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **21.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **242**
 - **By Navy/USMC: 217**
 - **By other services: 25**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Low altitude terrain avoidance and visual navigation.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **Yes, contains several extremely noise sensitive areas.**

Airspace Designator: VR-1757

- a. Type of airspace: **MTR**
- b. Dimensions: **158 NM long, 4 NM wide**
- c. Distance from main airfield: **214NM**
- d. Time enroute from main airfield: **30 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Intermittent.**
- i. Is the airspace under communications coverage? **Yes, but intermittent with multiple Flight Service Stations.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **4.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **50**
 - **By Navy/USMC: 50**
 - **By other services: 0**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Low altitude terrain avoidance and visual navigation.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **Yes, Shawnee State Park noise sensitive area.**

Airspace Designator: VR-1758

- a. Type of airspace: **MTR**
- b. Dimensions: **365 NM long, 6-10 NM wide**
- c. Distance from main airfield: **217NM**
- d. Time enroute from main airfield: **30 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Intermittent.**
- i. Is the airspace under communications coverage? **Yes, but intermittent with multiple Flight Service Stations.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **10.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **1,641**
 - By Navy/USMC: **1,453**
 - By other services: **188**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Low altitude terrain avoidance and visual navigation.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **No.**

Airspace Designator: VR-1759

- a. Type of airspace: **MTR**
- b. Dimensions: **188 NM long, 10NM wide**
- c. Distance from main airfield: **102NM**
- d. Time enroute from main airfield: **20 Minutes**
- e. Controlling agency: **ATKWINGLANT**
- f. Scheduling agency: **FACSFAC VACAPES**
- g. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- h. Is the airspace under radar coverage? **Intermittent.**
- i. Is the airspace under communications coverage? **Yes, but intermittent with multiple Flight Service Stations.**
- j. Number of low level airways (below 18,000ft) that bisect airspace: **19. Also conflicts with Farmville MOA.**
- k. Number of high altitude airways (above 18,000ft) that bisect airspace: **None**
- l. Number of sorties flown in FY 1993: **175**
 - By Navy/USMC: **165**
 - By other services: **10**
- m. Percent of sorties canceled due to weather: **Not tracked.**
- n. Number of available hours in FY 1993: **Continuous.**
- o. Number of scheduled hours in FY 1993: **Note 2.**
- p. Number of hours used: **See note 2. Traffic count depicts the volume of use.**
- q. Types of training permitted: **Low altitude terrain avoidance and visual navigation.**
- r. Is the training within this airspace affected by environmental issues? If so, how? **Yes, noise sensitive area at Pine Town (pt G).**

13. List all the air-to-ground training ranges routinely used by aviation units or squadrons assigned to your air station. For each range, provide the following data:

Note 1: Standard Instrument Departures (SIDS) are strongly recommended for departures and Stereo Routes are used for simplicity to depart the local area. NAS Oceana utilizes 68 IFR and 5 VFR departures/stereo flight plans. Five additional departures are published for entrance into the National Airspace System. Apollo SID is utilized for departure into the southern warning areas and SOUCEK SID is used for departure into the northern warning areas. 24 stereo flight plans are used by A-6 Intruder aircraft for departure to VR/IR routes and 15 F-14 Tomcat routes are used.

Range Name: R-5301

- a. Location (city/county & state): **Albemarle Sound, NC**
- b. Distance from main airfield: **55NM**
- c. Time enroute from main airfield: **13 MINUTES**
- d. Controlling agency: **FAA, ARTCC Washington, DC**
- e. Scheduling agency: **FACSFAC VACAPES**
- f. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- g. Is the airspace under radar coverage? **Yes.**
Secondary only 5,000 feet MSL and above.
- h. Is the airspace under communications coverage? **Yes.**
- i. Number of low level airways (below 18,000ft) that bisect airspace: **None.**
- j. Number of high altitude airways (above 18,000ft) that bisect airspace: **None.**
- k. Number of sorties flown in FY 1993: **718 operations**
 - By Navy/USMC: **Not tracked.**
 - By other services: **Not tracked.**
- l. Percent of sorties canceled due to weather: **Not tracked.**
- m. Number of available hours in FY 1993: **8,760**
- n. Number of scheduled hours in FY 1993: **8,760**
 - By Navy/USMC: **Not tracked.**
 - By other services: **Not tracked.**
- o. Number of hours used: **8,760**
 - By Navy/USMC: **Not tracked.**
 - By other services: **Not tracked.**
- p. Types of training permitted:
Testing and evaluation of various types of fused ordnance. Air support of ground equipment testing and passenger flights.
- q. Is the training within this airspace affected by environmental issues? **NO** If so, how?

Range Name: **R-5302A,B,C Palmetto Point Range**

- a. Location (city/county & state): **Harvey Point, NC**
- b. Distance from main airfield: **55NM**
- c. Time enroute from main airfield: **13 MIN**
- d. Controlling agency: **FAA, ARTCC Washington, DC**
- e. Scheduling agency: **FACSFAC VACAPES**
- f. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- g. Is the airspace under radar coverage? **Yes.**
Secondary only 5,000 feet MSL and above.
- h. Is the airspace under communications coverage? **Yes.**
- i. Number of low level airways (below 18,000ft) that bisect airspace: **None.**
- j. Number of high altitude airways (above 18,000ft) that bisect airspace: **None.**
- k. Number of sorties flown in FY 1993: **60**
 - By Navy/USMC: **60**
 - By other services: **None.**
- l. Percent of sorties canceled due to weather: **Not tracked.**
- m. Number of available hours in FY 1993: **8,760**
- n. Number of scheduled hours in FY 1993:
 - By Navy/USMC: **64.25**
 - By other services: **ANG-4.5, Other-60.0**
- o. Number of hours used:
 - By Navy/USMC: **18.25**
 - By other services: **Other-32.5**
- p. Types of training permitted: **Air to ground practice bombing, air operations, and routine training exercises.**
- q. Is the training within this airspace affected by environmental issues? **YES** If so, how? **No**
live ordnance permitted due to impact on water ecosystem.

Range Name: **R-5313 Stumpy Point Range and MOA**

- a. Location (city/county & state): **Long Shoal Point, NC**
- b. Distance from main airfield: **75NM**
- c. Time enroute from main airfield: **18 MINUTES**
- d. Controlling agency: **FAA, ARTCC Washington, DC**
- e. Scheduling agency: **FACSFAC VACAPES**
- f. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- g. Is the airspace under radar coverage? **Yes.**
Secondary only 5,000 feet MSL and above.
- h. Is the airspace under communications coverage? **Yes.**
- i. Number of low level airways (below 18,000ft) that bisect airspace: **1.**
- j. Number of high altitude airways (above 18,000ft) that bisect airspace: **None.**
- k. Number of sorties flown in FY 1993: **214**
 - By Navy/USMC: **201**
 - By other services: **13**
- l. Percent of sorties canceled due to weather: **Not tracked.**
- m. Number of available hours in FY 1993: **8,760**
- n. Number of scheduled hours in FY 1993:
 - By Navy/USMC: **262.25**
 - By other services: **38.50**
- o. Number of hours used:
 - By Navy/USMC: **114.25**
 - By other services: **2.5**
- p. Types of training permitted: **Practice bombing air to ground, and routine training exercises.**
- q. Is the training within this airspace affected by environmental issues? **YES** If so, how? **No live ordnance permitted due to impact on water ecosystem.**

Range Name: **R-5314 Navy Dare County Range** (This is for the Navy portion of the Navy Dare County Range. The entire range is operated and maintained by the Air Force.)

- a. Location (city/county & state): **Dare County, NC**
- b. Distance from main airfield: **60NM**
- c. Time enroute from main airfield: **15 MINUTES**
- d. Controlling agency: **FAA, ARTCC Washington, DC**
- e. Scheduling agency: **FACSFAC VACAPES**
- f. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- g. Is the airspace under radar coverage? **Yes.**
Secondary only 5,000 feet MSL and above.
- h. Is the airspace under communications coverage? **Yes.**
- i. Number of low level airways (below 18,000ft) that bisect airspace: **8.**
- j. Number of high altitude airways (above 18,000ft) that bisect airspace: **None.**
- k. Number of sorties flown in FY 1993: **8,048**
 - By Navy/USMC: **6,205**
 - By other services: **1,843**
- l. Percent of sorties canceled due to weather: **Not tracked.**
- m. Number of available hours in FY 1993: **8760**
- n. Number of scheduled hours in FY 1993: **3,013.25**
 - By Navy/USMC: **2,645.50**
 - By other services: **AF-135.50, ANG-228, Other-4.25**
- o. Number of hours used: **3,486**
 - By Navy/USMC: **1,785.25**
 - By other services: **AF-71.50, ANG-162.50, Other-4.25**
- p. Types of training permitted: **Air to ground practice bombing, air operations, and routine training exercises.**
- q. Is the training within this airspace affected by environmental issues? **YES** If so, how?
No live ordnance, flares, tracer ammunition and pyrotechnics permitted on targets due to fire hazard. Only inert practice type weapons can be deployed.
B-52 not permitted on range due to noise levels.

Range Name: **R-6609 Tangier Island Range**

- a. Location (city/county & state): **Patuxent River, MD**
- b. Distance from main airfield: **60NM**
- c. Time enroute from main airfield: **15 MIN**
- d. Controlling agency: **FACSFAC VACAPES**
- e. Scheduling agency: **FACSFAC VACAPES**
- f. Are canned/stereo airways needed to access airspace? **No,**
Note 1.
 - If so, how many?
 - If so, what types?
- g. Is the airspace under radar coverage? **Yes.**
- h. Is the airspace under communications coverage? **Yes.**
- i. Number of low level airways (below 18,000ft) that bisect airspace: **None.**
- j. Number of high altitude airways (above 18,000ft) that bisect airspace: **None.**
- k. Number of sorties flown in FY 1993: **978**
 - By Navy/USMC: **None.**
 - By other services: **978**
- l. Percent of sorties canceled due to weather: **Not tracked.**
- m. Number of available hours in FY 1993: **8,760**
- n. Number of scheduled hours in FY 1993: **460**
 - By Navy/USMC: **None**
 - By other services: **ANG-460.0**
- o. Number of hours used: **407**
 - By Navy/USMC: **None**
 - By other services: **ANG-407.0**
- p. Types of training permitted: **Air to ground bombing, Electronic Countermeasures, Pilot and Crew Training, Medium Attack Advanced Readiness Training.**
- q. Is the training within this airspace affected by environmental issues? **YES IF so, how?**
No live ordnance due to possible effects on established water ecosystem.

Range Name: R7104¹

- a. Location (city/county and state): Ceiba, Puerto Rico
- b. Distance from main airfield: 15nm east of NAVSTA Roosevelt Roads.
- c. Time enroute from main airfield: 5 minutes
- d. Controlling agency: San Juan CERAP
- e. Scheduling agency: AFWTF
- f. Are canned/stereo airways needed to access air space?: No
 - If so, how many?
 - If so, what types (i.e., IFR, VFR, or altitude reservation)?
- g. Is the airspace under radar coverage?: Yes
- h. Is the airspace under communications coverage?: Yes
- i. Number of low level airways (below 18,000 ft) that bisect airspace: None
- j. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- k. Number of sorties flown in FY 1993: Data not collected
 - By Navy/USMC
 - By other services (including Reserves and National Guard)
- l. Percent of sorties canceled due to weather: Data not collected
- m. Number of available hours in FY 1993: 5,648 hours
- n. Number of scheduled hours in FY 1993: 1,600 hours
 - By Navy/USMC Not known.
 - By other services (including Reserves and National Guard): Not known.
- o. Number of hours used:
 - By Navy/USMC 1,088
 - By other services (including reserves and national guard) 224 ours, Foreign Military - 288 hours.
- p. Types of training permitted: Air-to-ground, surface-to-surface live firing, missile and gunnery exercises and flight operations.
- q. Is the training within this airspace impeded by environmental issues?: No

¹This airspace is used by station aircraft when detached to NAVSTA Roosevelt Roads.

Range Name: BRAVO-16^{1,2}

- a. Location (city/county and state): Churchill County, Nevada
- b. Distance from main airfield: 9 NM west of NAS Fallon
- c. Time enroute from main airfield: 2 minutes by aircraft
- d. Controlling agency: NAS Fallon
- e. Scheduling agency: NAS Fallon
- f. Are canned/stereo airways needed to access air space?: No
- g. Is the airspace under radar coverage?: Yes
- h. Is the airspace under communications coverage?: Yes
- i. Number of low level airways (below 18,000 ft) that bisect airspace: None
- j. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- k. Number of sorties flown in FY 1993: 1924
- l. Percent of sorties canceled due to weather: Not available
- m. Number of available hours in FY 1993: 6022.5
- n. Number of scheduled hours in FY 1993:
 - By all users - 5638.7
- o. Number of hours used:
 - By all users - 1317.7
- p. Types of training permitted: Inert air-to-ground ordnance delivery.
- q. Is the training within this airspace impeded by environmental issues?: Yes (noise abatement procedures).

¹This airspace is used by station aircraft when detached to NAS Fallon.

²Air-to-ground utilization hours are typically less than the associated restricted air space utilization hours (e.g. restricted air space may be utilized while the target is closed).

Range Name: BRAVO-17 EAST^{1,2}

- a. Location (city/county and state): Churchill County, Nevada
- b. Distance from main airfield: 23 NM east of NAS Fallon
- c. Time enroute from main airfield: 4 min. by aircraft
- d. Controlling agency: NAS Fallon
- e. Scheduling agency: NAS Fallon
- f. Are canned/stereo airways needed to access air space?: No
- g. Is the airspace under radar coverage?: Yes
- h. Is the airspace under communications coverage?: Yes
- i. Number of low level airways (below 18,000 ft) that bisect airspace: None
- j. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- k. Number of sorties flown in FY 1993: 12957
- l. Percent of sorties canceled due to weather: Not available
- m. Number of available hours in FY 1993: 4273.75
- n. Number of scheduled hours in FY 1993:
 - By all users - 3280.8
- o. Number of hours used:
 - By all users - 2599.7
- p. Types of training permitted: Live/Inert air-to-ground ordnance delivery and live ground firing exercises.
- q. Is the training within this airspace impeded by environmental issues?: Yes (off-range ordnance abatement procedures).

¹This airspace is used by station aircraft when detached to NAS Fallon.

