

FORT A.P. HILL

An Army Hill of Quality Excellence

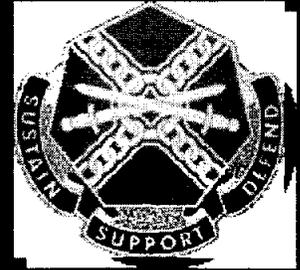


TABS BRIEF 2004

Where America's Military Sharpens Its Combat Edge

Agenda

"Where America's Military Sharpens Its Combat Edge"



Introduction – A Short Video

Mission Brief

Tenant Location, Size & Mission

**Support to Reserve Components,
Homeland Defense and other Agencies**

Master Plan

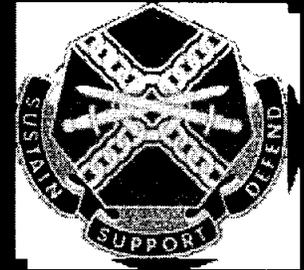
Economic and Social Impact

Summary



Military Value

"Where America's Military Sharpens Its Combat Edge"



Fort A.P. Hill provides a training environment suitable for use by small, medium or large-sized mounted or dismounted units.

...Including access to lakes and navigable river operating areas.

A state-of-the-art 27,000 acre Range Complex

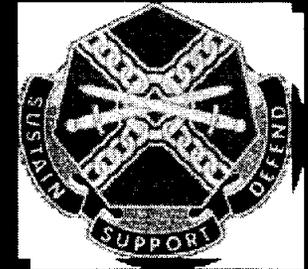
Maneuver space for small or medium-sized wheeled or tracked units.

Airspace available for use by all types of aviation with some restrictions.

Diverse Training Facilities

Military Value

"Where America's Military Sharpens Its Combat Edge"



Fort A.P. Hill - regional logistical support platform:

Subsistence support to 9 installations

Ammunition - operational and training loads for DoD, including special operations, countermine research and Homeland Defense and a transshipment point for Iraqi Freedom

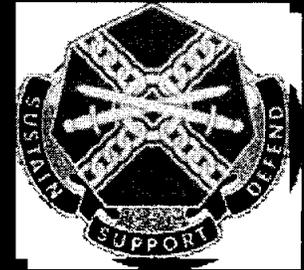
Immediate access to emergency relief supplies, for support and sustainment in the NCR

Staging area for FEMA (ESF 8) during Hurricane Isabel – September 2003

FEMA is seeking a permanent relationship for future contingency operations.

Training Capabilities

"Where America's Military Sharpens Its Combat Edge"



Army G-3 2003 analysis placed Fort A.P. Hill among a select group of installations capable of meeting Joint training needs using individual Services' respective doctrine, tactics, techniques, and procedures; as well as being capable of supporting Joint ground and close air operations.

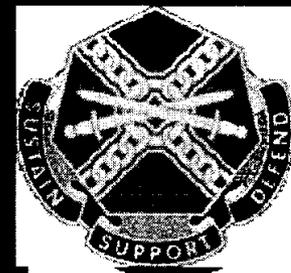
House & train a Brigade(+) in permanent facilities with few additional resources.

Mobilize a Brigade(+) with a training support package

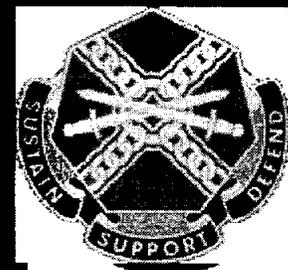
MP units - Gulf War

92nd Separate Infantry Brigade - Iraqi Freedom

House (under field conditions) and train a Division



Mission Brief

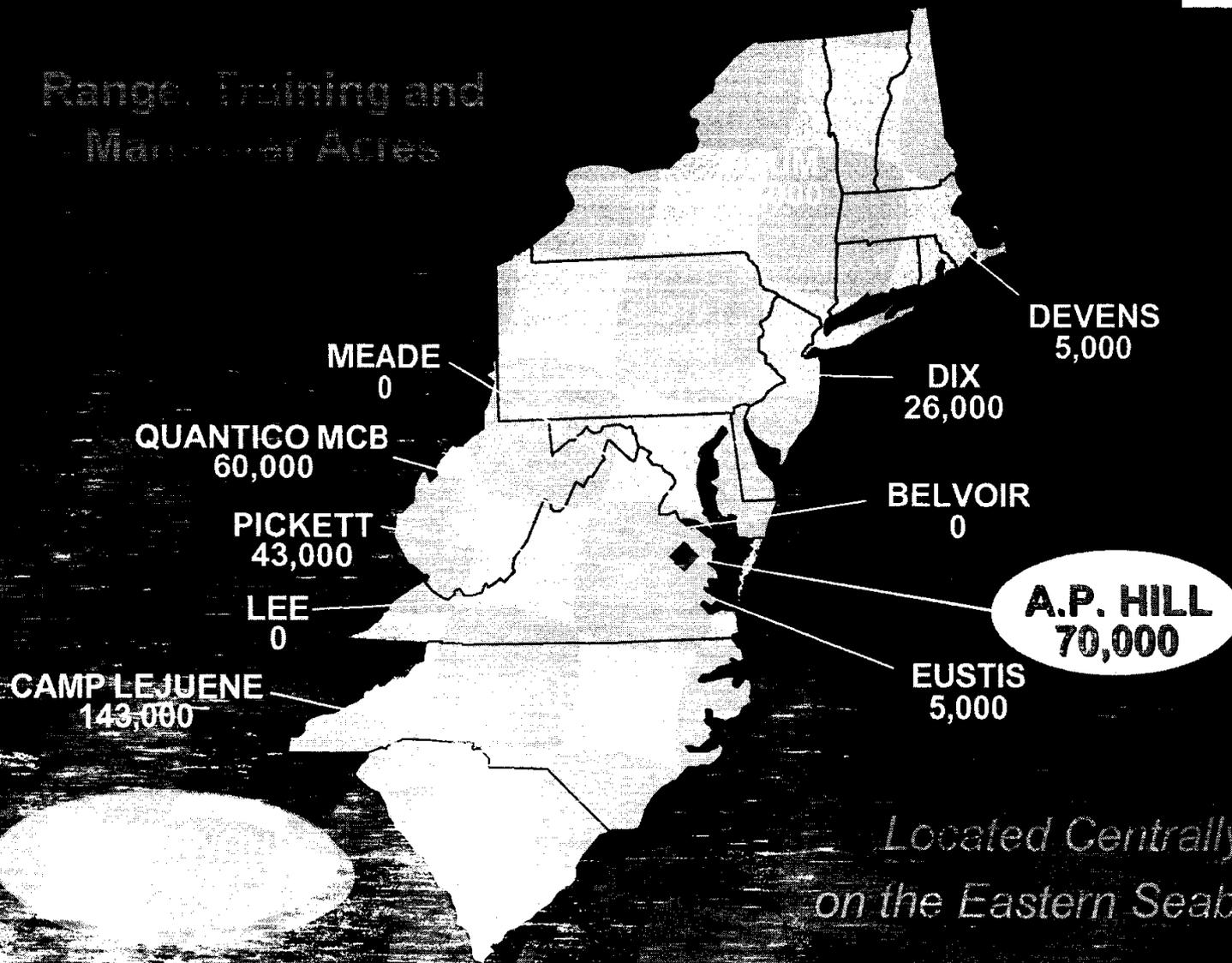


Location

"Where America's Military Sharpens Its Combat Edge"



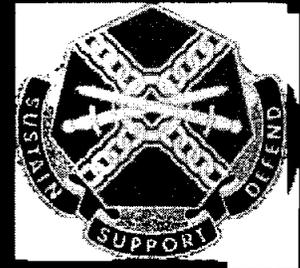
Range, Training and
Materiel Acres



*Located Centrally
on the Eastern Seaboard*

Installation Layout

"Where America's Military Sharpens Its Combat Edge"

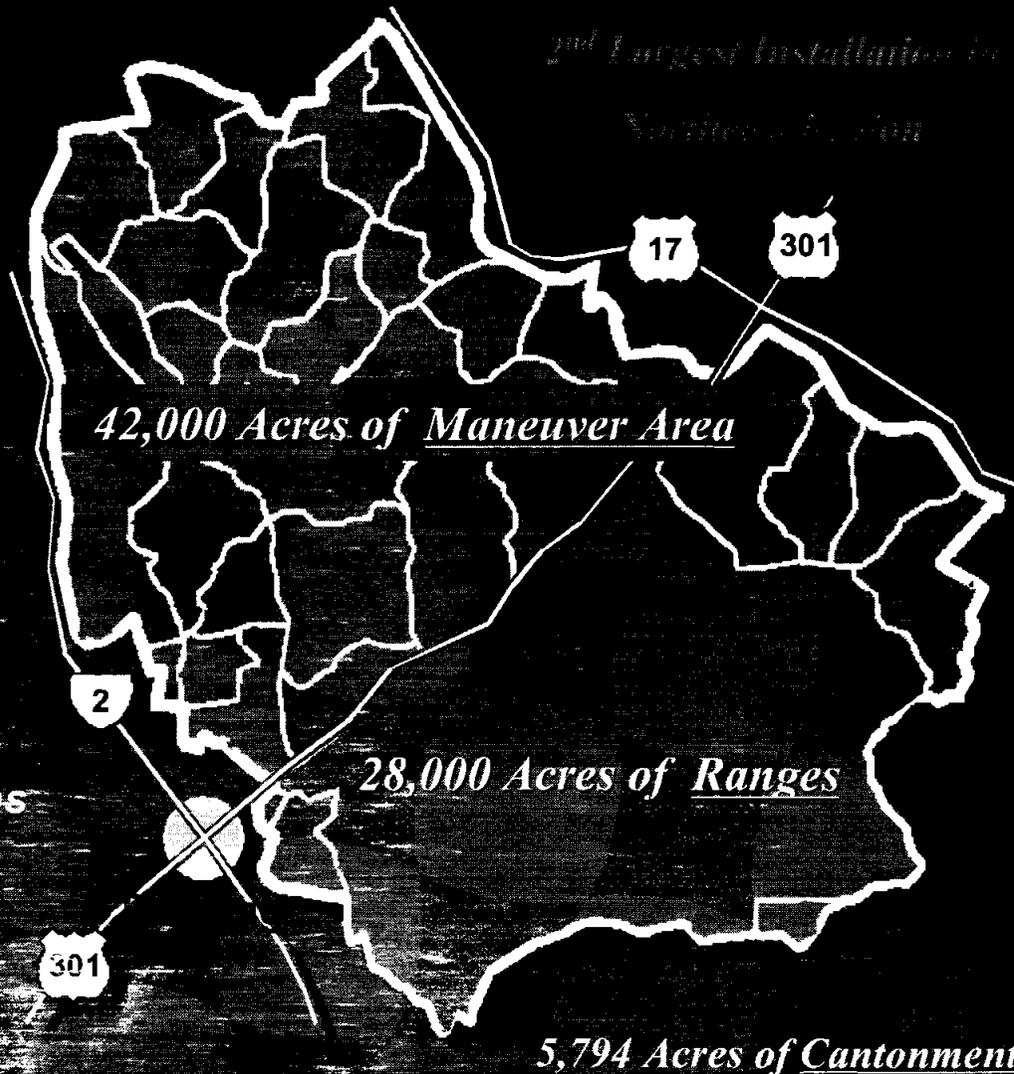


Fort A.P. Hill

75,794 Acres

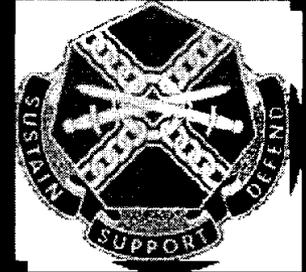
Vital Statistics

- 38 Ranges**
- 31 Tng Areas**
- 35 Artillery points**
- 15 Mortar points**
- 12 Camps**
- 8 Aerial Training Areas**
- 1 River Crossing Site**



History

"Where America's Military Sharpens Its Combat Edge"



Established as an Army Training Post – 11 Jun 1941

Served as staging area for General Patton's Task Force A, Operation Torch

During Korean War served as a staging area for European bound units including VII Corps Headquarters and Third Armored Cavalry Regiment.

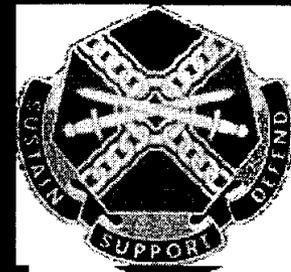
Mobilization station for military police units during the Gulf War.

During Iraqi Freedom provided training support for mobilizing the 92nd Separate Infantry Brigade (PR ANG).

to provide platform for units sustaining combat readiness

Installation Mission

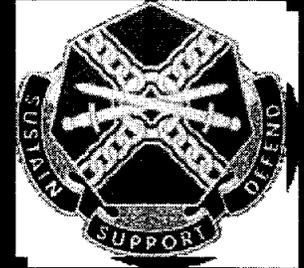
"Where America's Military Sharpens Its Combat Edge"



Provide realistic joint and combined arms training, logistics and support enabling America's Defense Forces to win on 21st Century battlefields.

Installation Vision

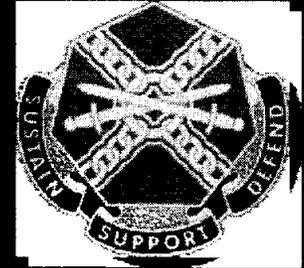
"Where America's Military Sharpens Its Combat Edge"



**The Best Training & Support
- - Anywhere!**

Workforce

"Where America's Military Sharpens Its Combat Edge"



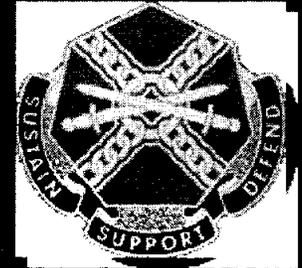
Category	Perm	Temp
Primary	13	
General Schedule	135	9
Warrant Grade	59	5
Non-Appropriated Fund	5	13
Senior Hire		0
Contractor (service-suppliers)	35	

Education	Count
Masters	6
Bachelors	20
Some College	37
High School	140
No High School	6
Unknown	3

Total	150
Female	62
Average Age	47.5

Training Capabilities

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38 ranges that support DoD weapons systems
(except ABA missile and Hellfire)

7 Ranges operate with Automated Target Systems

Aerial gunnery and bombing range

Squad & Platoon (mounted & dismounted) live fire
maneuver ranges (Bradley Table VIII)

35 Artillery firing points

15 Mortar points

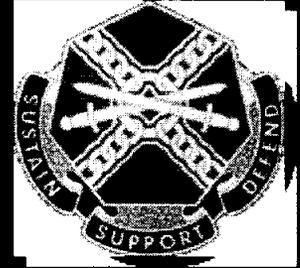
8 Observation points

109 Demolition sites with up to 100 lb. capacity

Available firing areas

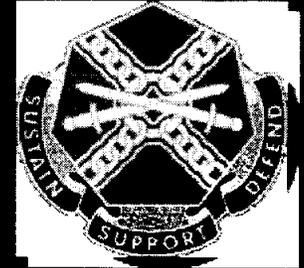
Multipurpose Ranges

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Training Capabilities

"Where America's Military Sharpens Its Combat Edge"



30 Training Areas

7 Infantry (dismount) Training Lanes with objectives

2 Training Lanes (wheeled/tracked) with objectives

A Driving Course – supports 88M MOS training requirements (The Transportation School)

Bridging & Rafting sites – supports multiple bridge sets

A River site – allows access by units with over the water mission from other installations

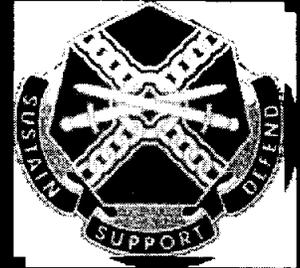
Landing Craft load/unload site

2 Drop Zones (1,750 yds - 32 seconds and 1 – 800 yds)

Assault Landing Strip (C-130 / C-17 capable)

Training Facilities

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Combat Village

POW Compounds

Decontamination Site

Gas Chamber

Landmine Warfare

Basic Rifle

Marksmanship

Classroom

Classrooms

Bayonet Assault

Course

4 Rappel Towers

**Leadership Reaction
Course**

**Expert Medical Badge
Course**

Light Leader Course

**Land Navigation
Courses**

4 Obstacle Courses

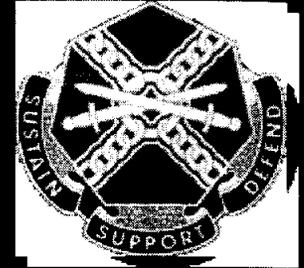
**Expert Infantry Badge
Test Site**

Hand-to-Hand Pits

PT Field

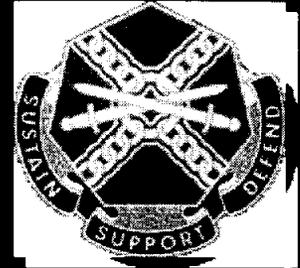
Bridge and Raft Sites

"Where America's Military Sharpens Its Combat Edge"



Support Facilities

"Where America's Military Sharpens Its Combat Edge"



Permanent Training Barracks – 1 Brigade (+)

**Field Housing (Tents on Tent Pads) for an
additional 10,000 soldiers**

TISA Throughput – 14,000 Rations/day

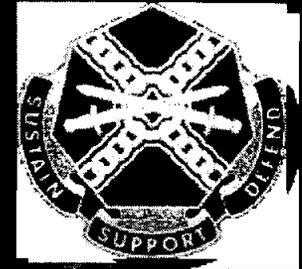
Fuel Storage – 250,000 gallons

Ammunition Storage - 24,031 square feet

**General Storage – 66,629 square feet
w/ an additional 43,000 square feet of
temporary storage**

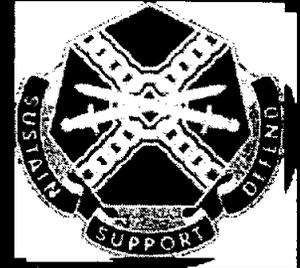
Fixed Camp Sites

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Tent Camp Sites

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Infrastructure Capabilities

"Where America's Military Sharpens Its Combat Edge"



Water Production & Distribution – 6 systems with a production capacity of approximately 2 million gallons per day; storage of 4 million gallons

Waste Water – 6 systems; Treat 698,000 gallons per day, storage capacity is 20.3 million gallons

Electrical Distribution is privatized with Rappahannock Electric Cooperative

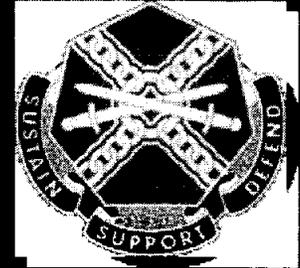
Roads – 87 miles of paved; 406 miles of unimproved roads and trails

Army Family Housing – 25 sets

Unaccompanied Personnel Housing – 14 units

Information Infrastructure

"Where America's Military Sharpens Its Combat Edge"



Telecommunications

Redundant data and telecommunications structure (only installation in MDW w/ this capability)

100 megabit local area network

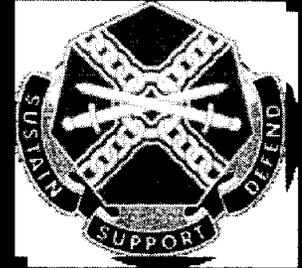
Multiple T-1 wide area network for Voice and Data

10 Non- tactical Frequencies

500(+) Tactical Frequencies (Air & Ground)

Environmental Highlights

"Where America's Military Sharpens Its Combat Edge"



Regional Engagement:

A member of the Virginia Department of Environmental Quality / DoD Pollution Prevention Partnership Member of the Caroline County Environmental Management System Committee

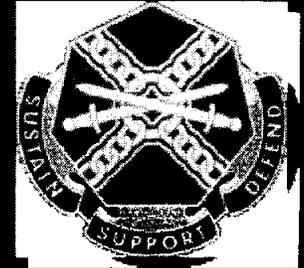
Member of the Caroline County Technical Review Committee for rezoning

Member of both the Chesapeake Bay, York and Rappahannock Tributary Committees

Member of the Regional West Nile Task Force

Environmental Highlights

"Where America's Military Sharpens Its Combat Edge"

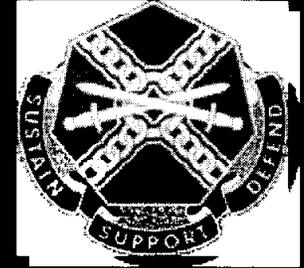


Award Winning

2002 Environmental Compliance Assessment System (ECAS) resulted in the least number of negative findings and the most positive findings for an Army installation

One of the first two military installations in Virginia designated Environmental Enterprise status (E2) in the State's Environmental Excellence Program.

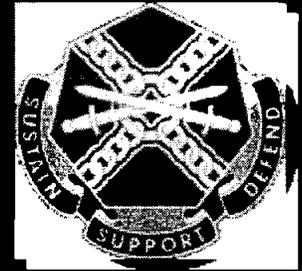
2003 Chesapeake Bay Program Outstanding Achievement Award



Tenant Location, Size and Mission

Resident Units

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Night Vision & Electronic Sensors – USA

Naval Special Warfare Group 2 – USN

**B Company, 3rd Battalion, 20th Special Forces, –
VA ANG**

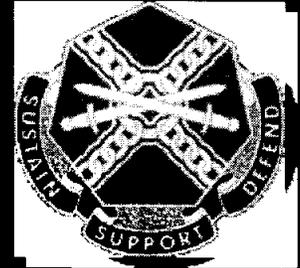
**1st Logistics Support Battalion, 322nd Regiment,
5th Brigade, 78th Division – USAR**

088 Base Maintenance Activity - USAR

80th Division Drill Sergeant School – USAR

Resident Units

"Where America's Military Sharpens Its Combat Edge"



Bureau of Alcohol, Tobacco, Firearms and Explosives – Dept. of Justice

Eastern Regional Support Center - USA

**HQ & HHD Engineer Brigade, 28th ID (M) –
VA ANG**

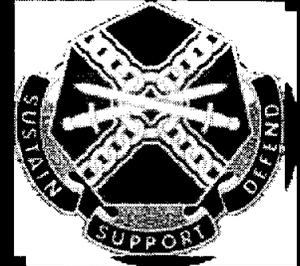
1710th Transportation Company – VA ANG

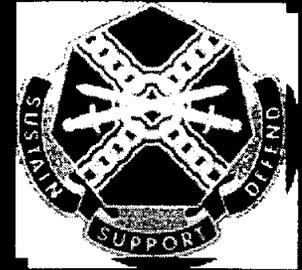
U.S. Army Health Clinic - USA

U.S. Army Corps of Engineers Office – USA

Special Operations

"Where America's Military Sharpens Its Combat Edge"

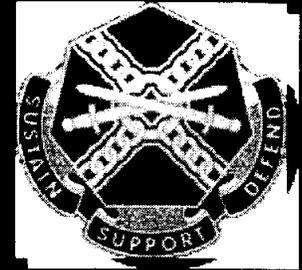




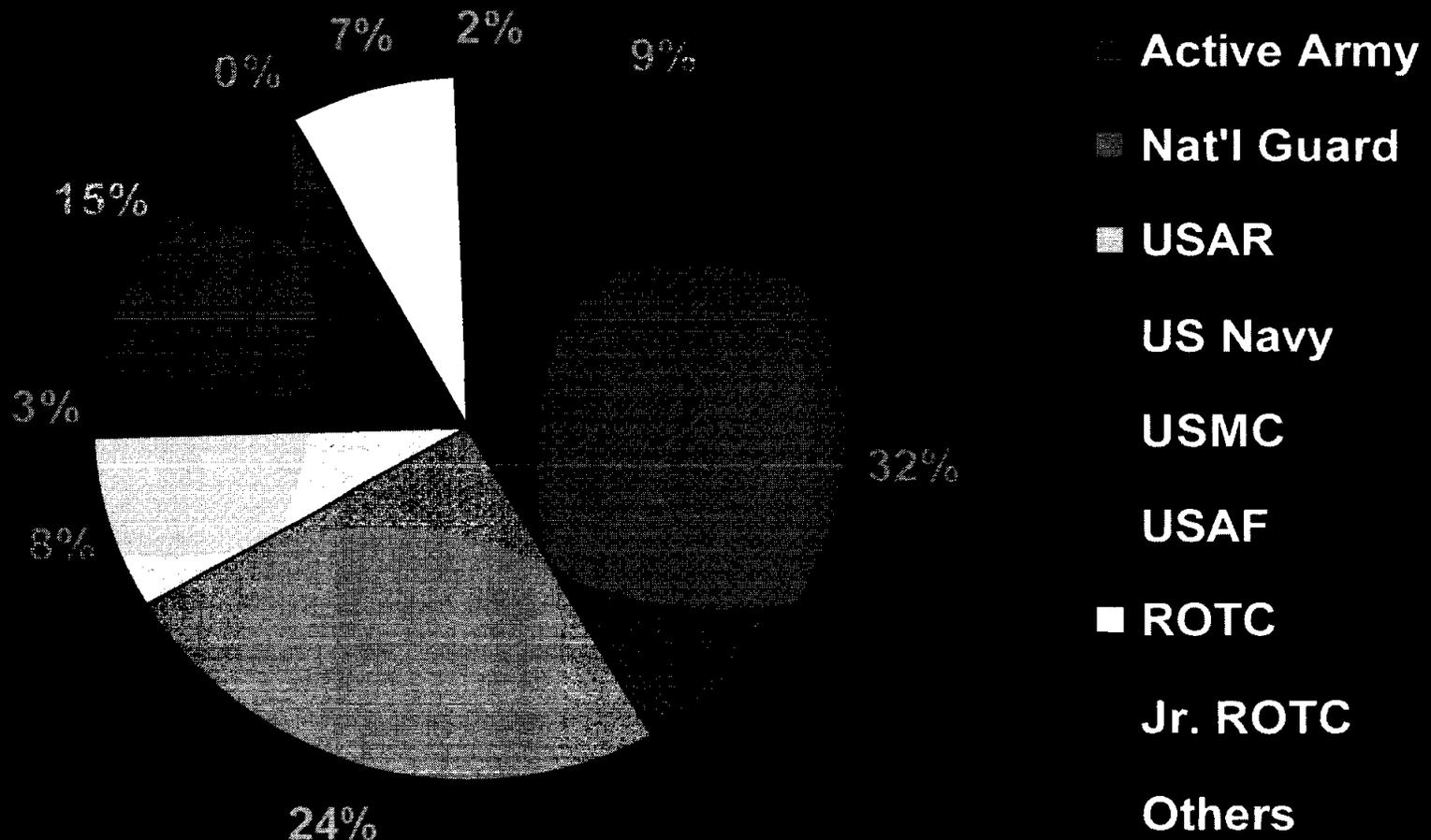
Support to Reserve Components, Homeland Defense, and Other Agencies

Component Utilization

"Where America's Military Sharpens Its Combat Edge"



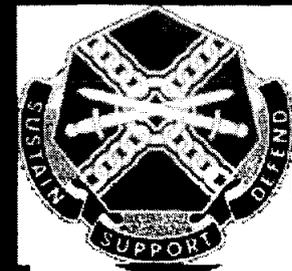
2003 - Total of 49,268 service members trained from 634 units



Annual average of 78,900 service members trained from 1999-2001

Customer Unit Sample

"Where America's Military Sharpens Its Combat Edge"



2003

3rd Infantry Regiment

USMC East Coast MEUs

**28th & 29th Infantry Division
units**

**99th Reserve Support
Command units**

82nd ABN Division units

12th Aviation Battalion

**2nd & 4th Naval Special Warfare
Groups**

Special Operations Command

USMC Recon School

US Army QM & TC Schools

Walter Reed Army Med Center

**USMC 2nd Engineer and AAV
Battalions**

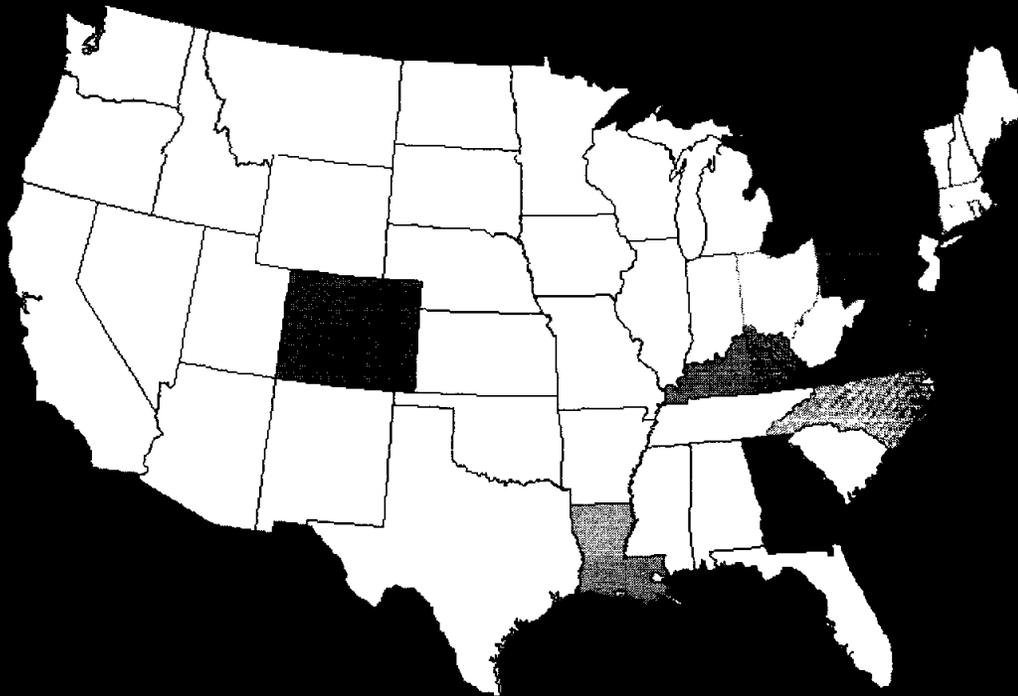
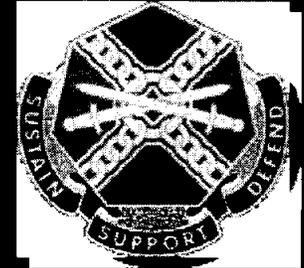
**Bureau of Alcohol, Tobacco,
Firearms and Explosives**

Dept. of State Security Forces

JTF Civil Support (COOP site)

Customer Unit Locations

"Where America's Military Sharpens Its Combat Edge"



Fort Dix, NJ
Fort Drum, NY
Fort Campbell, KY
Fort Carson, CO
Aberdeen PG, MD
Andrews AFB, MD
Fort Detrick, MD
Indianhead NSWC, MD
Patuxent NAS, MD
Fort Belvoir, VA
Fort Eustis, VA
Fort Lee, VA
Fort Monroe, VA
Fort Myer, VA
Fort Pickett, VA
Little Creek Naval Base, VA
Norfolk Navy Base, VA
Quantico Marine Base, VA
Fort Bragg
Camp Lejeune
Cherry Point NAS

Royal British Marines

Canadian Forces

92d Separate Infantry Brigade, Puerto Rico

Dover AFB, DE

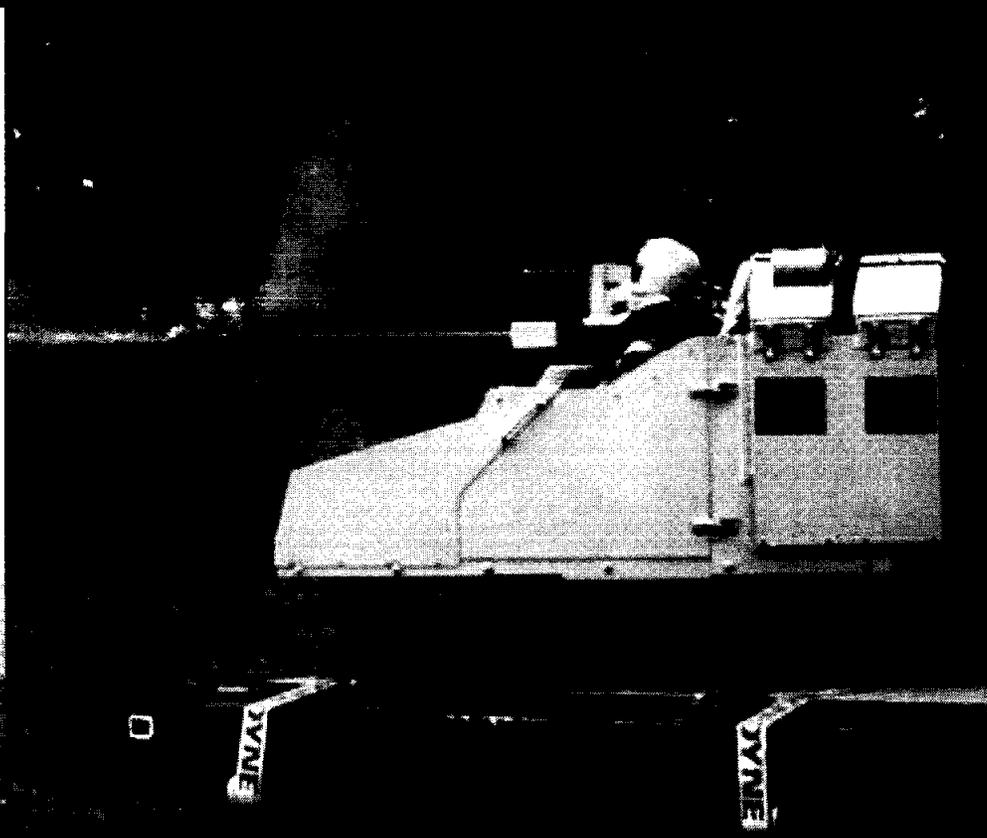
Fort Polk, LA

Fort Stewart, GA

Fort Gordon, GA

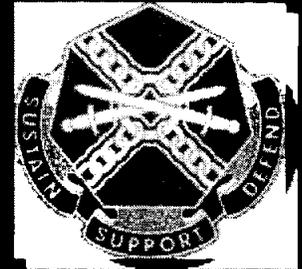
Naval Guns at A.P. Hill

"Where America's Military Sharpens Its Combat Edge"