²Air-to-ground utilization hours are typically less than the associated restricted air space utilization hours (e.g. restricted air space may be utilized while the target is closed).

Range Name: BRAVO-17 WEST^{1,2}

- a. Location (city/county and state): Churchill County, Nevada
- b. Distance from main airfield: 23 NM east of NAS Fallon
- c. Time enroute from main airfield: 4 min. by aircraft
- d. Controlling agency: NAS Fallon
- e. Scheduling agency: NAS Fallon
- f. Are canned/stereo airways needed to access air space?: No
- g. Is the airspace under radar coverage?: Yes
- h. Is the airspace under communications coverage?: Yes
- i. Number of low level airways (below 18,000 ft) that bisect airspace: None
- j. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- k. Number of sorties flown in FY 1993: Not available
- l. Percent of sorties canceled due to weather: Not available
- m. Number of available hours in FY 1993: 4273.75
- n. Number of scheduled hours in FY 1993:
 - By all users - 1539.7
- o. Number of hours used:
 - By all users - 1461.1
- p. Types of training permitted: No Drop Weapons Scoring (air-to-ground) and live ground firing exercises.
- q. Is the training within this airspace impeded by environmental issues?: No.

¹This airspace is used by station aircraft when detached to NAS Fallon.

²Air-to-ground utilization hours are typically less than the associated restricted air space utilization hours (e.g. restricted air space may be utilized while the target is closed).

Range Name: BRAVO-19^{1,2}

- a. Location (city/county and state): Churchill County, Nevada
- b. Distance from main airfield: 16 NM south of NAS Fallon
- c. Time enroute from main airfield: 3 min. by aircraft
- d. Controlling agency: NAS Fallon
- e. Scheduling agency: NAS Fallon
- f. Are canned/stereo airways needed to access air space?: No
- g. Is the airspace under radar coverage?: Yes
- h. Is the airspace under communications coverage?: Yes
- i. Number of low level airways (below 18,000 ft) that bisect airspace: None
- j. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- k. Number of sorties flown in FY 1993: 5076
- l. Percent of sorties canceled due to weather: Not available
- m. Number of available hours in FY 1993: 4273.75
- n. Number of scheduled hours in FY 1993:
 - By all users - 2476.6
- o. Number of hours used:
 - By all users - 1844.4
- p. Types of training permitted: Live/Inert air-to-ground ordnance delivery and live ground firing exercises.
- q. Is the training within this airspace impeded by environmental issues?: Yes (off-range ordnance abatement procedures).

¹This airspace is used by station aircraft when detached to NAS Fallon.

²Air-to-ground utilization hours are typically less than the associated restricted air space utilization hours (e.g. restricted air space may be utilized while the target is closed).

Range Name: BRAVO-20^{1,2}

- a. Location (city/county and state): Churchill County, Nevada
- b. Distance from main airfield: 30 NM northwest of NAS Fallon
- c. Time enroute from main airfield: 5 min. by aircraft
- d. Controlling agency: NAS Fallon
- e. Scheduling agency: NAS Fallon
- f. Are canned/stereo airways needed to access air space?: No
- g. Is the airspace under radar coverage?: Yes
- h. Is the airspace under communications coverage?: Yes
- i. Number of low level airways (below 18,000 ft) that bisect airspace: None
- j. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- k. Number of sorties flown in FY 1993: 6720
- l. Percent of sorties canceled due to weather: Not available
- m. Number of available hours in FY 1993: 6022.5
- n. Number of scheduled hours in FY 1993:
 - By all users - 4956.25
- o. Number of hours used:
 - By all users - 1772.7
- p. Types of training permitted: Live/Inert air-to-ground ordnance delivery.
- q. Is the training within this airspace impeded by environmental issues?: No.

¹This airspace is used by station aircraft when detached to NAS Fallon.

²Air-to-ground utilization hours are typically less than the associated restricted air space utilization hours (e.g. restricted air space may be utilized while the target is closed).

Range Name: ELECTRONIC WARFARE (EW) RANGE^{1,2}

- a. Location (city/county and state): Churchill County, Nevada
- b. Distance from main airfield: 23 NM east of NAS Fallon
- c. Time enroute from main airfield: 4 min. by aircraft
- d. Controlling agency: NAS Fallon
- e. Scheduling agency: NAS Fallon
- f. Are canned/stereo airways needed to access air space?: No
- g. Is the airspace under radar coverage?: Yes
- h. Is the airspace under communications coverage?: Yes
- i. Number of low level airways (below 18,000 ft) that bisect airspace: None
- j. Number of high altitude airways (above 18,000 ft) that bisect airspace: None
- k. Number of sorties flown in FY 1993: Not available
- l. Percent of sorties canceled due to weather: Not available
- m. Number of available hours in FY 1993: 4078.75
- n. Number of scheduled hours in FY 1993:
 - By all users - 1813.7
- o. Number of hours used:
 - By all users - 1182.0
- p. Types of training permitted: Electronic warfare
- q. Is the training within this airspace impeded by environmental issues?: Yes (electronic jamming frequency restrictions).

¹This airspace is used by station aircraft when detached to NAS Fallon.

²Air-to-ground utilization hours are typically less than the associated restricted air space utilization hours (e.g. restricted air space may be utilized while the target is closed).

14. Is land and/or air encroachment an issue which endangers long term availability of any training areas? If so, provide details.

YES. In 1996, shift of National Airspace boundary to 12NM limit will cause loss of 9NM of airspace available for training along the entire East Coast (approx 3,321 square miles total). Proposal for airspace (MOAs, Restricted Areas) modification to counter shift of National Airspace border from three to twelve miles in 1996 have been submitted to Navy Representative, FAA Southern and Northeast Regions. Proposed airspace will allow users to activate necessary airspace to permit training that would otherwise be impacted by loss of airspace.

15. Is the SUA/airspace for special use routinely used by aviation units or squadrons assigned to your air station sufficient to satisfy the air-to-air training, air-to-ground training and low level training missions of units assigned to the air station? Explain the nature and magnitude of any shortfalls.

The airspace routinely used by squadrons assigned is sufficient to satisfy air-to-air and low level training. Air-to-ground training has the limitation that live ordnance can not be dropped due to fire hazard or possible effects on established water ecosystems. Only inert weapons can be deployed. This limitation is overcome by doing live ordnance training requirements on detachment in conjunction with orange air support and airwing exercises.

16. If deployments or detachments to other domestic locations are required to satisfy airspace shortfalls, fill out the following tables:

Table 16.1 Deployment Costs

WHERE	REASON	ANNUAL TAD COSTS ADVERSE WEATHER	ANNUAL TAD COSTS AIRSPACE NOT AVAILABLE	ANNUAL TAD COSTS NO LOCAL RANGE/ OTHER ¹
Fallon, NV ²	Combined Airwing Tactical Training			231,000.00
Roosevelt Roads P.R.	Orange Air Det			96,000.00

¹Other-airwing detachments for unit training.

²Anticipate one Fallon Det for FY95. No Dets remaining for FY94.

Airfields

17. For the main airfield(s) and each auxiliary and outlying field, provide the following data

Airfield Name: NAS OCEANA

- a. Location: **Virginia Beach, VA**
- b. Distance from main field: **N/A**
- c. Does the airfield have more than one runway complex that can conduct independent (i.e., concurrent) flight operations? **NO**
- d. Does the airfield have parallel or dual offset runways? **YES, Dual Crossing Parallels.**
- e. If the airfield has parallel or dual offset runways, do they permit dual IFR flight operations? **NO**
- e. Does the airfield have full-length parallel taxiways? **YES**
- f. Does the airfield have high speed taxiways? **NO**
- g. Does the airfield have a crosswind runway? **YES**
- h. If conditions force the use of this runway, does the airfield lose flight ops capacity? **NO**
- i. How much capacity is lost? **N/A**
- j. What percent of the time do conditions force the crosswind runway to be used? **16%**
- k. Is the airfield equipped to support IFR flight operations? **YES**
- l. Is the airfield owned by the navy or leased? **Owned**
- m. Discuss any runway design features that are specific to particular types of aircraft (e.g., are the airfield facilities designed primarily for helo, prop. or jet train aircraft). **Primarily Tactical Jet, dual parallel runways, automatic carrier landing system, in ground power and air starting units, hot pit refueling capability, fresnel lens optical landing system.**
- n. Does the air station perimeter road completely encircle the airfield? **NO, NAS Oceana does not have a perimeter road.**
- o. Is the air station perimeter road 100% paved? If not estimate the percentage paved. **N/A.**
- p. Does the perimeter fence completely enclose the operational areas of the air station? If not, explain why. **NO. Lack of funding, waiver in effect.**
- q. Is lack of fencing a security discrepancy? **NO**
- r. Other remarks.

Airfield Name: NALF FENTRESS

- a. Location: **Chesapeake, VA**
- b. Distance from main field: **8.5 Miles**
- c. Does the airfield have more than one runway complex that can conduct independent (i.e., concurrent) flight operations? **NO**
- d. Does the airfield have parallel or dual offset runways? **NO**
- e. If the airfield has parallel or dual offset runways, do they permit dual IFR flight operations? **N/A**
- f. Does the airfield have full-length parallel taxiways? **YES**
- g. Does the airfield have high speed taxiways? **NO**
- h. Does the airfield have a crosswind runway? **NO**
- i. If conditions force the use of this runway, does the airfield lose flight ops capacity? **N/A**
- j. How much capacity is lost? **N/A**
- k. What percent of the time do conditions force the crosswind runway to be used? **N/A**
- l. Is the airfield equipped to support IFR flight operations? **NO**
- m. Is the airfield owned by the navy or leased? **Owned**
- n. Discuss any runway design features that are specific to particular types of aircraft (e.g., are the airfield facilities designed primarily for helo, prop. or jet train aircraft). **Primarily designed for carrier aircraft. Carrier deck lighting to support FCLP, fresnel lens optical landing, landing signal officer control facility abeam simulated carrier decks.**
- o. Does the air station perimeter road completely encircle the airfield? **NO, NALF Fentress does not have a perimeter road.**
- p. Is the air station perimeter road 100% paved? If not estimate the percentage paved. **N/A**
- q. Does the perimeter fence completely enclose the operational areas of the air station? If not, explain why. **NO. Lack of funding, waiver in effect.**
- r. Is lack of fencing a security discrepancy? **NO**
- s. Other remarks.

18. Are the current airfield descriptions, operations and facilities consistent with the flight information publication (FLIP)? Attach a copy of the latest FLIP chart annotated with any updates. **YES, see attached.**

Facilities**Base Infrastructure and Investment**

19. List the project number, description, funding year, and value of the capital improvements at your base completed (beneficial occupancy) during 1988 to 1994. Indicate if the capital improvement is a result of BRAC realignments or closures.

Table 19.1 Capital Improvement Expenditure¹

Project Number	Description	Fund Year	Value (\$K)
P-172	Addition to Building 340	87	504K
P-452	Jet Engine Test Cell	88	4,662K
P-700	Pay & Personnel Support Office	88	568K
P-200	TACTS Facility	89	1,450K
P-594	Golf Clubhouse	89	1,430K
P-725	Storage Facility	90	1,543K
P-182/P-185	F-14D Addition & CASS Building	91	2,008K
P-741	Navy Exchange Mall	91	6,941K
P-179	A-6E SWIP WST Addition	92	1,251K
P-184	Strike Weapons & Tactics School	92	2,024K
P-718	Addition to Squadron Trainer Bldg 223	92	3,897K
P-451	AIMD Avionics Addition for CASS	93	982K
C3-87	BLDG LS-500 Line Shack	87	135K
HC-1-83	Whole Site Improvements MOQ	88	307K
C15-84	Interior Improvements Bldg 520	88	222K
RMC6-88	Renovate Building 320	89	180K
HC2&3-89	Outdoor Play Structures/Landscaping	89	584K
C2-90	Hazardous Waste Storage Facility Improvements	90	175K

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Project Number	Description	Fund Year	Value (\$K)
HC-4-89	Install Aluminum Storm Doors - Wadsworth Housing	91	143K
C26-91	Self-Help Facilities Office	91	120K
C28-91	Install Air Compressor Bldg 119	91	111K
C33-90	Install 400 Hz MG Set Bldg 119	91	79K
C41-92	Self-Help Supply Warehouse	91	191K
P-452	Install 20K Gal Fuel Tank @ Test Cell (follow on contract)	92	170K
C1-84	Mods to Refueler Truck Parking Area	92	283K
C5-80	Lighting Replacement - Softball Fields	92	83K
HC-3-91	Additional Parking @ Wadsworth Housing	93	142K
C21-91	Sewage Pump Station Upgrades	93	241K
C52-92	Firefighting Training Facility	93	219K
C61-92	Install New JP-5 Fuel Piping/Pump	93	132K
C5-93	Addition to Bldg 820	93	175K
NONE	BEST Center Construction & Alterations	93	189K
CBU-479	Self-Help Supply Warehouse	93	191K
C51-83	Addition to FLTIMAGCEN	94	100K
NONE	BEST Center Construction & Alterations	94	98K
NONE	MWR Batting Cage	94	100K

¹None of these projects are BRAC related.

20.a. List the project number, description, funding year, and value of the non-BRAC related capital improvements planned for years 1995 through 1997.

Table 20.1 Planned Capital improvements

Project Number	Description	Fund Year	Value
P-821	Refueler Vehicle Shop	92	1100K
P-412	Replace Fuel Storage Tanks	94	1800K
P-750	Golf Course Enlargement	94	1400K
P-892 ¹	ECIP - Electric Peak Shaving Generators	94	1250K
HC-1-91	Community Center - Wadsworth Housing	94	860K
P-754	Golf Course Enlargement	95	1800K
TBD*	Install Additional Base Water Supply Line	95	300K
NONE	Dust Collector System Bldg 513	92	120K
(OPN \$)	Tower Replacement - Dare County	93	120K
C13-84	Racquetball Court Addition	93	155K
C11-93	ATKWING Oil/Water Separators	94	170K
C12-93	FITWING Oil/Water Separators	94	170K
C21-93	SPCC Requirements	94	100K
C9-93	Construct Refueler Truck On/Off Loading Facility	95	175K
C16-92	Retrofit Fluorescent Emergency Exit Signs	95	80K
C16-93	Install Filter Separators @ Day Tank	95	250K
C20-91	Install Variable Speed Drivers on Induction Motors	95	250K
C20-93	Install Motion Sensor Lighting Controls in Heads	95	144K
C31-85 ¹	Electric Tie Circuit "Z"	95	293K
NONE	Radar Tower BLDG 210	95	250K

Q-336	SOC Boat Launch Facility	93	1437K
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¹Utilities improvement project at NAS Oceana. Utilities systems owned by PWC Norfolk.