Support to DoD Testing

"Where America's Military Sharpens Its Combat Edge"



Advanced Aviation Technology Demonstration – Fort Eustis, UAV Testing

US Air Force Research Lab – satellite and aerial platform imagery

NGA / Army Environmental Center – hyperspectral mapping and imagery testing

Night Vision Labs – Fort Belvoir

Laser testing

Thermal Imaging and Optics Testing

Humanitarian De-mining and Countermine research

Naval Special Warfare Center, Indianhead - Thermobaric blast testing (tunnel and cave demolitions)

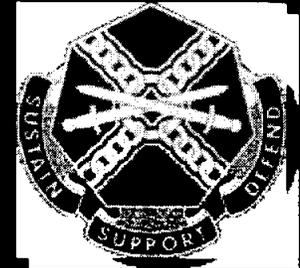
Naval Special Warfare Center, Dahlgren

USMC, Quantico MCB – Expeditionary Fighting Vehicle test

DARPA – advanced remote robotics developmental testing

Supporting the War

"Where America's Military Sharpens Its Combat Edge"



Many units deploy immediately to critical missions

29th Infantry Division – Bosnia Command

Navy SEALs – Afghanistan / Iraq

26th MEU – Seized Kandahar Airport, Afghanistan

3rd Special Forces Group – Afghanistan / Iraq

20th Special Forces – tenant unit deployed to Afghanistan

82nd Airborne Division – Engineers and Paratroopers in Afghanistan / Iraq

USMC 2nd Division Combat Engineers – Afghanistan / Iraq

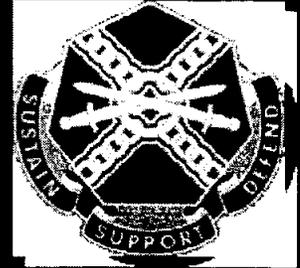
British Royal Marines – Basra, Iraq

MDW Engineers – POTUS / VPOTUS Rescue

92nd Separate Infantry Brigade – Guardian Mariner

Other Support

"Where America's Military Sharpens Its Combat Edge"



Continuity of Operations Sites for DoD

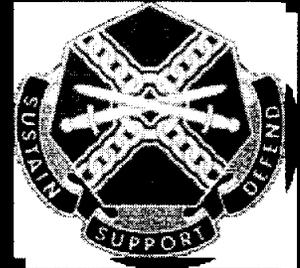
Defense Energy Supply Center

JTF Civil Support

**Regional Headquarters for Integrated
Training Area Management / Geographic
Information Systems – serving over 71
locations worldwide**

National Scout Jamboree

"Where America's Military Sharpens Its Combat Edge"



A Quadrennial Event – Next Jamboree is 2005

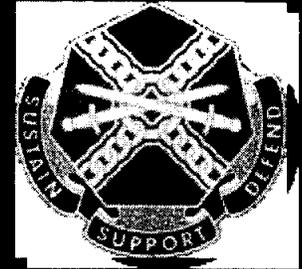
Serves as a two week showcase for the entire armed forces

40,000 scouts, 25,000 volunteers, 2,500 soldiers, & average of 25,000 daily visitors

Event provides training for soldiers in operations other than war

Mission assigned to DoD by Congress

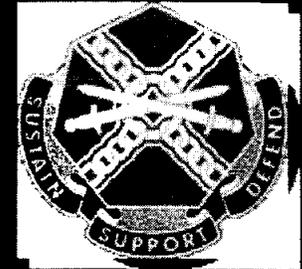
FAPH has hosted the Jamboree since early 80's



Master Plan

Master Plan

"Where America's Military Sharpens Its Combat Edge"



Fiscal 2005 through 2009

PN	FY	Title	Cost In \$ million
<u>58719</u>	05	Shoot House & Urban Assault Course	4.00
<u>12535</u>	06	Modified Records Fire Range	1.75
<u>54981</u>	07	Combined Arms Collective Training Facility Ph 1	10.79
<u>61546</u>	08	Multi Purpose Tank Range (Range 24)	2.50
<u>61548</u>	08	Combined Arms Collective Training Facility Ph 2	11.00
<u>13265</u>	08	Emergency Services Center	6.20
<u>61547</u>	09	Battle Area Course	30.00
<u>10556</u>	09	Physical Fitness Center	8.30
<u>13120</u>	09	Vehicle Maintenance Shop, Organizational	6.00

Master Plan

"Where America's Military Sharpens Its Combat Edge"

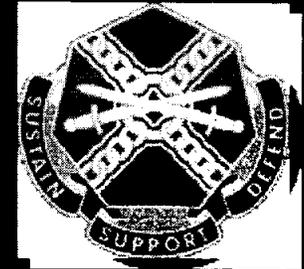


Long Range Projects

<u>PN</u>	<u>FY</u>	<u>Title</u>	<u>Cost</u> In \$ million
<u>13342</u>	LR	Training Aids Support Center	1.55
<u>48849</u>	LR	Health Clinic	1.05
<u>52272</u>	LR	Battalion Headquarters	1.10
<u>53580</u>	LR	Fixed Runway Surfaced	24.00
<u>48851</u>	LR	Multi-Purpose Training Range	5.90
<u>24946</u>	LR	Dining Facility	2.2
<u>48847</u>	LR	Battle Simulation Center	1.2
<u>55752</u>	LR	Brigade Headquarters Building	1.50

Master Plan

"Where America's Military Sharpens Its Combat Edge"



Long Range Projects

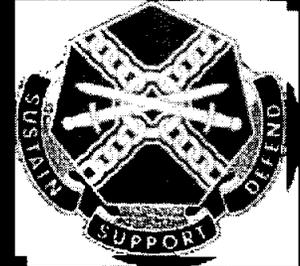
PN	FY	Title	Cost In \$ million
<u>13136</u>	LR	Igloo Storage Installation	.70
<u>24949</u>	LR	Community Service Center	2.00
<u>50007</u>	LR	Organizational Classroom	2.60
<u>25014</u>	LR	Multipurpose Machine Gun Range (RETS)	2.60
TOTAL MCA ROGRAM			\$128.0

Projects By Others

PN	FY	Title	Cost In \$ million
<u>N/A</u>	03	Army Reserve Center, AP Hill	4.93

Range Development Plan

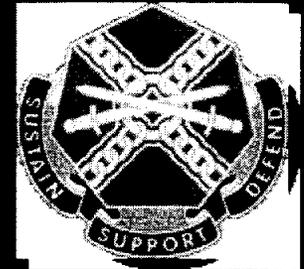
"Where America's Military Sharpens Its Combat Edge"



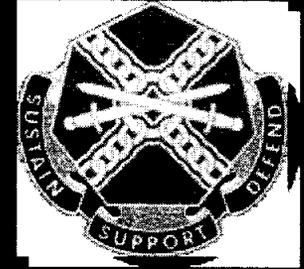
Priority	Project	In thousands		
		MCA	OPA	OMA
<hr/>				
<u>FY05</u>	<i>2005 Kelikian Assault</i>	<i>0</i>	<i>0</i>	<i>0</i>
2.	Breach Facility			\$200
3.	IPBC (RG 28)		\$682	\$500
4.	Multipurpose Machinegun (RG 3)		\$650	\$500
<hr/>				
<u>FY06</u>	<i>2006 Miller II (RG 37)</i>	<i>0</i>	<i>0</i>	<i>0</i>
2.	Convoy Live Fire (RG 25)		\$300	\$300
3.	Attack/Seize Objective (RG 25)			\$300
4.	Artillery Observation Point (OP 11)			\$200
	<i>WTCOM Project</i>			
				OMA and / or OPA Project

Range Development Plan

"Where America's Military Sharpens Its Combat Edge"



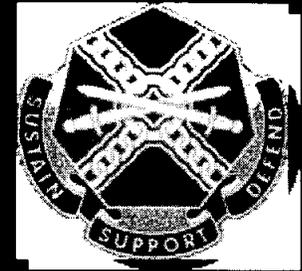
Priority	Project	In thousands		
		MCA	OPA	OMA
<u>FY07</u>	1. CACTI (Phase 1)	\$10,798	\$2,800	
	2. MPRM Range (RG 11)	\$1,500	\$000	
	3. Modified Record Fire (RG 32)		\$1,400	\$200
<u>FY08</u>	1. CACTI (Phase 2)	\$11,000	\$1,200	
	2. MPRM Upgrade (RG 74)	\$1,500	\$1,500	
	3. Infantry Squad Battle Crs (RG 26)		\$644	\$300
<u>FY09</u>	1. Battle Area Course	\$30,000	\$9,700	
<u>FY10</u>	1. Combat Pistol Qualification (RG 1)		\$346	\$100
	<i>MILCON Project</i>			
				OMA and / or OPA Project



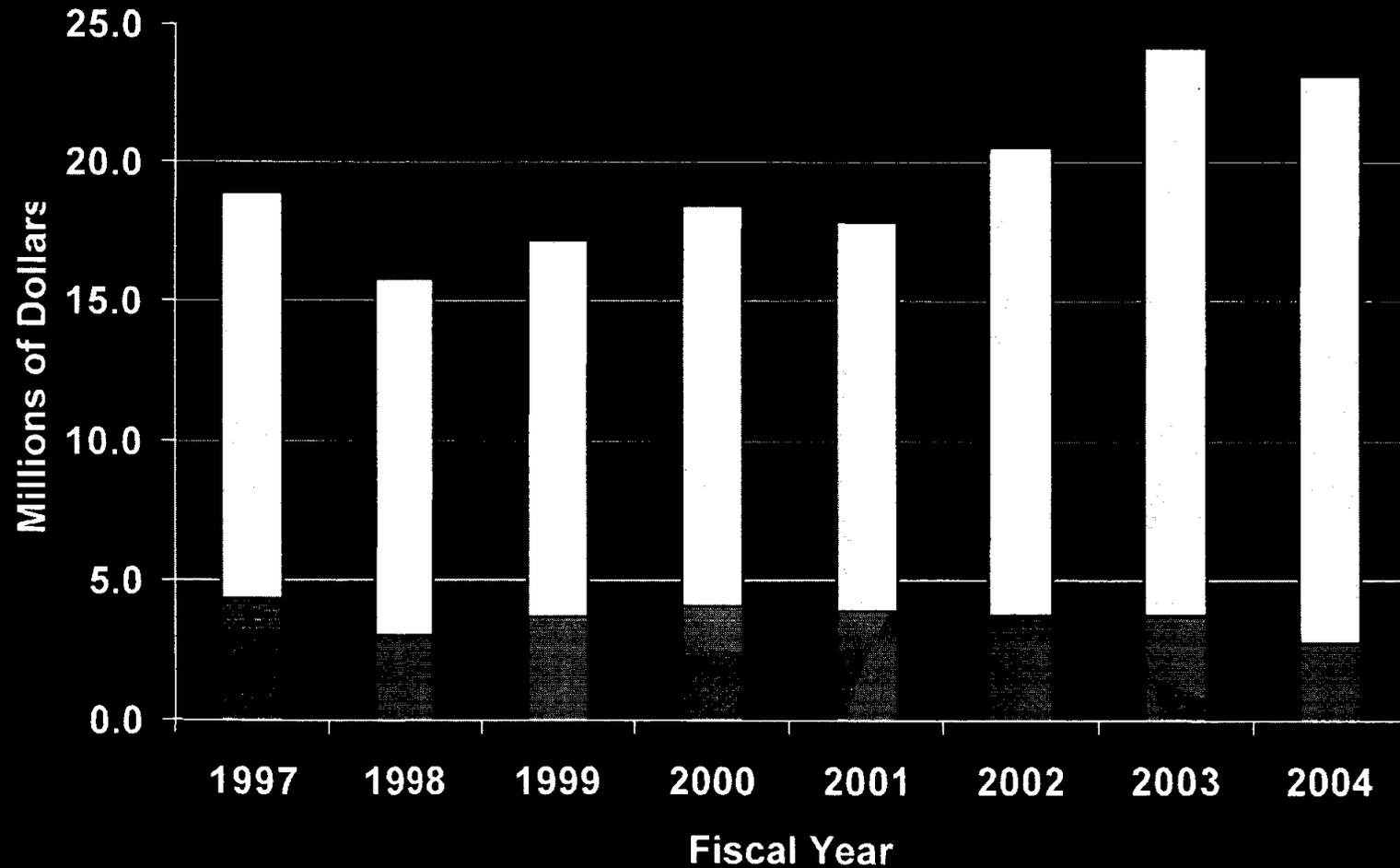
Economic and Social Impact

Annual Budget

"Where America's Military Sharpens Its Combat Edge"



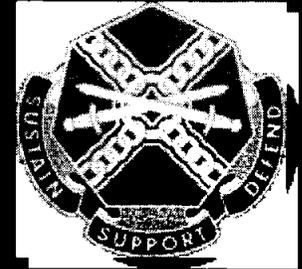
Total OMA Direct Funding with SRM Slice



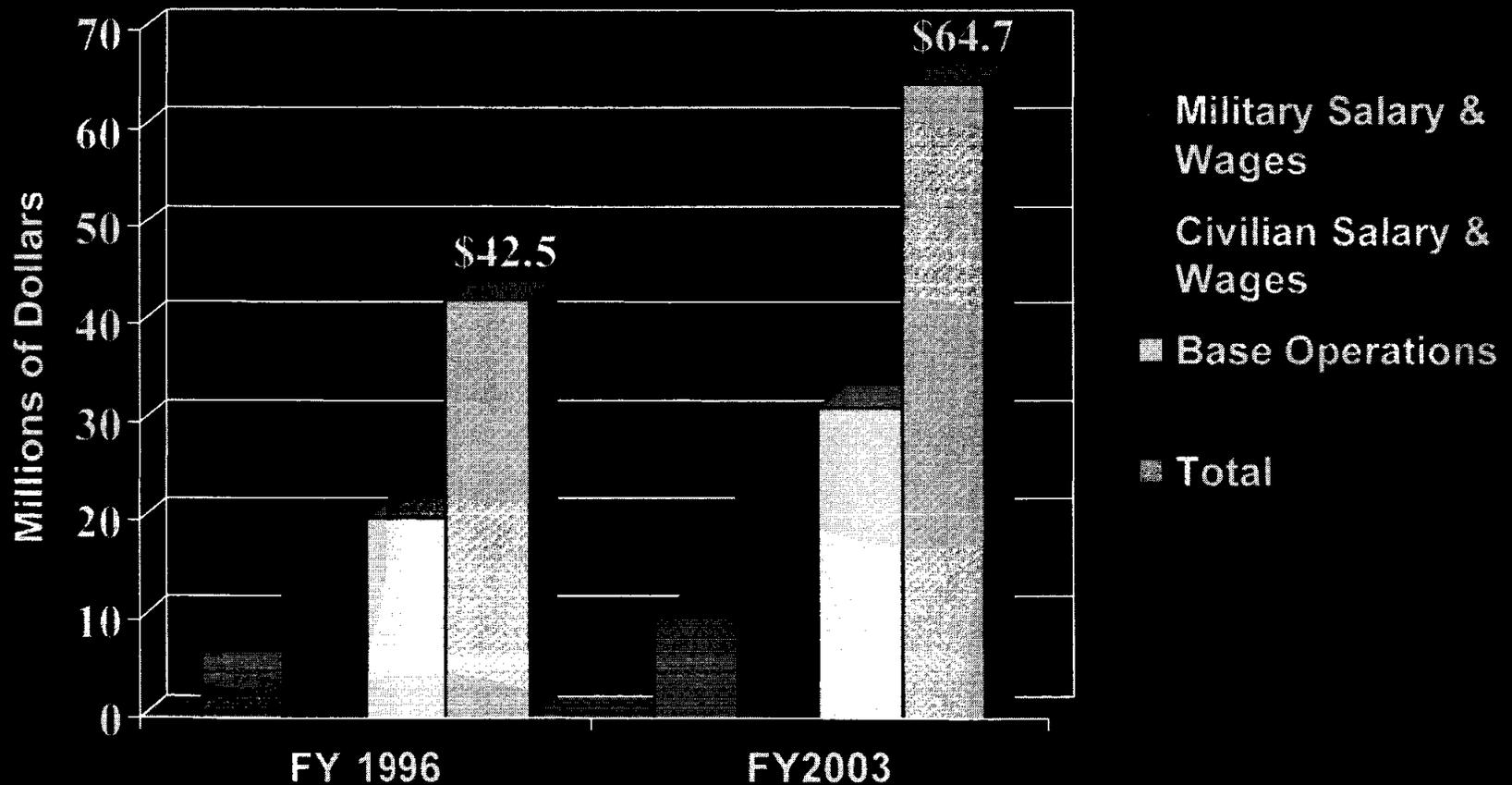
■ SRM, FY03 Constant \$ ■ OMA Other than SRM, FY03 Constant \$

Economic Impact

"Where America's Military Sharpens Its Combat Edge"



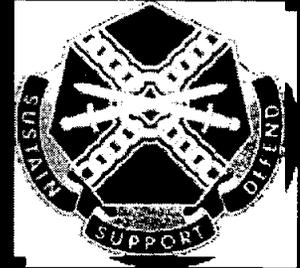
Estimated Economic Impact



Note: Impact increases by \$20 million during National Scout Jamboree year.

Encroachment

"Where America's Military Sharpens Its Combat Edge"



How Military Training is Impacted:

Three Dimensions :

Environmental – limits areas available for maneuver

Airspace – limits ability to employ aerial platforms

Incompatible Use -

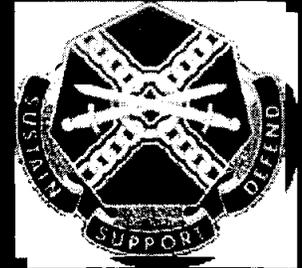
Zoning allows Communities to Build up to Installation Boundaries

Noise limits ability to train at night and using certain weapons

These Impacts are minimal at Fort A.P. Hill

Environmental Dimension

"Where America's Military Sharpens Its Combat Edge"



3 Threatened Species -

Bald Eagle – 8 active nests

Swamp Pink – a wetland plant

Small Whorled Pogonia – an orchid

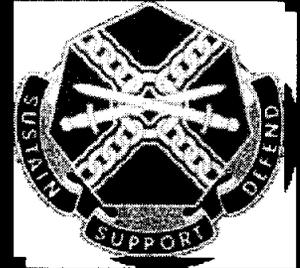
3 species of endangered Pitcher Plants – illegally planted on post

Minimum restrictions due to tolerance and location of species.

Impact to training nearly inconsequential!

Airspace Dimension

"Where America's Military Sharpens Its Combat Edge"



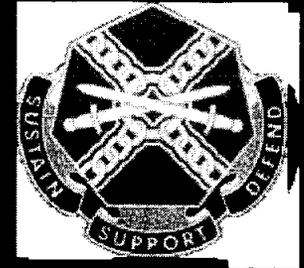
Controlled Airspace over southern portion of the installation – provides unimpeded access

Washington DC Metro approach route over eastern portion of the installation

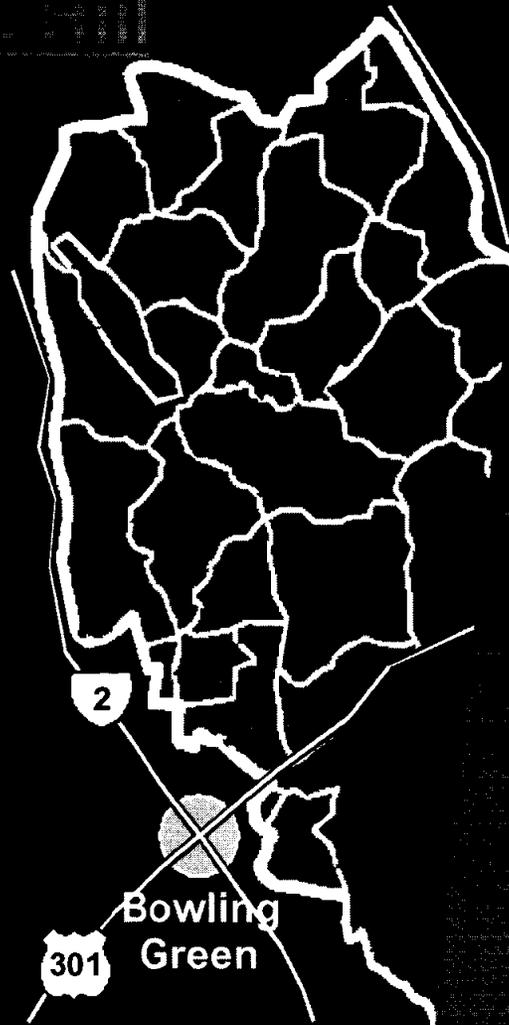
Helicopter and UAV training minimally limited

Regional Air Corridor

"Where America's Military Sharpens Its Combat Edge"



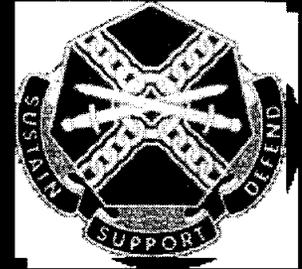
FOR A.P. 1111



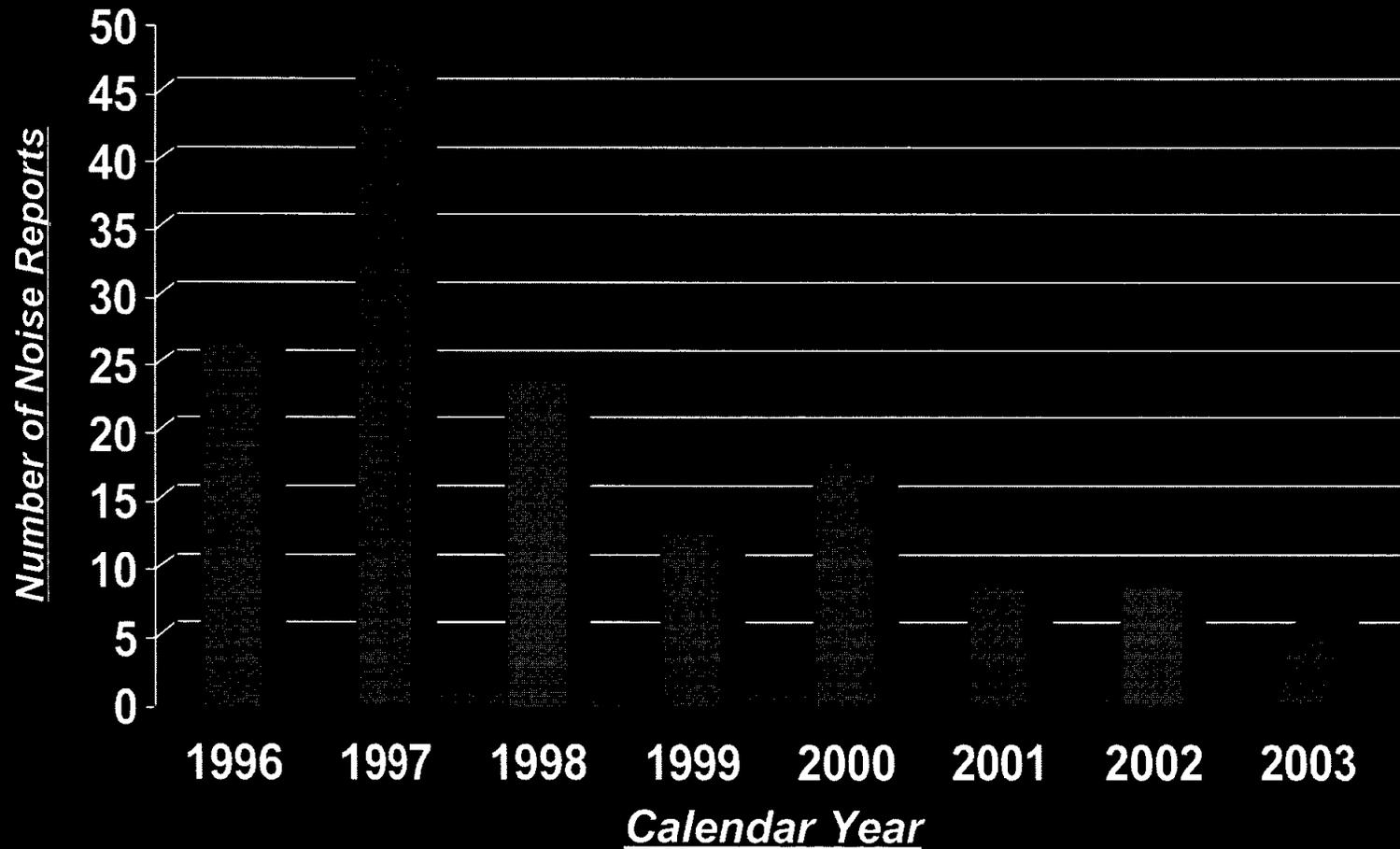
V 376 - above 6,000 ft.

Incompatible Use Dimension

"Where America's Military Sharpens Its Combat Edge"

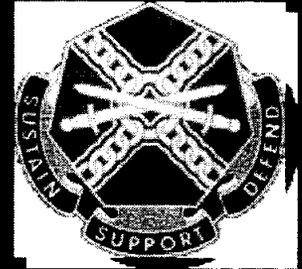


Noise Reports



Incompatible Use Dimension

"Where America's Military Sharpens Its Combat Edge"



We asked about Noise in a November 2003 Survey:

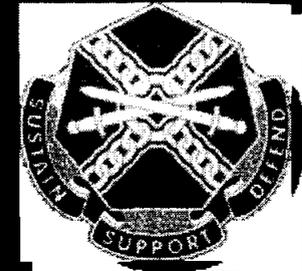
80% of respondents believe Fort A.P. Hill does an Excellent or Good job of minimizing effects of Training Noise

70% said Noise is not a problem

67% said they Rarely or Never experience Training Noise

Controlling Encroachment

"Where America's Military Sharpens Its Combat Edge"



Our Strategy:

Includes increasing buffers through acquisition and use of conservation or other easements to prevent incompatible development of land adjacent to key high noise areas of the installation.

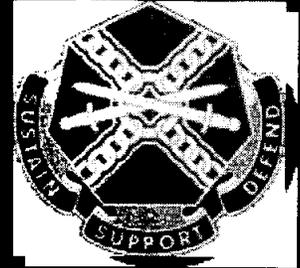
Working closely w/ local governments on zoning and comprehensive land use plans.

Most respondents (65%) to our Community Survey support efforts to reduce encroachment by development near the borders of Fort A.P. Hill

Two thirds (67%) favored a Comprehensive Plan that designates land surrounding the installation as Rural or Agricultural

Community Impact

"Where America's Military Sharpens Its Combat Edge"



We conducted a scientifically valid / reliable attitude survey of residents in a three county area surrounding the installation during Nov. 2003

VALUE TO NATIONAL DEFENSE

92% Believe the training conducted is important to National Defense. Virtually none thought the training unimportant.

GOOD NEIGHBOR

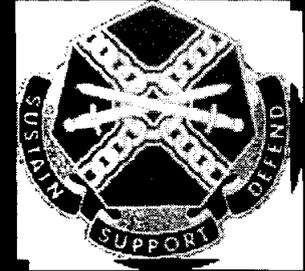
90% Agree Fort A.P. Hill is a good neighbor, with 75% strongly agreeing; only 2% disagreed.

COMMUNITY IMPACT

73% Said Fort A.P. Hill personnel have positive impact on surrounding communities

Our Strengths

"Where America's Military Sharpens Its Combat Edge"



Minimum Restrictions

Flexible Scheduling

Separate Maneuvering / Range Areas

Room for Innovative Concepts

Simultaneous Maneuver & Live Fire

Capable of Handling Today's Weapons

Knowledgeable, Customer-Oriented Staff

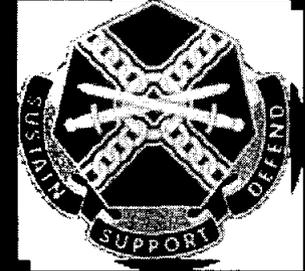
Units can concentrate and focus fully on training

Proximity to National Capital Region and multiple airports

Regional Range Partnership – Customer Firing Solutions

Military Value

"Where America's Military Sharpens Its Combat Edge"



Fort A.P. Hill serves DoD with 119 square miles of tailored training areas and modern ranges, unencumbered by environmental restrictions or urban growth. It's used extensively for Army and Joint warfighter exercises, and interagency use . . .

. . . for \$23 million per year.

From: Keys, Richard D CDR FFC (N762) [Richard.Keys@navy.mil]
Sent: Friday, July 22, 2005 6:26 PM
To: william.fetzer@wso.whs.mil
Cc: Anthony, Mark H CIV FFC N44
Subject: FT PICKETT INFORMATION

Attachments: FT PICKETT OLF.doc; Fort Pickett NWINoise.pdf;
FortPickettCensusNoise.pdf

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In 2002, 1997 Navy personnel used Fort Pickett a total of 161,000 mandays and 333 Navy Reservists use it for 1,041 mandays. Marines totaled 2,500 personnel and 22,340 mandays and Marine Reserves were 865 personnel for 2,212 mandays. Navy use was 3% and USMC was 5% of total annual usage. Navy primary users are specwar units. Marine users are FAST companies, 2nd LAR, and 24 and 26 MEU. Additionally HCS 4 and 6 use it for live fire 7.62, 50 cal, 2.75 rocket, and hellfire. F-14 and F-18 use it for inert bombs. This data is from range scheduling records.

V/R
CDR Keys
FFC N441
757-836-3674
cell 757-646-7068

<<FT PICKETT OLF.doc>> <<Fort Pickett NWINoise.pdf>> <<FortPickettCensusNoise

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<<FT PICKETT OLF.doc>> <<Fort Pickett NWNoise.pdf>> <<FortPickettCensusNoise.pdf>>

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DISCUSSION

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- e. **Public lands** (wildlife refuges/Nat'l parks)

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- **Environmental Issues. (Fail – wetlands)**
 - Wetlands within the complex are estimated at 3000 acres.
 - Endangered species include Bald Eagle, Roanoke Logperch, and Michaux's Sumac. Consultation on Bald Eagle and Michaux's Sumac would be required.
 - Unexploded ordnance cleanup likely required prior to OLF construction....unofficial cleanup cost estimation is \$25M.
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 - Perkinson Airport/Blackstone AAF would be within 5nm of the OLF. Class D airspace (Tower control area) would extend over existing airfield requiring deconfliction between the two traffic patterns.

- Restricted Area R-6602 (SFC to 17,999 MSL), comprises 35,000 acres, overlies Ft Pickett and is the VA. Nat'l Guard Maneuver Training Center. Incompatible use - Live fire area - small arms, tank, artillery and helicopter gunnery training.

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 - Fort Pickett is beyond the established 50 NM maximum (94 NM) from Oceana. Locations beyond 50 NM were only considered between NAS Oceana and MCAS Cherry Point due to economies of scale gained by supporting two facilities.

- **Population Density. (Pass)**
 - Updated (smaller) 60 DNL contour appears to fit within range complex if the runway is constructed near the center of the Fort Pickett property. Area of greater than 50 people per square mile population density is still less than two miles from projected 60 DNL contour.

- **Tall Obstacles. (Pass)**
 - None

- **Federal Public Lands. (Pass)**
 - None

FORT A. P. HILL

VIRGINIA

LOCATION

Fort A. P. Hill is situated within the boundaries of Caroline County, along the I-95 corridor and astride US Route 301. The Post is 20 miles southeast of Fredericksburg and is situated roughly midway between Richmond and the Washington, D.C. metropolitan area. The Installation rests on the upper Atlantic Coastal Plain and in the watersheds of the Rappahannock and Mattaponi Rivers. Fort A. P. Hill's terrain is rolling hills with wetlands. Most of the installation is forested. US Route 301 divides the post, allowing maneuver and range operations to occur simultaneously. The northwest portion of the post is dedicated to maneuver and the southeast portion contains a 27,000-acre modern range facility. To the south and east, the installation is bordered by forest, farmland and the town of Bowling Green. Forests, farmland, Haymont subdivision and the town of Port Royal lie to the west and north. Fort A. P. Hill is subject to all four seasons, and training is conducted throughout the entire year.

SIZE

Acres: 75,905.00

Square Footage of Buildings: 1,117,274 SF

Plant Replacement Value: \$522,364,189

HISTORY

Fort A. P. Hill was established as an Army training facility June 11, 1941, pursuant to War Department General Order No. 5. In its first year, the installation was used as a maneuver area for II Corps and the three activated National Guard Divisions from the Mid-Atlantic States. In the autumn of 1942, Fort A. P. Hill was the staging area for Operation Torch's Task Force A, commanded by MG Patton. During the early years of World War II, the post continued to be a training site for Corps and division-sized units and was one of the most active artillery ranges on the east coast. During the Korean War, Fort A. P. Hill was a major staging area for units deploying to Europe, including the VII Corps Headquarters and the Third Armored Cavalry Regiment.

Commencing in 1944 through the Vietnam War, Fort A. P. Hill served as a training center for the Engineer Officer Candidate School, a field training site for the Engineer Officer's Basic Course and Career Course. Fort A. P. Hill has served and continues to serve as a field training site for the Quartermaster, Transportation, and Special Forces Schools. Both enlisted and officer field training continues through to today.

The post has served as a mobilization training site for units deploying to Desert Shield and Desert Storm, missions in Bosnia-Herzegovina and Kosovo, Afghanistan and Iraq, and other destinations associated with the Global War on Terrorism.

MISSIONS

Fort A. P. Hill, a 2003 Army Community of Excellence, is an all-purpose, year-round, military training facility. The Installation's mission is to provide training and logistical support to military units, Allies, and other Federal Agencies that deploy to Fort A. P. Hill to train. Additionally, the post provides Class I supply support to all Army dining facilities in Maryland, Virginia and Washington D.C., and ammunition supply support for the Army units in the National Capital Region. The Installation also supports the Research and Development Community by providing space and ranges to support night vision device testing, laser testing and de-mining techniques and equipment development. Finally, Fort A. P. Hill, hosts the quadrennial National Scout Jamboree.