20.b. List the project number, description, funding year, and value of the BRAC related capital improvements planned/programmed for 1995 through 1999.

Table 20.2 Planned Capital improvements

Project Number	Description	Fund Year	Value
P-186T ¹	S3 Training Facility/OPS/Fencing	95	\$3.5M
P-187T ¹	S3 NAMTRAGRUDET Training Facility	95	\$3.3M
P-188T ¹	SE Aviation Maintenance Facility	95	\$2.5M
P-457T ¹	F-14D Aviation Maintenance Facility	95	\$.5M
C14-94	Alts to Bldg 140 F14D Aircrew Trmr. Suite	95	\$.3M

¹Scopes and costs of these projects are being revised by LANTDIV to use existing A6 spaces in existing buildings. Revised costs and estimates based on alterations/ modifications to existing facilities are not available at this time.

Source: Latest 1391 Documents from LANTDIV and Step Two Document.

Personnel Support Facilities

21. Administrative Spaces

21.a. In the following table, indicate the available space (SF), individual workstation (PN), and condition for each facility designated or used for administrative purposes.

Table 21.1 Administrative Support Spaces

Building Type	NAVFAC (P-80) category code	Adequate		Substandard		Inadequate		Total	
		SF	PN	SF	PN	SF	PN	SF	PN
Administrative office	610-10	14386	959	17950	120	1860	12	163646	1091
ADP installations	610-20			4223	28			4223	28
Legal services	610-40	8089	54					4089	54
Admin storage	610-77	0		0		0		0	
Underground administrative office	620-10	0		0		0		0	
Underground ADP installation	620-20	0		0		0		0	
Underground admin storage	620-77	0		0		0		0	
Other	620-7X	0		0		0		0	

Source - P-164, Base Maps, Building Plans

21.b. For all facilities that were classified as inadequate in the preceding table, identify the type of facility and describe why the facility is inadequate; indicate how the facility is being used and list other possible uses; and specify the costs to remove the deficiencies that make it inadequate (do not be concerned with the economic justification for these costs). Indicate current plans to remove these deficiencies and the amount of any programmed funds. Does the deficiency result in a C3 or C4 designation on your baserep?

Existing inadequate space is in an old (29 years) metal building (Bldg 3033) that has deteriorated beyond economical use, current use of facility is to storage of grounds maintenance equipment. Building should be replaced rather than repaired. Plans are to demolish building when funds become available. The deficiency noted does not result in a C3 or C4 designation.

22. Describe any administrative support facility limitations. Describe the potential for expansion of the services that administrative support facilities provide.

Administrative spaces are currently filled to approximately 90%. If mission requirements demanded expansion beyond current capacity, adequate land is available for additional facilities. NAS Oceana has over 1000 acres of undeveloped and unrestricted land available for expansion.

23.a. List all specialized training facilities/simulators that are located at or near the air station.

Table 23.1 Specialized Training Facilities/Simulators Onboard/In Vicinity

Type	Purpose and Availability Elsewhere
2H111	LSO Simulator/Unique: only one in the world
2F156A	A-6 SWIP Visual Flight Simulator/Unique to east coast
2F114	A-6 WST Flight Simulator/Unique to east coast
2F122A	A-6 Night Carrier Landing Simulator/Unique to east coast
Sim 2F95	Pilot Trainer/Unique to east coast
Sim 15C9	R10 Trainer/Unique to east coast
Sim 2E6	Aircrew Trainer/Unique to east coast
Aviation Physiology	Swim/Physiology/Jacksonville, FL
Firefighting School	Firefighting training/Jacksonville, FL
CSSP/ FT Story	Classified/Unique to east coast
Aviation Dept. Head School	Squadron Dept Head Training/Unique to east coast
C-12 FRS	Flight training in the C-12/Unique to east coast

NMITC	Train intelligence officers, IS rate/Unique to the Navy
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23.b. List other facilities/simulators not available locally that would assist the training mission.

Table 23.2 Facilities/Simulators Desired

Type	Training Function	Location
Navy Fighter Weapons School	Weapons Training Officers School	NAS Miramar, CA
NADC Centrifuge	G-Tolerance	Warminster, PA
Strike U	Strike Leader Attack Training School	NAS Fallon, NV

24.a. Is there is a NADEP located at the air station? NO

24.b. Does the NADEP provide any direct support/benefit to the installation's intermediate maintenance mission? N/A

25.a. What ship maintenance facilities are located at the air station?

Table 25.1 Ship Maintenance Facilities

Ship Maintenance Facility	Major Capabilities
NONE	

25.b. What other maintenance facilities do ships homeported/berthed at the air station use on a regular basis?

Table 25.2 Other Ship Maintenance Facilities

Maintenance Activity	Type of Support	Location
see below		

NAS Oceana AIMD's NDI, CAL Lab, test cell, power plants, hydraulic shop, metal shop, tire and wheel shop, aviation life support systems shops, aviation ordnance, ground support equipment and avionics division routinely provide extensive training and test benches for the carriers located at NS Norfolk and other air capable ships stationed at NAVPHIBASE Little Creek.

26. Has your AIMD been identified to be a part of the Navy's Regional Maintenance concept? If so, provide the details as currently known and what other DON industrial activities (both intermediate and depot level) are located within a 25 mile range of your activity?

NAS Oceana is participating in the Navy's Regional Maintenance concept. Some areas considered for consolidation are LOX/N2 Plant Operations, Corrosion Control, Gas Turbine Repair/Testing, Support Equipment, Hydraulics, Materials Lab and Huntron. All of these areas are being studied for feasibility, but no firm action has been taken to consolidate.

The Regional Maintenance Concept has been approved. At the current time, detailed implementation plans have not been finalized. The specific impact upon this activity and others in the region will be certified and provided as the information becomes available.

Special Military Facilities

27. List all facilities at or near the air station that have a special role in military operations (ASWOCs, oceanographic facilities, etc.) of the aircraft or ships based at the installation.

Table 27.1 Special Military Facilities

Type of Facility	Operational Mission of Facility
TACTS Range	36 Aircraft Track Capable Range which includes coverage of Dare County Bombing Range/BT-9, BT-11 TGTs
Fleet Imaging Center	Develops TARPS film
NWAD, Naval Warfare Assessment Div.	Telemetry-Track and analyze Vacapes Missile Shoots
FACSFAC	Schedules, controls all DOD air, surface and subsurface operations in warning, training areas off the east coast from MA to NC.
Mid Atlantic Electronic Warfare Range	Electronic warfare training range
DARE County	Bombing range
VC-6 DET.	Drone support
Naval Oceanography Command	Weather forecasting, wind prediction
NAMTRAGRU	Aircraft maintenance training facility

Non-DON Facility Support Arrangements

28. List all inter-service arrangements (e.g., inter-service support agreements) that involve supporting military (non-DON) activities at the air station.

Table 28.1 Non-DON Support

Activity Name / Military Service	Description of Activity Role and Degree of Support
436 MAW/LGX Dover AFB/ U.S. Air Force	Training/ As required
4th Wing Seymour Johnson AFB/U.S. Air Force	Airfield Operations/ Major
1st Tactical Fighter Wing Langley/U.S. Air Force	Training/ Major
113th TAC Andrews AFB/ DC Air National Guard USAF	Air Operations/ Major
203rd RHCEF/LGX Camp Pendleton/VA Air National Guard	Airfield Operations/ Limited
Atlantic Marine Center/NOAA	Airfield Support Fentress/ Minimal

29. List all formal support agreements and other arrangements that involve supporting other governmental agencies (federal, state, local or international) or civilian activities at the air station.

Table 29.1 Other Agencies

Activity / Sponsor / Government Affiliation'	Description of Activity Role and Support Level
FAA/Airfield Operations	Radar Tower/High
General Dynamics Aircraft Support	Aircraft Maintenance/High
Link Training Service Aircraft	A-6E SWIP ISD Program/High
General Electric Aircraft Support	F11-GE-400 Engine Program/High
City of Chesapeake, VA Firefighting Support	Mutual Aid Firefighting Agreement/High
Boeing Aircraft Support	Aircraft Maintenance/High
City of Chesapeake, VA Police Support	Mutual Aid law enforcement at NALF Fentress/High
Tyrell County, Columbia, NC Police Support	Mutual Aid law enforcement at Navy Bombing Range, Palmetta Point, NC/High
Tidewater Community College	Educational Services/Medium
St. Leo College	Educational Services/Medium
Troy State University	Educational Services/Medium
Embry-Riddle Aeronautical Univ.	Educational Services/Medium

Activity / Sponsor / Government Affiliation'	Description of Activity Role and Support Level
Virginia Tidewater Consortium	Educational Counseling and registration/Medium
Hughes Aircraft	F-14 AWG-9/Aim-54 Radar Technical support/High
Northrup/Grumman Aircraft	A-6 and F-14 project support and flight simulator/High
Beech Aircraft	Maintains UC-12B Aircraft/High
Pratt and Whitney	F-14 engine program/High
BMH Associates	Advanced Research Project Agency's (ARPA)/(WISSARD) Tactical Research Facility/High

LOCATION

Proximity to Operational Mission Areas

30.a. Describe the areas where aircraft based at this air station routinely conduct operational missions (vice training missions). Include details on the distance from the air station, average transit times and average length of time the aircraft spend in the operating areas.

NAS Oceana aircraft conduct operational missions throughout the Atlantic Ocean, Caribbean, Mediterranean, and Red Sea on board aircraft carriers deployed in response to National Command Authority direction. Transit time to operational site is approximately 30 minutes. Average length of deployment in operating area is 6 months.

JCS tasking for TARPS film of any natural disaster (hurricanes, floods, etc.). Average distance between 800-1200NM from Oceana and an average length of time is four hours.

NAS Oceana SAR helo performs rescue missions in the local area. An average length of time is 3 hours per mission.

30.b. Does the location of the air station permit any specialized training with other operational units (i.e. Battle Groups or Joint forces)? If so, provide details.

There is strategic value to being located with the majority of Atlantic Fleet carriers. Aircraft from NAS Oceana to participate in battle group exercises on a regular basis. Squadrons provide Orange Air assets, conduct bombing runs against fleet assets, and provide missile profiles for ship training. AIMD Oceana provides specialized training for aviation capable ships located in the Hampton Roads area. NAS Oceana personnel can take advantage of the many military schools located in the region. Firefighting, safety classes, and weapons school are some examples.

Local squadrons routinely schedule Defensive Air Combat Training sorties against USAF

F-15's from Langley AFB, F/A-18's from MCAS Cherry Point and Beaufort, and AV-8B's from MCAS Cherry Point; USAF F-15E's from Seymour Johnson AFB; E-2's from NAS Norfolk often provide command and control. Squadrons occasionally work with helicopters from Fort Pickett. There are many Airwing Exercises staged from Oceana. CVW-3 has exercise "Coastal Carnage" and CVW-7 has exercise "Bronze Nickel", both of which bring aircraft from NAS Cecil Field and NAS Norfolk to Oceana. USACOM routinely runs an exercise called "Agile Provider" in which local squadrons participate.

NAS Oceana's close proximity to the Littoral Warfare Training Area (Joint Training) allows squadrons the opportunity to participate in exercises and training at this facility.

30.c. Do squadrons routinely have to deploy to conduct carrier qualifications or other required training?

Fleet squadrons do not deploy for carrier qualification. Due to the more stringent criteria for weather and sea conditions Fleet Replacement Squadrons do make some detachments for carrier qualifications. Fleet squadrons do participate in some detachments for training purposes, as was discussed in data call 16.

Proximity to other support facilities

31.a. List all primary airfields in the local flying area that are available for training and emergency uses.

Table 31.1 Local Airfields

Airfield Name	Major Use / Capability	Location / Distance
NALF Fentress	Fleet Carrier Landing Practice	Chesapeake VA 8NM
MCAS Cherry Point	Practice Approaches/Divert Field	North Carolina 120NM
Bogue Field	Fleet Carrier Landing Practice/ Carrier Controlled Approach Practice	North Carolina 120NM
NAS Norfolk	Practice Approaches/Divert Field	Norfolk, VA 12NM
Langley AFB	Practice Approaches/Divert Field	Hampton, VA 15NM
CGAS Elizabeth City	Divert Field	North Carolina 35NM
NAS Pax. River	Practice Approaches	Pax River, MD 120NM

31.b. What other military facilities located in the vicinity are/could be used to support the air station's and tenants' mission?

NAS Oceana's dual crossing parallel runways are unique in the immediate geographic area. Relocation of individual squadron units may not be practical because of potential duplication of support infrastructure. Other military facilities in the vicinity could provide support in training, maintenance and supply functions.

Table 31.2 Other Military Facilities

Military Facility Name	Actual / Proposed Use	Distance
Dam Neck	Classroom Training/Classroom Training	4NM
NADEP Norfolk	Maintenance support/maintenance support	20NM
NAS Norfolk Supply	Supply support/Supply support	20NM

31.c. What civilian-owned facilities located in the vicinity are/could be used to support the air station's and tenants' mission?

Table 31.3 Civilian Facilities

Civilian Facility Name	Actual / Proposed Use	Distance
None		

Location

Proximity to Major Transportation Nodes

32. List the major transportation facilities (both military and civilian) that play a significant logistics role and/or could play a role in any future operational deployment and mobilization plans.

Table 32.1 Transportation Nodes

Facility	Mobilization Role	Location/ distance
NAS Oceana	Movement of High Pri Material and PAX in CONUS and overseas via air	NAS Oceana/ ONBOARD
MAC Terminal	Movement of High Pri Material and PAX overseas via air	NAVSTA Norfolk, VA/20 miles
QUICKTRANS Terminal	Movement of High Pri Material in CONUS via air/surface	NAVSTA Norfolk, VA/20 miles
Military Ocean Terminal	Movement of material overseas via water	NAVSTA Norfolk, VA/20 miles
Virginia Intl Marine Terminal	Movement of material overseas via water	Norfolk, VA/24 miles
Norfolk Intl Air Terminal	Movement of High Pri Material and PAX overseas and in CONUS via air	Norfolk, VA/15 miles
Norfolk Southern Rail Line	Movement of material in CONUS via rail	Norfolk, VA/18 miles
Norfolk & Portsmouth Belt Line Railroad Co.	Movement of material in CONUS via rail	Norfolk, VA/18 miles
Misc Air Freight Carriers ¹	Movement of High Pri Material in CONUS via air	VA Beach & Norfolk, VA/5-18 miles

Facility	Mobilization Role	Location/ distance
Misc Surface Freight Carriers ²	Movement of material in CONUS via highways (I-64 direct access)	VA Beach & Norfolk, VA/5-18 miles

¹Air freight carriers include Burlington Air Express, DHL Worldwide Express, International Cargo Services, UPS, RPS, Federal Express and Others.

²Surface freight carriers include ABF Freight, CF Motorfreight, Carolina Freight Carriers, Old Dominion Freight Lines, Yellow Freight Systems, Roadway Express, Overnite Transportation Co., Calore Freight Systems and Others.

Features and Capabilities - Weather

33.a. What percentage of the time (on average, by month) does the local weather affect training operations and restrict airfield sortie rates? Use the following chart and add any further descriptions on how weather generally impacts airfield and training operations (recurring wind or fog conditions, etc.). Also fill out the chart for outlying fields if the information is available.

Table 33.1 Weather Information

Field Name: OCEANA NAVAL AIR STATION

Month	% of Hours VMC ¹	% of Hours IMC ³	% of Hours Below 200 ft Ceilings and 1/2 Mile Visibility ⁴	% of All Sorties Canceled ² Due to Weather
Jan.	85.6	14.4	1	1.0
Feb.	86.0	14.0	2	1.0
Mar.	84.9	15.1	1	1.0
Apr.	92.6	07.4	1	0.5
May	86.1	13.9	1	0.5
June	91.4	08.6	LESS THAN 1	0.5
July	93.4	06.6	LESS THAN 1	0.5
Aug.	91.7	08.3	LESS THAN 1	0.5
Sept.	91.4	08.6	1	0.5
Oct.	89.9	10.1	1	0.5
Nov.	87.5	12.5	1	0.5
Dec.	86.0	14.0	1	1.0

¹Percentage of total normal operating hours that specified weather conditions were observed (include list of normal operating hours used for this calculation).

²Only include lost sorties (do not include sorties delayed or rescheduled).

³IMC - Ceilings below 1500 ft and/or visibility below 3 miles.

⁴Data is percentage of hours ceiling below 100 ft and/or visibility below 1/4 miles which are precision approach radar (par) minimums. Statistics are not maintained for 200 ft and 1/2 mile.

NALF Fentress, located approximately eight miles from NAS Oceana, experiences similar weather conditions. NALF Fentress is a VFR only field, therefore, flight operations are suspended when weather does not meet those conditions.

33.b. List the normal operating schedule used for the calculations on the previous table. Indicate if this schedule varies by month or season.

Table 33.2 Operating Hours

Day	Sun.	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Operating Schedule	24 HRS						

33.c. Do local weather conditions have a regular impact on maintenance schedules? If so, describe how the air station accommodates these conditions.

No.

33.d. Do the normal weather conditions at the most frequently used training areas pose a significant problem for scheduling training sorties? If so, are alternate training areas used? Does the use of alternate training facilities involve relocating aircraft and support personnel to other air stations during certain times of the year?

No. Normal weather does not pose a significant problem. In fact , because of our location and easy access to several different training areas, training flights are seldom cancelled for weather.

33.e. Does the local climate and geography provide unique training opportunities to the aircraft assigned to the air station (e.g., frequent opportunities for all-weather training)?

NAS Oceana experiences a relatively mild climate year around resulting from varying geographical influences in close proximity to the local area. The Atlantic Ocean, Chesapeake Bay, Dismal Swamp and Appalachian Mountains all contribute to the local area meteorological patterns. The diversity of these climatic controls provide a unique and challenging real-world training environment for aviators.

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The Atlantic Ocean provides quick access to carrier qualification training and a variety of weather elements ranging from clear skies to thunderstorms. The location of the Gulf Stream, some 50 miles offshore, is responsible for diverse and rapidly changing meteorological conditions. The mountains and associated valleys located 150 miles to the west of NAS Oceana are excellent for low level training as varying weather conditions will be experienced.

Overall, the adjacent topography enables aviators to train in varied meteorological environment.

Encroachment

34.a. Do current estimates of population growth and development or environmental constraints pose problems for existing or planned AICUZ restrictions (i.e., safety of flight, noise)? Attach a copy of any applicable sections of the air station AICUZ plan and note any recent modifications.

No. NAS Oceana's existing AICUZ restrictions and noise abatement procedures adequately protect the community's health, safety, and welfare without imposing undue operational constraints on its flight operations. The command is not now considering modifications to the program, nor does it foresee the need to do so in the near future based on projected population growth and development or environmental constraints.

Virginia Beach had 410,607 residents in January 1993, a figure the city projects will increase to 440,000 by the year 2000. Much of the residential development to house the projected increase will occur in the rural areas south and west of NAS Oceana in Noise Zone 2. AICUZ guidelines list residential use as compatible in noise Zones 2 in homes incorporating appropriate acoustical treatments. The City of Virginia Beach, on 23 August 1994, passed a comprehensive amendment to the city code. This airport ordinance incorporates sound attenuation standards for new construction and modifications to existing structures. This ordinance also mandates disclosure of noise zones for realtors and owners who sell homes in the airport area, incorporates FAA height restrictions for structures near the airport and incorporates compatible land use guidelines as described in OPNAVINST 11010.36A. This ordinance, coupled with the Navy's purchase of land and easements will halt encroachment at NAS Oceana. Nearly all undeveloped land in NAS Oceana's high noise zone is protected by restrictive easements and /or zoned for industrial uses, thereby minimizing further incompatible development in Noise Zone 3. Navy has purchased restrictive covenants on 4000 acres around NAS Oceana.

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Chesapeake has 164,000 residents and expects about 210,000 in 2000. Substantial residential development has occurred in the area within and just outside Noise Zone 2

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Chesapeake has 164,000 residents and expects about 210,000 in 2000. Substantial residential development has occurred in the area within and just outside Noise Zone 2 west and north of NALF Fentress, and zoning and preliminary site plans indicate that this trend will continue. Several factors will tend to confine development to this limited sector; primarily the environmental constraints of building in wetlands and a moratorium on rezonings in that general area due to schools and utilities already operating at well over designed capacity. The Navy enjoyed particular success with

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Noise and AICUZ studies currently underway will determine whether specific issues exist with currently projected aircraft loadings (F-14s and S-3s). While total noise zone 2 and 3 areas are expected to decrease, the noise contours may shift position and location.

34.b. Are there any known plans for a significant increase of commercial airline traffic in your area? If so, describe.

Commercial air traffic at Norfolk International Airport increased 45 percent last year as Continental and USAir engaged in a fare war. Hampton Roads is historically a very price-sensitive market for air travel with commercial traffic increasing sharply during periods of low fares. Insufficient information is available to predict future volume. is unknown.

35.a. Have there been any ATC delays (15 minutes or greater) between initial take-off request and actual take-off during the past three years as a result of civilian traffic? If so, please complete the following table.

Historical data is not kept beyond 90 days. None have occurred during that time. Because of NAS Oceana's unique location east of the air traffic routes conflicts are not likely to happen.

Table 35.1 Delays

Fiscal Year	Average Delay (minutes)	Number of Delays	% of Total Flight Operations Scheduled
1991	None known		
1992			
1993			

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Fiscal Year	Average Delay (minutes)	Number of Delays	% of Total Flight Operations Scheduled
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1992			
1993			

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35.b. How many times during each of the past three years have any of your low level training routes been modified to accommodate development or population growth (noise complaints)?

Table 35.2 Required Changes

Fiscal Year	Number of changes
1991	0
1992	0
1993	0

36.a. Is the existing AICUZ study encoded in local zoning ordinances?

The City of Virginia Beach, on 23 August 1994, passed a comprehensive amendment to the city code. This airport ordinance incorporates sound attenuation standards for new construction and modifications to existing structures. The ordinance also mandates disclosure of noise zones for realtors and owners who sell homes in the airport area, incorporates FAA height restrictions for structures near the airport area and incorporates compatible land use guidelines as described in OPNAVINST 11010.36A.

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In 1990, Chesapeake amended its Zoning Ordinance to establish a Fentress Airfield Overlay District which included the airfield's high noise zone. The ordinance lists allowable commercial and industrial uses within the district and describes appropriate conditions. City and Navy staffers together generated the list of compatible uses from easement conditions and AICUZ guidelines. Chesapeake Tax Maps include the AICUZ noise and accident potential contours from "NAVAL AIR STATION OCEANA AND AUXILIARY LANDING FIELD FENTRESS" (Aircraft Environmental Support Office Report 312-78-01 of October 1978).

36.b. Provide a description of local zoning ordinances and their impact on future encroachment, restricted flight hours and details of any litigation history.

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Table 35.2 Required Changes

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1992	0
1993	0

36.a. Is the existing AICUZ study encoded in local zoning ordinances?

Not in Virginia Beach. In the late 1980's, the Navy and Virginia Beach considered formally incorporating AICUZ guidelines into the city's zoning ordinance and comprehensive plan. The effort founded on the city attorney's belief that, since Virginia is a Dillon rule state, no locality could enact stricter codes than the state specifically authorized. However, the Virginia General Assembly has recently amended the state code authorizing local governments to regulate land use in airport safety zones and to require appropriate acoustical treatments for residential construction in areas impacted by the aircraft noise. (The latter amendment resulted from a petition submitted by the city of Virginia Beach). The city has drafted an Airport Ordinance for the Municipal Code which if enacted will adopt, at a minimum, the AICUZ sound attenuation guidelines. Coincident with adopting the ordinance, the city will need to incorporate Noise Zones and Accident Potential Zones into its zoning maps.

In 1990, Chesapeake amended its Zoning Ordinance to establish a Fentress Airfield Overlay District which included the airfield's high noise zone. The ordinance lists allowable commercial and industrial uses within the district and describes appropriate conditions. City and Navy staffers together generated the list of compatible uses from easement conditions and AICUZ guidelines. Chesapeake Tax Maps include the AICUZ noise and accident potential contours from "NAVAL AIR STATION OCEANA AND AUXILIARY LANDING FIELD FENTRESS" (Aircraft Environmental Support Office Report 312-78-01 of October 1978).

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construction and modifications to existing structures. The ordinance also mandates disclosure of noise zones for realtors and owners who sell homes in the airport area, incorporates FAA height restrictions on structures near the airport and incorporates compatible land use guidelines as described in OPNAVINST 11010.36A. The Virginia Beach Municipal Code also includes a City Zoning Ordinance which implements the purpose and intent of the comprehensive plan of the city by encouraging the most desirable use of the land for residential, recreational, agricultural, forestry, commercial, industrial, conservation, public service, floodplain, drainage, and other purposes, and the most desirable density of population in the several parts of the city, by encouraging the most appropriate use and occupancy of buildings, and by promoting

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good civic design and arrangement. The provisions of this ordinance provide reasonable standards with respect to the location, height, bulk, size of buildings and other structures, yard areas, courts, off-street parking facilities and other open spaces, density of population and the use of building, structures, and land for trade, industry business, residence, or other purposes.

The Municipal Code makes no mention of aircraft noise, airport safety zones, or flight hour restrictions in relation to land uses or building codes, but does address height in the Zoning Ordinance: "No structure which on the basis of its height would constitute an obstruction to air navigation pursuant to the standards of the FAA shall be allowed in any district unless it is subsequently determined by the FAA that the structure does not constitute a hazard to air navigation." Department of the Navy officials were provided the opportunity to comment on the construction of Pavilion Towers and Lynnhaven Mall under this Ordinance. The Virginia Beach Zoning Ordinance addresses height in residential districts, restricting most structures to 35 feet but allowing high rises up to 120 feet in high density apartment buildings. Most business and industrial zones have no specific height restrictions other than the oceanfront resort area where the ordinance restricts buildings to a maximum of 200 feet. The Chesapeake Zoning Ordinance has goals and land use regulations similar to Virginia Beach's with the addition of the Fentress Airfield Overlay District. It restricts building height in all districts to 35 feet unless City Council specifically permits higher, subject to FAA concurrence if required. Neither city has litigation history germane to airport zoning.

36.c. Do current estimates of population growth and development or environmental constraints pose problems for existing or planned missions/other operations/or development.?

No. Community growth and environmental constraint are not anticipated to pose problems for Navy missions at NAS Oceana.

36.d. Provide a summary of the current and proposed land development plans for the area surrounding the air station (e.g. the local government's comprehensive land-use plan).

The Virginia Beach Comprehensive Plan contains a section entitled, "An Industrial Development Policy for the City of Virginia Beach Involving Land Impacted by the Navy's AICUZ Program". The city established the following goal: AICUZ area industrial development which is centered on the most appropriate land; is adequately screened adjacent land uses; is consistent with planned public facilities and served by coordinated internal services; is aesthetically pleasing; and is concentrated in areas in which this can be achieved. The bulk of undeveloped land which can be developed in

NAS Oceana Noise Zone 3 is zoned industrial and subject to this policy. The Chesapeake Comprehensive Plan references NALF Fentress in development near airports. It recommends that the city maintain a working relationship with the Navy to determine appropriate land uses in areas impacted by air operations.

36.e. Discuss briefly any ongoing litigation concerning environmental or airspace problems.

None.

Features and Capabilities

Ability for Expansion

37.a. List the features of this air station that make it a candidate for basing other types of aircraft and other operational units in the future.