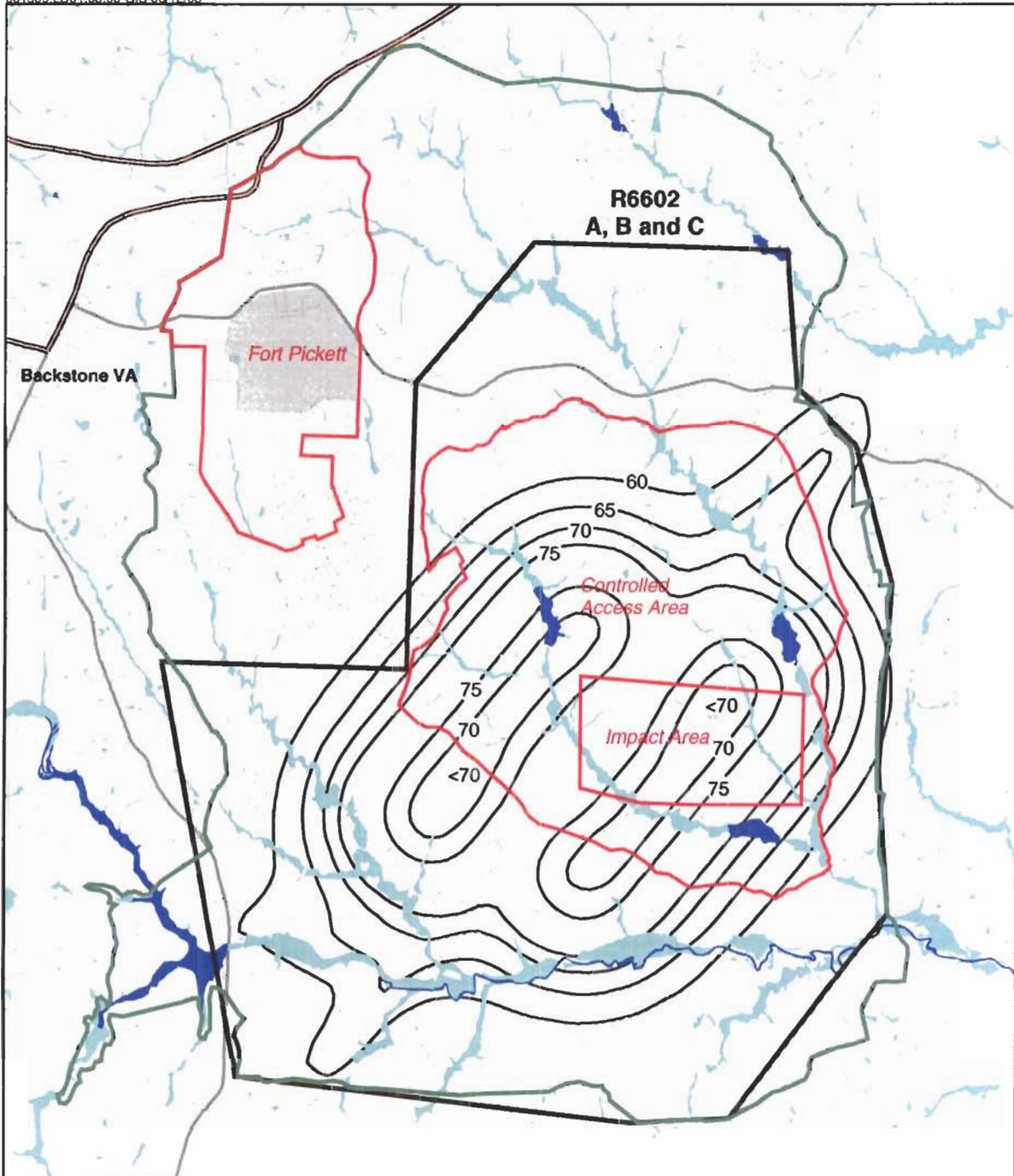
Fort A. P. Hill's automated ranges and maneuver areas can support all current Army weapon systems (with very few limitations), both ground and aerial, except for Air Defense missiles and the Hellfire missile. Other services and Federal Agencies frequently use the Post's training facilities. Fort A. P. Hill has some unusual training support facilities, such as a C-130/C-17 certified Assault Landing Zone, a fixed wing bombing range, an automated aerial gunnery range, squad battle course, convoy live fire course and an access control point range. These capabilities coupled with a customer-oriented workforce make Fort A. P. Hill the training location of choice for Warriors by providing the Best Training and Support ... Anywhere. Fort A. P. Hill is the training ground where America's Military sharpens its Combat Edge.

MAJOR UNITS/TENANTS

Night Vision & Electronics Sensors Lab	Hq & HHD Engineer Bde, 28 th ID
Naval Special Warfare Group 2	1710 th Transportation Co
B Co, 3 rd Bn, 20 th Special Forces	U.S. Army Health Clinic
1 st Logistics Support Bn, 322 nd Regiment,	U.S. Army Corps of Engineers, Timber
5 th Bde, 78 th Division	Office
088 Base Maintenance Activity	Bureau of Alcohol, Tobacco, Firearms and
80 th Division Drill Sergeant School	Explosives

POPULATION

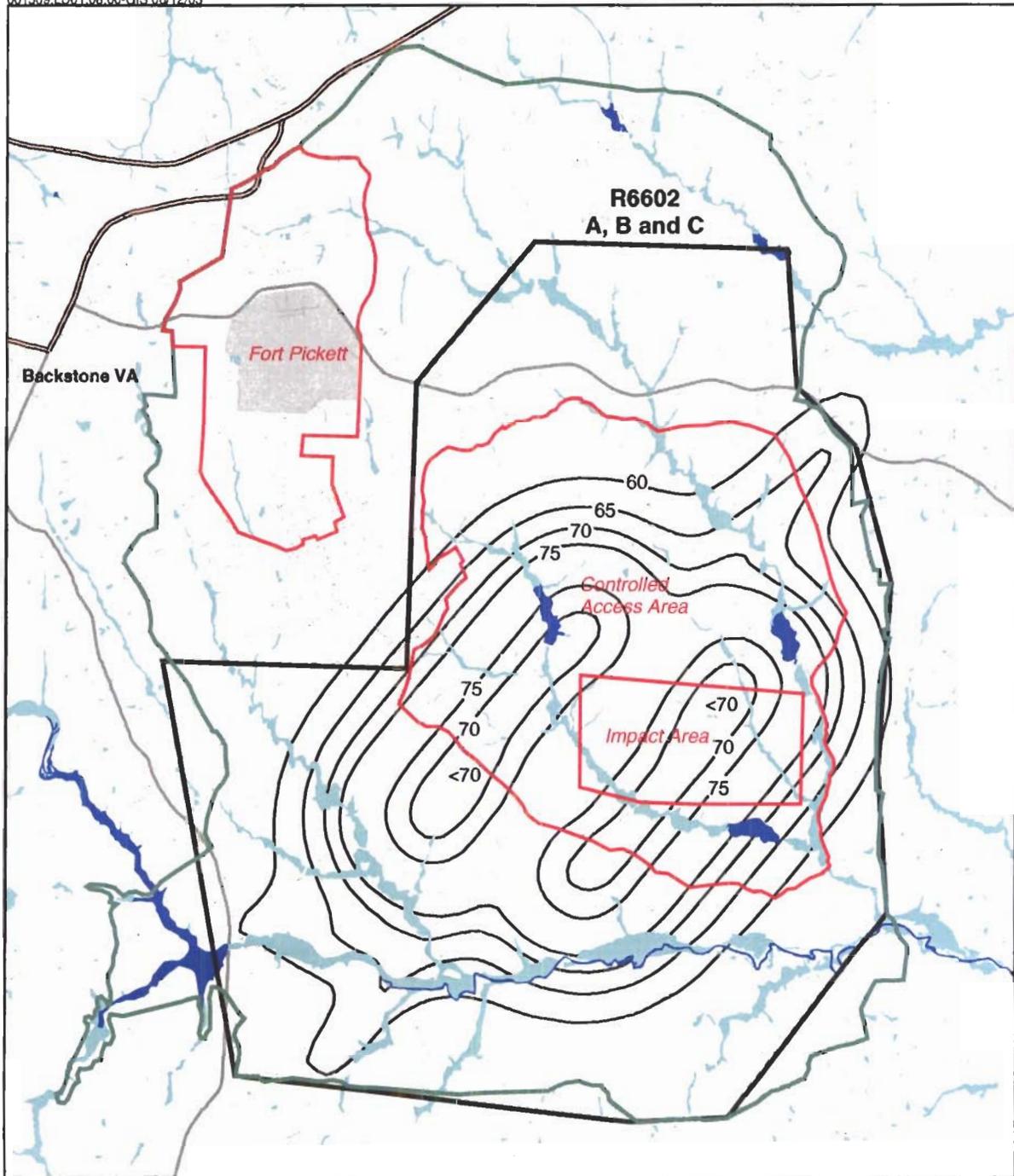
	Authorized
Military	77
Civilian	315
Contractor	46
Student	30
Other	18
TOTAL	486



-  Noise Contours
-  Fort Pickett
-  Fort Pickett Range
-  Fort Pickett Range Areas
-  Open Water
-  Wetlands

NWI Wetlands Fort Pickett Area

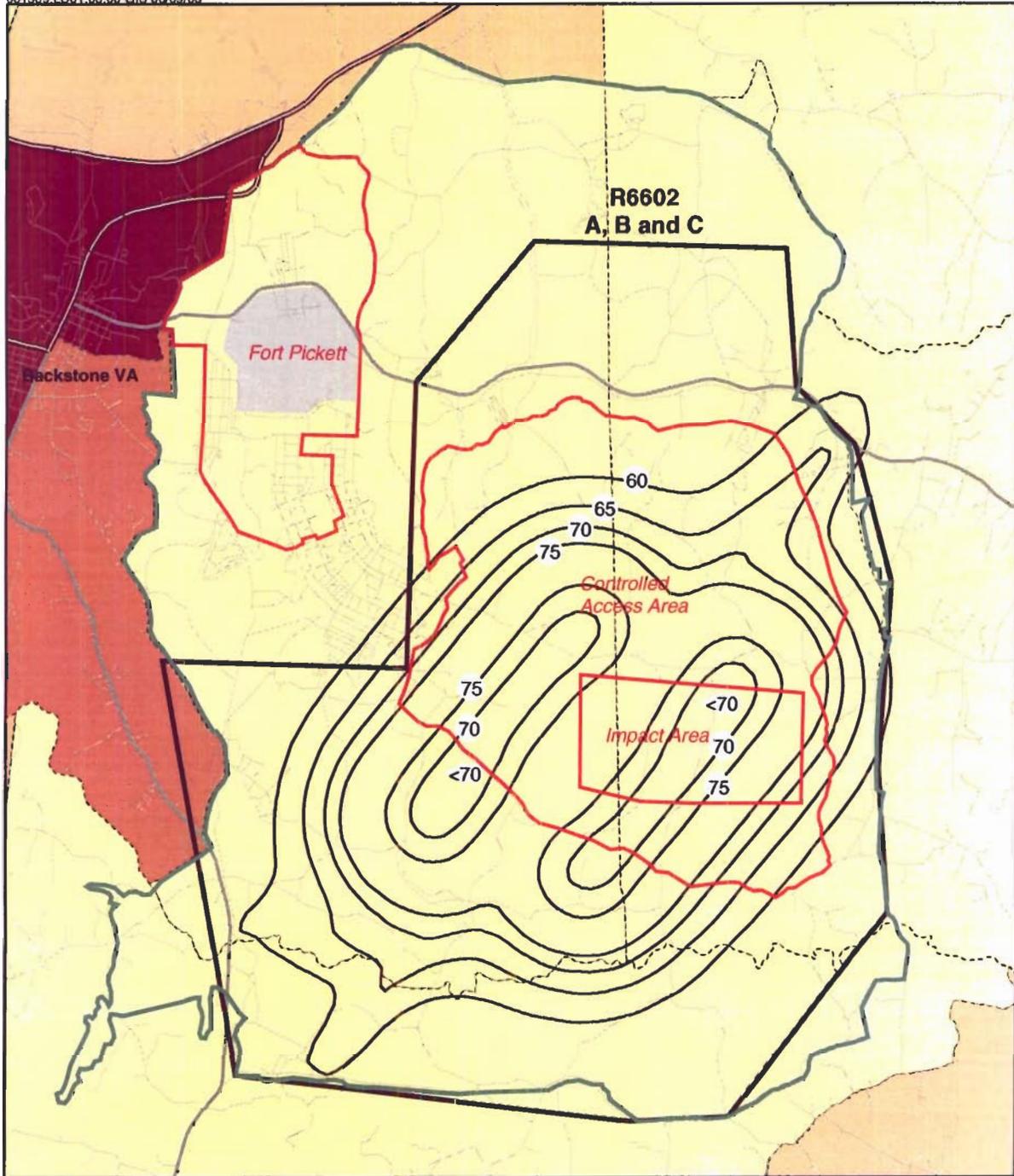




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NWI Wetlands Fort Pickett Area





- | | | | |
|---|---------------------------|---|--------------------------|
|  | <25 people/square mile |  | Noise Contours |
|  | 25-50 people/square mile |  | Fort Pickett |
|  | 50-75 people/square mile |  | Fort Pickett Range |
|  | 75-100 people/square mile |  | Fort Pickett Range Areas |
|  | >100 people/square mile | | |

**2000 Census Data
 Fort Pickett Area**



From: Keys, Richard D CDR FFC (N762) [Richard.Keys@navy.mil]
Sent: Friday, July 22, 2005 6:26 PM
To: william.fetzer@wso.whs.mil
Cc: Anthony, Mark H CIV FFC N44
Subject: FT PICKETT INFORMATION

Attachments: FT PICKETT OLF.doc; Fort Pickett NWINoise.pdf; FortPickettCensusNoise.pdf

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- **Tall Obstacles. (Pass)**
 - None

- **Federal Public Lands. (Pass)**
 - None

GENERAL ORDERS }
No. 14

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 18 December 1998

FORT PICKETT BASE CLOSURE ACTION

Section

FORT PICKETT, VIRGINIA (51535)-Inactivated.....	I
FORT PICKETT MANEUVER TRAINING CENTER, VIRGINIA (51541)-Activated and Assigned.	II

I-FORT PICKETT, VIRGINIA (51535)-INACTIVATED. This confirms that on 30 September 1997 Fort Pickett (51535) was inactivated in accordance with the Defense Base Closure and Realignment Act of 1990, Public Law 101-510, pending disposal of surplus property.

II-FORT PICKETT MANEUVER TRAINING CENTER, VIRGINIA (51541)-ACTIVATED AND ASSIGNED. This confirms that on 1 October 1997, the Fort Pickett Maneuver Training Center, Virginia (new installation number 51541) was activated and assigned to the Chief, National Guard Bureau.

(DAIM-BO)



Louis Caldera
Secretary of the Army

DISTRIBUTION:
Active Army, ARNG, USAR: To be distributed in accordance with initial distribution number (IDN) 040037, requirements for Department of the Army General Orders.

August 29, 2005

Memorandum for the Record Fort Pickett

In response to comments by former Virginia Congressman Owen Pickett in the news located as TAB A to this memo, the following Memorandum for the Record is submitted based on notes taken by the staff on 21 July 2005:

On July 21, 2005, I received a call from former Congressman Owen Pickett requesting to meet with me to suggest alternatives to the issues involving encroachment of NAS Oceana.

At his request I meet with him between approximately 4:30-5:00 PM for about one hour to discuss opportunities that the State of Virginia might consider offering to the Commission should the encroachment of NAS Oceana be considered too difficult to manage by the Navy.

I advised him that what was needed was a longer term view of the problem and that any near term solution should consider the possibility of the future expansion of a temporary Out Lying Field (OLF) solution to a Master Jet Base (MJB) for the future.

Former Congressman Pickett suggested that Virginia had two sites that might be suitable and that the State of Virginia would work with the Commission and the Navy to arrive at a solution. He offered Fort Pickett at 42,000 acres and Fort A. P. Hill at 76,000 acres.

He further advised that the National Guard uses Ft. Pickett, but that the Army still owned it. Ft. A.P Hill was in Caroline County with a sparse population density.

I told former Congressman Pickett that I would add Pickett and A. P. Hill to the list of considerations.

On July 22, 2005, I requested information from Commander, Fleet Forces Command (CFFC) representative, CDR Richard Keys, (N762) to provide any info they had on the Navy's OLF determination regarding Forts Pickett or A. P. Hill. CDR Keys forwarded several documents on 22 July that are included in the files. His email is provided at TAB B.

TAB A

 MSNBC.com

Florida Pitches Cecil Field as Alternative to NAS Oceana

WAVY-TV

Florida made it's biggest push yet on Thursday to convince members of the Base Realignment and Closure Commission to move the jets and jobs now at Naval Air Station Oceana in Virginia Beach to Cecil Field in Jacksonville, a former Navy air base that was closed in 1993.

Florida Governor Jeb Bush made that pitch in a closed door meeting with some of the BRAC commissioners Thursday morning.

No one from the commission or the Florida Governor's office will say which commissioners were there, how long how they met, or what was said.

Because of the closed nature of the meeting, the Virginia delegation fighting to keep Oceana open is crying foul.

"People have right to know what's going on," Owen Pickett, former Virginia Beach Congressman and member of the Commission on Virginia Military Bases, told WAVY News 10. "They can't just go behind closed doors and make deals, that's not what you're supposed to do."

Virginia Senator John Warner has already launched an investigation into supposed backroom talks between a Navy Admiral and the BRAC commission, but local officials admit there is very little they can do about such meetings.

In addition to Florida, Texas recently offered its own alternative to Oceana.

And now North Carolina is getting into the act.

Beginning in 2007, the Marine Corps Air Station in Cherry Point, N.C., is scheduled to receive two squadrons of F/A-18 Super Hornets. The rest would be based at Oceana. However, N.C. Senator Elizabeth Dole and Governor Mike Easley recently wrote to BRAC chairman asking

that at least four squadrons - or about 48 planes - be moved to Cherry Point if Oceana is ultimately closed.

Also, N.C. Representative Walter Jones wrote to the commission suggesting that Oceana's jets be moved to Beaufort, South Carolina, and that Beaufort's F/A-18's be moved to Cherry Point.

Finally, much of the discussion surrounding the possibility of Cecil Field in Florida actually becoming the East Coast Master Jet Base centers on the air space around the facility.

While NAS Oceana has encroachment issues on land, Virginia officials contend Cecil Field has a far greater problem, encroachment on its air space.

However, the final BRAC Commission's report in 1993, the year the base was closed, found "current and potential future air encroachment at NAS Cecil Field were overstated by the Navy."

The BRAC panel will make its final decision later this month about which bases to propose for closing or altering, with President Bush and Congress making a binding decision in the fall.

TAB B

From: Keys, Richard D CDR FFC (N762) [Richard.Keys@navy.mil]
Sent: Friday, July 22, 2005 6:26 PM
To: william.fetzer@wso.whs.mil
Cc: Anthony, Mark H CIV FFC N44
Subject: FT PICKETT INFORMATION

Attachments: FT PICKETT OLF.doc; Fort Pickett NWINoise.pdf;
FortPickettCensusNoise.pdf

Sir,

Attached are documents previously generated regarding Ft Pickett as an OLF. I will have to fax a draft of the letter previously sent to Governor Warner. As explained in the EIS, FT Pickett was not within the designated OLF study area. However, because of comments received during the process we did a separate analysis of Ft Pickett using our OLF siting criteria. There have been two variations on the Ft Pickett OLF. There is an existing airfield which was proposed to be expanded (Blackstone AAF). It is joint civil use and also within three miles of the town of Blackstone. Therefore, it did not meet our requirement of low population density and no incompatible (civilian) operations. The latest suggestion was to close down the National Guard live fire training area and build an OLF within the confines of the Ft Pickett boundaries. This is the issue the attached papers address.

In 2002, 1997 Navy personnel used Fort Pickett a total of 161,000 mandays and 333 Navy Reservists use it for 1,041 mandays. Marines totaled 2,500 personnel and 22,340 mandays and Marine Reserves were 865 personnel for 2,212 mandays. Navy use was 3% and USMC was 5% of total annual usage. Navy primary users are specwar units. Marine users are FAST companies, 2nd LAR, and 24 and 26 MEU. Additionally HCS 4 and 6 use it for live fire 7.62, 50 cal, 2.75 rocket, and hellfire. F-14 and F-18 use it for inert bombs. This data is from range scheduling records.

V/R
CDR Keys
FFC N441
757-836-3674
cell 757-646-7068

<<FT PICKETT OLF.doc>> <<Fort Pickett NWINoise.pdf>> <<FortPickettCensusNoise

MANNING SNAPSHOT

Division	On Watch	Total Req	12 hr Total
Tower / Air Traffic Controllers	3	4	7
Ground Electronics	2	3	5
Crash & Salvage	7	10	18
Airfield Facilities	2	4	6
Fuel Pits (single pit fueling only)	5	8	14
Ground Support Equipment	0	0	0
Total:	19	29	50

50 PERS X \$64K annual compensation = \$3.2M annually

**Outlying Landing Field (OLF)
Siting Study**

May 2003

Prepared for:

U.S. Department of the Navy

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List of Abbreviations and Acronyms

AGL	above ground level
AICUZ	Air Installations Compatible Use Zones
APZ	accident potential zone
DNL	day-night average sound level
DOE	U.S. Department of Energy
FAA	Federal Aviation Administration
FCLP	Field Carrier Landing Practice
GADNR	Georgia Department of Natural Resources
GIS	Geographic Information Systems
GPS	Global Positioning System
LSO	Landing Signals Officer
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
MSL	mean sea level
MTR	military training route
NAS	Naval Air Station/National Airspace System
NASMOD	Naval Aviation Simulation Model
NM	nautical mile
NOAA	National Oceanic and Atmospheric Administration
NPL	National Priorities List
NRCS	National Resource Conservation Service
NWI	National Wetland Inventory
OLF	outlying landing field
SSR	secondary state route
SUA	Special Use Airspace
USFWS	United States Fish and Wildlife Service

List of Abbreviations and Acronyms (cont.)

USGS	United States Geological Survey
WMA	Wildlife Management Area

Purpose and Need

The Navy conducted a siting study for an outlying landing field (OLF) as part of the ongoing environmental impact statement for introduction of the F/A-18 E/F (Super Hornet) aircraft on the East Coast of the United States. In the EIS, the Navy will be evaluating several homebasing alternatives, which include the following Navy and Marine Corps air stations:

- Naval Air Station (NAS) Oceana, Virginia Beach, Virginia;
- Marine Corps Air Station (MCAS) Cherry Point, Havelock, North Carolina; and
- MCAS Beaufort, Beaufort, South Carolina.

The Super Hornet could be homebased at one or more of these air stations. An OLF would be operationally necessary under some homebasing alternatives to support Super Hornet field carrier landing practice (FCLP) involving MCAS Cherry Point and MCAS Beaufort. An OLF was determined to not be required for operations at NAS Oceana; however, because the construction and operation of an additional OLF is being considered to provide for operational flexibility and to mitigate the noise impacts of the Super Hornet squadrons on the communities of Chesapeake and Virginia Beach, an OLF will be evaluated in the EIS.

The purpose of this OLF Siting Study is to identify a reasonable range of alternative OLF sites that will be considered as part of the Super Hornet homebasing alternatives in the EIS.

The OLF Siting Study is composed of the following six phases (see Figure 1-1):

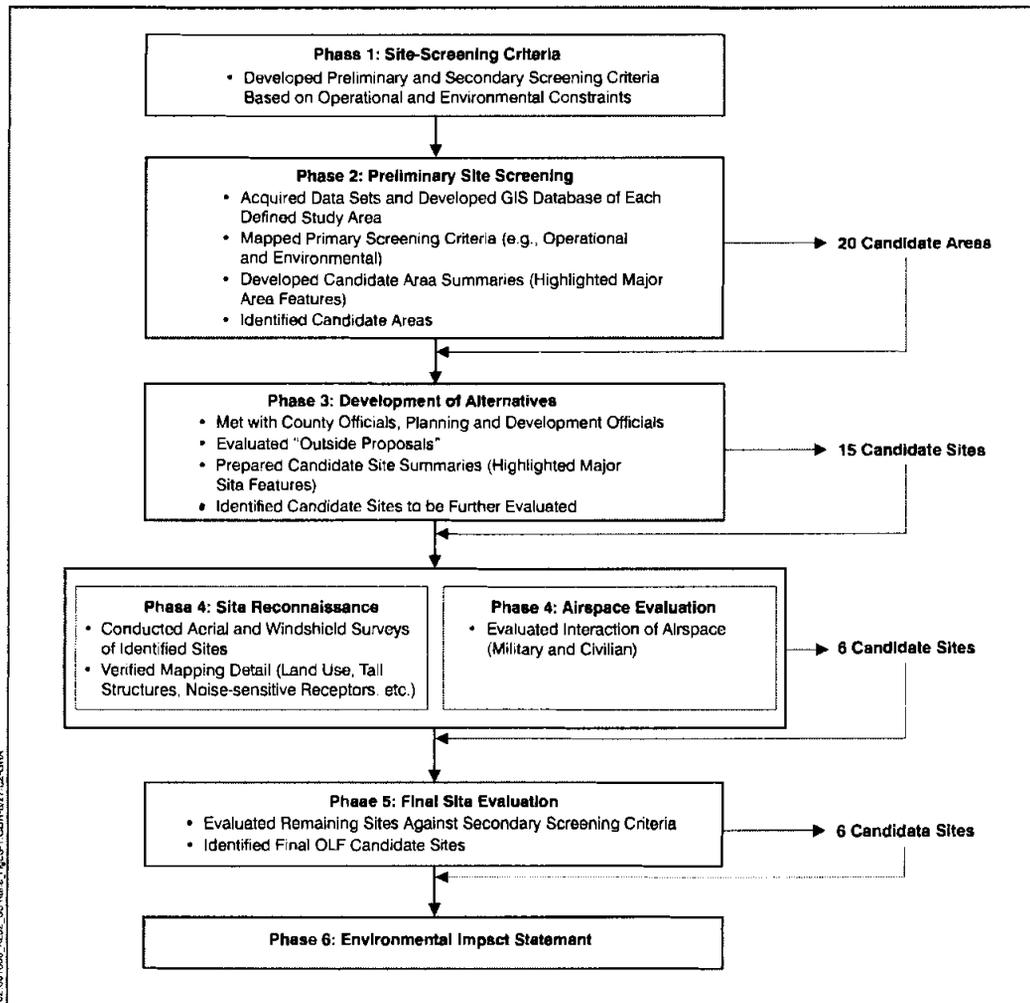


Figure 1-1 OLF Siting Study Process

1. Develop Site-Screening Criteria;
2. Preliminary Site Screening;
3. Alternatives Development;
4. Site Reconnaissance/Airspace Evaluation;
5. Final Site Evaluation (Secondary Site Screening); and

6. Environmental Impact Statement.

This report presents phases one through five of the OLF siting study process and identifies final candidate sites to be carried forward and analyzed in the *Environmental Impact Statement for Introduction of the F/A-18 E/F Aircraft on the East Coast of the United States*.

The Study Area

The OLF Siting Study initially encompassed the geographical area within an approximately 50-nautical-mile (NM) radius of each of the air stations where the Super Hornet could be homebased (see Figures 1-2 through 1-5). Fuel consumption rates for flights to and from the OLF, performing FCLPs themselves, and the required safety margin make a distance of 50 NM the most desirable maximum distance between the primary airfield and the OLF. As the distance from the primary airfield to the OLF increases, air-frame and engine use/wear and fuel consumption increase, while the time available to complete required training decreases.

As the study progressed, the geographic area between the northern edge of the 50-NM radius around MCAS Cherry Point and the southern edge of the 50-NM radius around NAS Oceana (see Figure 1-5) was also included in the study area. At their closest point, the 50-NM boundaries are less than 25 miles apart. For the NAS Oceana and MCAS Cherry Point dual-siting alternatives, an OLF sited in the geographic region between NAS Oceana and MCAS Cherry Point would be operationally acceptable for completing training exercises at either air station. The economies of scale gained by allowing two stations to utilize one OLF site outweigh the benefits sacrificed from deviating from the desirable maximum distance between the primary airfield and the OLF.

OLF Components

The components of an OLF include the airfield and all supporting facilities, the greater than 60-decibel day-night average sound level (DNL) noise zones, and accident potential zones (APZs). Although the APZs are a key component of an OLF and are used along with noise zones under the Air Installations Compatible Use Zones (AICUZ) Program to define the minimal acceptable area where land use controls are needed to protect

the health, safety, and welfare of those living around military airfields, they were not used in this analysis to identify potential OLF sites (see Figure 1-6):

- **Airfield.** The airfield will occupy approximately 2,000 acres and include the primary runway and ancillary facilities (see Table 1-1). The primary runway is to be a Class B runway, 8,000 feet long and 200 feet wide, aligned with the prevailing wind direction. Associated with the runway are clear zones 3,000 feet wide centered on the runway centerline and extending 3,000 feet beyond either end of the runway. Ancillary facilities associated with the airfield include:
 - a taxiway and parking apron,
 - a fire and rescue station,
 - arresting gear,
 - communications/navigational aids,
 - a Landing Signals Officer (LSO) building,
 - a modular control tower,
 - utilities (water, electric, sanitary, and storm water systems), and
 - aircraft refueling stations.

Table 1-1 Estimated Acreage of Airfield and Noise Zones Used During Phase 5 of the OLF Siting Study

Component	Acreage
Airfield	
Airfield	2,000
Noise Zones	
> 75 DNL	9,765
70-75 DNL	3,543
65-70 DNL	7,449
60-65 DNL	15,374
Total^a	38,134

^a The total acreage within the noise zones includes the 2,000-acre airfield.

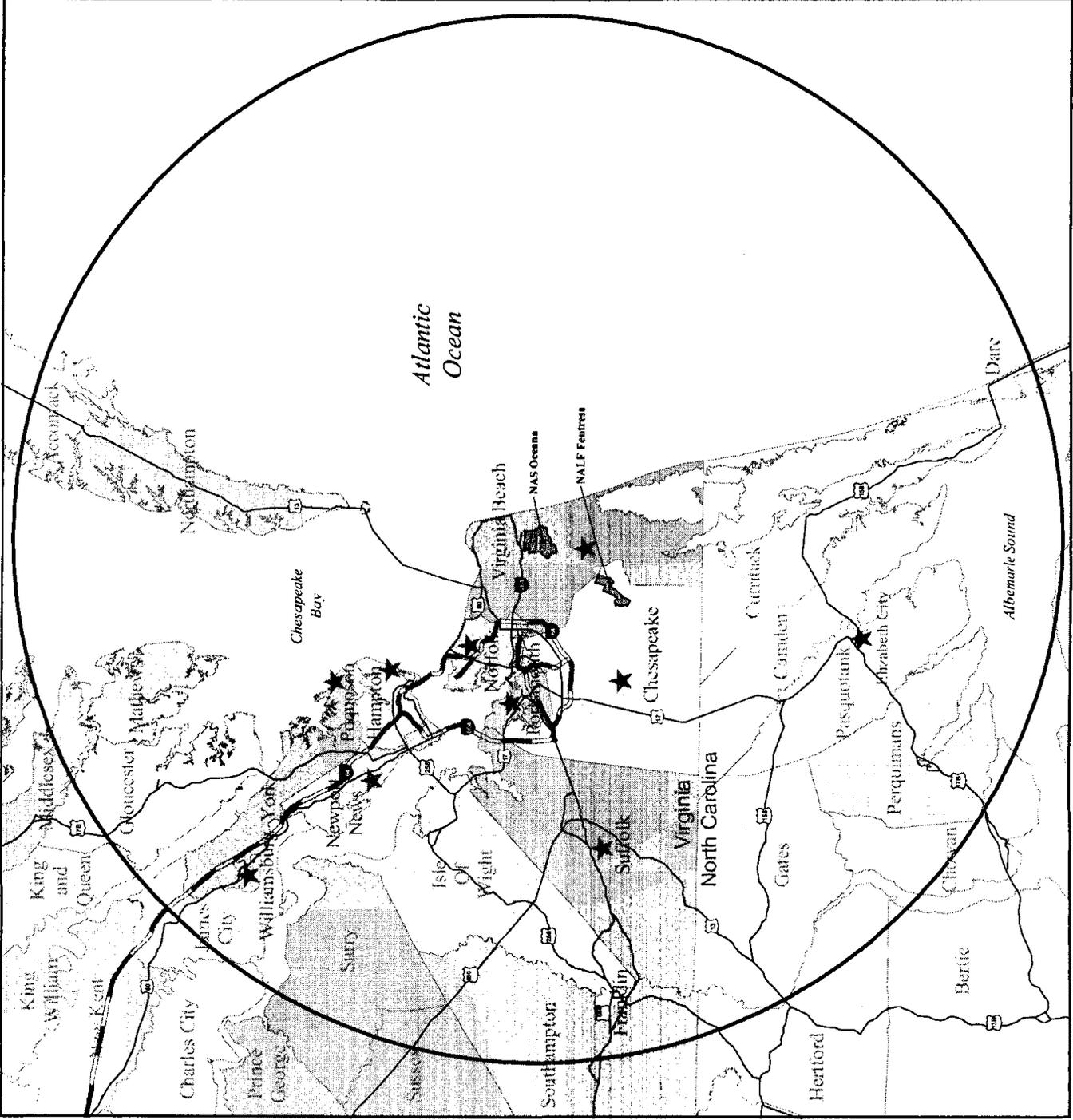
- **Noise Zones.** Projected noise contours utilized for the OLF Siting Study were refined in phases as the study evolved. The initial stages of the project utilized projected noise contours encompassing approximately 53,000 acres within the 60 DNL noise contour. These contours were developed based on flight operations at NALF Fentress, using a projected 51,000 FCLP operations that would be conducted at the OLF. These contours were meant to be conservative, so that the impacts would not be underestimated, as the process was further refined.

As refined noise data for the Super Hornet aircraft became available, the projected noise contours were reduced to encompass approximately 38,000 acres (See Table 1-1). The latter phases of the OLF Siting Study and the subsequent *Draft Environmental Impact Statement for Introduction of F/A-18 E/F (Super Hornet) Aircraft to the East Coast of the United States* incorporated these reduced noise contours in their analysis.

During the preparation of the Final Environmental Impact Statement (FEIS), the Navy developed site-specific flight tracks to reflect the expected departure and arrival flight profiles for all of the OLF sites. Additionally, the Navy reduced the number of Super Hornet aircraft that will be assigned to each squadron, made changes to the training syllabus, and further refined power settings. These changes further reduced projected OLF noise contours to contain approximately 25,000 acres. The 25,000-acre noise contours were evaluated in the Super Hornet FEIS.

DNL has been determined to be a reliable measure of community annoyance with aircraft noise and has become the standard metric used in the United States for assessing aircraft noise. The DNL for the proposed OLF site is depicted as a series of contours that connect points of equal value, usually in 5-dB increments. While most military airfields normally show contours starting at 65 DNL, this study also includes the 60 DNL contour because of the low ambient noise levels in the rural environment. The noise zones used to evaluate noise exposure in the vicinity of each of the proposed OLF sites are:

- Less than 60 DNL;
- 60 to 65 DNL;
- 65 to 75 DNL; and
- Greater than 75 DNL.



LEGEND

- Suffolk
- Camden
- ★
- Independent City
- County
- Population Center

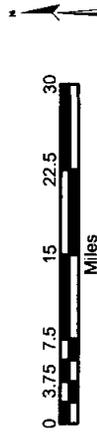
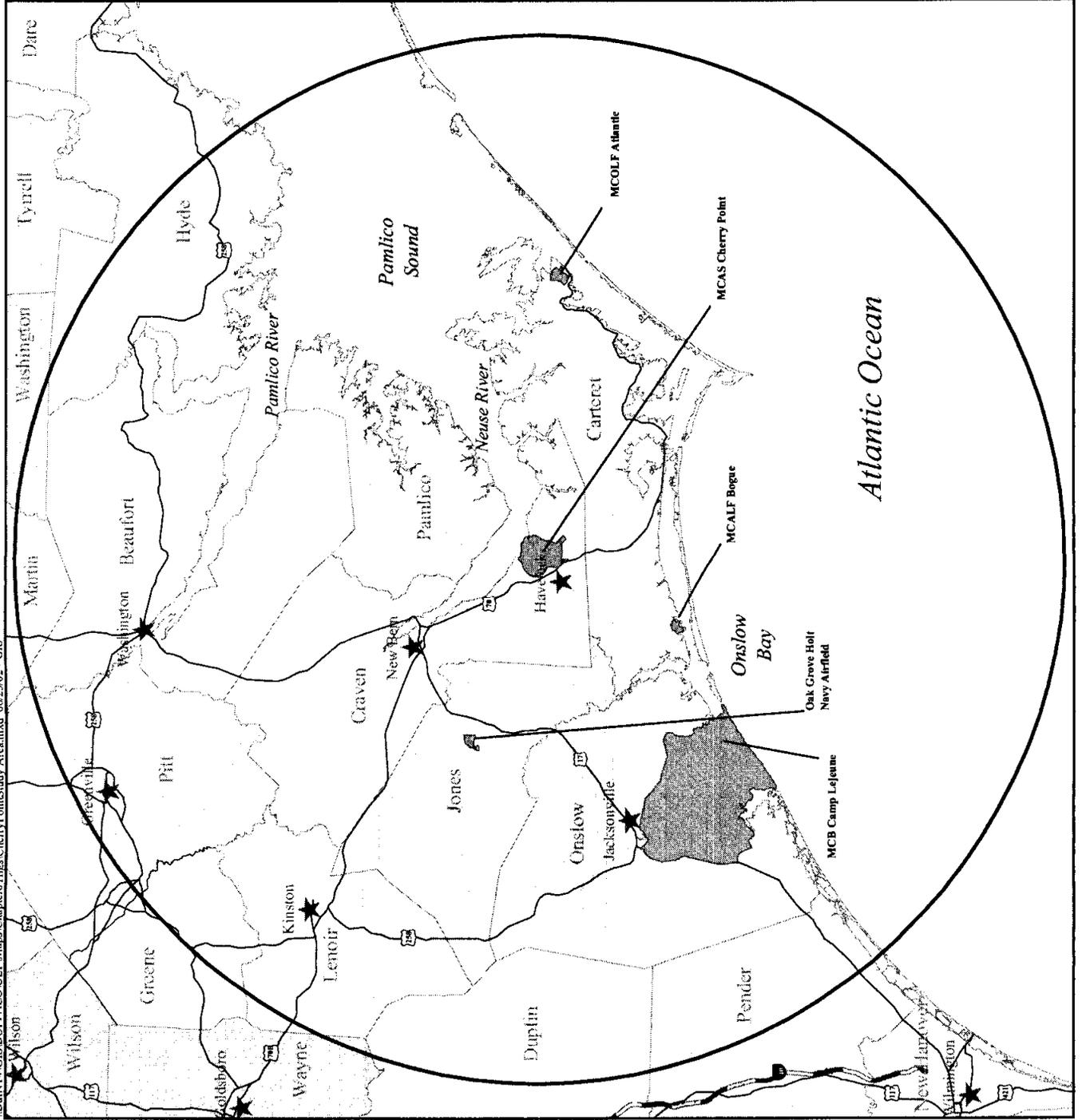


Figure 1-2

**NAS Oceana
Study Area**



LEGEND

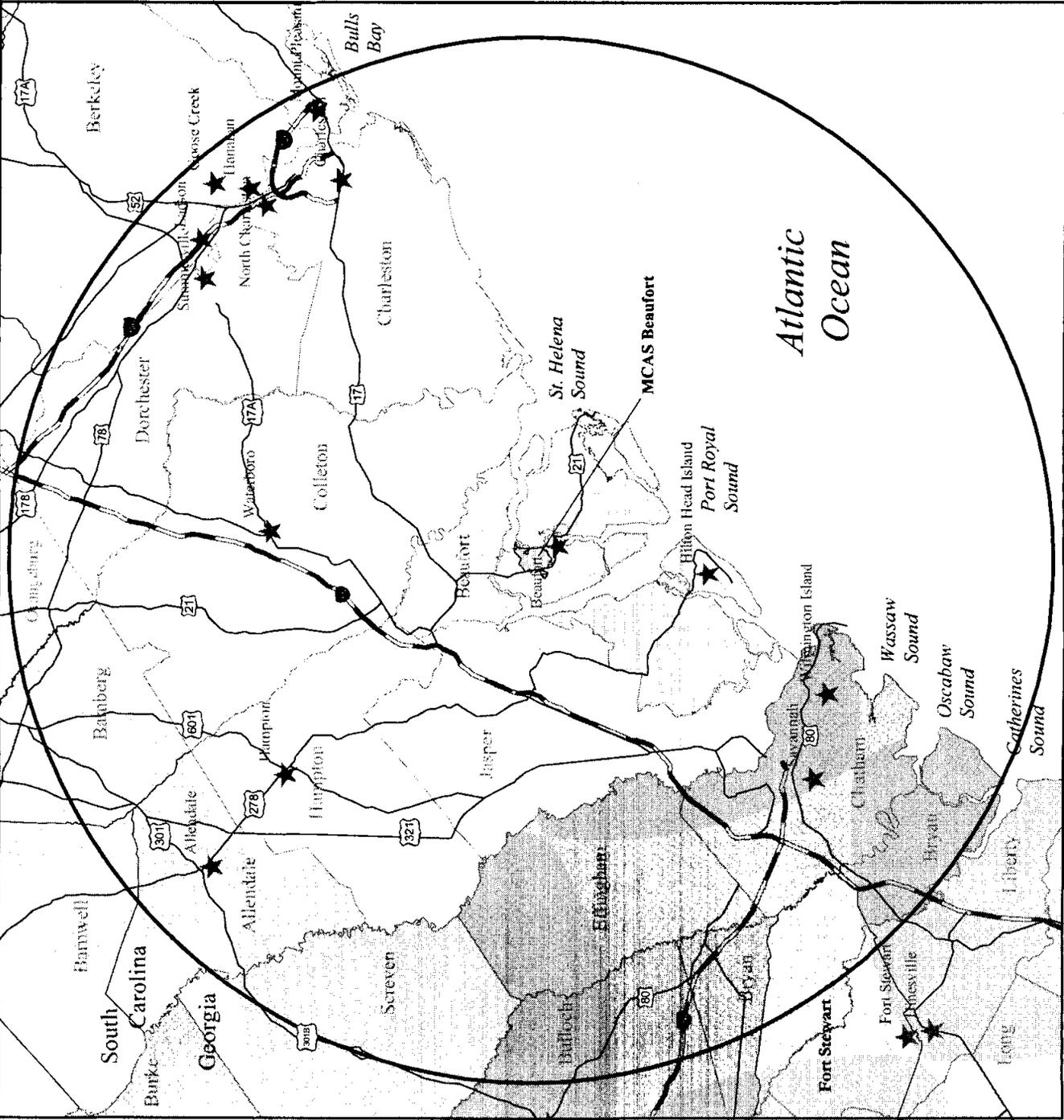
- Hyde ★
- County
- Population Center



Figure 1-3

**MCAS Cherry Point
 Study Area**

Source:
 Environmental Systems Research Institute (ESRI) 1999



LEGEND

- Beaufort
- ★ Population Center
- County

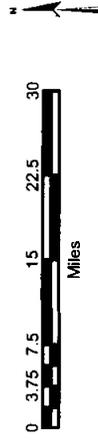
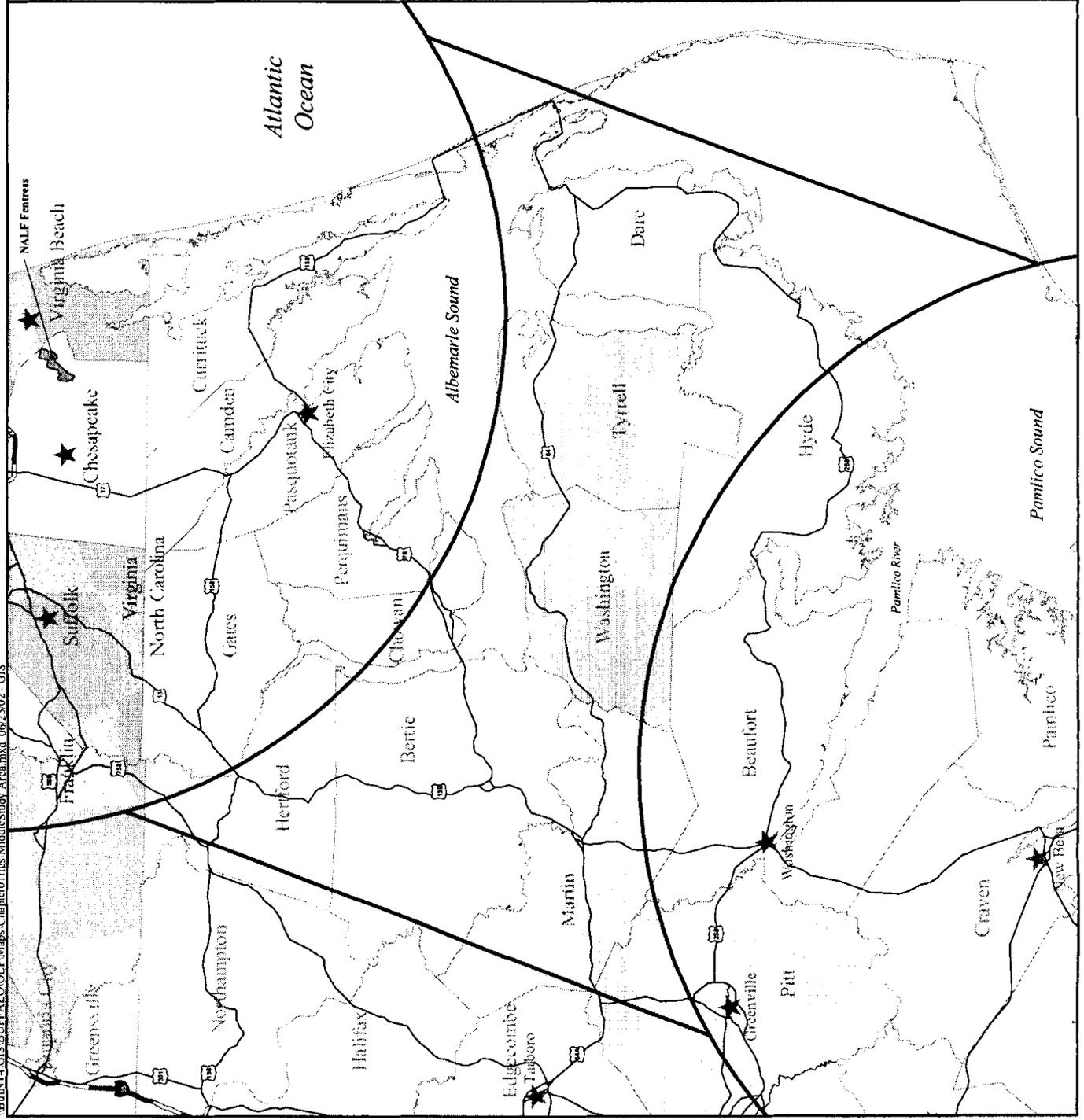


Figure 1-4

**MCAS Beaufort
 Study Area**

Source:
 Environmental Systems Research Institute (ESRI) 1999



LEGEND

- Suffolk
- Independent City
- Camden
- County
- ★
- Population Center

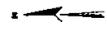
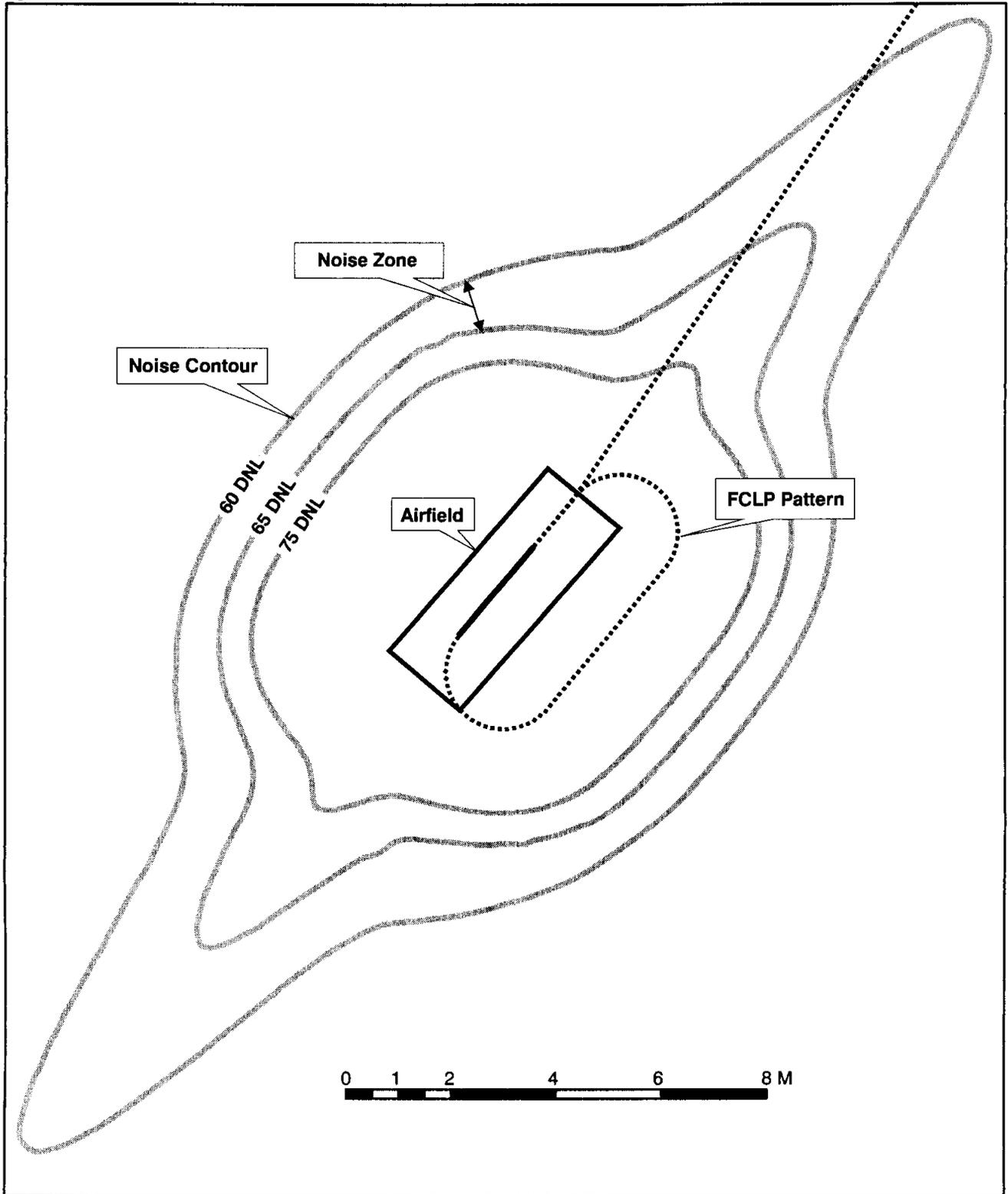


Figure 1-5

Middle Study Area

Source:
Environmental Systems Research Institute (ESRI) 1999



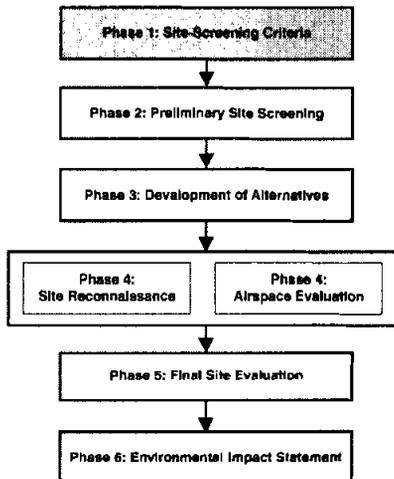
SOURCE: Ecology and Environment, Inc., 2003

Figure 1-6 COMPONENTS OF AN OLF

2

Phase 1: Site-Screening Criteria

The site-screening phase of the study, illustrated below in the context of the entire OLF Siting Study process, involved the development of primary and secondary operational and environmental criteria to site an OLF.



2.1 Methodology

Site-screening criteria form the basis of OLF siting. The criteria are used in later phases of the study to exclude portions of the study area from further analysis and at the same time identify regions most suitable for OLF site development. Site-screening criteria were developed based on the Navy's defined operational requirements for an OLF and general environmental constraints that should be avoided or minimized. These screening

criteria are carried forward as the basis for Phase 2 of the OLF Siting Study, the preliminary site screening analysis (see Section 3).

2.2 Results

Preliminary site-screening criteria for the OLF are summarized in Table 2-1 and discussed further in Section 3.

Table 2-1 Preliminary OLF Site-Screening Criteria

Operational
Elevation below 1,000 feet above ground level (AGL)
Avoid slopes > 5%
Avoid Class C and D airspace
Avoid incompatible military controlled or other special use airspace
Avoid obstructions (e.g., tall towers)
Environmental
Site in low-population-density areas; avoid urban areas
Avoid extensive wetland/open-water complexes
Avoid public interest areas (e.g., national/state forests, parks, recreation areas, wildlife refuges, wilderness areas)
Avoid ecologically sensitive areas (e.g., critical habitat)

The operational and environmental secondary site-screening criteria are summarized in Table 2-2 and discussed further in Section 5. Secondary screening criteria were determined to be more applicable for analysis following the identification of specific candidate sites (see Section 6).

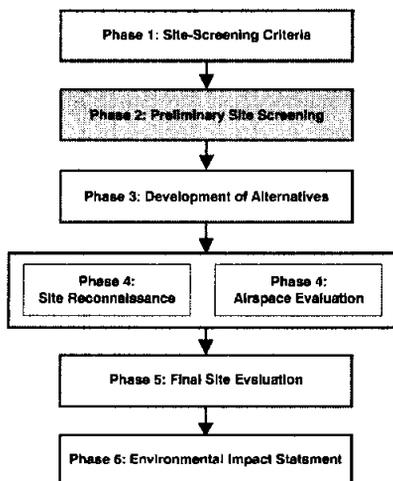
Table 2-2 Secondary OLF Site-Screening Criteria

Operational
Support an 8,000-foot runway and clear zones oriented toward prevailing winds
Support unrestricted 24-hour operations
Minimize the number of landowners
Few airspace obstructions
Ease of site access
Environmental
Existing and planned land-use compatibility
Avoid impacts to significant cultural resources
Limit disturbance of wetlands/open water
Avoid sensitive ecological habitats
Soil stability/limitations for construction
Avoid hazardous waste sites

3

Phase 2: Preliminary Site Screening

The preliminary site-screening phase of the study is illustrated below in the context of the entire OLF Siting Study process.



Based on the preliminary site-screening criteria, operational and environmental constraints were identified and mapped for each of the study areas during the preliminary site screening phase. Secondary site-screening criteria were analyzed following the identification of candidate sites (see Section 6). Following the mapping of constraints, broad candidate areas potentially suitable for siting an OLF were identified within an approximately 50-NM radius of each of the primary air stations and the area between the northern edge of the 50-NM radius around MCAS Cherry Point and the southern edge of the 50-NM radius around NAS Oceana. The candidate areas identified represented general loca-

tions within the study area that presented minimal or no siting constraints. Consultation with local planning agencies was conducted to review general locations within the study area and identify potential OLF development sites.

3.1 Methodology

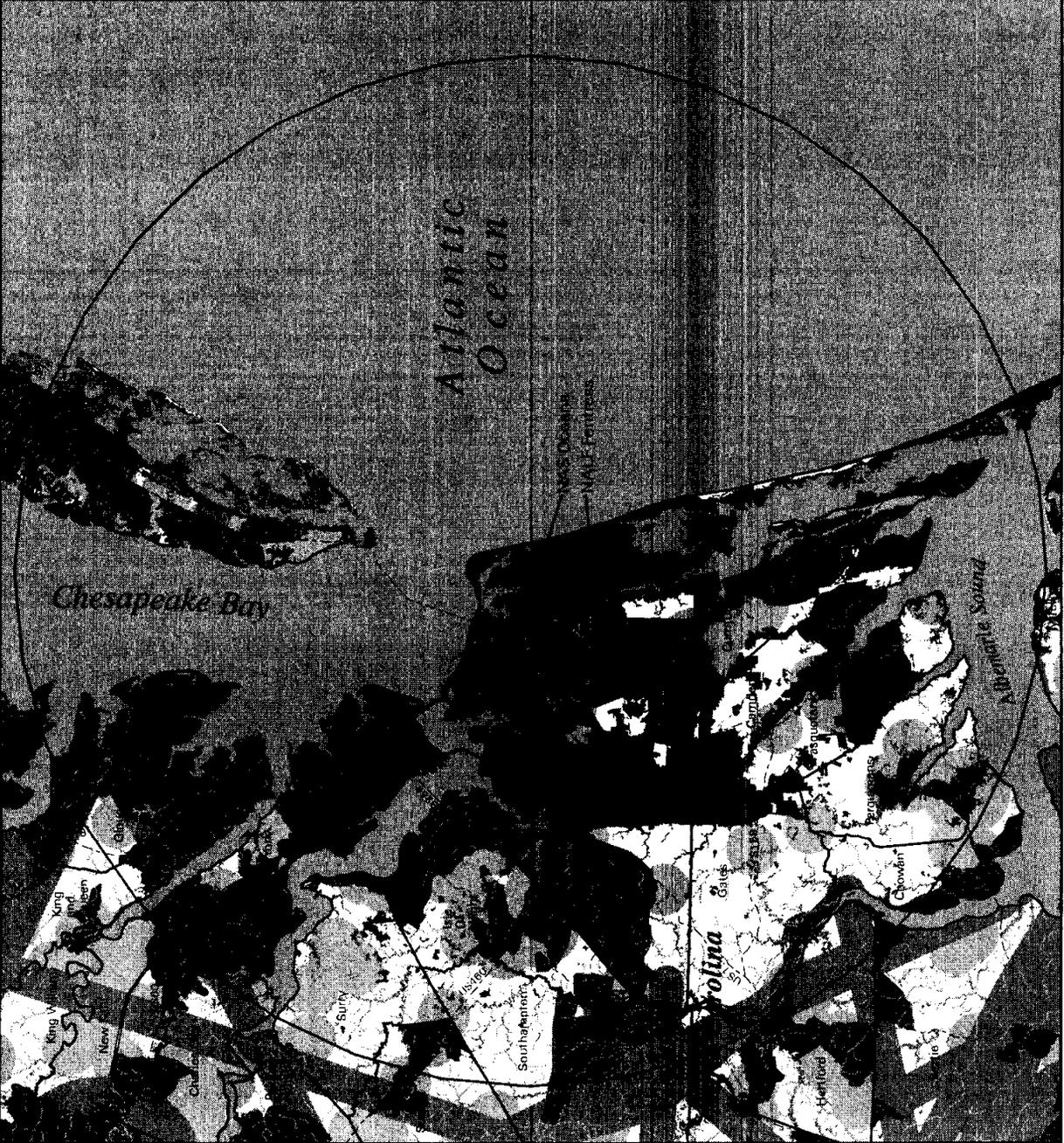
To facilitate preliminary site screening, existing data sets were acquired. Data were converted to a common digital format, projected to a unified coordinate system, and integrated within a geographic information system (GIS) database for the defined study area.

For each air station, a series of maps of the relevant operational and environmental features were developed. Mylar overlay maps were created to facilitate a comprehensive review of the mapped features of each of the study areas. Mapped features were overlaid on top of one another to illustrate all the constraints present throughout the study area, as well as areas free from constraints.

The following features were mapped within the approximately 50-NM radius of each of the primary air stations (NAS Oceana, MCAS Cherry Point, and MCAS Beaufort) and the area between NAS Oceana and MCAS Cherry Point:

Population Density

Population density data are based on the U.S. Bureau of the Census' 1990 census of population and housing, and were acquired at the block group level (ESRI 1999). The 1990 population data were used because 2000 data were not available at block group level. A review of total population for each of the impacted counties, however, revealed little or no population change from 1990 to 2000. Population density ranges from fewer than 25 persons per square mile to more than 100 persons per square mile. Areas with population densities of more than 100 persons per square mile are indicative of both developing and developed areas. Only population densities of more than 50 persons per square mile are shown on the attached constraint summary figures (Figures 3-1 through 3-4).



LEGEND

- > 50 people/square mile
- Class C & D Airspace and MTR Buffers
- Tall Obstacles and Buffer Zones
- Wetland Complex > 100 acres
- Public Lands
- Water

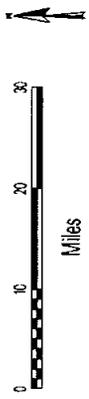
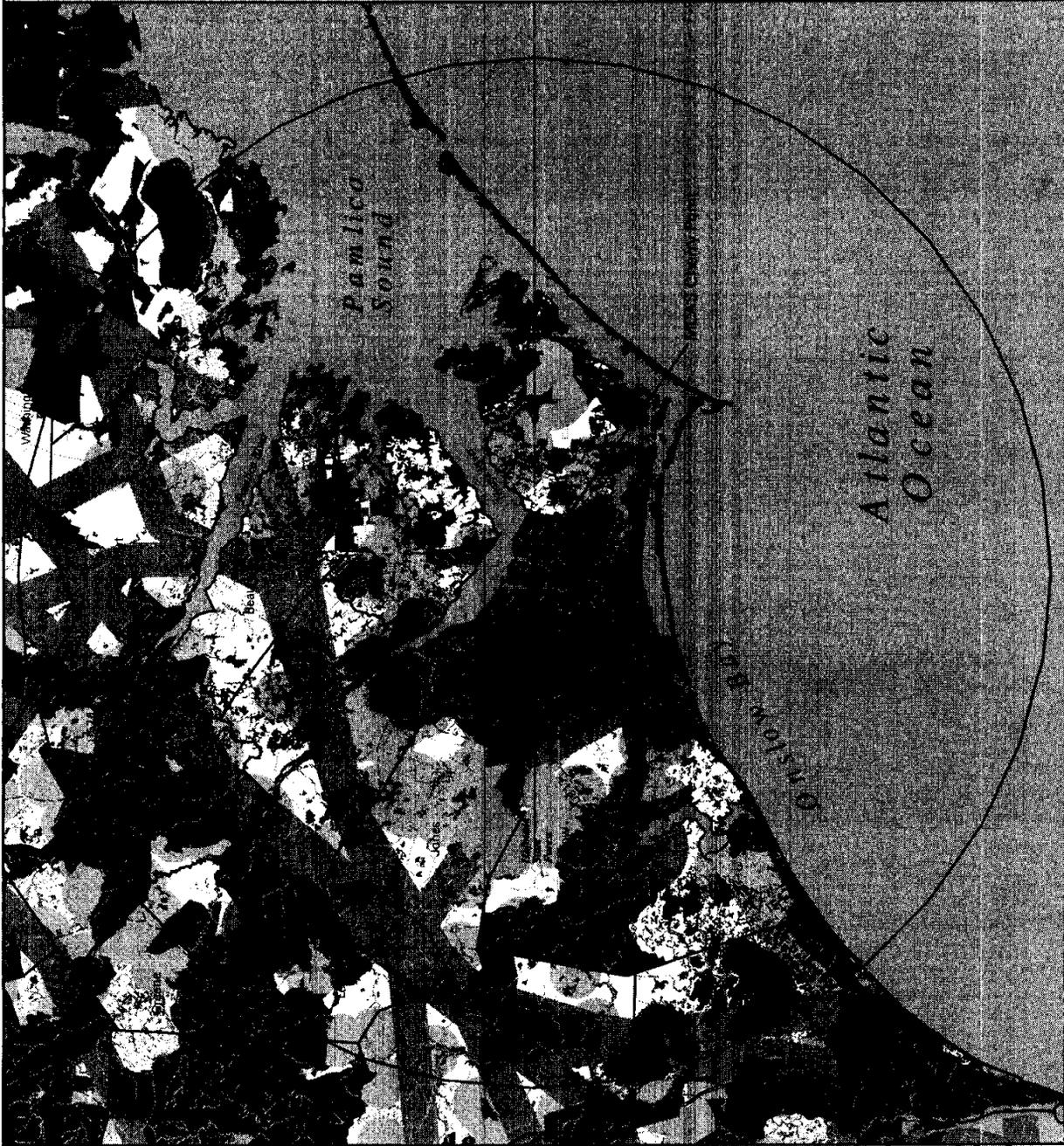


Figure 3-1
 OLF Constraints Summary
 NAS Oceana Study Area



LEGEND

-  > 50 people/square mile
-  Class C & D Airspace and MTR Buffers
-  Tall Obstacles and Buffer Zones
-  Wetland Complex > 100 acres
-  Public Lands
-  Water

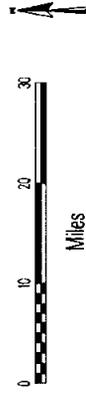
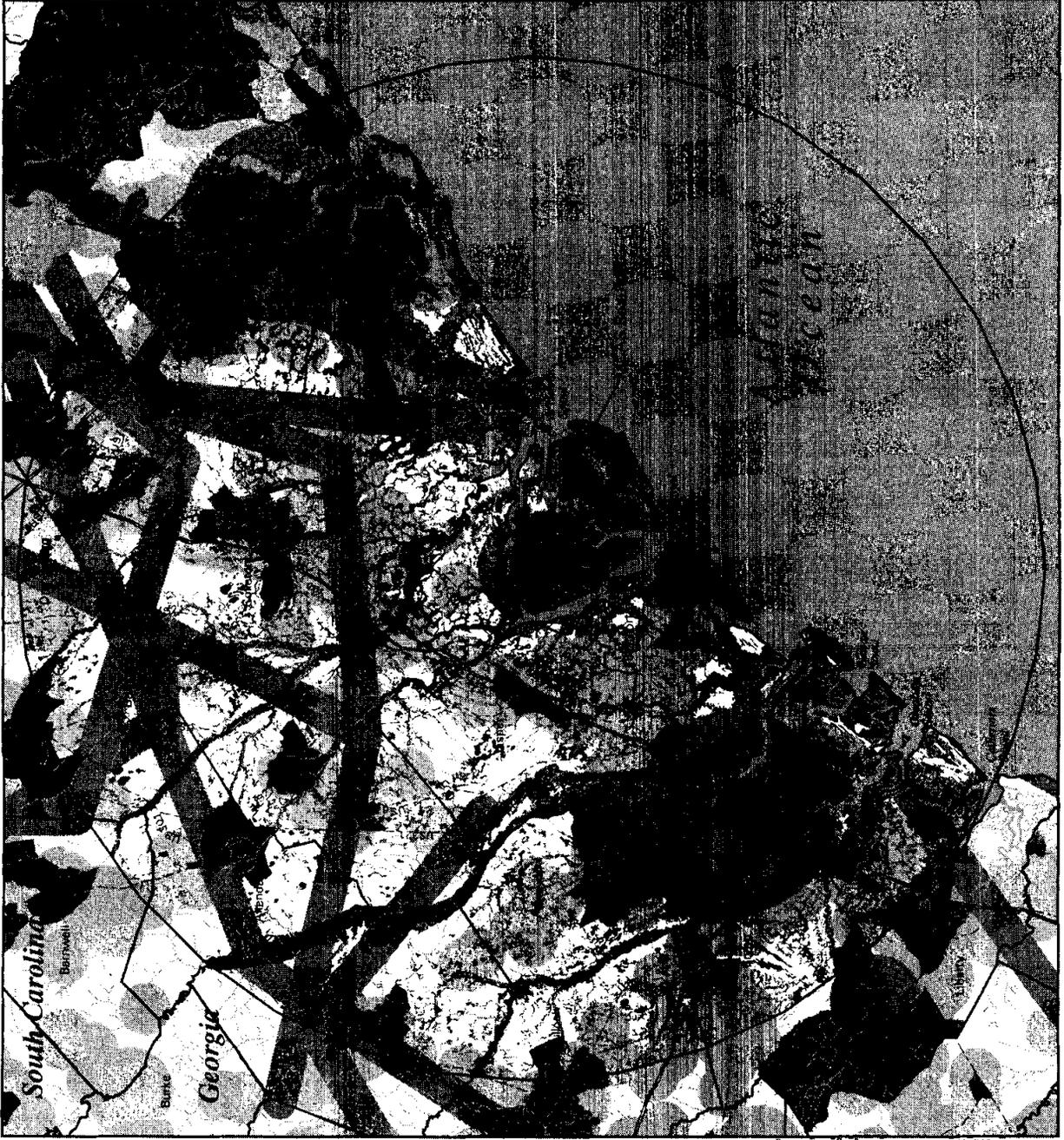