Air Station Feature	Benefit for Aircraft Squadrons
Dual Parallel Runways	Multiple take-off and landing capabilities
Four Runways	Allows operations with wind from any directions
12,000 Runway	Capable of handling any aircraft in U.S. inventory - Selected as an alternate site for Space Shuttle Landings.
5 Large Hangars	Capable of supporting all carrier type aircraft. Day/night and year round maintenance.
Hangar Expansion Capability	Unencumbered land is available to expand our hangar facilities on the FITWING side and on the ATTACKWING side.
Large Aircraft Parking Apron Ramps	Capable of parking additional aircraft.
Ramp Expansion Capability	Unencumbered land is available to expand our ramp facilities and support additional aircraft.
Classified Special Operations	Reason provided by separate correspondence.
Air Space	Allows aircraft safe, direct and unencumbered access to Fentress, Training, Bombing and TACTS ranges.
Excellent Training Ranges	Bombing Ranges in Dare County, Stumpy Point and Palmetto Point are close, easily accessible, and can support various aircraft in the Navy inventory.
TACTS Range	ACMR - Aircraft Maneuvering Range - capable of handling over 30 aircraft during any exercise. Often used for joint services exercises.
FACSFAC Facility	Capable of monitoring and handling almost any Navy or joint services exercise in the Mid-Atlantic Region. Control airspace approximately the size of Oregon. (4000 target capability)

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Air Station Feature	Benefit for Aircraft Squadrons
Medical/Dental Facilities	Are available on station and capable of expansion to support additional personnel.
Navy Auxiliary Landing Field (NALF) Fentress	Outlying field used primarily for Field Carrier Landing Practice (FLIP) training. Has two simulated carrier decks painted on the runway surface and two sets of arresting gear for emergencies. Capable of supporting FCLP for all carrier based type aircraft.
Ten Hot Refueling Pits	Each has two outlets and together can support an entire squadron refueling simultaneously.
Air Start Unit	Installed in approximately 60% of our apron spaces - allows squadrons to start aircraft simultaneously and eliminates wasteful waiting of starting one aircraft at a time with yellow gear. System can be expanded to support additional aircraft.
Ordnance Handling Pad	Allows ordnance and weapons to be loaded/unloaded in an isolated area without endangering other personnel. Also allows classified missions away from view of general public or other military personnel not involved.
Large Galley	Has capability to serve 30 - 35% more than currently served. Room available for expansion.
Supply Capacity	Current warehouse and open storage compounds only filled to 85% of capacity. Space available to expand.
AIMD	Local repair of aircraft components on station for expeditious turn-around of repairables. Capacity to expand capability. Some depot level repair accomplished on a daily basis.
Fueling System	Has capacity to pump 850,000 gallons a day.

Air Station Feature	Benefit for Aircraft Squadrons
<p>Located in Virginia Beach/Norfolk/Tidewater Area</p>	<p>Affordable Housing and rental units for personnel. Large number of houses/units to choose from. Good school system for children. Wide choice of Colleges/Universities for dependent's education. Multitude of recreational facilities in local communities. Close to Ocean and Chesapeake Bay. Multitude of cultural facilities in local communities. Large job market for spouses/families. Good local highway/roadway networks. Good Interstate highway links to other parts of country. Local International Airport (Norfolk). Good Climate - Not too hot or cold. Skilled and loyal civilian work force.</p>
<p>Closeness to Norfolk Fleet (25 miles)</p>	<p>Facilitates unit interface between commands and provides easy access to fleet headquarters and TYCOM staffs. Provides improved Quality of Life: Squadron personnel can live at home with families, travel to piers daily to ready ship until the actual day of deployment. Fewer days away from family. Navy personnel can have several tours of duty in the local area and don't have to relocate with each tour. This allows them to purchase homes and set roots for their families. Fewer family hardships. Excellent for maintaining viable sea/shore rotation. Family and friends can easily travel to piers to meet squadron personnel on ships. Squadron personnel can be bused to ships in less than 1 hour for deployment or exercises. Saves TAD and transportation costs as follows: Squadron gear can be loaded on trucks, transported to ship and unloaded in the same day by the same personnel. Little is lost or damaged in transport. No per diem or travel costs associated with deployments or exercises from carriers/ships at Norfolk. NAS Oceana benefits and contributes to the consolidation of activities in the East Coast Navy hub. To realize the efficiency, effectiveness and cost savings programmed in consolidations of PWC, DFAS, PSAs, etc. Maintaining the concentration of activities is essential.</p>

Air Station Feature	Benefit for Aircraft Squadrons
Trainer buildings	Buildings in place with sufficient air conditioning to support installation of other A/C simulators and/or classroom instruction space.

38.a. Are there any assets in the vicinity of the air station that are currently not used because of a deficiency but could be improved or enhanced to increase the air station's capabilities?

Yes. Resurface NALF Fentress taxiways. E-2C aircraft are required to back taxi on the runway to hot switch crews. This causes delays in the operation of the FCLP pattern.

38.b. Does the operational infrastructure (i.e., parking apron, fuel and munitions storage, warehouse space, hangar space) meet current requirements and provide capabilities for future expansion or change in mission?

Yes. NAS Oceana is currently operating below full capacity in all these areas. NAS Oceana also has over 1000 acres of unrestricted and unencumbered land which can be used to build new facilities if the need should arise. See data call 16 for specific information on capacity.

39. Give the average level of SELRES drill participation for the past three years (i.e. percentage attending regular and make-up drills). These numbers should reflect the participation of the SELRES population reported in your Capacity Data Call.

	FY-1991	FY-1992	FY-1993
OFFICER	100	100	100
ENLISTED	100	100	100

40. Does the local area provide a skilled work force that is essential for air station operations? Are these skills unique to the area or readily duplicated or available elsewhere?

Yes. Critical skills required by civilian employees for essential air station operations are available in abundance in the local work force due to the large number of military retirees and other skilled defense industry civilians. While these skills are not necessarily unique to the Hampton Roads area, they are more readily available than elsewhere.

Quality of Life

41. Military Housing

41.a. Family Housing:

(1) Do you have mandatory assignment to on-base housing? **NO**

(2) For military family housing in your locale provide the following information:

Type of Quarters	Number of Bedrooms	Total number of units	Number Adequate	Number Substandard	Number Inadequate
Officer	4+	6	6	0	0
Officer	3	20	20	0	0
Officer	1 or 2	0	0	0	0
Enlisted	4+	232	196	36	0
Enlisted	3	492	404	88	0
Enlisted	1 or 2	379	0	379	0
Mobile Homes	0	0	0	0	0
Mobile Home lots	0	96	96	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	N/A
	2	0	N/A
	3	0	N/A
	4+	0	N/A
O-4/5	1	0	N/A
	2	0	N/A
	3	8	5-9 MONTHS
	4+	7	9-12 MONTHS
O-1/2/3/CWO	1	0	N/A
	2	0	N/A
	3	9	5-9 MONTHS
	4+	15	9-12 MONTHS
E7-E9	1	0	N/A
	2	0	3-5 MONTHS
	3	13	6-9 MONTHS
	4+	15	10-12 MONTHS
E1-E6	1	0	N/A
	2	133	3-5 MONTHS
	3	170	6-9 MONTHS
	4+	120	10-12 MONTHS

¹As 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	Economics
2	Security (for families during deployments)
3	Social (living with other military families)
4	Convenience to work and services
5	Recreation and morale

The above list does not vary by grade category.

(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)?

51%

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

Type of Quarters	Utilization Rate
Adequate	98.93%
Substandard	98.37%
Inadequate	N/A

(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, there has been no significant change since FY93.

41.b. BEQ:

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

Type of Quarters	Utilization Rate
Adequate	97.5%
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?

Utilization has decreased due to squadrons decommissioning/ disestablishing - 3 squadrons from January 1994 to March 1994 and a projected 2 more in September 1994. Space vacated by these squadrons is slated to be filled by 6 S-3 squadrons moving to NAS Oceana from NAS Cecil Field as a result of BRAC III.

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

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

$$AOB = 80$$

(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 ²	Percent of GB	Comments
Family Commitments (children in school, financial, etc.)	8	9.4%	
Spouse Employment (non-military)	25	31.3%	
Other	47	59.3%	1
TOTAL	80	100	

¹Separated pending divorce most frequently occurring reason (24).

²These numbers represent a distribution of the geographic bachelors AOB.

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

According to the definition for geographic bachelors in NAVPERS Manual, NAS Oceana has none.

41.c. BOQ:

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

Type of Quarters	Utilization Rate
Adequate	69%
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?

Utilization has increased to 75 percent during FY94 due largely to increased transient activity during the normally slow winter months. NAS Oceana hosted several major naval and joint exercises increasing utilization. In addition, the Central Reservation System automatically sends overflow residents from nearby Dam Neck to Oceana's BOQ. During the months of March through October, the utilization rate per month is between 95 and 100 percent.

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

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

$$\text{AOB} = 10$$

(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 ²	Percent of GB	Comments
Family Commitments (children in school, financial, etc.)	3	30%	
Spouse Employment (non-military)	2	20%	
Other	5	50%	1
TOTAL	10	100	

¹Difficulty in selling house at previous duty station most frequently cited reason.

²These numbers represent a distribution of the geographic bachelors AOB.

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

According to the definition for geographic bachelors in NAVPERS Manual, NAS Oceana has none.

On Base MWR Facilities

42. For on-base MWR facilities¹ available, complete the following table for each separate location. For off-base government owned or leased recreation facilities indicate distance from base. If there are any facilities not listed, include them at the bottom of the table.

LOCATION NAS OCEANA DISTANCE N/A

Facility	Unit of Measure	Total	Profitable (Y,N,N/A)
Auto Hobby	Indoor Bays	24	Y
	Outdoor Bays	0	
Arts/Crafts	SF	N/A	N/A
Wood Hobby	SF	N/A	N/A
Bowling	Lanes	24	Y
Enlisted Club	SF	45600	Y
Officer's Club	SF	28800	Y
Library	SF	6100	N/A
Library	Books	15155	N/A
Theater	Seats	983	N/A
ITT	SF	648	N
Museum/Memorial	SF	4	N/A
Pool (indoor)	Lanes	N/A	N/A
Pool (outdoor)	Lanes	6 E; 4 O	N
Beach	LF	N/A	N/A
Swimming Ponds	Each	N/A	N/A
Tennis CT	Each	11	N/A

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Facility	Unit of Measure	Total	Profitable (Y,N,N/A)
Boat, Camper, Auto & RV Outdoor Storage	SF	342650	N
Maintenance & Warehouse	SF	15071	N/A
Support Offices (Director, Accounting, Personnel)	SF	4471	N/A
Single Sailors Program	SF	750	N/A
Outdoor Rec Issue	SF	18939	N
Fitness Trail	Miles	1.3	N/A
Jogging Trails	Miles	3	N/A
Batting Cages	Each	6	Y
SATO Travel	SF	450	Y
Picnic Areas	Acres	20/ 4,800 SF Shelters	N
Hunting Areas	Acres	2800	N/A
Skeet and Trap	SF	2832	Y
Archery Ranges on Base	Targets	9	N/A
Volleyball CT(outdoor)	Each	3	N/A
Basketball CT (outdoor)	Each	3	N/A
Racquetball CT	Each	6	N/A
Golf Course	Holes	18/9 ²	Y
Driving Range	Person Capacity	100	Y
Gymnasium	SF	14300	N/A

Facility	Unit of Measure	Total	Profitable (Y,N,N/A)
Fitness Center	SF	18300	N/A
Marina	Berths	N/A	N/A
Stables	Stalls	65	Y
Softball Fld	Each	11	N/A
Football Fld	Each	2	N/A
Soccer Fld	Each	1	N/A
Youth Center	SF	4645	N/A

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

²These 9 holes are currently under construction.

LOCATION NALF FENTRESS DISTANCE 8.5 MILES

Facility	Unit of Measure	Total	Profitable (Y,N,N/A)
Baseball Field	Each	1	N/A
Outdoor Volleyball CT	Each	1	N/A
Outdoor Basketball CT	Each	1	N/A
Weight Room	SF	1302	N/A
Rec Room	SF	289	N/A
Swimming Pool	Lanes	3	N/A
Hunting	Acres	2000	N/A

43. Is your library part of a regional interlibrary loan program?

YES. While there is no special regional inter-library loan program supporting military station libraries, NAS Oceana is on a national system named Online Computer Library Center. This system is comprised of academic, public, and technical libraries throughout the nation. The public libraries in the region are on this system allowing NAS Oceana access to their collection.

44. Base Family Support Facilities and Programs

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

Age Category	Capacity (Children)	SF			Number on Wait List	Average Wait (Days)
		Adequate	Substandard	Inadequate		
0-6 Mos ¹	6	650			44	180
6-12 Mos ¹	6	650			23	180
12-24Mos	15	1,300			61	365
24-36Mos	14	750			37	240
3-5 Yrs	64	2,800			88	240

¹Infant care space can accommodate 12 children between the ages of 0 - 12 months in 1,300 SF

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: NA

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.

The Virginia Beach area has an abundance of child care available to its residents. In Virginia Beach there are 71 child care facilities with a capacity of 8101, with 29 having infant care. There are also 47 nursery schools and 11 church based facilities.

d. How many "certified home care providers" are registered at your base? 34

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

Other programs sponsored by NAS Oceana:

Navy Family Home Care Program: This program averages between 210-220 children. Active Duty, retired and reservists on active duty children are eligible. All care providers are background checked and CPR/First AID certified.

Youth Activities Program: This program handles 150 children per day, ages 7-14, during the summer and 90 children per day, ages 4-14, during the school months.

Other military child care centers within 30 minutes.

Naval Station Norfolk - 318 children/6wks-6yrs

Naval Amphibious Base Little Creek - 250 children/6wks-6yrs

Both have waiting lists also

45. 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	99,746
Gas Station	SF	64,675 ¹
Auto Repair	SF	4,180
Auto Parts Store	SF	3,500
Commissary	SF	68,610
Mini-Mart	SF	25,609
Package Store	SF	6,498
Fast Food Restaurants	Each	5 ²
Bank/Credit Union	Each	2
Family Service Center	SF	4,581
Laundromat	SF	1,296
Dry Cleaners	Each	1
ARC	PN	0
Chapel	PN	600
FSC Classrm/Auditorium	PN	40
Religious Education Bldg	SF	3,002
Post Office	SF	1,128
Amusement Center	SF	9,488
Car Wash	Bays	4
Thrift Shop	SF	960
Auto Hobby Shop	SF	10,200
Bowling Alley	LA	24

Service	Unit of Measure	Qty
Gymnasium	SF	17,002
Field House	SF	32,472
Skeet Range	EA	1
Theater	SE	1,000
Child Care Center	SF	8,082
Library	SF	4,141
Riding Stable	SF	13,874
Golf Course	HOLES	18/9 ³
Educational Services Off.	SF	938
Educational Services Classroom	PN	140
Swimming Pools	EACH	2
Medical Clinic	SF	41,770
Dental Clinic	SF	17,430
Photo Lab	SF	7,942

Source - P-164, Base Maps, Building Plans.

¹Two NEX operated gas stations.