Figure 3-2
 OLF Constraints Summary
 MCAS Cherry Point Study Area

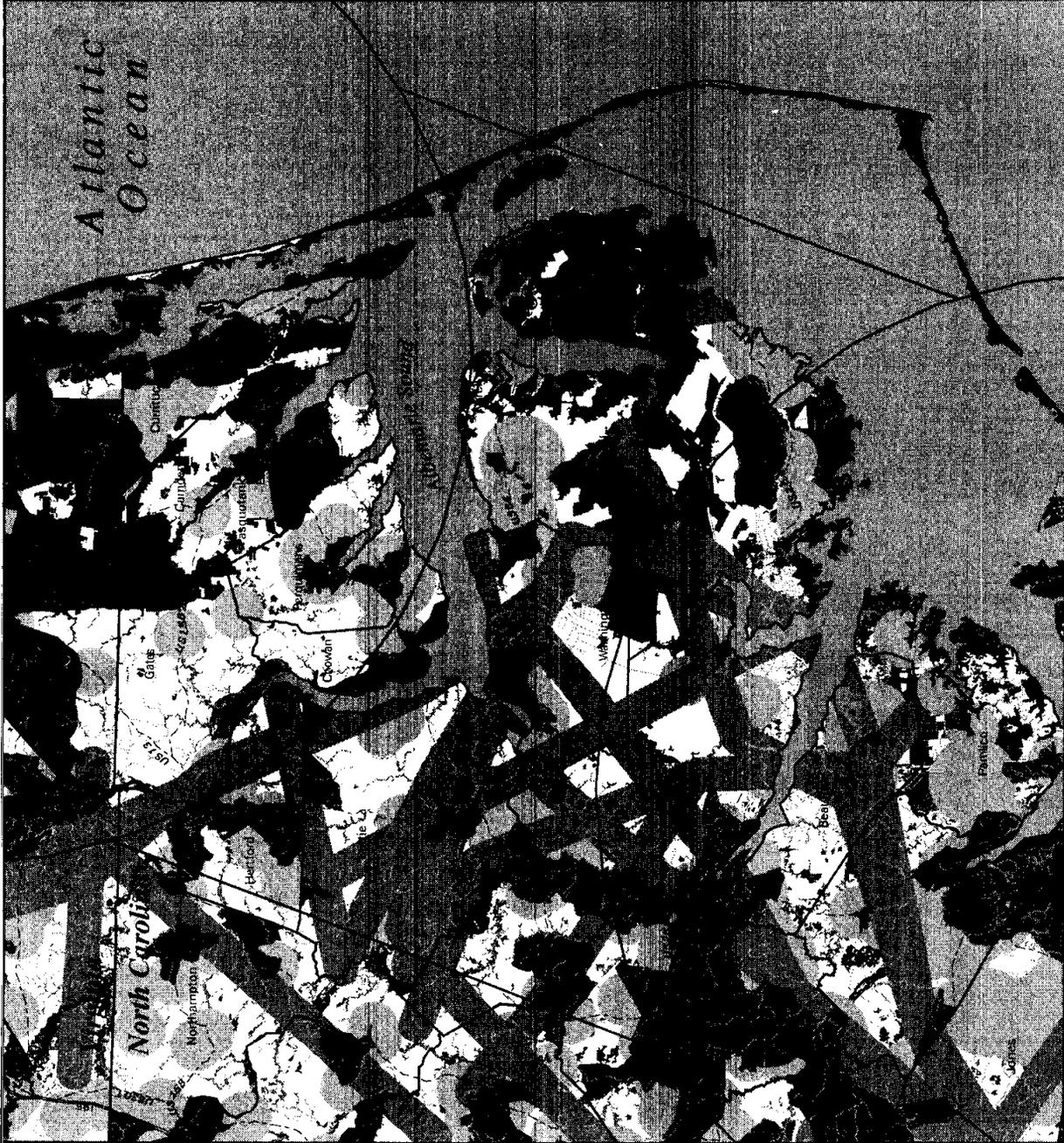


LEGEND

-  > 50 people/square mile
-  Class C & D Airspace and MTR Buffers
-  Tall Obstacles and Buffer Zones
-  Wetland Complex > 100 acres
-  Public Lands
-  Water



Figure 3-3
OLF Constraints Summary
MCAS Beaufort Study Area



LEGEND

- > 50 people/square mile
- Class C & D Airspace and MTR Buffers
- Tall Obstacles and Buffer Zones
- Wetland Complex > 100 acres
- Public Lands
- Water

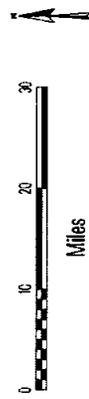


Figure 3-4
OLF Constraints Summary
Middle Study Area

Airspace Constraints

Data sets related to airspace include locations of airports/airfields, controlled airspace, and military training routes (MTRs). Operating airports and airfields (military and public/private) were mapped using Wessex Streets 5.0, software that provides the latest TIGER 97 files from the U.S. Bureau of the Census in ArcView format (Princeton University Library 2000). All other data, including abandoned airfields, were digitized into the project GIS database from National Oceanic and Atmospheric Administration (NOAA) Sectional Aeronautical Charts (U.S. Department of Commerce 2000a, 2000b, and 2000c).

Controlled airspace, as defined by the Federal Aviation Administration (FAA), is airspace in which all aircraft operators are subject to certain pilot qualifications, operating rules, and equipment requirements. Controlled airspace is further differentiated as Class A through Class E airspace. Only Class C and Class D airspace was mapped as potential constraints and included on the overlay maps. Class A and Class E airspace was not mapped because it was not considered a potential constraint; no Class B airspace lies within the study areas.

MTRs are a type of airspace with defined vertical and lateral dimensions established for military flight training at airspeeds in excess of 250 knots. MTRs are considered potential siting constraints and were included on the overlay maps of siting constraints. In addition, a 2-mile buffer was included on either side of the MTR.

Tall Obstacles and Buffer Zones

The data set of obstacles 200 feet or higher was obtained from NOAA. The Digital Obstacle File is a subset of positional data used by the FAA and NOAA to manage the National Airspace System. Structures were classified by type, including radio tower, stacks, other tower, and miscellaneous. A 3-NM buffer surrounds the structures between 200 and 500 feet tall, and a 5-NM buffer surrounds structures more than 500 feet tall.

Wetlands and Open Water

Information on wetlands within the study areas was obtained from a national database based on the U.S. Fish and Wildlife Service's National Wetland Inventory (NWI)

maps (GeoComm International Corporation 2000). Wetland areas greater than 100 acres and open water were included on the overlay maps of siting constraints.

Federal Public Lands

Federal lands mapped within the study areas include National Parks and Seashores, National Wildlife Refuges, and National Forest lands. These federal lands are included on the attached siting constraints figures.

Although state and local public lands were originally identified as a primary site-screening criterion, data sets of these areas were not readily obtainable at this level; therefore, these areas were considered as a secondary screening criterion. However, the North Carolina State University Hofmann Forest was included on the map because of the significant land area it includes.

Other Criteria

Other primary site-screening criteria including slopes of less than 5% and areas less than 1,000 feet AGL were similar for all the areas examined. For example, slopes were found only in river drainage areas, and all areas were determined to be below 1,000 feet AGL.

3.2 Results

To identify potential OLF candidate areas, siting constraint overlay maps were combined into a single summary map for each of the study areas (see Figures 3-1 through 3-4). Summary maps present the following siting constraints:

- Population density of more than 50 persons per square mile;
- Class C and Class D controlled airspace;
- MTRs and 2-mile buffers;
- Tall obstacles and 3- to 5-mile buffers;
- Wetland complexes larger than 100 acres;
- Open water; and

- Federal public lands.

Based on the results of the preliminary site screening, a total of 20 candidate areas potentially suitable for siting an OLF were identified. Candidate areas are identified in Figures 3-5 through 3-8. The 20 candidate areas were associated with primary air stations as follows:

- Five within 50 NM of NAS Oceana,
- Five within 50 NM of MCAS Cherry Point,
- Seven within 50 NM of MCAS Beaufort, and
- Three within the Middle Study Area that falls between NAS Oceana and MCAS Cherry Point.

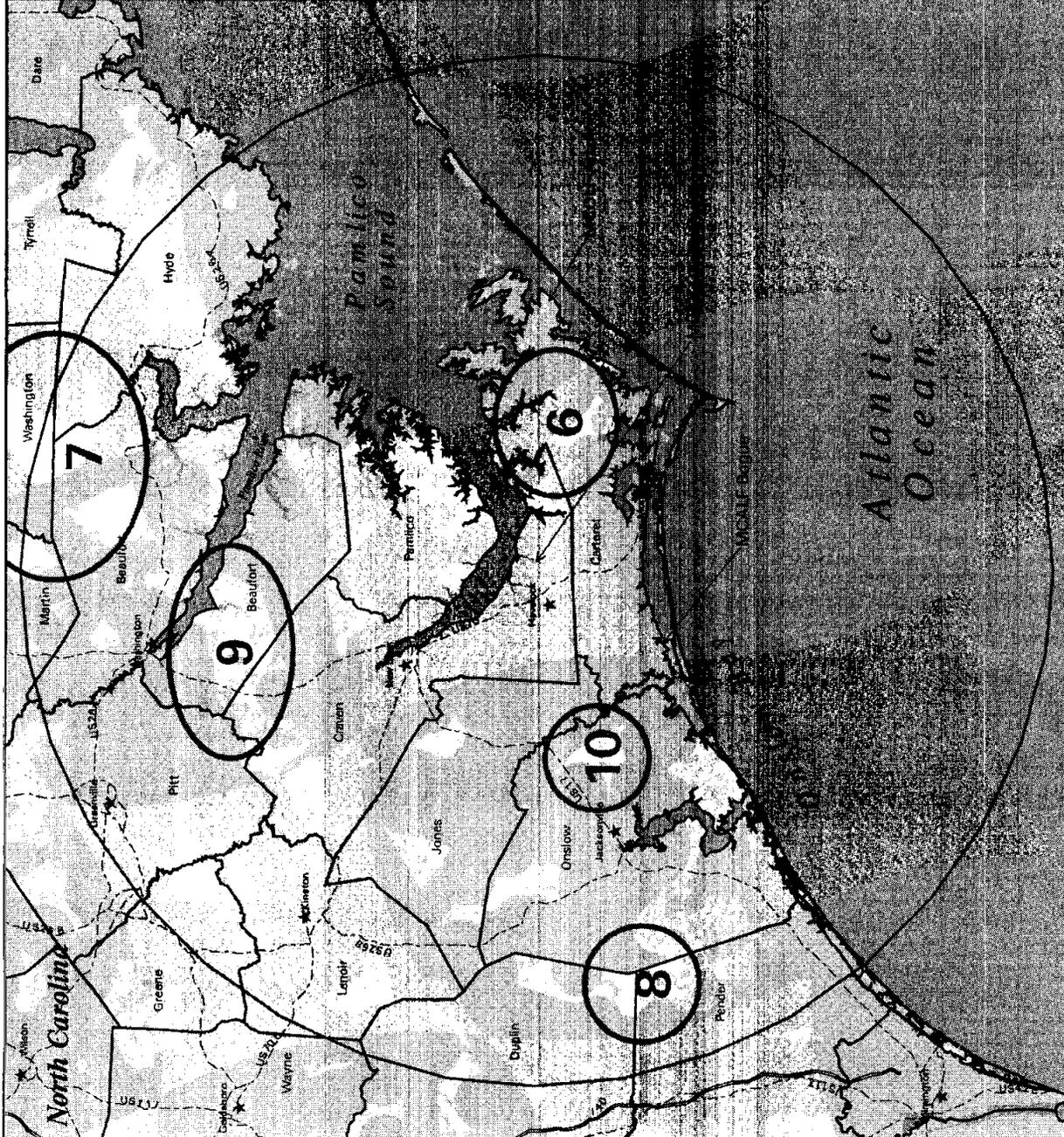
A list of the candidate areas is also provided on Table 3-1.

Table 3-1 Preliminary Candidate Areas

Candidate Area	State	County
NAS Oceana		
1	Virginia	Surry and Southampton
2	Virginia/North Carolina	Suffolk (Virginia) and Gates (North Carolina)
3	North Carolina	Chowan and Perquimans
4	North Carolina	Camden
5	North Carolina	Pasquotank
MCAS Cherry Point		
6	North Carolina	Carteret
7	North Carolina	Beaufort, Martin, and Washington (Beaufort A)
7 (expanded)	North Carolina	Beaufort, Martin, and Washington
8	North Carolina	Pender and Duplin (Beaufort B)
9	North Carolina	Beaufort
10	North Carolina	Onslow
MCAS Beaufort		
11	South Carolina	Jasper
12	South Carolina	Colleton
13	South Carolina	Bamberg
14	South Carolina	Allendale and Hampton
15	Georgia	Bulloch and Screven
16	South Carolina	Allendale
17	Georgia	Screven and Burke

Table 3-1 Preliminary Candidate Areas

Candidate		
Area	State	County
Middle Study Area (Between NAS Oceana and MCAS Cherry Point)		
18	North Carolina	Hyde
19	North Carolina	Tyrrell and Washington
20	North Carolina	Bertie



LEGEND

- Candidate Areas
 6 Carteret
 7 Beaufort A
 8 Pender-Duplin
 9 Beaufort B
 10 Onslow

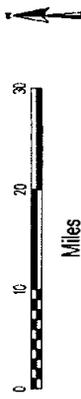
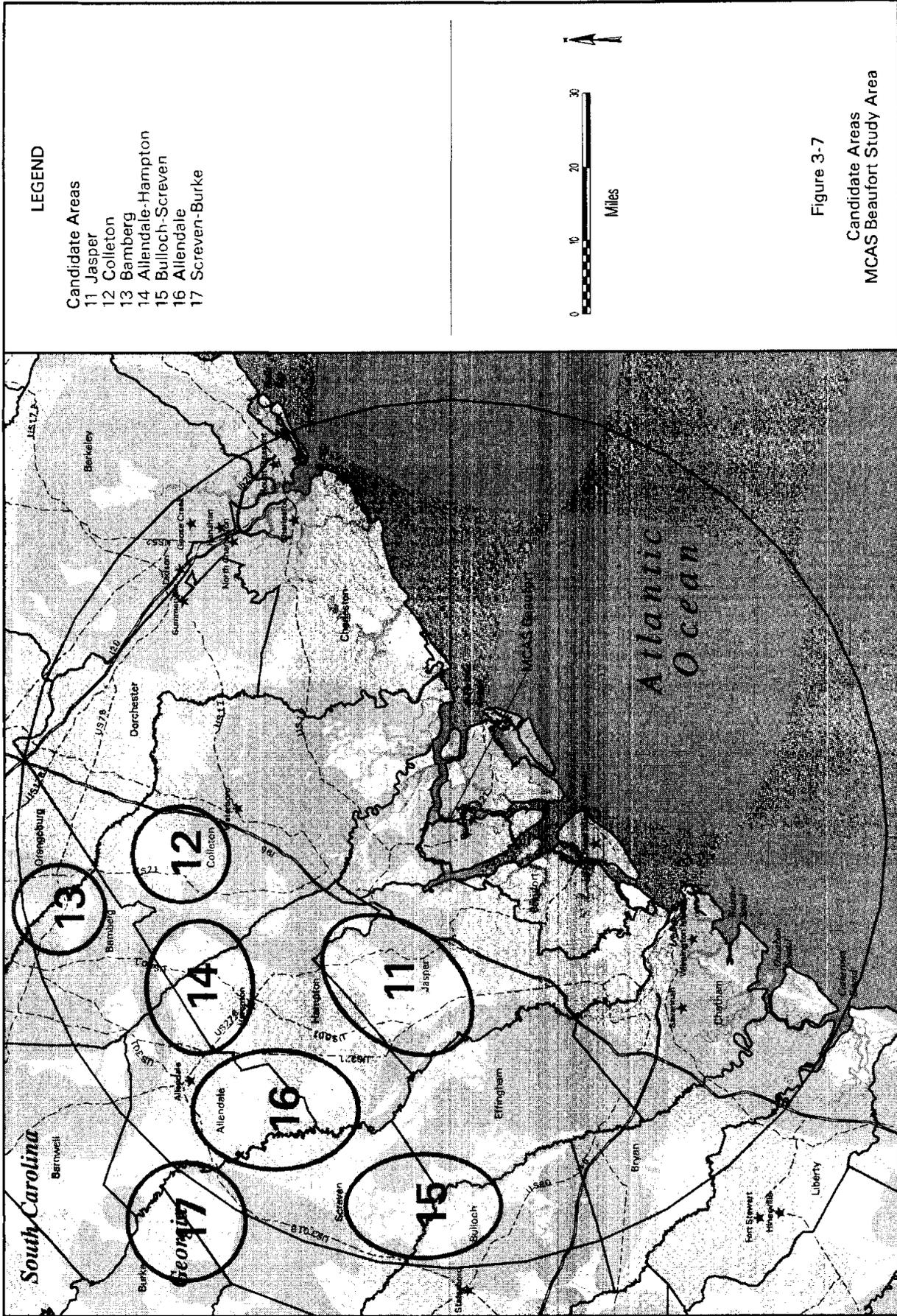


Figure 3-6
 Candidate Areas
 MCAS Cherry Point Study Area



LEGEND

- Candidate Areas
- 11 Jasper
 - 12 Colleton
 - 13 Bamberg
 - 14 Allendale-Hampton
 - 15 Bulloch-Screven
 - 16 Allendale
 - 17 Screven-Burke

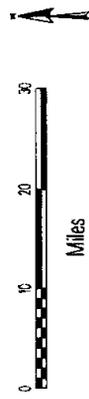
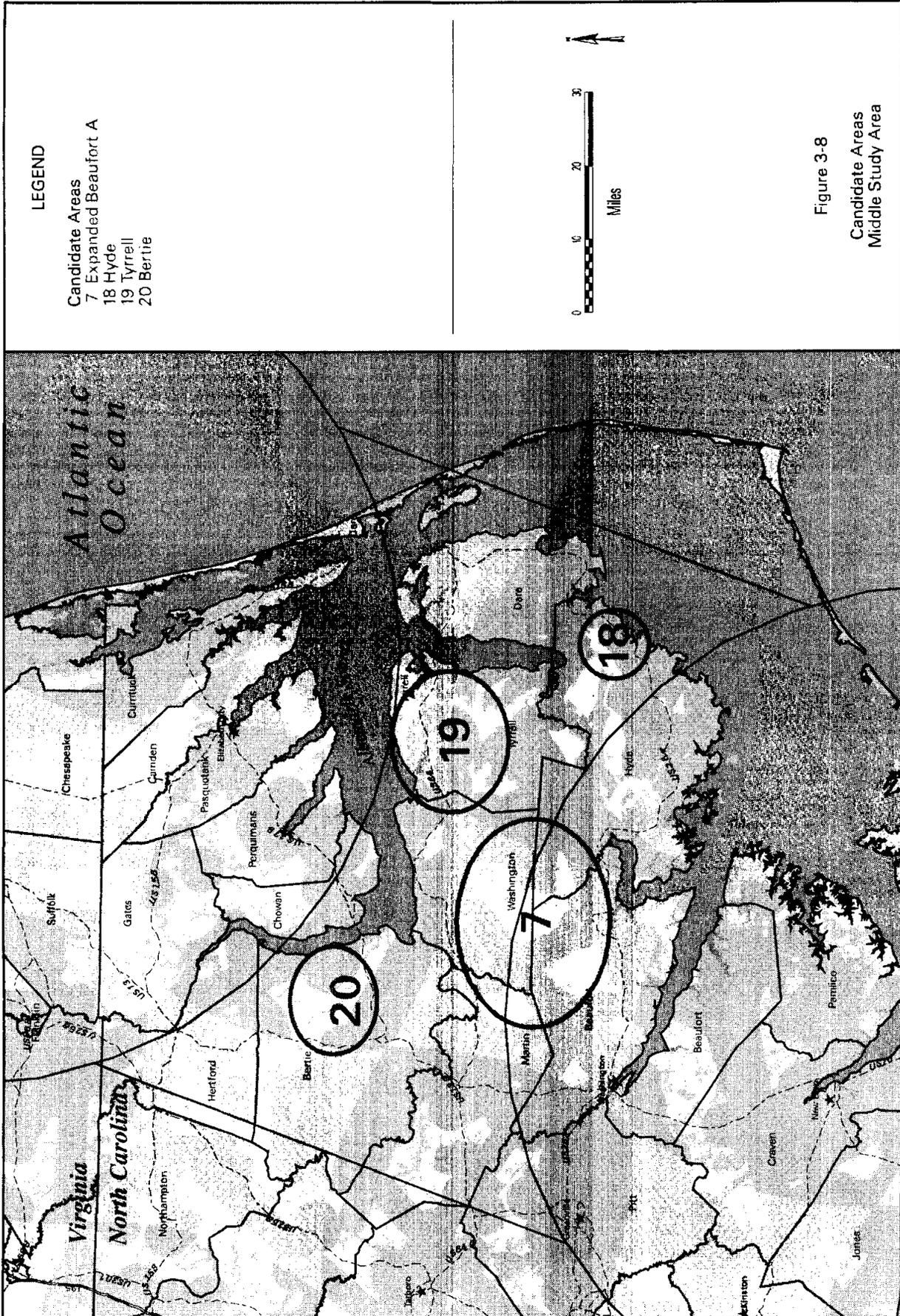


Figure 3-7
Candidate Areas
MCAS Beaufort Study Area



LEGEND

- Candidate Areas
- 7 Expanded Beaufort A
- 18 Hyde
- 19 Tyrrell
- 20 Bertie

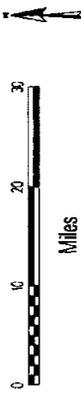
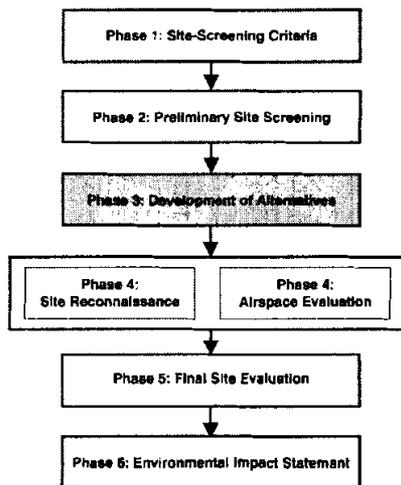


Figure 3-8
Candidate Areas
Middle Study Area

4

Phase 3: Development of Alternatives

The development of alternatives phase of the study, illustrated below in the context of the entire OLF Siting Study process, identified candidate sites located within candidate areas identified in the preliminary site-screening phase. Candidate sites identified were recommended for further analysis and aerial and windshield field surveys.



4.1 Methodology

Candidate sites were identified based on discussions with local county representatives, a review of topographic maps, and an analysis of development and land use trends in the vicinity of the candidate sites. Candidate sites recommended for further analysis were those that would be the least encumbered by surrounding development and/or incompatible land uses.

Land use trends were analyzed using data sets acquired from the U.S. Geological Survey (USGS) (U.S. Department of Interior 1999). Land use data for Virginia were last updated in April 2000, and land cover data for the states of South Carolina, North Carolina, and Georgia were last updated in June 2000. Land use classifications include water, developed, barren, forested upland, herbaceous planted/cultivated, and wetlands. Land use was provided for general reference information only; the land use designations were not included in the overlay maps of siting constraints. Selected noise-sensitive receptors, including cemeteries, churches, hospitals, and schools, were individually identified, mapped, and analyzed using Wessex Streets 5.0, software that provides the latest TIGER 97 files from the U.S. Census Bureau in ArcView format (Princeton University Library 2000).

Additionally, several properties and existing facilities were recommended to the Navy as potential OLF sites outside of the preliminary site-screening and agency consultation process. These properties and facilities were included as candidate sites where the siting was consistent with the preliminary site-screening criteria.

The following components and issues were presented for each identified candidate site:

Airfield

- Percent of land designated as agriculture (agricultural land represents a land use/land cover type compatible with aircraft operations); and
- Percent of land designated as wetland (wetland areas should be avoided or minimized in the airfield area).

Greater than 75 DNL Noise Zone

- Population (avoid populated areas); and
- Number of noise-sensitive land uses (avoid noise-sensitive areas).

60 to 75 DNL Noise Zone

- Percent of land designated as agriculture;

- Percent of land designated as forested (forested land represents land use/land cover type compatible with aircraft operations);
- Acreage developed (avoid developed areas); and
- Population.

A summary of major development constraints also is presented for each site. Major development constraints include the presence of state and federal roads, population centers, and public lands within the airfield boundary or high noise zones.

Following the evaluation of each site, candidate sites were designated as either retained for further study or requiring no further action. Sites designated for further study were carried forward to the site reconnaissance phase of the study.

4.2 Agency Consultation

Following preparation of OLF constraints maps and identification of OLF candidate areas, the Navy prepared and distributed a letter to the designated agency responsible for land use and development within each of the counties wholly or partially within a candidate area. The letter included notification of the project and a request to meet and obtain recommendations on potential OLF development sites.

Counties with the greatest amount of unencumbered area within the designated candidate areas were considered the primary counties; that is, the counties that offered the best opportunity for siting an OLF. Meetings were scheduled between May 14, 2001, and June 1, 2001, with representatives of the primary counties (see Table 4-1). Meetings were also arranged with several planning commissions that are responsible for regional planning initiatives among one or more of the primary counties.

The county officials who attended the agency meetings ranged from county commissioners and managers to planning and development directors to staff planners and representatives from designated economic development agencies. At each meeting, representatives from the Navy and its consulting team provided a brief overview of the project and the current status of the siting study. Base maps of the proposed candidate area and maps illustrating the projected noise contours were presented at each meeting. The initial site screening used a projected 53,000-acre greater than 60 DNL noise zone that was based on

preliminary noise information for the Super Hornet aircraft and ensured that a conservative noise impact area was analyzed.

Table 4-1 Counties and Agencies Contacted in Primary Counties

Associated Candidate Area(s)	County/Agency	Date of Meeting
1	Southampton, Virginia	14 May 2001
1	Surry County, Virginia	14 May 2001
2	Gates County, North Carolina	15 May 2001
4 and 5	Pasquotank, North Carolina	15 May 2001
4 and 5	Camden County, North Carolina	15 May 2001
3 and 5	Perquimans County, North Carolina	16 May 2001
3 and 20	Bertie County, North Carolina	17 May 2001
3	Chowan County Chamber of Commerce/Economic Development Agency	17 May 2001
19	Tyrell County, North Carolina	18 May 2001
7 and 19	Washington County, North Carolina	18 May 2001
7 and 9	Beaufort County, North Carolina	29 May 2001
7 and 18	Hyde County, North Carolina	29 May 2001
6 and 9	Craven County, North Carolina	30 May 2001
6	Carteret County, North Carolina	31 May 2001
8 and 10	Onslow County, North Carolina	31 May 2001
8	Pender County, North Carolina	1 June 2001
8	Duplin County, North Carolina	1 June 2001
13, 14, 16,17	Lower Savannah Council of Governments, South Carolina	16 May 2001
11	Jasper County, South Carolina	29 May 2001
13 and 14	Bamberg County, South Carolina	30 May 2001
13	Orangeburg County, South Carolina	30 May 2001
11, 14, and 16	Hampton County, South Carolina	31 May 2001
14, 16, and 17	Allendale County, South Carolina	31 May 2001
11, 12, 14, and 16	Lowcountry Council of Governments, South Carolina	31 May 2001
12 and 14	Colleton County, South Carolina	1 June 2001
15 and 17	Central Savannah River Area Regional Development Council, Center, Georgia	16 May 2001
17	Burke County, Georgia	17 May 2001
15, 16, 17	Screven County, Georgia	17 May 2001
15	Bulloch County, Georgia	18 May 2001

At the meetings, Navy and county officials discussed the preliminarily identified candidate areas. Issues such as site ownership; property fragmentation; surrounding and proposed land use; availability of utilities, roads, and other infrastructure; proposed development projects; and consistency and compatibility of an OLF with county and municipal land use plans and regulations were discussed in detail for each site. County offi-

cial also provided valuable feedback on how they felt an OLF would be received in their county.

4.3 Candidate Site Summaries

Generally, the specific candidate sites were selected from within the candidate areas, which were identified in the preliminary site screening phase (see Figures 4-1 through 4-4). In a few instances, candidate sites were identified outside the bounds of candidate areas. Specific candidate sites were identified through meetings with county representatives, a review of topographic maps, and analysis of land use and development trends within the candidate areas.

Summary tables illustrating the key land use features of the identified OLF candidate sites within each primary air station study area are presented below. The following summary tables (Tables 4-2 through 4-5) are based on the noise zones that encompass 53,000 acres of land area.

Each candidate site is numbered according to the candidate area number, and multiple sites within the candidate area are then lettered in sequence (e.g., Site 1A, Site 1B, etc.).

NAS Oceana Study Area

The NAS Oceana study area contained five candidate areas. Nine candidate sites were identified within these candidate areas, eight of which were identified based on discussions with county representatives. A ninth candidate site was included for discussion, based on an outside proposal received by the Navy.

MCAS Cherry Point Study Area

The MCAS Cherry Point study area contained four candidate areas. Candidate Area 7 was initially included in the MCAS Cherry Point Study Area, but it subsequently was expanded to encompass areas beyond the 50-NM radius around MCAS Cherry Point and became part of the study area between NAS Oceana and MCAS Cherry Point. Five candidate sites were identified within the candidate areas.

MCAS Beaufort Study Area

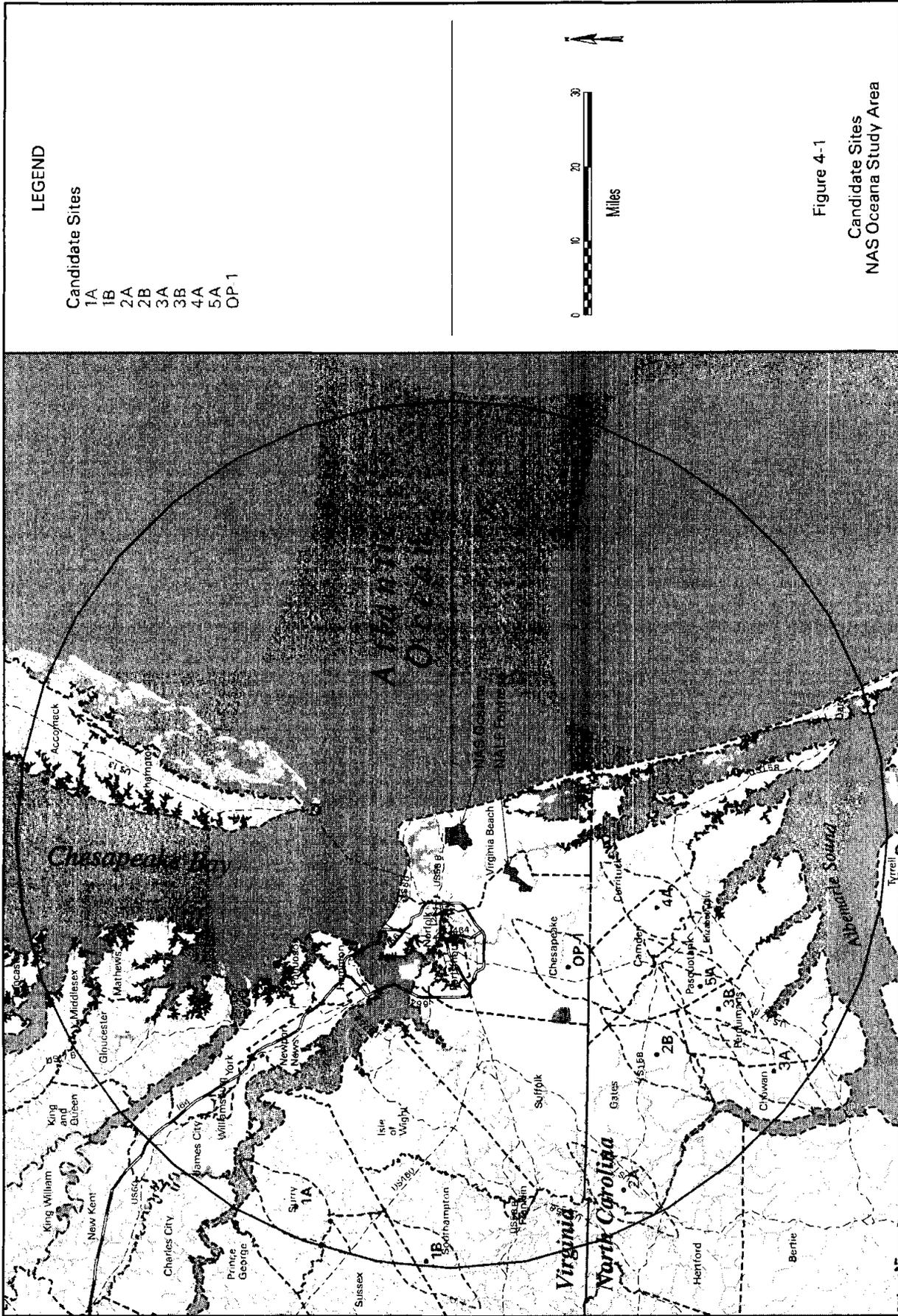
The MCAS Beaufort study area contained seven candidate areas. Eight candidate sites were identified within these candidate areas.

Middle Study Area between NAS Oceana and MCAS Cherry Point

The area between the 50-NM radius around NAS Oceana and MCAS Cherry Point contained four candidate areas. Five candidate sites were identified within these candidate areas; four of these sites were identified based on discussions with county representatives. A fifth candidate site was included for discussion based on an outside proposal received by the Navy.

4.4 Results

The purpose of the OLF development of alternatives phase was to identify a reasonable range of potential OLF sites within the NAS Oceana, MCAS Cherry Point, and MCAS Beaufort study areas, as well as the area between NAS Oceana and MCAS Cherry Point. Tables 4-6, 4-7, 4-8, and 4-9 present the summarized results of this evaluation process.



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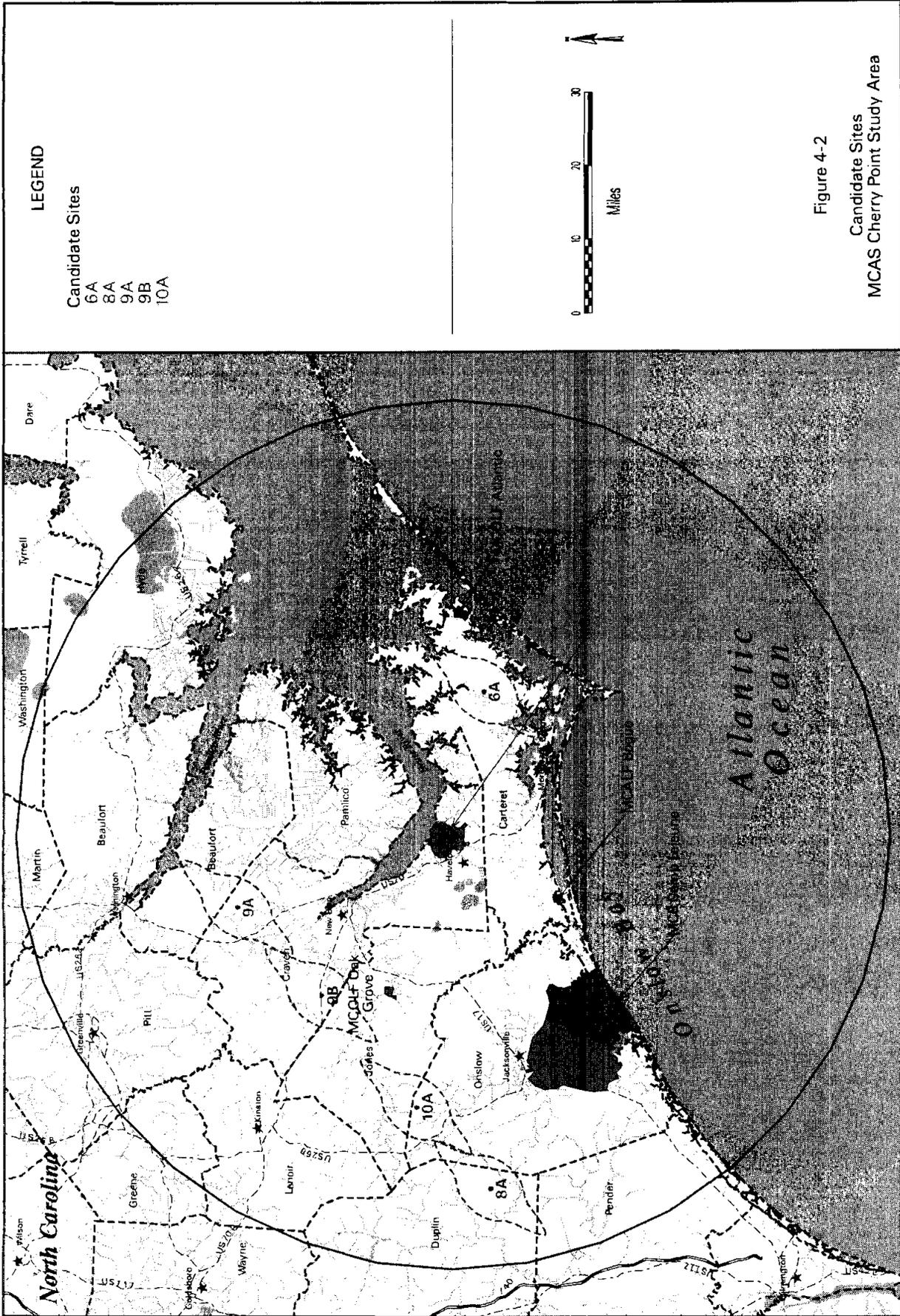


Figure 4-2
Candidate Sites
MCAS Cherry Point Study Area

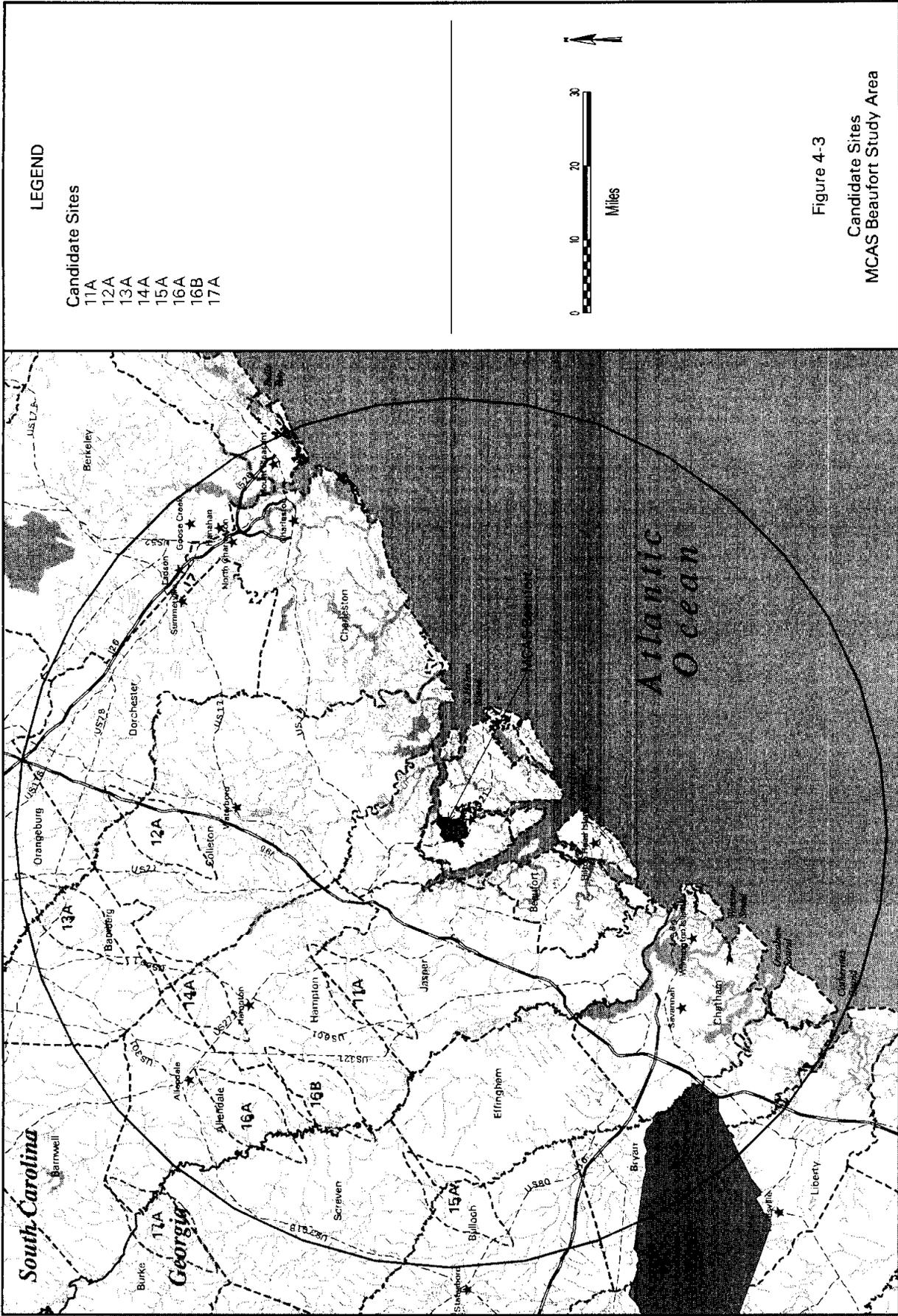


Figure 4-3
 Candidate Sites
 MCAS Beaufort Study Area

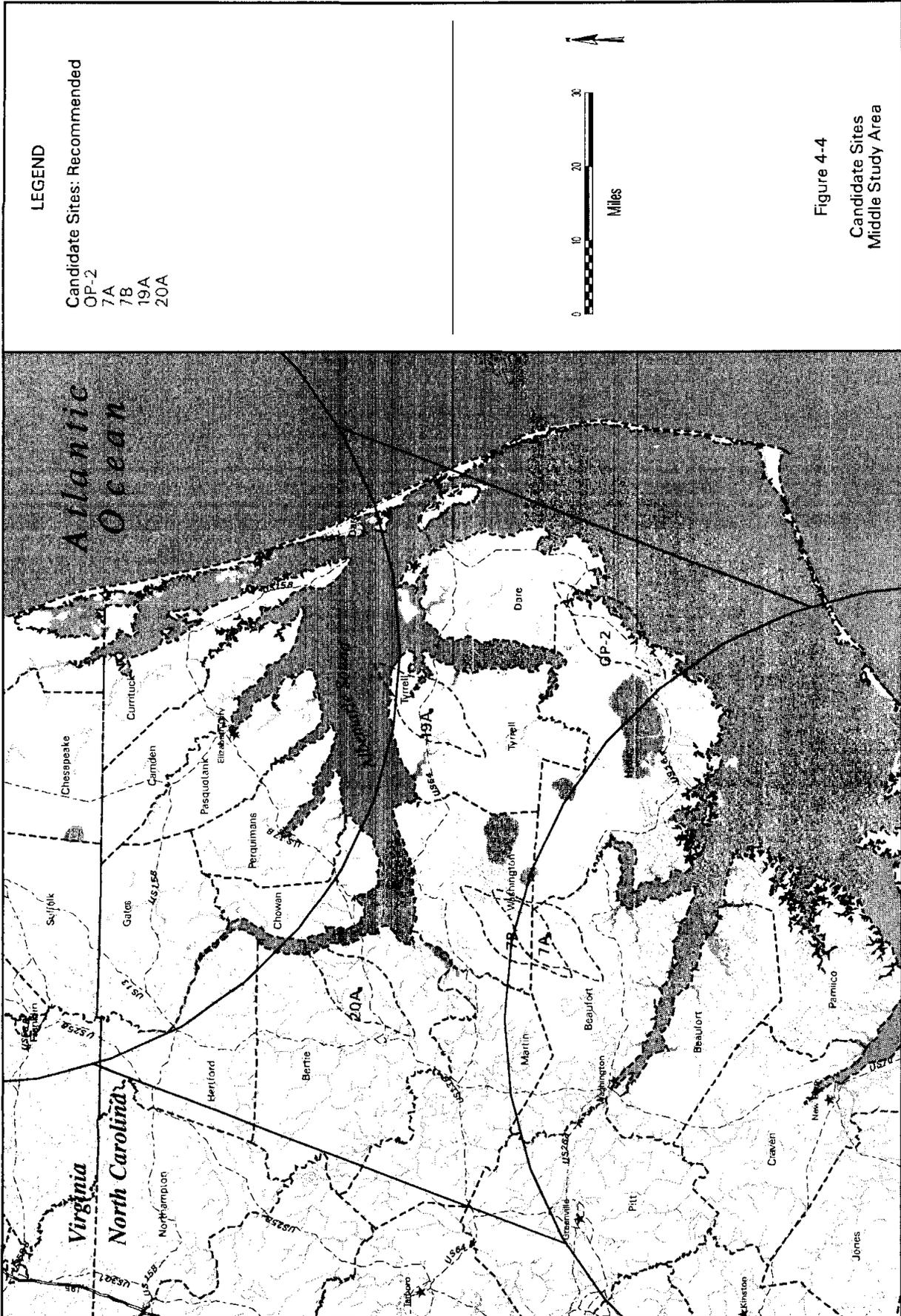


Figure 4-4
Candidate Sites
Middle Study Area

Table 4-2 NAS Oceana Study Area Land Use Summaries

Proposed Outline	Land Use/Land Cover %							Sensitive Land Uses			
	Water	Wetlands	Barren	Forested	Residential	Planted and Cultivated	Other Developed	Population ^a	Schools	Churches	Hospitals
Site 1A											
Airfield	<1	4	11	85	0	<1	<1	NA	-	-	-
60 DNL	4	7	5	65	<1	19	<1	1,650	-	5	-
Site 1B											
Airfield	0	3	3	91	0	3	0	NA	-	-	-
60 DNL	1	13	4	59	<1	24	<1	1,800	-	8	-
Site 2A											
Airfield	<1	5	0	93	0	2	0	NA	-	-	-
60 DNL	2	23	2	60	<1	12	<1	2,118	-	4	-
Site 2B											
Airfield	<1	6	0	70	<1	23	0	NA	-	-	-
60 DNL	<1	41	<1	30	<1	29	<1	1,893	2	4	-
Site 3A											
Airfield	0	6	0	20	0	74	0	NA	-	-	-
60 DNL	3	11	<1	31	<1	55	<1	2,419	2	7	-
Site 3B											
Airfield	0	1	0	76	0	23	<1	NA	-	-	-
60 DNL	<1	12	<1	16	<1	71	<1	2,078	-	6	-
Site 4A											
Airfield	-	-	-	-	-	100	-	NA	-	-	-
60 DNL	1	28	1	16	<1	54	<1	3,790	-	4	-
Site 5A											
Airfield	-	-	-	-	-	100	-	NA	-	-	-
60 DNL	<1	14	<1	16	<1	70	<1	2,573	-	4	-
Site OP-1^b											
Airfield	-	10	-	4	<1	86	<1	NA	-	-	-
60 DNL	<1	61	<1	4	1	33	<1	8,168	-	3	-

^a Population estimates are based on an assumption of equal population distribution throughout the noise zones. In actuality, the population within these contours would be expected to be considerably lower.

^b OP-1 represents a proposed OLF site that was identified outside of the preliminary site screening and agency consultation process. OP-1 is located in Chesapeake, Virginia.

Table 4-3 MCAS Cherry Point Study Area Land Use Summaries

Proposed Outline	Land Use/Land Cover %							Sensitive Land Uses			
	Water	Wetlands	Barren	Forested	Residential	Planted and Cultivated	Other Developed	Population ^a	Schools	Churches	Hospitals
Site 6A											
Airfield	–	–	–	–	–	100	–	NA	–	–	–
60 DNL	9	25	<1	5	<1	60	<1	5150	–	2	–
Site 8A											
Airfield	<1	6	20	66	<1	8	<1	NA	–	–	–
60 DNL	<1	18	1	51	<1	29	<1	2,835	1	12	–
Site 9A											
Airfield	–	^a	52	48	–	–	–	NA	–	–	–
60 DNL	1	21	12	54	<1	11	<1	1,887	1	1	–
Site 9B											
Airfield	<1	4	–	85	–	11	<1	NA	–	–	–
60 DNL	<1	20	3	51	<1	25	<1	2,628	4	6	–
Site 10A											
Airfield	–	12	2	80	–	6	–	NA	–	–	–
60 DNL	<1	24	3	48	<1	24	<1	3,412	2	8	–

^a Population estimates are based on an assumption of equal population distribution throughout the noise zones. In actuality, the population within these contours would be expected to be considerably lower.

Based on NWI mapping for Site 9A, the proposed airfield location contains an estimated 1,037 acres of forested wetland. Land use/land cover categories are based on primary uses of land. Since the study area is primarily used for silvicultural purposes, the land uses were identified as barren (clear-cut) and forested (pine stands).

Table 4-4 MCAS Beaufort Study Area Land Use Summaries

Proposed Outline	Land Use/Land Cover %							Sensitive Land Uses			
	Water	Wetlands	Barren	Forested	Residential	Planted and Cultivated	Other Developed	Population ^a	Schools	Churches	Hospitals
Site 11A											
Airfield	0	5	6	83	0	6	0	NA	-	-	-
60 DNL	0	23	5	55	0	17	0	1,436	7	9	-
Site 12A											
Airfield	0	9	13	77	0	1	0	66	-	-	-
60 DNL	0	17	5	64	0	13	0	2,096	4	9	-
Site 13A											
Airfield	0	21	2	59	0	18	0	43	0	0	0
60 DNL	0	28	3	46	0	23	<1	1,595	4	14	0
Site 14A											
Airfield	<1	15	5	33	0	47	0	82	1	2	-
60 DNL	<1	27	3	31	<1	38	0	1,838	7	10	-
Site 15A											
Airfield	<1	28	16	35	0	20	0	52	-	-	-
60 DNL	<1	30	6	34	<1	30	<1	1,607	3	8	-
Site 16A											
Airfield	<1	14	5	60	0	21	0	22	-	-	-
60 DNL	1	31	4	47	<1	17	<1	1,146	-	7	-
Site 16B											
Airfield	<1	22	7	56	0	15	0	51	-	-	-
60 DNL	<1	28	4	38	<1	29	0	1,305	-	8	-
Site 17A											
Airfield	1	7	8	34	0	50	0	32	-	-	-
60 DNL	1	20	7	32	<1	40	<1	988	-	12	-

^a Population estimates are based on an assumption of equal population distribution throughout the noise zones. In actuality, the population within these contours would be expected to be considerably lower.

Table 4-5 Middle Study Area between NAS Oceana and MCAS Cherry Point Land Use Summaries

Proposed Outline	Land Use/Land Cover %							Sensitive Land Uses			
	Water	Wetlands	Barren	Forested	Residential	Planted and Cultivated	Other Developed	Population ^a	Schools	Churches	Hospitals
Site 7A											
Airfield	0	0	0	0	0	100	0	NA	-	-	-
60 DNL	<1	3	<1	3	<1	94	<1	1,110	1	2	-
Site 7B											
Airfield	<1	<1	0	<1	0	99	<1	NA	-	-	-
60 DNL	<1	6	<1	14	<1	80	<1	1,025	-	2	-
Site OP-2											
Airfield	<1	1	<1	24	0	74	<1	NA	-	-	-
60 DNL	18	41	<1	10	<1	28	<1	786	1	2	-
Site 19A											
Airfield	0	43	0	10	0	47	0	NA	-	-	-
60 DNL	7	43	<1	26	<1	23	<1	798	-	5	-
Site 20A											
Airfield	<1	4	0	90	0	6	0	NA	-	-	-
60 DNL	3	16	1	65	<1	14	<1	2,298	-	3	-

^a Population estimates are based on an assumption of equal population distribution throughout the noise zones. In actuality, the population within these contours would be expected to be considerably lower.

Table 4-6 Candidate Site Summary, NAS Oceana Study Area

Site	Airfield			75 DNL Noise Contour			60 DNL Noise Contour			Development Constraints	Recommendations
	% Agricultural	% Wetland	Population	No. Sensitive Receptor	% Agricultural	% Forested	Acreage Developed	Population			
Site 1A	<1%	4%	404	1	19%	65%	20	1,650	SR 047 (airfield); SR 611 (airfield); camps along James River (60 and 65 DNL contour); FAA towers (70 DNL contour), proximity to Richmond and Hampton Roads MSA.	Retained for further study <ul style="list-style-type: none"> high percentage of compatible land use in 60 DNL contour low development, population, noise-sensitive receptors 	
Site 1B	3%	3%	457	0	24%	59%	179	1,800	Wakefield, U.S. Route 460 corridor (60 DNL contour); Wakefield Municipal Airport (approximately 9 miles north), proximity to Richmond and Hampton Roads MSA.	Retained for further study <ul style="list-style-type: none"> high percentage of compatible land use in 60 DNL contour low development, population, noise-sensitive receptors 	
Site 2A	2%	5%	282	1	12%	60%	78	2,118	SR 1201 (airfield); federally protected red-cockaded woodpecker (75 DNL contour); communities along US Route 13 (75 DNL contour); Chowan Swamp Game Lands (70 and 75 DNL contour).	No further action <ul style="list-style-type: none"> large area of state land in > 70 DNL contour large wetlands area (bird habitat) in 70 DNL contour, a potential flight safety concern 	
Site 2B	23%	6%	532	0	29%	30%	214	1,893	SR 1428 (airfield), Great Dismal Swamp NWR; FAA towers, two schools in 65+ DNL contour	No further action <ul style="list-style-type: none"> large area in Great Dismal Swamp NWR 2 schools in > 65 DNL contour 	
Site 3A	74%	6%	643	3	55%	31%	161	2,419	SR 1312, SR 1313 (airfield), FM radio tower (approximately 5 miles south of airfield); community of Center Hill and SR 1303 (75 DNL contour), and Valhalla (65 DNL contour); two schools in 70 DNL contour Town of Edenton growth area; multiple jurisdictions; FAA Tower (60 DNL contour).	Retained for further study <ul style="list-style-type: none"> high percentage of compatible land use in 60 DNL contour high agricultural use in airfield 	
Site 3B	23%	1%	561	1	71%	16%	106	2,078	Hertford (county seat, 6 miles south of airfield); Dillard Airport (4 miles southeast of the airfield); FAA Tower (60 DNL contour); multiple jurisdictions	Retained for further study <ul style="list-style-type: none"> high percentage of compatible land use in 60 DNL contour low development, population, noise-sensitive receptors 	
Site 4A	100%	0%	597	0	54%	16%	238	3,790	U.S. Route 17, Elizabeth City (60 and 65 DNL contour); population along SR 168 (65 DNL contour); AM radio tower (outside 60 DNL contour); FAA towers (60 DNL contour); Northwest River Marsh Game Land (60 DNL contour); recreational uses along waterfront.	No further action <ul style="list-style-type: none"> large area of state land growth around Elizabeth City 	
Site 5A	100%	0%	697	0	70%	16%	57	2,573	Three uncontrolled airfields (approximately 3-5 miles south/southeast), U.S. Route 17 (65 DNL contour), and Elizabeth City (6-7 miles south)	Retained for further study <ul style="list-style-type: none"> high percentage of compatible land use in airfield, 60 DNL contour low development, population, noise-sensitive receptors 	
OP-1	86%	10%	1,528	1	33%	4%	929	8,168	Cornland (75 DNL contour); high population density (60 DNL contour); Chesapeake Municipal Airport (approximately 5 miles north); Great Dismal Swamp NWR (75, 70, 65, 60 DNL contour).	No further action <ul style="list-style-type: none"> high population in 60 DNL contour large area in Great Dismal Swamp NWR 	

Table 4-7 Candidate Site Summary, MCAS Cherry Point Study Area

Site	Airfield		75 DNL Noise Contour		60 DNL Noise Contour		Developments Constraints	Recommendations
	% Agricultural	% Wetland	Population	No. Sensitive Receptor	% Agricultural	% Forested		
Site 6A	100%	0%	276	0	60%	5%	City of Beaufort and Towns of North River, North River Center, and Onway (60 DNL contour); developing coastline (east of 60 DNL contour); FAA towers (70 DNL contour)	Retained for further study <ul style="list-style-type: none"> ■ moderate compatible land use in 60 DNL contour ■ low development, noise-sensitive receptors ■ high agricultural use in airfield
Site 8A	8%	6%	755	2	29%	51%	SR 1817 (airfield); Fountain Town and SR 111 (75 DNL contour); development in high noise zone (75 DNL contour); Fountain Town Airport (4 miles northeast); Albert J. Ellis Airport (6 miles east); Angola Bay Game Land area (60 DNL contour); FAA towers (75 and 60 DNL contour); one school in 70 DNL contour	Retained for further study <ul style="list-style-type: none"> ■ high percentage of compatible land use in 60 DNL contour ■ moderate development, low noise-sensitive receptors
Site 9A	0%	0%	450	2	11%	54%	Weldon Airport (75 DNL contour); Town of Vanceboro and other communities along the Route 17 corridor; high growth Chocowinity; Bay area (60 DNL contour)	Retained for further study <ul style="list-style-type: none"> ■ moderate compatible land use in 60 DNL contour ■ low to moderate development, low noise-sensitive receptors
Site 9B	11%	4%	845	0	25%	51%	U.S. Route 70 (airfield); Town of Tuscarora (70 DNL contour); Cove City (65 DNL contour); FAA towers (60 DNL contour); Turkey Quarter Island state conservation land (60 DNL contour)	No further action <ul style="list-style-type: none"> ■ U.S. Route 70 through airfield ■ moderate to high development, population
Site 10A	6%	12%	1,013	1	24%	48%	Town of Richlands (60, 65, and 70 DNL contour); Hett and Pungatory Airport (3 miles west of site); FAA tower (60 DNL contour); Hofmann State Forest (65 DNL contour)	No further action <ul style="list-style-type: none"> ■ Town of Richlands population center ■ moderate to high development, population ■ state land in 65 DNL contour

Table 4-9 Candidate Site Summary, MCAS Beaufort Study Area

Site	75 DNL Buffer Contour			60 DNL Buffer Contour			Development Constraints*	Recommendations	
	% Agricultural	% Wetland	Population	No. Sensitive Receptor	% Agricultural	% Forested			Acres Developed
Site 11A	6%	5%	498	3	17%	55%	77	1,436	FAA lower (60 DNL contour). High growth rate in county. <ul style="list-style-type: none"> low development and population high compatible land use in 60 DNL contour
Site 12A	1%	9%	624	4	13%	64%	106	2,096	US Incentive 55 (75, 70, 65, 60 DNL contour); Warhooen (county seat, 8 miles southeast); FAA towers (60-70 DNL contour). <ul style="list-style-type: none"> Retained for further study high compatible land use in 60 DNL contour
Site 13A	18%	21%	442	7	23%	46%	3	1,395	US Route 70 (0.5 miles north of airport), U.S. 17 (0.5 miles east of airport), Hampton (county seat, 6 miles northeast). <ul style="list-style-type: none"> No further action large wetlands area in airfield
Site 14A	47%	15%	625	2	38%	31%	112	1,838	Brevin Bridge Plantation Airport (75 DNL contour); Secondary SR 8 (airfield), SR 13 (airfield), SR 238 (airfield), Innes (60 DNL contour); Hampton (county seat, 5 miles south). <ul style="list-style-type: none"> No further action state and Federal roads throughout 60 DNL contour large wetlands area in airfield
Site 15A	20%	28%	481	1	30%	34%	336	1,607	Private growth area along US Route 80 including Booklet (60 DNL contour). <ul style="list-style-type: none"> No further action large wetlands area in 60 DNL contour potential DASH lane
Site 16A	21%	14%	167	4	17%	67%	5	1,186	Tuckahoe WMA (60 DNL contour); developed area around Alhadeid and US 90 (north of 60 DNL contour); Allendale County Airport (7 miles north of airfield), SR 3 (75 DNL contour). <ul style="list-style-type: none"> No further action large wetlands area in 60 DNL
Site 60B	15%	22%	456	3	29%	38%	41	1,305	Extensive wetlands in airfield. Estill (east of 60 DNL contour). <ul style="list-style-type: none"> No further action large wetlands area in airfield
Site 17A	50%	7%	280	6	40%	32%	16	981	Royal Road (airfield); FAA lower (60 DNL contour); Yuchi Wildlife Management Area (70 and 75 DNL contour); Savannah River recreational resource; NRCS conservation easement. <ul style="list-style-type: none"> Retained for further study high percentage of compatible land use in 60 DNL contour low development and population

* Sites where the wetland area is not included as a development constraint for the MCAS Beaufort Study Area because the data are used for this information includes both active and inactive wetlands in South Carolina and does not distinguish between them.

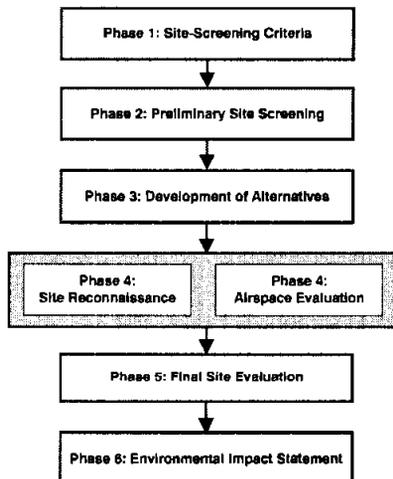
Table 4-9 Candidate Site Summary, Middle Study Area

Site	Airfield		75 DNL Noise Contour		60 DNL Noise Contour				Development Constraints	Recommendations
	% Agricultural	% Wetland	Population	No. Sensitive Receptor	% Agricultural	% Forested	Acreage Developed	Population		
Site 7A	100%	0%	402	0	94%	3%	48	1,110	Koech Airport and Respass Airfields (approximately 5 miles southwest); Town of Wenona (70 DNL contour); Pocosin Lakes NWR (60 DNL contour); multiple jurisdictions.	Retained for further study <ul style="list-style-type: none"> high percentage of compatible land use in 60 DNL contour low development, population and noise sensitive receptors
Site 7B	99%	<1	261	0	80%	14%	14	1,025	State Route 45/99 (airfield); Town of Wenona (70 DNL contour); Plymouth (county seat, northwest of 60 DNL contour); multiple jurisdictions.	Retained for further study <ul style="list-style-type: none"> high percentage of compatible land use in 60 DNL contour high agricultural use in airfield low development, population and noise sensitive receptors
Site 19A	47%	43%	237	1	23%	26%	21	798	US Route 64 (northern border); extensive forested wetlands (airfield); Pocosin Lakes NWR (60 DNL contour); FAA tower (60 DNL contour); Little Alligator State Game Land (75 DNL contour); Alligator River State Preserve (70 DNL contour).	No further study <ul style="list-style-type: none"> extensive forested wetlands in airfield large area of state land in 70 and 75 DNL contours
Site 20A	6%	4%	764	1	14%	65%	68	2,258	Developed areas along US Route 17 and SR 1366 (75 DNL contour); Todd's Airport (2 miles northwest of airfield); Towns of Midway and Ashland (70 DNL contour); private conservation land (60 DNL contour); Windsor (county seat, southwest 60 DNL contour).	Retained for further study <ul style="list-style-type: none"> moderate-high compatible land use in 60 DNL contour
Site OP-2	74%	1%	61	0	28%	10%	341	786	US Route 264 (along eastern airfield border); Town of Engelhard with school (65 and 70 DNL contour); Liverman Airport (approximately 5 miles south); Alligator River NWR (70, 65, 60 DNL contour); FAA towers (60 DNL contour); extensive wetlands (bird habitat) in 60 DNL contour (potential flight safety concern).	Retained for further study <ul style="list-style-type: none"> high agricultural use in airfield low population and noise sensitive receptors

5

Phase 4: Site Reconnaissance/ Airspace Evaluation

The site reconnaissance and airspace evaluation phase of the study is illustrated below in the context of the entire OLF Siting Study process.



As a defined set of candidate sites emerged from the development of alternatives phase of the study, site reconnaissance efforts began to verify the information mapped for each site. Immediately following site reconnaissance, the Navy evaluated the most viable sites from an environmental perspective for potential airspace conflicts. Each of these tasks is discussed below.

5.1 Site Reconnaissance

OLF candidate site reconnaissance efforts were focused on candidate sites retained for further study as recommended in the OLF development of alternatives phase. The purpose of the reconnaissance studies was to gather site-specific information characterizing each of the candidate sites, including:

- Verification of the presence and location of noise-sensitive receptor sites and community facilities (churches, schools);
- Verification of the presence and location of identified towers and airfields;
- Verification of land use/land cover types (e.g., developed areas);
- General characterization of ecological communities (e.g., forestland, scrub/shrub, wetlands, etc);
- Road access to identified sites; and
- Other significant features not addressed during the development of alternatives phase.

5.1.1 Methodology

Site reconnaissance of the candidate sites was completed by helicopter flyover and windshield survey. To accurately identify the center of each of the proposed OLF sites during the helicopter surveys, the survey team coordinated with the Navy and Marine Corps helicopter pilots and provided them with the latitude and longitude coordinates for each of the proposed sites. Once in the air, the coordinates were tracked with the helicopter's on-board navigation system. The survey team verified these coordinates as well with a hand-held Global Positioning System (GPS). Because of weather constraints during the first week of helicopter flyovers, candidate sites 3A and 20A were viewed only by windshield survey.

Helicopter reconnaissance flights were completed on August 14, 2001, for sites 1A, 1B, 3B, 5A, OP-2, 7A, and 7B; on August 20, 2001, for sites 6A, 8A, and 9A; and on August 23, 2001, for sites 11A, 12A, and 17A. Windshield surveys were conducted during the weeks of August 13 and August 20, 2001.

Additionally, as site reconnaissance efforts identified the most viable OLF sites from a land-use perspective, Navy and Marine Corps air traffic control personnel and air-

craft operators conducted an extensive evaluation of potential airspace conflicts that could be present in the vicinity at each of the sites. This analysis is presented below. Following each assessment is a determination of whether the site was carried forward or removed from further consideration.

5.1.2 Results

The following is a discussion of the results of the site reconnaissance and airspace evaluation. To supplement the discussion, a photographic log containing representative photographs of the candidate sites obtained during the site reconnaissance surveys is provided in Appendix A. The photographic log includes photographs obtained during both the helicopter flyovers and windshield surveys.