²McDonald's, Chicken Loft, Casa de Amigos, Pizza Gallery, and Vie de France.

³These 9 holes currently under construction.

46. Proximity of closest major metropolitan areas (provide at least three):

City	Distance (Miles)
Norfolk, VA	20
Richmond, VA	110
Washington, DC	206

47. Standard Rate VHA Data for Cost of Living

Pay grade	With Dependents	Without Dependents
E1	127.43	71.30
E2	116.47	73.25
E3	111.47	82.10
E4	139.18	97.14
E5	155.24	108.39
E6	175.73	119.62
E7	191.50	133.03
E8	176.39	133.35
E9	165.28	125.47
W1	281.03	213.43
W2	247.26	193.94
W3	240.16	195.22
W4	176.30	156.31
O1E	306.00	226.98
O2E	251.41	200.45
O3E	238.87	202.08
O1	181.59	133.81
O2	186.47	145.75
O3	228.14	192.08
O4	205.30	178.53
O5	222.77	184.23
O6	228.47	189.11
O7	158.54	128.81

48.a. 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	\$500	\$360	Included in rent
Apartment (1-2 Bedroom)	425	380	\$106
Apartment (3+ Bedroom)	490	380	201
Single Family Home (3 Bedroom)	525	445	213
Single Family Home (4+ Bedroom)	650	577	260
Town House (2 Bedroom)	420	415	130
Town House (3+ Bedroom)	500	425	180
Condominium (2 Bedroom)	416	475	123
Condominium (3+ Bedroom)	500	417	192

48.b. What was the rental occupancy rate in the community as of 31 March 1994?

Type Rental	Percent Occupancy Rate
Efficiency	92.16
Apartment (1-2 Bedroom)	96.00
Apartment (3+ Bedroom)	96.00
Single Family Home (3 Bedroom)	96.00
Single Family Home (4+ Bedroom)	99.00
Town House (2 Bedroom)	92.00
Town House (3+ Bedroom)	92.00
Condominium (2 Bedroom)	88.00
Condominium (3+ Bedroom)	88.00

48.c. What are the median costs for homes in the area?

Type of Home	Median Cost
Single Family Home (3 Bedroom)	\$ 94,884
Single Family Home (4+ Bedroom)	117,786
Town House (2 Bedroom)	67,018
Town House (3+ Bedroom)	80,438
Condominium (2 Bedroom)	59,400
Condominium (3+ Bedroom)	96,990

48.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	14	27	4
February	17	26	5
March	20	45	4
April	28	53	9
May	25	49	6
June	49	58	13
July	48	62	8
August	32	69	16
September	56	51	18
October	38	54	12
November	40	61	10
December	37	11	16

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

The main housing cost driver in our area is the same as every place in the country.

1. National long-term interest rates.
2. Economic growth in the regional economy. As population increases, the demand for housing in the regional economy also increases. This has the effect of increasing average home prices.
3. Local regulations or ordinances which curtail or slow the growth in the supply of housing in the regional economy. Any new regulation or moratorium which limits the amount of new home construction or increases the cost of building new homes will cause a subsequent increase in housing prices.

49. 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
AM	692	278
AO	334	129
AE	323	169
AT	639	338
AD	326	252

50. 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)
Virginia Beach, VA	89	10	15
Norfolk, VA	5	22	25
Chesapeake, VA	4	27	35
Portsmouth, VA	1	22	30
Other VA/NC	1	35	45

51. Complete the tables below to indicate the civilian educational opportunities available to service members stationed at the air station (to include any outlying fields) and their dependents:

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

Institution	Type	Grade Level (s)	Special Education Available	Annual Enrollment Cost per Student	1993 Avg SAT/ACT Score	% HS Grad to Higher Educ	Source of Info ¹
Chesapeake Elementary	Public	Elem	Yes	N/A	N/A	N/A	HRPDC
Chesapeake Middle	Public	Middle	Yes	N/A	N/A	N/A	HRPDC
Chesapeake High	Public	High	Yes	N/A	831	0.71	HRPDC
Norfolk Elementary	Public	Elem	Yes	N/A	N/A	N/A	HRPDC
Norfolk Middle	Public	Middle	Yes	N/A	N/A	N/A	HRPDC
Norfolk High	Public	High	Yes	N/A	769	0.66	HRPDC
Portsmouth Elementary	Public	Elem	Yes	N/A	N/A	N/A	HRPDC
Portsmouth Middle	Public	Middle	Yes	N/A	N/A	N/A	HRPDC
Portsmouth High	Public	High	Yes	N/A	744	0.71	HRPDC
VA Beach Elementary	Public	Elem	Yes	N/A	N/A	N/A	HRPDC

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Institution	Type	Grade Level (s)	Special Education Available	Annual Enrollment Cost per Student	1993 Avg SAT/ACT Score	% HS Grad to Higher Educ	Source of Info ¹
VA Beach Middle	Public	Middle	Yes	N/A	N/A	N/A	HRPDC
VA Beach High	Public	High	Yes	N/A	889	0.77	HRPDC
Suffolk Elementary	Public	Elem	Yes	N/A	N/A	N/A	HRPDC
Suffolk Middle	Public	Middle	Yes	N/A	N/A	N/A	HRPDC
Suffolk High	Public	High	Yes	N/A	742	0.44	HRPDC
Hampton Elementary	Public	Elem	Yes	N/A	N/A	N/A	HRPDC
Hampton Middle	Public	Middle	Yes	N/A	N/A	N/A	HRPDC
Hampton High	Public	High	Yes	N/A	833	0.74	HRPDC
Newport News Elementary	Public	Elem	Yes	N/A	N/A	N/A	HRPDC
Newport News Middle	Public	Middle	Yes	N/A	N/A	N/A	HRPDC
Newport News High	Public	High	Yes	N/A	862	0.78	HRPDC
Poquoson Elem	Public	Elem	Yes	N/A	N/A	N/A	HRPDC
Poquoson Middle	Public	Middle	Yes	N/A	N/A	N/A	HRPDC
Poquoson High	Public	High	Yes	N/A	916	0.85	HRPDC

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Institution	Type	Grade Level (s)	Special Education Available	Annual Enrollment Cost per Student	1993 Avg SAT/ACT Score	% HS Grad to Higher Educ	Source of Info ¹
Williamsburg & James City County Elementary	Public	Elem	Yes	N/A	N/A	N/A	HRPDC
Williamsburg & James City County Middle	Public	Middle	Yes	N/A	N/A	N/A	HRPDC
Williamsburg & James City County High	Public	High	Yes	N/A	911	0.77	HRPDC
York County Elementary	Public	Elem	Yes	N/A	N/A	N/A	HRPDC
York County Middle	Public	Middle	Yes	N/A	N/A	N/A	HRPDC
York County High	Public	High	Yes	N/A	899	0.88	HRPDC
Academy of Early Learning	Private	Pre K-K	None	\$3536	N/A	N/A	HRPDC
Alliance Christian Schools, Inc	Private	2	2	2	2	2	HRPDC
Atlantic Shores Christian School	Private	2	2	2	2	2	HRPDC

Institution	Type	Grade Level (s)	Special Education Available	Annual Enrollment Cost per Student	1993 Avg SAT/ACT Score	% HS Grad to Higher Educ	Source of Info ¹
Azalea Garden Christian School	Private	K-12	None	\$925-\$1570	1000	0.31	HRPDC
Baylake Pines Private School	Private	²	²	²	²	²	HRPDC
Bayview Christian School	Private	²	²	²	²	²	HRPDC
Bethel Christian School	Private	K-12	None	\$1100-\$1900	1000	0.75	HRPDC
Brentwood Forest Day School	Private	Pre K-K	None	²	²	²	HRPDC
Cape Henry Collegiate School	Private	Pre K-12	None	\$6500 - \$7500	1000	1	HRPDC
Cathedral of Faith Christian School	Private	K-First	None	\$2182	N/A	N/A	HRPDC
Central Baptist Church Schools	Private	²	²	²	²	²	HRPDC
Central Baptist Church School	Private	K-6	None	\$700 - \$1300	N/A	N/A	HRPDC

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Institution	Type	Grade Level (s)	Special Education Available	Annual Enrollment Cost per Student	1993 Avg SAT/ACT Score	% HS Grad to Higher Educ	Source of Info ¹
Chesapeake Bay Academy	Private	None	Handicap	\$6900	2	2	HRPDC
Christ the King School	Private	Pre K-8	None	\$1550 - \$1925	2	2	HRPDC
Collinswood Church School	Private	2	2	2	2	2	HRPDC
Cornerstone Christian School	Private	K-6	None	\$1350 - \$2580	N/A	N/A	HRPDC
Court Street Academy	Private	2	2	2	2	2	HRPDC
Denbigh Christian Academy	Private	2	2	2	2	2	HRPDC
Denby Park Day Care Center, Inc	Private	2	2	2	2	2	HRPDC
Gateway Christian School	Private	2	2	2	2	2	HRPDC
Gloria Dei Lutheran School	Private	K-5	None	NA	N/A	N/A	HRPDC
Greenbriar Christian Academy	Private	K-12	Wheelchair	\$2400 - \$3600	1000	0.89	HRPDC

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Institution	Type	Grade Level (s)	Special Education Available	Annual Enrollment Cost per Student	1993 Avg SAT/ACT Score	% HS Grad to Higher Educ	Source of Info ¹
Hampton Roads Seventh Day Adventist School	Private	K-8	None	\$1780	N/A	N/A	HRPDC
Hampton University Laboratory School	Private	3yr-5	Special Programs	\$1250	N/A	N/A	HRPDC
Hebrew Academy of Tidewater	Private	2	2	2	2	2	HRPDC
Holy Trinity Elementary & Jr. High School	Private	3yr-8	None	\$1300 - \$2310	N/A	N/A	HRPDC
Hunterdale Baptist School	Private	K-12	None	\$650 - \$1440	N/A	0.5	HRPDC
Indian Creek-Welcome Baptist Church School	Private	K-12	None	\$1075 - \$1300	N/A	N/A	HRPDC
Isle of Wight Academy	Private	3yr-12	None	\$2200 - \$3100	842	0.9	HRPDC
McLea School	Private	2.5yr-3	None	\$3300 - \$4800	N/A	0.9	HRPDC
Montessori Laboratory School	Private	1-3	Depends on child	\$1900 - \$4000	N/A	N/A	HRPDC

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Institution	Type	Grade Level (s)	Special Education Available	Annual Enrollment Cost per Student	1993 Avg SAT/ACT Score	% HS Grad to Higher Educ	Source of Info ¹
Mt Pleasant Christian School	Private	K-8	Learning disabled	\$1950	N/A	N/A	HRPDC
Nansemond Suffolk Academy	Private	3yr-12	None	\$3300 - \$4800	950	1	HRPDC
Norfolk Academy	Private	1-2	None	\$6450 - \$7440	1160	1	HRPDC
Norfolk Catholic High School	Private	9-12	Wheelchair Access	\$3700 - \$4700	947	0.95	HRPDC
Norfolk Christian Schools	Private	8-12	Learning & Physical Disabled	\$4855	1030	0.92	HRPDC
Norfolk Christian Schools	Private	4yr-7	Learning & Physical Disabled	\$999 - \$4195	N/A	N/A	HRPDC
Norfolk Collegiate School	Private	K-12	Learning Disabled	\$5600	1104	1	HRPDC
Open Door Christian Academy	Private	K-12	None	\$1765	N/A	0.5	HRPDC
Our Lady of Mt. Cammel School	Private	K-7	Minor Disabilities	\$1690 - \$2420	N/A	N/A	HRPDC
Welsingham Academy Lower School	Private	K-7	None	\$3600	N/A	N/A	HRPDC

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Institution	Type	Grade Level (s)	Special Education Available	Annual Enrollment Cost per Student	1993 Avg SAT/ACT Score	% HS Grad to Higher Educ	Source of Info ¹
Welsingham Academy Upper School	Private	8-12	Wheelchair Access	\$4000 - \$4400	1030	1	HRPDC
Parkview Christian Academy	Private	K-3	None	NA	N/A	N/A	HRPDC
Peninsula Catholic High School	Private	8-12	Learning Disabled	\$3100 - \$3350	1033	0.95	HRPDC
Peninsula Christian School	Private	K-12	Learning Disabled	\$900 - \$1650	N/A	0.85	HRPDC
Portsmouth Catholic Elementary School	Private	K-8	Attention Deficiency	\$2000 - \$2385	N/A	N/A	HRPDC
Portsmouth Christian Schools	Private	K-12	Learning Disabled	\$1386 - \$4150	900	0.94	HRPDC
Providence Christian School	Private	K-12	None	\$1120 - \$1440	N/A	N/A	HRPDC
Ryan Academy of Norfolk	Private	K-12	Attention Deficit	Mail info			HRPDC
Southampton Academy	Private	3yr-12	None	\$3100 - \$3450	N/A	0.89	HRPDC
St. Andrew's Episcopal Day School	Private	K-5	None	\$1720 - \$2680	N/A	N/A	HRPDC

Institution	Type	Grade Level (s)	Special Education Available	Annual Enrollment Cost per Student	1993 Avg SAT/ACT Score	% HS Grad to Higher Educ	Source of Info ¹
St. Christopher School	Private	Pre K-3	None	\$3120 - \$2080	N/A	N/A	HRPDC
St. Mary's	Private	Pre K-8	None	\$1600 - \$2270	N/A	N/A	HRPDC
St. Mary's Academy	Private	Pre K-5	None	\$230 - \$1575	N/A	N/A	HRPDC
St. Matthew's School	Private	Pre K-8	Emotionally Disturbed	\$1530	N/A	N/A	HRPDC
St. Pius X School	Private	Pre K-8	None	\$850 - \$2050	N/A	N/A	HRPDC
Star of the Sea Catholic School	Private	Pre K-8	None	\$1300 - \$2500	N/A	N/A	HRPDC
Stonebridge School	Private	2	2	2	2	2	HRPDC
Sweethaven Christian School	Private	Pre K-6	None	\$170 - \$1750	N/A	N/A	HRPDC
Tabernacle Baptist School of Va Beach	Private	Pre K-12	None	\$1795 - \$2380	1100	0.75	HRPDC
Tidewater Jr. Academy	Private	K-10	None	NA	NA	NA	HRPDC
Town and Country Day School	Private	K-5	None	\$50/WK	N/A	N/A	HRPDC

NAS OCEANA/60191

Institution	Type	Grade Level (s)	Special Education Available	Annual Enrollment Cost per Student	1993 Avg SAT/ACT Score	% HS Grad to Higher Educ	Source of Info ¹
Trinity Lutheran School	Private	K-8	Handicap	\$1380 - \$2680	N/A	N/A	HRPDC
Twin Oaks School	Private	K-3	None	\$2700	N/A	N/A	HRPDC
Virginia Beach Country Day School	Private	K-5	None	\$4360	N/A	N/A	HRPDC
Warwick River Christian School	Private	K-5	Handicap	\$2015	N/A	N/A	HRPDC
Williams School	Private	K-12	None	\$5200	1115		HRPDC
Williamsburg Christian Academy	Private	K-12	None	\$1000 - \$3000	N/A	N/A	HRPDC

¹HRPDC - Hampton Roads Planning District Commission

²Schools without information would not participate in data collection. All schools were contacted.