The following table summarizes the results of the OLF candidate site reconnaissance efforts and identifies sites to be carried forward to final site evaluation.

Table 5-1 Results of Site Reconnaissance and Airspace Evaluation

Site	Status	Comments
Site 1A	Removed from further consideration	V-189 and V-260 transit the site Wakefield Municipal Airport General airspace/transition constraints Pipsco Scout Reservation Low development and population
Site 1 B	Removed from further consideration	Conflict with proposed subdivision Constraints by congested airspace Beneath victor airspace 4H camp/conference center Low population
Site 3A	Removed from further consideration	V-139, V-130, and V-472 transit the site Northeastern airspace conflicts Incompatible development surrounding site
Site 3B	Retained for final site evaluation	Highly compatible land use Low development, population, and noise sensitivity
Site 5A	Removed from further consideration	Due to their proximity, sites 3B and 5A were combined as site 3B
Site 6A	Removed from further consideration	Proximate to R-5306A. Less than 8 NM from BT-11 High compatible land use Low development, population, and noise sensitivity

Table 5-1 Results of Site Reconnaissance and Airspace Evaluation

Site	Status	Comments
Site 7C ¹	Retained for final site evaluation	Highly compatible land use Low development, population, and noise sensitivity Proximity to Plymouth Airport Proximity to Donald's Air Park
Site 8A	Removed from further consideration	OLF ingress and egress Proximity to Albert Ellis airport Proximate to highly developed population center
Site 9A	Retained for final site evaluation	Moderate to high compatible land use Low development, population, and noise sensitivity
Site 11A	Removed from further consideration	Incompatible development pressure west of Interstate 95
Site 12A	Removed from further consideration	Incompatible development pressure west of Interstate 95 Walterboro/Low Country Regional Airport IR-36 proximate to site
Site 17A	Retained for final site evaluation	Highly compatible land use Low development, population, and noise sensitivity Proximate to Savannah River Test Site
Site 20A	Retained for final site evaluation	Highly compatible land use Low development, population, and noise sensitivity
Site OP-2	Retained for final site evaluation	Proximate to R-5306A. Proximate to Dare County Bombing Range Highly compatible land use Low development, population, and noise sensitivity

¹ Sites 7A and 7B were combined to form Site 7C.

Site 1A, Surry County, Virginia

Overview. Site 1A is located in central Surry County, Virginia. Surry County is located 47 miles west of NAS Oceana. The largest population center in proximity to Site 1A is the Town of Wakefield (with a 2000 population of 2,309 persons). The location of Site 1A in Surry County is such that the adjacent county of Sussex is impacted by the projected noise zones for Site 1A. General land uses throughout Surry County are primarily

agricultural and forested. Land use within the proposed outline of the airfield for Site 1A is dominated by forested land. The center of the airfield layout for Site 1A is traversed by secondary state route (SSR) 647. State Routes 10 and 31 traverse the north and east of the site, respectively. Development is sparse in this part of Surry County, limited mainly to areas on the state routes that surround the site. According to county officials, no known or significant development proposals exist in the vicinity of Site 1A.

Population in Surry County has increased by 11% since 1990; however, the current population density of 25 persons per square mile has not changed significantly. The only portion of the county with population densities that exceed 25 persons per square mile is the northern end of the county that borders the James River, where the population density is 25 to 50 persons per square mile.

Noise-Sensitive Land Uses. In addition to the residential areas identified, the locations of three churches within the noise zones were verified, while two churches previously identified within the noise zones were found to be non-existent. The absence of schools or other noise-sensitive land uses within the site was verified. Therefore, the total number of noise-sensitive land uses within Site 1A was reduced from five to three.

Towers and Airfields. The location of an FAA radio tower site within the 70 to 75 DNL noise zone was verified. The tower site consisted of a cluster of four radio towers approximately 200 to 250 feet in height. No other towers or airfields were identified within the site.

Land Use/Land Cover. The helicopter flyover confirmed that forestland is the dominant land use within the airfield outline and surrounding noise zones (see Appendix A, p. A-1). Scattered agricultural fields comprising mainly row crops were also observed within the site. Windshield surveys along the roads that traverse Site 1A verified the low population density of the area. Residences were widely scattered throughout the site and were primarily located along State Route 10 and within small crossroad communities. The crossroad communities within the site are located in the 60 to 65 and 65 to 70 DNL noise zones and include Spring Grove, Savedge, and Carlsey. No more than 10 to 15 residences were observed in any of these small communities. The site reconnaissance

also verified the presence of various camps associated with the Pipsco Scout Reservation located near the James River in the 65 to 70 DNL noise zone.

Road Access. Direct access to Site 1A is provided off State Route 40 via State Route 647, which extends through the center of the 2,000-acre OLF airfield outline. State Route 647 is a dirt road that appeared to be used primarily for logging activities. Significant improvements to this roadway would be needed (i.e., expansion, grading, and paving) prior to use as a site access route.

Ecological Communities. Based on the helicopter flyover and windshield survey, the airfield site is dominated by forested vegetation, with both pine and hardwood species present. Timber management activities were evident throughout the airfield, with the forested communities ranging in age from recently harvested to 20- to 30-year-old stands. A mix of pine and hardwood species also occurs throughout the remainder of the forested cover and is the dominant ecological community within the noise zones.

Other Significant Features. No other significant features were identified within Site 1A during the reconnaissance surveys that were not previously identified during the Phase 1 and Phase 2 site screening.

Airspace. Two victor airways transit Site 1A (V-189 and V-260), potentially restricting access to the OLF. A total of three airports, two private and one municipal, are located within 10 miles of the proposed site. Wakefield Municipal Airport is located approximately 7 miles southwest, Wells Airport is located approximately 7 miles southeast of the center of Site 1A, and Melville Airport is located approximately 7 miles northeast of Site 1A. Additionally, general airspace/transition conflicts exist with the arrival and departure routes for Richmond International Airport, located to the northwest of Site 1A. No special use airspace (SUA) or other military training routes are in proximity to Site 1A.

Site 1B, Southampton, Virginia

Overview. Site 1B is located in the northwestern portion of Southampton County, Virginia, and is located 50 miles west of NAS Oceana. The largest population center in proximity to Site 1B is the Town of Wakefield (with a 2000 population of 2,309 persons). The noise zones for Site 1B cross into neighboring Sussex County to the west and Surry County to the north. Scattered development in Southampton County occurs mainly along U.S. Route 460, which bisects the center of Site 1B in Southampton County, and U.S. Route 258 along the eastern edge of the site.

Population in Southampton County has increased by 3% since 1990, which has not had a significant effect on the 29-persons-per-square-mile population density of the county. The areas of highest population density are located in the southern portion of the county in the vicinity of the City of Franklin (with a 2000 population of 17,842 persons) and the community of Courtland (with a 2000 population of 1,270 persons). The noise zones of Site 1B would mainly cover an area with fewer than 25 persons per square mile.

Noise-Sensitive Land Uses. In addition to the residential areas identified, the locations of three churches within the noise zones were verified, while five other churches previously identified within the noise zones were found to be non-existent. The absence of schools or other noise-sensitive land uses within the site was confirmed. Therefore, the total number of noise-sensitive land uses within Site 1A was reduced from eight to three.

Towers and Airfields. No towers or airfields were identified within Site 1B.

Land Use/Land Cover. The helicopter flyover verified that forestland is the dominant land use throughout the site, with timber management activity concentrated in the vicinity of the airfield outline. Agricultural fields were also observed to be scattered throughout the site. Windshield surveys along the secondary state roadways that traverse the site verified the low population density of the area. Residences were widely scattered throughout the site along these roadways. The town of Sebrell was the only community identified within the site and consisted of 15 to 20 residences. Some population growth

was observed in the 60 to 65 DNL noise zone northeast of the airfield in the vicinity of the community of Wakefield. A proposed new subdivision containing several hundred lots was noted in this area (see Appendix A, page A-2).

Road Access. No public roads traverse the airfield of Site 1B. State Routes 606, 607, and 628, all paved roadways, each extend along the periphery of the airfield.

Ecological Communities. Based on the helicopter flyover, the airfield is entirely forested, with a mix of pine and hardwood species. Silvicultural practices were evident throughout the area, with forested stands ranging from recently harvested to mature. A mixture of pine and hardwood species was also present within the forested communities that comprise the majority of land within the noise zones.

Other Significant Features. The site reconnaissance resulted in the identification of a large conference/recreation facility not previously identified during initial site screening. The Airfield 4-H Center was identified northeast of the Site 1B airfield, on Airfield Pond within the 65 to 75 DNL noise zones. This 218-acre complex is a multi-purpose conference facility that also supports youth recreation activities.

Airspace. VR-1713 transits northwest to west to southwest of Site 1B; however, because the route width of VR-1713 is 3 miles on either side of the route centerline, Site 1B would be traversed. Additionally, V-189/V-260 transits the center of Site 1B, presenting potential access constraints to and from the OLF site. No towers or airfields were identified within Site 1B; however, Wakefield and Franklin Municipal airports are located 10 and 12 miles, respectively, from Site 1B.

Site 3A, Chowan County, North Carolina

Overview. Site 3A is located in eastern Chowan County, North Carolina, 46 miles southwest of NAS Oceana. Approximately half of the eastern portion of the projected noise zones for Site 3A spill into western Perquimans County. Major roads trav-

ersing the noise zones for Site 3A include State Route 32 to the west and State Route 37 to the north and east.

Chowan County is generally a rural community, which experienced an 8% growth in population between 1990 and 2000. The largest population center proximate to Site 3A is the Town of Edenton (approximately 5 miles south of the candidate area boundary), which had a 2000 population of 5,000 persons. Agricultural and forested lands are the predominant land uses throughout the candidate area, with most of the development in the county concentrated around the Town of Edenton. Other development outside of the Town of Edenton is generally limited to rural single-family residences located along state and federal highways, including U.S. Route 17, which crosses the two counties at the southern edge of Site 3A.

Noise-Sensitive Land Uses. In addition to verifying the locations of seven churches, an additional four churches were identified within the noise zones, two of which occur within the greater than 75 DNL noise zone. The locations of two schools within the 70 to 75 DNL noise zone were confirmed, and an additional day care facility was identified within the greater than 75 DNL noise zone (see Appendix A, page A-4). Therefore, the total number of noise-sensitive land uses within Site 3A was increased from nine to 14; these are in addition to the residential areas identified.

Towers and Airfields. No towers or airfields were identified within Site 3A.

Land Use/Land Cover. Based on the helicopter flyover, the northern two-thirds of the airfield is in agricultural use (see Appendix A, page A-5), with the southern one-third consisting of undeveloped forestland. A mix of agricultural land and forestland was observed to be the dominant land use throughout the remainder of the site. Windshield surveys along the various roadways that traverse the site verified the low population density of the area. Scattered rural residences were observed on many of the roadways. Communities identified within the site include Center Hill, Valhalla, and Belvidere, each of which is a small crossroad community, generally consisting of between 20 and 40 residences.

An overall increase in development was observed in the southwest portion of the site in proximity to State Route 32. New or proposed developments in this area include a residential subdivision, planned community, and child day care center.

Road Access. Secondary State Route 1312 traverses the northern section of the airfield layout and would likely be the main roadway to provide access to the site.

Ecological Communities. The forested portion of the airfield site and surrounding forestland have been utilized for timber management activities. Relatively extensive wetland complexes associated with the Perquimans and Chowan rivers were observed during the helicopter reconnaissance. These watercourses and associated wetland complexes traverse the edges of the site within the 60 to 70 DNL noise zones.

Other Significant Features. No other significant features were identified within Site 3A during the reconnaissance surveys that were not previously identified during the preliminary and secondary site screening.

Airspace. Three Victor airways transit in close proximity to Site 3A: V-139, V-130, and V-472. Additionally, VRs 1713, 1752, and 1753 lie in proximity to the proposed site, with VR-1713 coming as close as 1 mile west of the center of Site 3A. The Northeastern Regional (Edenton) Airport is located 9 miles south of the site, and Lees Airport, a small private airport, is located 4 miles to the northwest.

Site 3B, Perquimans County, North Carolina

Overview. Site 3B is located in northeastern Perquimans County, North Carolina, approximately 37 miles from NAS Oceana. Perquimans County is very sparsely developed, characterized primarily as an agricultural community. The largest community proximate to Site 3B is the Town of Hertford, which is located approximately 15 miles south of Site 3B. The projected noise zones for Site 3B cross into Pasquotank County to the north. State Route 37 traverses the projected noise zones on the southwest.

The 1990 population density around Site 3B is less than 25 persons per square mile, increasing to 25 to 50 persons per square mile to the northeast into Pasquotank County. Between 1990 and 2000, the population of the county increased by 9%, to 11,368 persons.

Noise-Sensitive Land Uses. In addition to the residential areas identified, the locations of six churches previously identified within the noise zones were verified during the site reconnaissance, with an additional church identified within the 70 to 75 DNL noise zone. The absence of schools or other noise-sensitive land uses within the site was confirmed. Therefore, the total number of noise-sensitive land uses within Site 3B was increased from six to seven.

Towers and Airfields. A previously unidentified grass landing strip used for local crop dusting was identified directly southwest of the airfield outline within the greater than 75 DNL noise zone. In addition, a previously unidentified water tower, approximately 100 feet tall, was identified in the same area as the landing strip.

Land Use/Land Cover. The helicopter flyover verified that forestland covers approximately 75% of the airfield outline, with agricultural land the dominant land use throughout the remainder of the site (see Appendix A, pages A-5 and A-6). Small areas of forestland were observed to be interspersed with the agricultural land (in row crops) within the site.

No residences or other types of development were observed within the northern half of the site, which is entirely utilized for agricultural purposes. Scattered rural residences were observed in the southern half of the site, primarily on state highways 1221, 1001, and 1208. Communities identified within the site include Parkville, Smithtown, and Beach Springs, each of which is a small crossroad community generally consisting of between 20 and 30 residences.

Road Access. The airfield outline is traversed by several unimproved agricultural and possibly timber roads, none of which would provide sufficient access to the site. A

new access road would need to be constructed off one of the various secondary state highways that extend through the greater than 75 DNL noise zone.

Ecological Communities. The forested area within the airfield outline consists of mature pine species with dense vegetation in the understory. The majority of the land within the remainder of the site is cultivated for row crops. Based on the helicopter fly-over, the most significant ecological feature within the site is a relatively extensive forested wetland complex that is associated with the Perquimans River, which traverses the southwest section of the site.

Other Significant Features. No other significant features were identified within Site 3B during the reconnaissance surveys that were not previously identified during the preliminary and secondary site screening.

Airspace. The original location of OLF Site 3B conflicted with victor airways surrounding the site. The site location was moved approximately 1 mile to the west to minimize impacts with these conflicting airspaces. A follow-up site visit to review the new location was then conducted, and it was determined the move to the west unnecessarily exposed more populated areas near the Town of Belvidere to high noise zones. The site was modified a final time, moving it to the east to avoid these populated areas and the Victor airways. The following evaluation is based on this modified site location.

The closest controlled airport is the Elizabeth City Coast Guard Air Station/Regional Airport, located approximately 14 miles east of Site 3B. The site is circumscribed by three federal airways (V-139, V-266, and V-310), each of which extends 4 NM on either side of the airway centerline, with a floor of 1,200 feet AGL and a ceiling of 18,000 feet mean sea level (MSL). The airway used most heavily is V-139 (outbound from Craven County Regional Airport), which provides for northerly navigation to Norfolk, Virginia, from New Bern, North Carolina. The project area is crossed by V-266 (outbound from the Elizabeth City Coast Guard Station), which provides northwesterly navigation to Franklin, Virginia. A small private airstrip (Dillard) lies approximately 3 miles south of the center of Site 3B, and the Northeastern Regional Airport in Edenton lies approximately 17 miles to the southwest of Site 3B. Based on a preliminary analysis

of existing airspace obstructions near Site 3B, a number of potential obstructions have been identified, including five towers, with the tallest being 515 feet and located approximately 3.5 miles south of Site 3B. Additionally, electrical transmission lines are present to the south and west of Site 3B.

Site 5A, Pasquotank County, North Carolina

Overview. Site 5A is located in southwestern Pasquotank County, North Carolina. The proposed site lies on the border between Pasquotank and Perquimans counties. The site is approximately 3 miles north of Site 3A. Given its proximity to Site 3A, the area of impact for Site 5A is very similar to that of Site 3A. This location results in a large area of the site's noise zones crossing southwest into Perquimans County.

Site 5A is located 33 miles west of NAS Oceana. A significant portion of the agricultural land that characterizes the proposed site was historically part of the Great Dismal Swamp but had been converted for agricultural uses. Only minor developed areas occur within the southwestern portion of Pasquotank County, mainly within small cross-roads communities. U.S. Route 158 and several smaller county routes traverse the northern one-third of the Site 5A area.

In 2000, Pasquotank County's population was 34,879 persons. The highest population density within the county occurs along the U.S. Route 17 corridor, which traverses the central portion of the county, south of Site 5A. Elizabeth City is the largest community along this corridor and, with a 2000 population of 17,188 persons, contains more than half of the total Pasquotank County population.

Noise-Sensitive Land Uses. The locations of five churches previously identified within the noise zones were verified during the site reconnaissance, with an additional church identified within the greater than 75 DNL noise zone. The absence of schools or other noise-sensitive land uses within the site was confirmed. Therefore, the total number of noise-sensitive land uses within Site 3B was increased from five to six; these uses are in addition to the residential areas identified.

Towers and Airfields. The location of an approximately 200-foot-tall FAA radio tower was verified within the 60 to 65 DNL noise zone northwest of the airfield layout. No other towers or airfields were identified within the site.

Land Use/Land Cover. The helicopter flyover verified that the airfield and most of the land within the surrounding noise zones are in agricultural use (see Appendix A, page A-7). The windshield survey of the site verified the low population density of the area. Rural residences were scattered mainly within the northern portion of the site on state highways 1354 and 343, and on Northside Road. Communities identified within the site include Parkville and Beach Springs, both of which are small crossroad communities generally consisting of between 20 and 30 residences.

Road Access. The airfield is traversed by several unimproved agricultural roads, none of which would provide sufficient access to the site. A new access road would need to be constructed off one of the various secondary state highways that extend through the site.

Ecological Communities. The airfield and most of the land within the surrounding noise zones is cultivated for row crops. Based on the helicopter flyover, the most significant ecological feature within the site is a relatively extensive forested wetland complex that is associated with the Pasquotank River, which traverses the northeast section of the site.

Other Significant Features. No other significant features were identified within Site 5A during the reconnaissance surveys that were not previously identified during the preliminary and secondary site screening.

Airspace. Given the proximity of Site 5A to 3B, the potential airspace conflicts for Site 5A would be very similar to those presented at Site 3B. See the airspace analysis for Site 3B for details.

Site 6A, Carteret County, North Carolina

Overview. Site 6A is located in Carteret County, North Carolina, between the Neuse River and Onslow Bay. Site 6A, commonly referred to as the Open Grounds Farm, lies approximately 18 miles from MCAS Cherry Point. The noise zones for Site 6A are contained completely within Carteret County.

The general area surrounding Site 6A is primarily agricultural, with some scattered forested and wetland areas. Development occurs along U.S. Route 70, the principal transportation corridor along the southern coastline of Carteret County. U.S. Route 70 is located primarily outside of Site 6A. Large wetland complexes on the eastern edge of Site 6A are within Cedar Island NWR. Morehead City and the Town of Beaufort, North Carolina, are the two largest population centers near Site 6A. Both are located outside the Site 6A noise zones, to the southwest of the site.

The 1990 population density in the vicinity of Site 6A is less than 25 persons per square mile, but the 60 DNL noise zone extends to an area of higher population concentration (greater than 100 persons per square mile) around Beaufort, southwest of the site location.

Noise-Sensitive Land Uses. The locations of two churches previously identified within the noise zones were verified during the site reconnaissance, with two additional churches identified within the 60 to 65 DNL noise zone. In addition, scattered residential areas were identified south of the site. The absence of schools or other noise-sensitive land uses within the site was confirmed. Therefore, the total number of noise-sensitive land uses within Site 6A was increased from two to four.

Towers and Airfields. The location of an FAA radio tower was verified within the greater than 75 DNL noise zone north of the airfield layout. No other towers or airfields were identified within the site.

Land Use/Land Cover. Based on the helicopter flyover, the airfield is cultivated for row crops. Agricultural land and undeveloped forestland are the dominant land uses throughout the remainder of the site. No residences were identified within the northern

half of the site during the windshield survey. Rural residences were scattered on secondary state roadways in the southern portion of the site off U.S. Route 70. Communities identified within the site included North River Corner and Bertie, both of which are small crossroad communities consisting of fewer than 30 residences.

Road Access. The airfield is traversed by several unimproved agricultural roads, none of which would provide sufficient access to the site. A new access road would need to be constructed, most likely off U.S. Route 70, to provide direct access to the site.

Ecological Communities. The airfield and most of the land within the greater than 75 DNL noise zone are cultivated for row crops. Significant ecological communities were observed in both the northeast and southwest quadrants of the site: Long Bay and adjacent tidal wetlands occur in the northeast quadrant in the 60 to 70 DNL noise zones, while the North River and associated wetland complexes occur in the southwest quadrant in the 60 to 70 DNL noise zones (see Appendix A, page A-9). In addition, the South River and adjacent wetlands extend through the western portion of the site to near the northwest end of the airfield.

Other Significant Features. No other significant features were identified within Site 6A during the reconnaissance surveys that were not previously identified during the preliminary and secondary site screening.

Airspace. Site 6A is located 18 NM east of MCAS Cherry Point, in R-5306A. This area is used for Navy and Marine Corps training. According to Navy aircraft operators, conducting FCLP operations at Site 6A would potentially diminish the value of the training range. In addition to its location within R-5306A, proposed Site 6A would be extremely close (less than 8 NM) to the Piney Island Target Complex (BT-11). Site 6A's proximity to BT-11 could potentially impinge upon the range's 5-mile safety buffer zone and was considered a significant operational concern. Site 6A would create an unacceptable safety risk for both FCLP and target operations. For this reason, this site was eliminated from further consideration.

Site 7A, Beaufort County, North Carolina

Overview. Site 7A is located in the northern portion of Beaufort County, North Carolina. Site 7A is located approximately 75 miles from NAS Oceana and 46 miles from MCAS Cherry Point. The largest population center in proximity to Site 7A is the City of Washington, North Carolina, which had a 2000 population of 9,583 persons. The location of Site 7A is such that the projected noise zones for the site impact Washington County, which is located to the north. Land use in the vicinity of the site is primarily agricultural, as is the land use within the proposed airfield outline. Some development occurs at the southern edge of Site 7A along the Pungo River and north of the site around the Town of Plymouth, North Carolina. State Route 45/99 crosses the northeastern edge of the site, and State Route 32 is west of the proposed site. The Pocosin Lakes NWR and Pettigrew State Park in Washington and Hyde counties are proximate to Site 7A.

The 1990 population density in the vicinity of Site 7A is less than 25 persons per square mile. Between 1990 and 2000, the population in Beaufort County grew by 6%, increasing from 42,283 to 44,958.

Noise-Sensitive Land Uses. In addition to verifying the locations of two churches, five additional churches were identified within the noise zones (see Appendix A, page A-10). A school previously identified within the 65 to 70 DNL noise zone was found to be non-existent, while a previously unidentified school was found to be located in the 65 to 70 DNL noise zone. Therefore, the total number of noise-sensitive land uses within Site 7A was increased from three to eight. Residential land uses were also confirmed, scattered along the roads that surround the site.

Towers and Airfields. A previously identified FAA radio tower was found to be non-existent during the survey. The locations of two airfields southwest of the airfield layout were verified. Both airfields consist of grass landing strips and are used by local crop dusters.

Land Use/Land Cover. Based on the helicopter flyover, 100% of the land within the airfield is cultivated with row crops. Agricultural land is also the dominant land use

throughout the remainder of the site. Rural residences were scattered along the various primary and secondary state highways that traverse the site, with the largest number of residences occurring on state highways 99, 45, 1127, and 1626. Communities identified within the site include Winona, Wilkinson, and Swindel, each of which is a small cross-road community consisting of fewer than 30 residences.

Road Access. A dirt road extends through the center of Site 7A. Significant improvements to this roadway would be needed (i.e., expansion, grading, and paving) prior to its use as a site access route. Alternatively, a new access road could be constructed off State Route 1626, which is close to the northeast corner of the airfield.

Ecological Communities. The entire airfield outline and most of the land within the surrounding noise zones is cultivated for row crops.

Other Significant Features. No other significant features were identified within Site 7A during the reconnaissance surveys that were not previously identified during the preliminary and secondary site screening.

Airspace. See analysis below for Site 7C.

Site 7C, Washington County, North Carolina

Overview. Following site reconnaissance, the location of Site 7B was shifted south to avoid conflicting with U.S. Route 45/99 and east to avoid developed uses along U.S. 32 (see Section 4.1). Site 7B was then renamed 7C. The following evaluation is based on this modified site location.

Site 7C is located in Washington County, North Carolina, approximately 3 miles north of Site 7A. The overall area of impact for Site 7C is similar to that presented for Site 7A. The projected noise zones for Site 7C span county borders and cross south into Beaufort County. The site is 72 miles southwest of NAS Oceana and 49 miles northwest of MCAS Cherry Point. Regional land uses surrounding Site 7C are primarily agricultural, with more heavily forested land uses to the west and more extensive wetland areas

to the east. U.S. Route 64 and State Route 45/99 bisect the center of the proposed airfield outline, while State Route 32 traverses the eastern portion of the projected noise zones. Pocosin Lakes NWR and Pettigrew State Park lie east of Site 7C. Land uses within the proposed airfield outline are dominated almost entirely by agricultural use. Population densities are low in the proposed project area, with the closest population center being the Town of Plymouth, approximately 3 miles north.

There are no known development proposals in the vicinity of Site 7C. Washington County lost 2% of its population between 1990 and 2000, falling from 13,997 to 13,723.

Noise-Sensitive Land Uses. The locations of the previously identified two churches within the noise zones were verified (see Appendix A, page A-10). No additional churches, schools, or other noise-sensitive land uses were identified within the noise zones. Rural residences were identified along the state and county roads that cross and surround the site.

Towers and Airfields. A single tower within the greater than 75 DNL noise zone previously identified during the preliminary site screening was determined to be non-existent. No other towers or airfields were identified within Site 7C.

Land Use/Land Cover. The helicopter flyover verified that nearly 100% of the land within the airfield and the greater than 75 DNL noise zone is in agricultural use (see Appendix A, page A-11). Much of the remaining land in the noise zones is also utilized for agricultural production, with other land use restricted mainly to undeveloped forestland. The windshield surveys verified the low population density of the area. Scattered rural residences were confined primarily to State Routes 45, 99, 1127, and 32, many of which consisted of farmhouses. Wenona was the only community identified within Site 7C. This small crossroad community is located east of the airfield near the 75 DNL noise zone and consists of approximately 10 to 15 residences.

Road Access. State Route 45 and 99 traverses the northern edge of the airfield and would be the main roadway to provide access to the site. A road would need to be constructed off this highway to access the center of the airfield site.

Ecological Communities. The entire airfield outline and most of the land within the surrounding noise zones is cultivated for row crops. Forested areas along the periphery of the site appeared to be connected with large forested areas that extend well beyond the site.

Other Significant Features. No other significant features were identified within Site 7C during the reconnaissance surveys that were not previously identified during the preliminary site screening.

Airspace. Restricted airspace controlled by the U.S. Air Force, designated as R-5314J (associated with the Dare County Range), is located approximately 10 NM northeast of the center of Site 7C. Three MTRs are close to the site: VR-73, VR-84, and IR-62. Plymouth Airport is the closest controlled airport, located approximately 6 miles north of the site. Site 7C overlaps with Plymouth Airport's Class E airspace. The Warren Airport (Washington, North Carolina) is also located approximately 15 miles north of Site 7C. A small private airstrip (Donald's) is also mapped on the FAA's Charlotte aeronautical sectional chart at a location within 2 miles of the proposed OLF site. Another private airstrip (Keech) is located 7 miles south of Site 7C. The Navy identified a 320-foot tower located approximately 5 miles south of Site 7C.

Site 8A, Duplin County, North Carolina

Overview. Site 8A is located in southeastern Duplin County, North Carolina, approximately 41 miles from MCAS Cherry Point. The outer projected noise zones for Site 8A impact the surrounding counties of Onslow and Pender. The largest population center in proximity to Site 8A is the City of Jacksonville, North Carolina.

Land uses in the vicinity of Site 8A are primarily forested, agricultural, and primarily forested wetland. Large wetland areas, associated with the Cape Fear River, are

located west of the site. The New River, located east of the site, is surrounded by Marine Corps Base (MCB) Camp Lejeune and the City of Jacksonville.

Population in Duplin County grew by 23% between 1990 and 2000, from 39,995 to 49,063. In general, population growth was the greatest in the northeast portion of the county. Future development in Duplin County is expected to occur primarily in the northeast, as a result of agribusiness employment, and in the extreme south due to the migration of employees from New Hanover County.

Noise-Sensitive Land Uses. In addition to verifying the locations of 12 churches, six additional churches were identified within the noise zones. The location of a previously identified school in the 70 to 75 DNL noise zone was confirmed. In addition, a previously unidentified community center was identified within the 65 to 70 DNL noise zone. Therefore, the total number of noise-sensitive land uses within Site 8A was increased from 13 to 20. Rural residences were also confirmed to be scattered along the roads in and around the site.

Towers and Airfields. The locations of two previously identified towers were verified. An airport located northeast of the airfield in the 65 to 70 DNL noise zone was identified as a grass landing strip.

Land Use/Land Cover. The helicopter flyover verified that forestland is the dominant land use throughout the site, with timber management activities apparent within the airfield and the greater than 75 DNL noise zone. Scattered agricultural fields also occur throughout the site. Rural residences were scattered along the primary and secondary state roadways that traverse the site (see Appendix A, page A-12). Roadways with the highest relative density of residences included state highways 111, 50, and 1826. Communities identified within the site included Fountaintown and Cedar Fork, both of which are small crossroad communities consisting of fewer than 30 residences.

Road Access. Ludie Brown Road traverses the center of the airfield and would provide direct access to the site.

Ecological Communities. Based on the helicopter flyover and windshield survey, the airfield is dominated by forested vegetation, with both pine and hardwood species present. Timber management activities were evident within the airfield, with the forested communities ranging in age from recently harvested to mature stands. A mix of pine and hardwood species also occur throughout the remainder of the forested cover that is the dominant ecological community within the noise zones.

Other Significant Features. No other significant features were identified within Site 8A during the reconnaissance surveys that were not previously identified during the preliminary and secondary site screening.

Airspace. Site 8A lies within close proximity to Albert Ellis Airfield (Jacksonville, North Carolina), with the proposed OLF footprint falling within that airfield's Class E airspace. This location may impact approaches to Albert Ellis Airfield. The site also is located underneath V-70 and impacts IR-718, VR-84, and V-56. The proposed location of Site 8A also places the OLF within the Wilmington Airport approach control area of responsibility. Wilmington is a small FAA facility that may be impacted by increased OLF traffic.

Site 9A, Craven County, North Carolina

Overview. Site 9A is located in Craven County, North Carolina, near its border with Beaufort County. The site is approximately 25 miles northeast of MCAS Cherry Point. The noise zones for Site 9A extend into central Beaufort County, Chocowinity, and the Pamlico River and Blounts Bay regions. Land uses in the vicinity of Site 9A are primarily forested, with areas of wetland complexes and cleared timberland. State and federal highways that cross the Site 9A area include U.S. Route 17 and State Route 33.

Population density in the vicinity of Site 9A is low; however, in Craven County, the projected noise zones for the site would extend to an area of high population density around the Town of Vanceboro, west of the site. Additionally, the noise zones that cross into Beaufort County would extend to new and planned residential and recreational de-

velopments in the vicinity of the Pamlico River, northeast of Site 9A. This area is currently one of the most rapidly growing regions in Beaufort County.

Noise-Sensitive Land Uses. The location of a single church previously identified within the site was verified, with an additional two churches identified within the 60 to 65 and 65 to 70 DNL noise zones. The location of a school previously identified within the 60 to 65 DNL noise zone was also verified. Therefore, the total number of noise-sensitive land uses within Site 9A was increased from two to four. Existing residences occurring in and around the site were also confirmed.

Towers and Airfields. The location of an FAA tower west of the airfield on the edge of the 60 DNL noise zone was verified. The tower was identified as a small radio tower, less than 100 feet in height.

Land Use/Land Cover. The helicopter flyover verified that forestland is the dominant land use throughout the site, with timber management activities concentrated within the airfield layout and greater than 75 DNL noise zone. Scattered agricultural fields also occur throughout the site. Rural residences were confined mainly to the northeast and southwest quadrants of the site and were widely scattered along state roadways. The town of Rover was the only community identified within the site and consisted only of eight to 10 residences. A planned development area was identified in the 60 to 65 DNL noise zone northeast of the airfield layout on Blounts Creek (see Appendix A, page A-13). An overall increase in residential development was observed in this portion of the site and its surrounding off-site areas.

Road Access. No public roads traverse the airfield layout of Site 9A. Various secondary state roadways occur within the site off of U.S. Route 17 and State Route 33 that would need to be extended to provide direct site access.

Ecological Communities. Based on the helicopter flyover, the airfield outline is entirely forested, with a mix of pine and hardwood species. Silvicultural practices were evident throughout the area, with forested stands ranging from recently harvested to ma-

ture. A mix of pine and hardwood species were also present within the forested communities that comprise the majority of land within the noise zones. It was evident from the windshield surveys that the area historically had been wetland and still maintains wetland characteristics. Wetland conditions were evident in both the managed timber stands and clear-cut openings. However, these wetlands have been significantly impacted by silvicultural activities.