51.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	
Tidewater Community College	Day	Yes	No	Yes	No	Yes	No
	Night	Yes	No	Yes	No	Yes	No
University of Virginia	Day	Yes	No	No	No	No	Yes
	Night	Yes	No	No	No	No	Yes
Virginia Polytechnical University	Day	Yes	No	No	No	No	Yes
	Night	Yes	No	No	No	No	Yes
Virginia Wesleyan College	Day	Yes	No	No	No	Yes	No
	Night	Yes	No	No	No	Yes	No
Norfolk State University	Day	Yes	No	No	No	Yes	Yes
	Night	Yes	No	No	No	Yes	Yes
Old Dominion University	Day	Yes	No	No	No	Yes	Yes
	Night	Yes	No	No	No	Yes	Yes
Regents University	Day	Yes	No	No	No	No	Yes
	Night	Yes	No	No	No	No	No
Thomas Nelson Community College	Day	Yes	No	Yes	No	Yes	No
	Night	Yes	No	Yes	No	Yes	No

Institution	Type Classes	Program Type(s)				
		Adult High School	Vocational/ Technical	Undergraduate		Graduate
				Courses only	Degree Program	
Christopher Newport University	Day Yes	No	No	No	Yes	Yes
	Night Yes	No	No	No	Yes	Yes
George Washington University	Day Yes	No	No	No	No	Yes
	Night Yes	No	No	No	No	Yes
Hampton University	Day Yes	No	No	No	Yes	Yes
	Night Yes	No	No	No	Yes	Yes
Norfolk Adult Education Center	Day Yes	No	Yes	No	No	No
	Night Yes	Yes	Yes	No	No	No
Virginia Beach Adult Education Center	Day Yes	No	Yes	No	No	No
	Night Yes	Yes	Yes	No	No	No
Chesapeake Adult Education Center	Day Yes	No	Yes	No	No	No
	Night Yes	Yes	Yes	No	No	No
Electronic Computer Programming Institute	Day Yes	No	Yes	No	Yes	No
	Night Yes	Yes	Yes	No	Yes	No
ITT Electronics Technology	Day Yes	No	Yes	No	Yes	No
	Night Yes	No	Yes	No	Yes	No

Institution	Type Classes	Program Type(s)				
		Adult High School	Vocational/ Technical	Undergraduate		Graduate
				Courses only	Degree Program	
Johnson and Wales University	Day Yes	No	Yes	No	Yes	No
	Night Yes	No	Yes	No	Yes	No
Common- wealth College	Day Yes	No	Yes	No	Yes	No
	Night Yes	No	Yes	No	Yes	No
Tidewater Technical University	Day Yes	No	Yes	No	No	No
	Night Yes	No	Yes	No	No	No
Court Reporting Institute of Virginia	Day Yes	No	Yes	No	No	No
	Night Yes	No	Yes	No	No	No
Computer Dynamics Institute	Day Yes	No	Yes	No	No	No
	Night Yes	No	Yes	No	No	No
Advanced Technology Institute (Automotive)	Day Yes	No	Yes	No	No	No
	Night Yes	No	Yes	No	No	No

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

Institution	Type Classes	Program Type(s)				
		Adult High School	Vocational / Technical	Undergraduate		Graduate
				Courses only	Degree Program	
Saint Leo College ¹	Day No	No	No	No	No	No
	Night Yes	No	No	No	Yes	No
	Corres- pondence No	No	No	No	No	No
Embry-Riddle Aeronautical University ¹	Day No	No	No	No	No	No
	Night Yes	No	No	No	Yes	Yes
	Corres- pondence No	No	No	No	No	No
Troy State University ¹	Day No	No	No	No	No	No
	Night Yes	No	No	No	No	Yes
	Corres- pondence No	No	No	No	No	No
Old Dominion University ²	Day No	No	No	No	No	No
	Night Yes	No	No	No	No	Yes

Institution	Type Classes	Program Type(s)				
		Adult High School	Vocational / Technical	Undergraduate		Graduate
				Courses only	Degree Program	
	Corres- pondence No	No	No	No	No	No
Norfolk State University ³	Day No	No	No	No	No	No
	Night Yes	No	No	No	Yes	No
	Corres- pondence No	No	No	No	No	No
Norfolk State University ⁴	Day No	No	No	No	No	No
	Night Yes	No	No	Yes	No	Yes
	Corres- pondence No	No	No	No	No	No
Tidewater Community College ⁵	Day No	No	No	No	No	No
	Night No	No	No	No	No	No
	Corres- pondence No	No	No	No	No	No
Florida Institute of Technology ⁶	Day No	No	No	No	No	No
	Night Yes	No	No	No	No	Yes
	Corres- pondence No	No	No	No	No	No

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Institution	Type Classes	Program Type(s)				
		Adult High School	Vocational / Technical	Undergraduate		Graduate
				Courses only	Degree Program	
Southern Illinois University ⁷	Day No	No	No	No	No	No
	Night Yes	No	No	No	Yes	No
	Corres- pondence No	No	No	No	No	No

¹Available at NAS Oceana

²Available at NAS Norfolk and FCTCL Dam Neck

³Available at NAS Norfolk

⁴Available at Naval Station Norfolk

⁵Available at Naval Station Norfolk and Naval Medical Center Portsmouth

⁶Available at Naval Station Norfolk

⁷Available only to active duty personnel. Program is offered at FCTCL, Dam Neck

52. Spousal Employment Opportunities

Provide the following data on spousal employment opportunities.

Skill Level	Number of Military Spouses Served by Family Service Center Spouse Employment Assistance			Local Community Unemployment Rate
	1991	1992	1993	
Professional				
Manufacturing				
Clerical				
Service				
Other ¹	85	641	1780	5.3%

¹Total. FSC Oceana helps spouses find jobs in all skill levels listed and keeps totals for people served by FSC spouse employment representatives, but does not break down those statistics by skill level.

53. 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.

Appointments in either the military or civilian health care system for both active duty personnel and their dependents are obtained through the Tricare Service Center (TSC). The staff at the TSC provide expanded hours, seven days per week, for booking appointments. In the past year, TSC received a total of 564,174 calls from members, dependents and retirees requesting both same day and specialized care appointments. TSC cannot breakout number of active duty, dependents and retirees who requested appointments. The total number of calls includes numerous multiple calls for an appointment and appointments which were offered but declined and includes the entire Tri-service catchment area. Of the total appointments made, 290,419 were made at a military treatment facility and 13,670 were made at a civilian treatment facility. Access to daily medical care for active duty, dependents and retirees is good at Oceana. Where accessibility of appointments for specialized care is hindered it is largely due to the need for additional providers. Because there is a limited number of uniform and contract providers, there are sometimes not enough appointments available for specialized care.

Access to dental care is limited to active duty personnel because there is not enough preventive medicine dentistry support to treat family members.

54. 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.

For dependents it's difficult if the dependent is sponsored by an active duty member returning from overseas with less than two years left to their EAOS, as they are not covered under the Delta Dental Plan and there is no space "A" dental care provided.

55. 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 statistics for NAS Oceana and Virginia Beach are not available in the format requested. These statistics are normally maintained by calendar year vice fiscal year and are not categorized by on base military/civilian or off base military/civilian involvement. Additionally, Virginia Beach statistics are not maintained or necessarily correspond to the NCIS case category definitions utilized in the data call.

"Not available" entry in table indicates that data is unavailable for category.

NAS OCEANA/60191

Crime Definitions	CY 1991	CY 1992	CY 1993
1. Arson (6A)			
On-Base	2	0	0
Off Base	219	211	200
2. Blackmarket (6C)			
On-Base	0	0	0
Off Base	0	0	0
3. Counterfeiting (6G)			
On-Base	0	0	0
Off Base	446	432	298
4. Postal (6L)			
On-Base	1	2	0
Off Base	Not available	Not available	Not available

NAS OCEANA/60191

Crime Definitions	CY 1991	CY 1992	CY 1993
5. Customs (6M)			
On-Base	0	0	0
Off Base	Not available	Not available	Not available
6. Burglary (6N)			
On- Base	13	25	21
Off Base	4,379	3,930	3,609
7. Larceny - Ordnance (6R)			
On-Base	0	0	0
Off Base	Not available	Not available	Not available
8. Larceny - Government (6S)			
On-Base	54	61	29
Off Base	Not available	Not available	Not available

NAS OCEANA/60191

Crime Definitions	CY 1991	CY 1992	CY 1993
9. Larceny - Personal (6T)			
On-Base	237	250	137
Off Base	16,824	15,108	14,812
10. Wrongful Destruction (6U)			
On-Base	161	228	45
Off Base	6,314	5,882	5,247
11. Larceny - Vehicle (6V)			
On-Base	1	1	1
Off Base	1,325	1,160	1,195
12. Bomb Threat (7B)			
On-Base	4	1	2
Off Base	119	81	104

NAS OCEANA/60191

Crime Definitions	CY 1991	CY 1992	CY 1993
13. Extortion (7E)			
On Base	1	0	0
Off Base	Not available	Not available	Not available
14. Assault (7G)			
On Base	32	69	25
Off Base	2,903	3,471	3,242
15. Death (7H)			
On Base	1	0	1
Off Base	111	91	110
16. Kidnapping (7K)			
On Base	0	0	0
Off Base	Not available	Not available	Not available

NAS OCEANA/60191

Crime Definitions	CY 1991	CY 1992	CY 1993
18. Narcotics (7N)			
On Base	4	6	6
Off Base	984	938	1,139
19. Perjury (7P)			
On Base	0	0	0
Off Base	Not available	Not available	Not available
20. Robbery (7R)			
On Base	0	1	0
Off Base	512	612	631
21. Traffic Accident (7T)			
On Base	215	281	243
Off Base	8,964	9,212	8,820

Crime Definitions	CY 1991	CY 1992	CY 1993
22. Sex Abuse - Child (8B)			
On Base	0	3	2
Off Base	Not available	Not available	Not available
23. Indecent Assault (8D)			
On Base	2	4	7
Off Base	Not available	Not available	Not available
24. Rape (8F)			
On Base	5	1	1
Off Base	127	153	181
25. Sodomy (8G)			
On Base	1	0	0
Off Base	53	84	94



DOD
FLIGHT INFORMATION PUBLICATION

AREA PLANNING

NORTH AND SOUTH
AMERICA

28 APR 94

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DMA STOCK NO. PLANXAP1


EPR. DATE 94118

NAS Oceana
UTC 6091
DC38

3-56 UNITED STATES

excluded from limitations; however, they must be accomplished in designated areas and prudence must be exercised to avoid excessive turn-up time.

8. MESSAGE TRAFFIC - All message traffic to NAS North Island pertaining to flight operations shall be directed to "NAS NORTH ISLAND CA/30/P". Request to use NAS North Island as BINGO field for carrier operations requires 7 days prior notice.

9. AIR TERMINAL - Operates H24. All passengers (except DV's) are required to enplane/deplane at the Air Terminal. Fueling of large passenger aircraft will be accomplished after all passengers/baggage have been off-loaded.

10. TRANSIENT SERVICE - Ground transportation and billeting extremely limited. Prior coordination required. Contact the Operations Duty Officer DSN 735-8233 C819-545-8233 for billeting and transportation information.

Oceana NAS

(NAVFIC/FIL 92-7)

1. NOISE ABATEMENT PROCEDURES - Oceana NAS is located in an extremely noise-sensitive area and strict compliance with ATC procedures is mandatory. Flight/course rule violations will be processed in accordance with OPNAVINST 3710.7.

2. Touch and go, low approach or carrier landing practice not permitted at Oceana NAS during the hours 0400-1200Z + Monday-Saturday and 0400-1800Z + Sunday.

3. PROCEDURES FOR TAKEOFFS ON ALL RUNWAYS ARE:

a. During all operating conditions:

- (1) Climb to 1000' MSL on runway heading.
- (2) Secure afterburners no later than field boundary.
- (3) Commence turn required for SID/SMO departure at 1000' MSL.

(4) One exception: For southbound departures, on Runway 5 during daylight, VFR conditions. Upon reaching 300' MSL commence a climbing right turn (within safe aircraft/crew limitations) to intercept the initial departure track. The right turn out shall commence no earlier than abeam the control tower.

4. DEPARTURE PROCEDURES AFTER TAKEOFF:

a. Runways 5 and 14. Upon commencing right turn out, continue to climb to 1500' MSL or to altitude as cleared by tower/departure control and turn to a heading of 210°. Intercept and track the NTU 175° radial not later than the 4 NM fix. Caution R-8605 3.5 NM east.

b. Runways 23 and 32. Upon commencing left turn out at 1000' MSL, maintain 1000' MSL until clear of the VFR landing pattern and then continue climb to 1500' or to altitude as cleared by tower/departure control. Intercept and track the NTU 175° radial not later than the 4 NM fix. Departures Runway 32 must complete left turn within 2 NM.

c. Extreme care shall be exercised to avoid flight east of the NTU 175° radial between 2 and 8 NM.

d. Climbouts will be at reduced power settings until reaching 4000' MSL.

5. SPECIAL OPERATING PROCEDURES:

a. VFR minima - fixed wing 1500/3 except 3 NM radius of NALF Fentress and helicopters - 1000/3.

b. All military aircraft (except c, d, and e below) operate under positive IFR control within 25 NM of Oceana.

c. VFR tower pattern - when cleared aircraft enter the break at 1500' MSL, break level when cleared and maintain 1500' MSL until established downwind to avoid departing traffic. Downwind 1000' MSL.

d. VFR/SVFR helicopter routes mandatory for all helicopter flights at or below 1000'.

e. NALF Fentress traffic pattern: Break altitude 1000' MSL, downwind 800' MSL. Climb straight ahead on runway heading prior to turn downwind. Runway 5 - Absolute maximum pattern width 1.5 NM. Runway 23 - Absolute maximum pattern width 1.7 NM to avoid overflight of residential area located 1.5 NM SE of approach end. All flights to/from NALF Fentress require Oceana ATC approval. No VFR entry permitted except from NAS Oceana via prescribed routing. Aircraft departing Runway 23 and returning to Norfolk, climb straight ahead to 1500' MSL before making any turns (noise abatement). CAUTION: Arrivals to Runway 5 at Oceana pass over Fentress as low as 1500' MSL.

6. MISCELLANEOUS:

a. QUARTERS - Officer/enlisted berthing very limited, require 48 hours prior notice to ensure accommodations.

b. TRANSPORTATION.

(1) Normal working hours; on base taxi only.

(2) After normal working hours; Base Ops will provide limited transportation on base only. Off station transportation shall be arranged prior to arrival.

c. FUEL.

(1) Turbojet aircraft expect hot pit refueling with possible 1-2 hour delay if truck refuel required.

(2) No transient hot pit available weekend or holiday.

d. Prior Permission Required, DSN 433-2162 or C804-433-2162.

e. No locked wheel turns on asphalt portions of runways/taxiways.

f. Touch and go prohibited for HEAVY aircraft.

Offutt AFB

(AFFEAJFC/AFFSAJFC)

1. CAUTION-Migratory birds in vicinity of airport. No brake/drag chute repacking available. Bring spare chute. Fleet service unavailable. Limited parking and no hangar space avail-

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FLIGHT INFORMATION PUBLICATION
(ENROUTE)



IFR - SUPPLEMENT
UNITED STATES

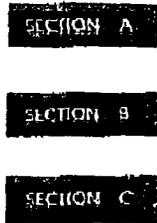
This Supplement is issued EVERY EIGHT WEEKS

EFFECTIVE 0901Z 28 APR 1994
TO 23 JUN 1994

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DMA STOCK NO. ENRXUSIFRSP


EFF. DATE 94118

B-386 AIRPORT/FACILITY DIRECTORY

CONTINUED FROM PREVIOUS PAGE

SERVICE - LGT - MIL Rwy 18-36 press to lnt, to increase lnt and ACTIVATE-MALSR Rwy 36-CTAF. **FUEL** - (NC-100L, A1+)
REMARKS - AHeaded 1330Z +-35. Per attendant after 25 from CDB-467-2073 or 495-7478 (FIC). **RSTD** - All occit dep Rwy 18 maint rwy hdg to 800' AQI or until reaching end of rwy whichever occurs later before making left turn. **CAUTION** - Active helipad lnd 2850' S and 930' W of epoch end Rwy 36.
COMMUNICATIONS - CTAF/UNICOM - 123.0 AWOS-3 - 128.125 FSS-GAINESVILLE GNV-NOTAM OCF RCO - 111.7T 122.1R JACKSONVILLE CENTER - (R) (135.75 317.6 APP CON and) (118.6 CLNC DEL/DEP CON and)
NAVAIDS - VORTAC - (U) 113.7 OCF CH 84 29°10.7'N 82°13.8'W At Rd. 80/000E
ILS/RADAR - 8 LOC - BRG 002' I-OCF 111.3 LOM OC 423 Unmtd

OCEANA NAS, (APOLLO SOUCEK FIC) VA O KNTU N 36°49.3'N 76°01.9'W 22 UTC-5(-4DT)

M-44-6H, L-32H-87D
 (8) RWY-08L L6,13 (8001x150 CON 574 T130 ST161 TT290) L6,13 RWY-23R E-28(B) (1476) E-28(B) (1500)
 RWY-08R L6,7,8,11,13 (11,997x200 ASP/CON 5113 T170 ST175 TT260) L6,7,8,11,13 RWY-23L E-28(B) (1416) E-28(B) (1438)
 RWY-14L L6,13 (8000x150 CON 574 T130 ST161 TT290) L6,13 RWY-32R E-28(B) (1448) E-28(B) (1500)
 RWY-14R L6,11,13 (7999x200 ASP/CON 5112 T145 ST175 TT220) L6,11,13 RWY-24L E-28(B) (1420) E-28(B) (1442)

SERVICE - A-GEAR - 3ton-Hd A-O on inbound duty rwy and de-rigged. JASU - (OTC-35) (NC-8) (NCFF-105 Cte-Air OPS Duty Officer to ensure avbl. NC-8 need to give NC-3 capability) **FUEL** - 15 O-156 SP LHOK LOX TRAN ALERT - Tran line 1200-0330Z +- Mon-Fri, 1200-2330Z +- Sat, Sun, and hol. No tran w/d dep allowed OT. Lnd pnt/star fac. Dur peak periods extn delay in tran avg.
REMARKS - **RSTD** - PPR V433-2162/2163, C804-433-2162/2163. Final ldy only 0400-1300Z +- dly, 0400-1800Z +- Sun. All P/W and capter fit abv 1000' cr/dep NTU must file IPR fit plan. VFR/special VFR capter rta mandatory for all capter fit at or b/w 1000'. **CAUTION** - Dur VMC all dep and arrival lnt epoch fly rwy hdg and do not exceed 1000' Hl post dep and due arrv overhead etc. TFC PAT - Simultaneous ldy/dep are conducted on part rwy lnd 700' apart. Evry jet lmg NAS Oceana/ALF Facilities. Reduced rwy separation ttd in aft USN/USMC cch. Dur peak periods exp one epoch to full stop ldy. NB ABTMT - Strict compliance req with program outlined in RUP AP/1 Supplementary Arpt Rmt. CSTMS/AQ/IMG - Avbl Oceana NAS based tactical cch only. Rwy 48 hr PM to Base OPS. Aircrew req to remain in cch Hl released by CSTMS. MISC - See RUP AP/1, Supplementary Arpt Rmt.

COMMUNICATIONS - SPA ATIS - Opr 1200-0500Z +- . 315.4 FSS-NEWPORT NEWS PHF-OL-NOTAM PHF OCEANA ATCOM - 6723 APP CON - (R) (E) 119.6 279.2 NORFOLK APP CON - (R) (E) 126.03 372.1 TWR - (E) 126.2 360.2 336.4 340.2x GND CON - 336.4 DEP CON - 374.8 NORFOLK DEP CON - 125.2 289.9 CLNC DEL - 300.4 BASE OPS - 284.9 PMSV: METRO - 387.4

NAVAIDS - TACAN - (U) NTU CH 113 36°49.4'N 76°02.3'W At Rd. 64/1000'W
 TACAN unuse 000°-039° byd 30 NM b/w 3000' 210°-239° byd 20 NM b/w 4000'
 090°-109° byd 30 NM b/w 1500' 240°-280° b/w 6000'
 110°-199° byd 30 NM b/w 2000' 291°-329° byd 15 NM b/w 3000'
 300°-309° byd 30 NM b/w 2000' 340°-359° byd 20 NM b/w 3000'

ILS/RADAR - RADAR - SEE TERMINAL RUP FOR RADAR MINIMA.

OCEANSIDE MUNI, CA L32 33°13.1'N 117°21.1'W 28 UTC-8(-7DT) M-2B, L-3C

(8) RWY-08 L (2712x3061x75 ASP S12) L4,10 RWY-24

SERVICE - LGT - MIL Rwy 06-24 press to lnt, to increase lnt and ACTIVATE-REL Rwy 24-CTAF. No rnk or edge lgt byd chp'd thld. **FUEL** - (NC-80, 100L)

CONTINUED ON NEXT PAGE

DOD
FLIGHT INFORMATION PUBLICATION
(ENROUTE)



VFR - SUPPLEMENT
UNITED STATES

This Supplement is issued Every Twenty-Four Weeks

EFFECTIVE 26 MAY 1994
TO 10 NOV 1994

ECN EFFECTIVE 18 AUG 1994
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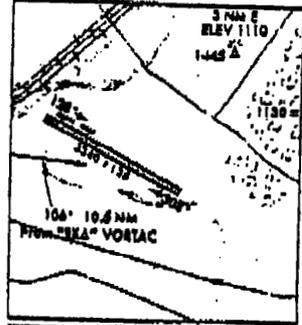


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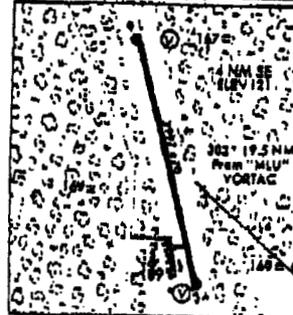


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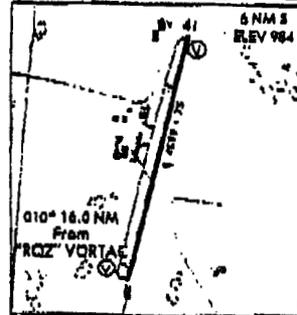
P&F AIRPARK INC, NY (Oceana) 42°37'N 77°00'W
 UTC-5 (-10T) **NEW YORK**
 (418)
 UG
 FUEL - (NC-108LL)
 AIRPORT REMARKS - Attended day/2 Mar-Nov. ☉ Fono 607-432-8800 for LIR. Rwy 15-31.
 COMMUNICATIONS - (GTAF/UMCOM 122.8)
 (FSS UTIDA UGA)



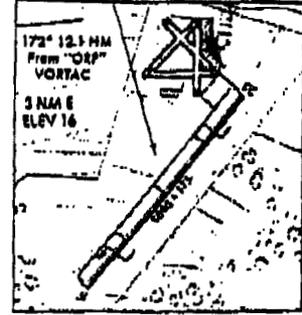
FARMERVILLE, LA 32°45'N 92°20'W UTC-5 (-50T)
MEMPHIS
 (F87)
 ROAD, RD. 100
 AIRPORT REMARKS - (SR) Activated 1900-1300Z → → Mon-Fri. Grass encroachment and grass and soil buildup on rwy edge. ☉ Rot Bea O/S 1894. ☉ NDB - Rwy 14-34 paved to left; ACTIVATE at end and REL. Rwy 34-122.3 REL Rwy 34 O/S Inad. Several rwy edge lgt O/S. ☉ VASI - Rwy 14-34 O/S Inad.
 COMMUNICATIONS - (GTAF 122.8)
 (FSS DE RIDDER ORL-NOTAM ORR)



FAYETTEVILLE MUNI, TN 35°04'N 86°34'W
 UTC-5 (-50T) **L-14, ATLANTA**
 (F740)
 P SLA, S. 10
 FUEL - (NC-108LL A)
 AIRPORT REMARKS - (SZ1, T31) Attended 1400-2300Z → → Mon-Sat. 1400-2300Z → → Sun.
 COMMUNICATIONS - (GTAF/UMCOM 122.8)
 (AWOS-3 - 135.275)
 (FSS JACKSON MFL-NOTAM MFL)
 ☉ HUNTSVILLE APP/DEP CON ☉ - [E] 123.8 354.1
 CON REMARKS - ☉ Opv 1200-0550Z → → Mon-Fri; 1200Z → → Sat-0550Z → → Sun; OT c/o MEMPHIS CENTER 120.8 287.8.



FENTRESS RALF, VA 36°42'N 78°02'W
 UTC-5 (-10T) **L-22-27, WASHINGTON**
 (NFK)
 AIRPORT REMARKS - CAUTION - Prohibit jumps at Fentress RALF rfs to 10,000 1300-2300Z → → Sat 10 NM if Oceana NAS TACAN R-227. (SBC. T112, ST142, T1158). Unatd arpt. Prior ATC clear req fr OCEANA NAS APP/CON.
 COMMUNICATIONS -
 (FSS NEWPORT NEWS PNF-NOTAM PNF)
 OCEANA NAS APP CON - 119.8 279.2



NAS OCEANA UIC 60191
DATA CALL THIRTY-EIGHT

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print)

Signature

Title

Date

Activity

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

NEXT ECHELON LEVEL (if applicable)

J. W. CRAINE, JR.

NAME (Please type or print)


Signature

Captain

Title Commander

7/28/94
Date

Naval Shore Activities

U.S. Atlantic Fleet

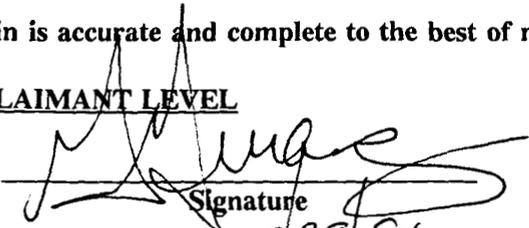
Activity

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

MAJOR CLAIMANT LEVEL

H. H. MAUZ, JR.

NAME (Please type or print)


Signature

Admiral

Title Commander in Chief

7/29/94
Date

U.S. Atlantic Fleet

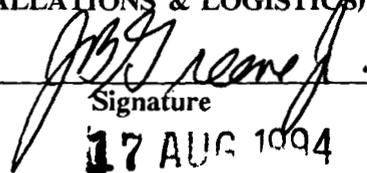
Activity

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

17 AUG 1994
Date

Title

17 AUG 1994
Date

DATA CALL 38 CERTIFICATION

BRAC-95 CERTIFICATION

Reference: SECNAVNOTE 11000 of 08 December 1993

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

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

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

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

ACTIVITY COMMANDER

WILLIAM H. SHURTLEFF
NAME (Please type or print)

William H. Shurtleff
Signature

COMMANDING OFFICER
Title

6 JUNE 94
Date

NAVAL AIR STATION OCEANA
Activity

NAS OCEANA UIC N60191
DATA CALL THIRTY-EIGHT REVISED PGS 94-97

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print)

Signature

Title

Date

Activity

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

NEXT ECHELON LEVEL (if applicable)

NAME (Please type or print)

Signature

Title

Date

Activity

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

MAJOR CLAIMANT LEVEL

W. J. FLANAGAN, JR.

NAME (Please type or print)



Signature

01 NOV 1994

Admiral

Title Commander in Chief

Date

U.S. Atlantic Fleet

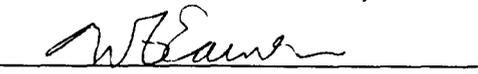
Activity

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

11/15/94

Title

Date