Other Significant Features. No other significant features were identified within Site 9A during the reconnaissance surveys that were not previously identified during the preliminary and secondary site screening.

Airspace. Site 9A is approximately 18 NM northwest of the Craven County Regional Airport (New Bern, North Carolina). This municipal airport serves commercial airlines (17 operations per day) and general aviation users (146 operations per day) for a total of 163 daily aircraft operations. Seventy-three aircraft are based at the airport. V-139 provides an outbound northerly air navigation route to Norfolk, Virginia, from New Bern. MTRs in the vicinity of Site 9A include IR-12, which transits south of the site, and VR-084/1074, which crosses close to the center of Site 9A. No towers or other tall obstacles were identified by the Navy in the vicinity of Site 9A.

Site 11A, Jasper County, South Carolina

Overview. Site 11A is located in the northern portion of Jasper County, South Carolina. The site is 22 miles from MCAS Beaufort. The projected noise zones for the site impact the adjacent Hampton County to the west. Although the overall region has a very low population, growing communities near Site 11A include Ridgeland and Hardeeville along U.S. Route 278 where it parallels U. S. Route 95, west of the site. Developed areas occur west of the site along U. S. Route 95. U.S. Route 278 is located to the east, and U.S. Routes 601 and 321 on the west cross the outermost noise zones of Site 11A from north to south.

Land use within the proposed footprint of the airfield is dominated by forested land, which encompasses over 80% of the area. Remaining land is evenly distributed among wetlands, barren, and planted and cultivated uses.

Between 1990 and 2000, the population of Jasper County grew from 15,487 to 20,678. However, county officials state that most of the growth in the county has occurred in south Jasper County, associated with the growth and migration from Hilton Head and other portions of Beaufort County, South Carolina, to the east and Savannah, Georgia, to the south.

Noise-Sensitive Land Uses. The locations of scattered residential areas and eight churches within the noise zones were verified. One church previously identified within the noise zones was found to be non-existent, while three previously unidentified churches were identified within the site. Seven previously identified schools within the noise zones were found to be either non-existent, abandoned, or converted to community recreational facilities. Based on the windshield survey, the number of noise-sensitive land uses within Site 11A was decreased from 16 to 11.

Towers and Airfields. A cluster of four radio towers was identified west of Site 11A within the 65 to 70 DNL noise zone, and a single weather tower was identified east of the airfield site within the 70 to 75 DNL noise zone. No airfields were identified within Site 11A.

Land Use/Land Cover. The helicopter flyover verified that forestland is the dominant land use throughout Site 11A. Site reconnaissance of the forested areas indicated that much of the forestland is managed for timber production. Widely scattered agricultural lands were also observed within the site. Residences were scattered throughout the site along various primary and secondary roadways. The towns of Pineland and Grays are located southwest and northeast, respectively, of the airfield layout within the 60 to 65 DNL and 65 to 70 DNL noise zones. Both are very small communities consisting of fewer than 20 residences.

Road Access. State Route 462 passes within 0.1 mile of the southeast corner of the Site 11A airfield layout. An access road would need to be constructed off this roadway to provide site access.

Ecological Communities. Based on the helicopter flyover and windshield survey, a significant portion of Site 11A is dominated by forested vegetation, with much of the forestland managed as pine plantation. The pine stands ranged in age from recently harvested to mature stands. A mix of pine and hardwood species was present in the far northern section of the site, where the habitat transitioned from pine plantation to a bottomland forest community. Cypress Creek and the Coosawhatchie River and their adjacent forested wetlands traverse the northern portion of the site.

Other Significant Features. While previous data indicated four towers, field reconnaissance identified the presence of a satellite Christian radio broadcasting antennae array. The array consisted of four to six large towers with numerous smaller towers completing the array.

Airspace. There are no Victor airways transiting or in the vicinity of Site 11A. Additionally, there is no SUA in proximity to the site. Two MTRs lie north of the proposed site, VR-97 and VR-1059, and could potentially impact OLF siting. A cluster of four radio towers was identified west of the airfield within the 65 to 70 DNL noise zone, and a single weather tower was identified east of the airfield.

Site 12A, Colleton County, South Carolina

Overview. Site 12A is located in central Colleton County, South Carolina, near U. S. Route 95. The site is located 34 miles northwest of MCAS Beaufort. The projected noise zones for the site cross north into Orangeburg County. Regional land use surrounding the site is primarily forested. U. S. Route 95 lies to the east of the site, and U.S. Route 21 runs in a north-south direction on the western edge of the site. Some limited development occurs along U.S. Route 21. The largest population center near Site 12A is located to the southeast in Walterboro, South Carolina.

Land use within the proposed footprint of the Site 12A airfield is dominated by forested and barren land, which collectively comprise 90% of the site.

Colleton County's population grew by 11% between 1990 and 2000. This growth has primarily occurred east of 95, primarily in the Town of Walterboro and to a lesser extent in Cottageville.

Noise-Sensitive Land Uses. In addition to confirming residential areas, the locations of nine churches within the noise zones were verified. Four schools previously identified within the noise zones were found to be either non-existent or abandoned (see Appendix A, page A-16). Therefore, the total number of noise-sensitive land uses within Site 12A was decreased from 13 to nine.

Towers and Airfields. Four cellular communication towers were identified along the eastern portion of the site in proximity to U.S. Route 95. No airfields were identified within the site.

Land Use/Land Cover. The helicopter flyover verified that forestland is the dominant land use throughout the site, with timber management activities concentrated within the airfield layout and greater than 75 DNL noise zone. Scattered agricultural fields also occur throughout the site. Residences were widely scattered throughout the site along various primary and secondary state roadways. The town of Springtown, located north of the airfield layout within the 70 to 75 DNL noise zone, was the only town identified within the site and consisted of approximately 20 residences and minimal commercial development.

Road Access. The Site 12A airfield is traversed by several unimproved logging roads, none of which would provide sufficient access to the site. A new access road would need to be constructed off one of the various secondary state roadways that traverse the site.

Ecological Communities. Based on the helicopter flyover and windshield survey, the Site 12A airfield is dominated by forested vegetation, with both pine and hard-

wood species present. Timber management activities were evident within the airfield, with the forested communities ranging in age from recently harvested to mature stands. A mix of pine and hardwood species also occurs throughout the remainder of the forested cover that is the dominant ecological community within the noise zones. The Edisto River and its associated wetland complex traverses the noise zones in the northern portion of the site.

Other Significant Features. No other significant features were identified within Site 12A during the reconnaissance survey that were not previously identified during the preliminary and secondary site screening.

Airspace. The airspace in proximity to Site 12A is very congested, with two federal airways (V-3 and V-417) transiting east and south of Site 12A, respectively, and three MTRs (IR-36, VR-88, and VR-97) near the site as well. Four cellular communication towers were identified along the eastern portion of the site in proximity to U.S. Route 95.

Site 17A, Burke County, Georgia

Overview. Site 17A is located in the southeastern portion of Burke County, Georgia. Because of its location close to the state border, the projected noise zones for Site 17A cross north into Barnwell and Allendale Counties in South Carolina and impact Screven County, South Carolina, to the east. Land use in the vicinity of Site 17A is primarily agricultural. Forested areas are located along the Savannah River, which extends along the northeastern edge of Site 17A. Brier Creek extends along the southwest. A large forested area to the north of the Site 17A area is the U.S. Department of Energy's (DOE) Savannah River Test Site. With the exception of State Route 125, which traverses the northern portion of Site 17A, there are only several smaller county and local routes throughout the site's noise zones.

Land use within the proposed outline of the airfield is dominated by agricultural and forested land, which collectively cover approximately 85% of the area. The Yuchi

Wildlife Management Area (WMA) is located within the 75 DNL noise zone along the Savannah River.

The communities of Hattieville, Girard, and Murray Hill, which have relatively low populations, are located within the Site 17A noise zones. The population in the portions of Burke, Allendale, and Screven counties near Site 17A have not significantly changed between 1990 and 2000. While Allendale County lost population, Burke and Screven counties' modest population increases occurred primarily in the population centers, including Waynesboro in Burke County and Sylvania in Screven County.

Noise-Sensitive Land Uses. The locations of 12 churches within the Site 17A noise zones were verified. The absence of schools or other noise-sensitive land uses within the site was confirmed. Therefore, the total number of noise-sensitive land uses within Site 17A remained at 12. Residential locations were also confirmed.

Towers and Airfields. The location of a cellular communication tower northwest of the airfield in the 60 to 65 DNL noise zone was verified. No other towers or airfields were identified within the site.

Land Use/Land Cover. The helicopter flyover verified that the site is composed of a mixture of forestland and agricultural land (see Appendix A, page A-18). Timber management activities were observed in various locations throughout the site. Residences were widely scattered throughout the site along various primary and secondary state roadways. Communities identified within the site included Murray Hill, Dunbar Store, and Hills Store, each of which is a small crossroad community, generally consisting of fewer than 15 residences. The DOE Savannah River Test Site was found to be located just north of the proposed noise zones (see Appendix A, page A-17).

Road Access. Direct access is provided to Site 17A via Royal Road, which traverses the center of the site.

Ecological Communities. The forested communities within the site are composed of both pine and hardwood species. Timber management activities were evident in

some locations, with the forested communities ranging in age from recently harvested to mature stands. The site is bisected in the northern and southern end by two watercourses and their associated wetland complexes. The Savannah River extends through the greater than 60 DNL noise zones north of the airfield, while Brier Creek extends through the greater than 65 DNL noise zones south of the airfield.

Other Significant Features. No other significant features were identified within Site 17A during the reconnaissance surveys that were not previously identified during the preliminary and secondary site screening.

Airspace. Two MTRs (VR-97 and VR-1059) are located south of Site 17A. One Victor airway, V-185, is located west of Site 17A, and the Bulldog B MOA is located 13 miles southwest. Site 17A is also adjacent to the DOE Savannah River Test Site, a designated national security area; airspace associated with this power facility is considered restricted. The Burke County Airport is located approximately 12 NM west of Site 17A in Waynesboro, Georgia. Allendale and Barnwell, the two other public airfields, are more than 15 miles south and east of Site 17A. Two small private airports, Wade and Millhaven, are located south of the proposed site.

Site 20A, Bertie County, North Carolina

Overview. Site 20A is located in southeastern Bertie County near the banks of the Chowan River and Albemarle Sound. Site 20A is approximately 60 miles from NAS Oceana and 67 miles from MCAS Cherry Point. The land use in the area where the proposed site is located has extensive forested lands with scattered agricultural and developed areas. U.S. Route 17 traverses the southern end of the proposed noise zones, and State Route 45 traverses the eastern edge of the candidate area.

Between 1990 and 2000, the county as a whole lost 3% of its population. Population densities around Site 20A are generally within a range of 25 to 50 persons per square mile. The Town of Windsor (with a 2000 population of 2,283 persons) is the most populated town in the region. Other populated areas include Powellsville and Colerain along State Route 42.

Noise-Sensitive Land Uses. In addition to verifying identified residential areas and the locations of three churches, one additional church was identified within the noise zones. The absence of schools within the noise zones was verified. Therefore, the total number of noise-sensitive land uses within Site 20A was increased from three to four.

Towers and Airfields. The location of an approximately 175-foot-tall FAA radio tower northeast of the airfield layout was verified. The location of an airfield west of the airfield in the greater than 75 DNL noise zone was verified. The airfield consisted of a grass landing strip and is used by local crop dusters.

Land Use/Land Cover. Based on the windshield survey and a review of available aerial photography, nearly the entire airfield consists of managed forestland (see Appendix A, page A-19). The northeast quadrant of the site is a mixture of agricultural land and forestland, with agricultural land the dominant land use. Undeveloped forestland is the dominant land use in the southeastern quadrant of the site. Residences were scattered throughout the site on various primary and secondary state roadways, with the highest relative concentration of rural residences located off U.S. Route 17 in the greater than 75 DNL noise zone. The town of Midway, located east of the airfield within the 70 to 75 DNL noise zone, was the only town identified within the site and consisted of approximately 10 residences.

Road Access. Direct access is provided to Site 20A via Taylor Store Road (State Road 1363), which traverses the center of the site.

Ecological Communities. The airfield is composed predominantly of young planted pine. A mixture of pine and hardwood species of varying ages occur throughout the remainder of the site. The extreme northeast portion of the site in the greater than 60 DNL noise zone is traversed by the Chowan River, while the Cashie River and its associated wetland complex traverses the extreme southwest portion of the site.

Other Significant Features. No other significant features were identified within Site 20A during the reconnaissance surveys that were not previously identified during the preliminary and secondary site screening.

Airspace. No SUA was identified in proximity to Site 20A. Additionally, several MTRs (VR-073, VR-085, VR-1713, VR-1753, and VR-1758) are close to the site. The closest public airports to Site 20A are the Northeastern Regional (Edenton) and Plymouth airports, which are located approximately 13 miles east and 15 miles south of Site 20A, respectively. Site 20A is close to several Victor airways (V-70, V-139, V-310, and V-72). V-139 crosses east of the site. The Navy conducted a preliminary analysis of existing airspace obstructions near Site 20A. Four towers of varying height are located within 8 miles of the center of Site 20A.

Site OP-2, Hyde County, North Carolina

Overview. Site OP-2 is located north of Lake Mattamuskeet, in northeastern Hyde County, North Carolina, approximately 75 miles from NAS Oceana and 60 miles from MCAS Cherry Point. The proposed site is located at the existing Hyde County Airport, which has one 4,800-foot runway and is reportedly used only by small private airplanes. The Hyde County Airport does not have any full-time operators. The noise zones for Site OP-2 extend north into Dare County, North Carolina.

Agriculture, forested lands, and wetlands are the predominant land uses/land cover types throughout the majority of Hyde County. Most of the area surrounding the site is agricultural and forested land. Wetlands are located all along the coast and around Lake Mattamuskeet, located in the center of Hyde County. U.S. Route 264 traverses the eastern end of the site. State Route 1311 is the other main transportation corridor in the area, passing through the southwest corner of the proposed noise zones.

Populated areas that occur within the Site OP-2 area generally include rural single-family residences located along these transportation corridors. The Town of Engelhard is located in the south of the proposed site, along the coast of Pamlico Sound, approximately 3 miles northeast of Site OP-2. Since 1990, the population of the county has

increased by 8 %, from 5,411 to 5,826. However, the county's population remains the lowest in the State of North Carolina.

Noise-Sensitive Land Uses. In addition to verifying residential locations and the locations of two churches, an additional six churches were identified within the noise zones. A school previously identified within the 65 to 70 DNL noise zone was found to be non-existent. Therefore, the total number of noise-sensitive land uses within Site OP-2 was increased from three to eight.

Towers and Airfields. The locations of four FAA radio towers within the noise zones were verified. One of the towers was identified near the southeast edge of the airfield outline and was estimated to be 350 to 400 feet tall. The other three towers are located southeast of the airfield in the 60 to 65 DNL noise zone and ranged from 150 to 400 feet in height. An airport previously identified within the 65 to 70 DNL noise zone was found to be non-existent.

Land Use/Land Cover. Based on the helicopter flyover, nearly the entire airfield outline is cultivated for row crops. The only portion of the airfield outline not in agricultural use is the area associated with the facilities for the Hyde County Airport. Agricultural land was also observed to be the dominant land use within the noise zones southwest of the airfield. Forestland was observed to be the dominant land use in the northeast section of the site, with the open waters of Pamlico Sound and Long Shoal River covering the eastern section of the site.

A relatively concentrated area of residences was identified within the community of Englehard during the windshield surveys. This community is located on the edge of the 65 and 70 DNL noise zone southeast of the airfield on U.S. Route 264. Limited commercial development was also observed within the community. No residences were identified within the noise zones northeast of the airfield outline.

Road Access. U.S. Route 264 parallels the eastern edge of the airfield. A road would need to be constructed off this highway to access the center of the airfield site.

Ecological Communities. The entire airfield is cultivated with row crops. A significant wetland complex occurs in the northeastern portion of the site and is part of the Alligator River National Wildlife Refuge. An ecologically significant tidal marsh system associated with Pamlico Sound and Long Shoal River occurs within the eastern portion of the site.

Other Significant Features. No other significant features were identified within Site OP-2 during the reconnaissance surveys that were not previously identified during the preliminary site screening.

Relocated Site OP-2

An alternative location for Site OP-2 was evaluated by windshield survey. The original location was shifted approximately 3 miles to the west in an effort to avoid tidal storm surge and significant noise exposure within the community of Engelhard and at several noise-sensitive land uses. Based on the windshield survey, the overall land use within the site would be similar to that of the original site location. However, significantly fewer residences would be located within the noise zones. Shifting the site to the west would place the 60 to 65 and 65 to 70 DNL noise zones south of the site over the Mattamuskeet National Wildlife Refuge.

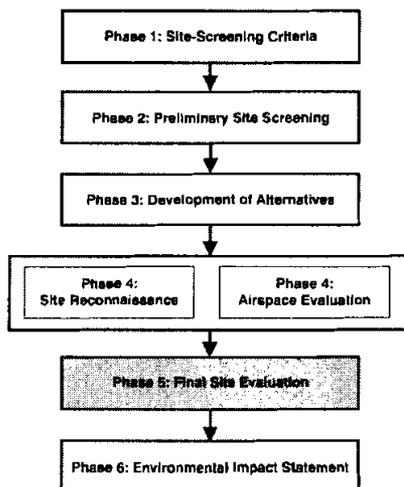
Airspace. Following site reconnaissance, the location of Site OP-2 was shifted approximately 4 miles west, away from the coast where flooding hazards exist and to avoid exposing populated areas near the Town of Engelhard to the 60 DNL noise zone. The following evaluation is based on this modified site location.

OP-2 is surrounded by restricted airspace associated with the Dare County Range, BT-9, BT-11, and the Stumpy Point Range. No MTRs or federal airways cross the site. The closest existing airfield to Site OP-2 is the publicly owned but unattended Hyde County Airport in Engelhard. This airport is located 4 miles southeast of Site OP-2 and serves primarily single-engine aircraft and helicopters. No aircraft are based at the Hyde County Airport. Several towers are located southeast of Site OP-2 in the vicinity of the Town of Engelhard, the tallest being 1,030 feet and located approximately 6 miles from the site.

6

Phase 5: Final Site Evaluation

The final site evaluation phase of the study is illustrated below in the context of the entire OLF Siting Study process.



Following field review of potential OLF candidate sites and the detailed airspace evaluation, each remaining site was then evaluated against secondary environmental and operational criteria developed during the site-screening criteria phase (see Section 1). Information to evaluate the sites in the secondary screening phase was derived primarily from meetings with local planning and zoning agencies, review of existing land use development plans and local ordinances, and site reconnaissance information.

6.1 Methodology

The final site evaluation applied secondary environmental and operational screening criteria to remaining OLF development sites. The purpose of this final screening is to eliminate unreasonable alternatives and identify the final OLF candidate sites to be car-

ried forward and evaluated in the *EIS for Introduction of the F/A-18 E/F Aircraft on the East Coast of the United States*.

As mentioned previously, the initial OLF site screening was conducted using the greater than 60 DNL noise zones, encompassing 53,000 acres. The 53,000-acre noise zone area was developed based on preliminary noise information that existed for the Super Hornet during the early phases of the project. These noise zones represented a conservative noise impact area estimate and ensured that an adequate area of noise impact for the new OLF was analyzed.

During the secondary screening phase, discussed below, refined noise data for the Super Hornet based on actual flight operations became available. These data showed the greater than 60 DNL noise zone to encompass 38,000 acres. Additionally, during the secondary screening analysis, sites were reconfigured to reduce community impacts. The proposed airfield location and 38,000-acre noise zones were adjusted to avoid population areas while remaining within the 53,000-acre area assessed during the initial OLF site screening.

6.2 Results

An evaluation of each candidate OLF site for secondary screening criteria is discussed below. For criteria requiring a site-specific analysis, this information is provided in the attached Table 6-1.

6.2.1 Secondary Screening Criteria: Operational

Site Supports an 8,000-foot Runway and Clear Zones Oriented toward Prevailing Winds

Each of the remaining OLF candidate sites would support an 8,000-foot runway and clear zones oriented toward prevailing winds. The orientation of the OLF runway is assumed to be 5/23 L/R. This is the orientation of the primary runway at NAS Oceana, NALF Fentress, and MCAS Beaufort. (MCAS Cherry Point uses runway 14/32 L/R as frequently as 5/23 L/R.) Wind rose data were collected from six on-shore meteorological stations, which further confirmed the use of a 5/23 orientation for OLF candidate site planning purposes (see Table 6-2).

Table 6-1 OLF Secondary Screening Results

Site 3A Perquimans County, NC	Site 20A Bertie County, NC	Site 7C Washington County, NC	Site OP-2 Hyde County, NC	Site 9A Craven County, NC	Site 17A Burke County, GA
Soil Suitability					
Soils at this site represent a mix of two major soils types that are suited differently for construction. The majority of the site soils are characterized as aggregate rock that may be well suited for construction if covered with fill material and leveled for runway construction. However, another larger portion of the site has soil characterized as a sandy loam that is very poorly drained with a seasonal high water table that may be subject to frequent ponding. These mixed soils may impact runway design, construction, and operation.	Soils at this site would not be well suited for construction since soil types present exhibit slow permeability, seasonal wetness and have a high shrink-swell potential. This may impact runway design, construction, and operation. Facilities would need to be designed to resist cracking caused by the shrinking and swelling of the subsoil as a result of changes in moisture. Mucky and frequently flooded soils are also associated with the site due to the high water table that is at or near the surface. These factors present a disadvantage for construction of the runway area since high levels of runway maintenance and flood protection may be an ongoing activity.	Suitability of soils at this site for construction may be moderate since the site contains soils consisting of clayey, loamy, and sandy sediments. These soils are poorly drained to moderately drained and have slow to moderate runoff with a water table near the surface. The seasonal high water table may encourage standing water and mucky soils at or near the surface and create ponded areas. However, areas where standing water occurs or mucky soils are present may be filled in or covered over with material to promote increased drainage and stability and decrease compaction potential during construction of the OLF runway area. No wetlands are present at this location.	Soils at this site are mixed consisting of some that are poorly and moderately suited for construction. The majority of the soil types present include Urban land complexes that are nearly level and well drained that may be suitable for construction. However, mixed in with the Urban land complexes are soil types that are not suited for construction based on their seasonal wetness, seepage, and flooding in low lying areas. These mixed soils may impact runway design, construction, and operation.	Soils at this site would not be well suited for construction because they are very wet and exhibit slow permeability. This may impact runway design construction, and operation since mucky wet areas are characteristic of the soil types present and compaction, subsidence and deep ruts often occur. In addition, standing water or ponded areas are likely to occur and would need to be filled. Stabilization practices may be an ongoing maintenance measure for parts of the runway constructed in wet areas.	The majority of soils at this site are suited for construction because they are very well drained with moderate to high permeability that does not allow for the accumulation of standing water or a seasonal high water table since internal drainage is rapid. Therefore, compaction potential of these soils is low and minimal fill material would be needed to stabilize the area. However, NWI mapped wetland areas are present in the peripheral areas of the OLF runway construction area and would be filled in during runway construction to stabilize the area.

6-3

Table 6-1 OLF Secondary Screening Results

Site 3A Perquimans County, NC	Site 20A Bertie County, NC	Site 7C Washington County, NC	Site OP-2 Hyde County, NC	Site 9A Craven County, NC	Site 17A Burke County, GA
Terrestrial Environment					
<p>Coordination with USFWS indicated that no federally listed threatened or endangered species are known to occur at Site 3.</p> <p>OLF Site 3 is located approximately 9 miles south of the Great Dismal Swamp NWR. According to USFWS, over 200 species of birds have been observed and 96 species nest at the Great Dismal Swamp NWR. The greatest diversity of bird species occurs during the spring migration, but winter also brings flocks of blackbirds and robins, and thousands of ducks, geese, and swans are attracted to Lake Drummond, located within the Great Dismal Swamp NWR.</p>	<p>Coordination with the USFWS and completion of an NCNHP database search identified three federally protected species as potentially occurring in the general vicinity of Site 20, including the red-cockaded woodpecker (<i>Picoides borealis</i>), bald eagle (<i>Haliaeetus leucocephalus</i>), and shortnose sturgeon (<i>Acipenser brevirostrum</i>).</p> <p>OLF Site 20 is located approximately 9 miles to the north and northeast of the Roanoke River NWR and approximately 25 miles west and northwest of Pocosin Lakes NWR. Roanoke River NWR is a major flight corridor for colonial nesting birds and passerines, and Pocosin Lakes NWR is an important location for migratory waterfowl. USFWS indicates that the Conine Island Tract of the Roanoke River NWR contains the largest inland rookery in North Carolina. This nationally significant rookery is active from March through July and contains over 2,500 nesting blue herons, great egrets, anhingas, and other herons. Smaller rookeries are present in the floodplain. Large numbers of wood ducks have been observed just north of the Conine Tract.</p>	<p>Based on coordination with the USFWS and the NCNHP, no federally listed threatened and endangered species have been identified as occurring within the immediate area of the airfield site. The predominance of agricultural usage within and adjacent to Site 7 limits its function as wildlife habitat.</p> <p>Because of its location in the vicinity of the Pungo Unit (a part of the Pocosin Lakes NWR), an inviolate waterfowl sanctuary, and the 600-acre B Canal Tract of Pocosin Lakes NWR (0.84 miles east of Site 7), various wading birds and waterfowl would also use the agricultural fields for foraging. The Pungo Unit attracts more than 100,000 birds during the winter, with peak numbers of tundra swans (20,000) and snow geese (44,000) reported in 2001-2002.</p> <p>Additionally, the reintroduced red wolf (<i>Canis rufus</i>) could occur in the project area.</p> <p>Site 7C is located on productive land for the wild red wolf population (USFWS 2002). A five-county area including Washington, Beaufort, Hyde, Dare, and Tyrrell counties contains the only wild population of red wolves and comprises the Red Wolf Recovery Program.</p>	<p>Based on coordination with the USFWS and completion of a NCNHP database search, three federally protected species could potentially occur in the vicinity of Site D: the red-cockaded woodpecker (<i>Picoides borealis</i>), bald eagle (<i>Haliaeetus leucocephalus</i>), and American alligator (<i>Alligator mississippiensis</i>).</p> <p>OLF Site OP-2 is also located directly south of the Alligator River NWR and approximately 11 miles east and 3 miles south and southwest of the Pocosin Lakes NWR. The Mattamuskeet NWR contains North Carolina's largest freshwater lake, and this area, with surrounding impoundments, attracts an estimated 150,000 waterfowl each winter.</p> <p>OP-2 is located on productive land for the wild red wolf population (USFWS 2002). A five-county area including Washington, Beaufort, Hyde, Dare, and Tyrrell counties contains the only wild population of red wolves and comprises the Red Wolf Recovery Program.</p>	<p>Based on coordination with the USFWS and completion of a NCNHP database search, two federally protected species potentially occur in the vicinity of Site 9: the red-cockaded woodpecker (<i>Picoides borealis</i>) and the bald eagle (<i>Haliaeetus leucocephalus</i>).</p>	<p>Based on coordination with the USFWS, Georgia Department of Natural Resources (GADNR), and South Carolina Department of Natural Resources, five federally protected species could potentially occur in the vicinity of the project area: the red-cockaded woodpecker, bald eagle, wood stork (<i>Mycteria americana</i>), eastern indigo snake (<i>Drymarchon corais couperi</i>), and shortnose sturgeon.</p> <p>There are no NWRs or other sensitive or unique habitats in the vicinity of Site 9.</p>

Table 6-1 OLF Secondary Screening Results

Site 3A Perquimans County, NC	Site 20A Bertie County, NC	Site 7C Washington County, NC	Site OP-2 Hyde County, NC	Site 9A Craven County, NC	Site 17A Burke County, GA
Wetlands					
<p>Site 3 contains only three wetland areas that cumulatively cover approximately 47 acres of the site. Two of the wetlands are mapped in the southwest portion of the site, with the third located in the northern section. Each wetland is classified as a broad-leaved deciduous forest wetland. The wetlands mapped in the southwest portion of the site are surrounded by agricultural land, while the wetland in the northern end is part of a forested area likely used for silvicultural purposes. Hydric soils predominate throughout the site. However, given its ongoing agricultural usage, the majority of the site would be considered prior converted farmland.</p>	<p>Site 20 contains 12 wetlands that cumulatively total 93 acres. The largest wetlands mapped on the site appear to be associated with on-site tributary systems. Each of these wetlands is mapped either as broad-leaf deciduous forest or scrub-shrub wetlands. Typical species in these wetlands include loblolly pine, sweetgum, red maple, and black gum, with understory including American holly, wax myrtle, sweetbay, and greenbriers. Given the presence of hydric soils throughout the site, additional wetland areas not included on the NWI maps may be present.</p>	<p>No mapped wetlands are present within the proposed airfield area of Site 7. While historically the area was part of the Great Dismal Swamp, drainage activities have converted this land to prior converted farmland.</p>	<p>Site OP-2 contains a single wetland complex that covers approximately 238 acres of the northwest section of the site. The wetland is classified mainly as a needle-leaved evergreen, forested wetland, with a small area mapped as needle-leaved evergreen scrub-shrub wetland. Typical species within this wetland would include cypress, red maple, sweetgum, and blackgum. Typical understory species would include fetterbush, lyonia, blueberries, wax myrtle, greenbriers, and switch-cane. This wetland extends north and west beyond the site and is part of an extensive wetland complex that comprises the Alligator River NWR. Given the presence of hydric soils throughout the site, additional wetland areas not included on the NWI maps may occur in the forested portions of the site that are currently managed for silvicultural purposes. Although the agricultural fields are underlain by hydric soils, they would be considered prior converted farmland.</p>	<p>Based on the NWI maps, approximately one-half of the site contains forested wetland cover. However, the field-level reconnaissance survey of the area indicated that the site is in active silviculture for the harvesting of loblolly pine. Based on the field reconnaissance, much of the currently managed area within the airfield site may meet wetland criteria. Numerous drainage ditches have been constructed to convey water off the site in order to facilitate the timber operations. This disruption of the hydrology of the area has significantly altered natural water regimes.</p>	<p>Wetlands are associated with several areas throughout Site 17. Based on the NWI maps, Site 17 contains wetland areas that cumulatively cover 174 acres. The majority of the wetland areas are mapped as palustrine (deciduous) forested communities that are perennially saturated to seasonally inundated. Other, less commonly occurring communities include palustrine emergent, palustrine unconsolidated bottom (impounded and/or excavated ponds), and palustrine aquatic beds. In some areas, the wetlands have been diked or impounded. These areas have likely been improved to provide agricultural uses. The remainder of the Site 17 soils are classified as upland.</p>

6-5

Table 6-2 Prevailing Wind Directions at Selected Meteorological Stations

Station	Location	Latitude/ Longitude	Nearby Candidate Areas	Prevailing Wind Direction	Secondary Wind Direction
723080	Norfolk International Airport, VA	3654N/ 07612W	1, 2, 3, 4, 5	SW (225)	NE (045)
746943	Elizabeth City, North Carolina	3616N/ 07611W	2, 3, 4, 5, 7, 18, 19, 20	SW (225)	WSW (248)
723096	MCAS New River, North Carolina	3442N/ 07726W	6, 8, 10	WSW (248)	NNE (023)
723065	Pitt Greenville Air- port, North Carolina	3538N/ 07724W	7, 9, 18, 19, 20	SW (225)	WSW (248)
722180	Augusta/Bush Field, GA	3322N/ 08158W	13, 14, 15, 16, 17	W (270)	WSW (248)
722085	MCAS Beaufort, SC	3229N/ 08043W	11, 12, 14, 15, 16	NNE (023)	N (360)

Source: National Climatic Data Center 2001.

Unrestricted 24-hour Operations

Based on the lack of existing development present at each of the OLF candidate sites and on discussions with local planning officials, no future land use plans, zoning, or noise ordinances were identified that would restrict 24-hour training operations at any of the proposed OLF sites.

Number of Landowners

Because of the extensive land area contained within the projected greater than 60 DNL noise zones (over 38,000 acres), the number of landowners could not be accurately determined. However, sites with as few landowners as possible were carried forward because these sites, in almost all cases, had the lowest overall population and fewest development impacts.

Site Access

Construction of the OLF at any of the proposed sites would likely require either the extension of the existing roads near the site or upgrades to some of the unimproved farm or logging roads to two-lane, paved roads.

6.2.2 Secondary Screening Criteria: Environmental

Existing and Planned Land-Use Compatibility

Based on Navy AICUZ guidance, land uses within the proposed airfield boundary, noise zones, and APZs for each of the proposed OLF sites, with a few exceptions, are generally considered compatible with aircraft operations. The primary land uses that exist within and surrounding each of the sites are agricultural and forested (see Tables 4-2 through 4-5). Additionally, scattered residences do occur throughout the projected noise zones and APZs at each of the sites; however, the amount of residential land use in all cases is less than 1% of the land use within the airfield and each noise zone.

Agricultural lands are considered compatible within high noise zones and APZs. Forested lands are not generally compatible within the clear zone and would need to be maintained at a sufficient height for flight safety. Forested uses are considered compatible within APZ 1 and APZ 2.

Additionally, noise-sensitive land uses such as churches and schools have also been identified to exist throughout the various noise zones for each of the sites (see Tables 4-2 through 4-5). Churches and schools are not considered compatible in the greater than 75 DNL noise zone or clear zones and APZs.

Wetlands/Open Water

For each OLF site, the potential occurrence of wetlands was estimated using available published information including soil surveys published by the Natural Resource Conservation Service (NRCS) and NWI maps produced by the U.S. Fish and Wildlife Service (USFWS). No detailed on-site inspections or formal wetland delineations were performed. Acreages of wetland areas that could potentially be disturbed are presented in Table 6-1.

Sensitive Ecological Habitats

Analysis of sensitive ecological habitats includes an assessment of threatened and endangered species, unique or sensitive habitats (i.e., National Wildlife Refuges), and the potential for overwintering waterfowl to be present at or near the proposed OLF site. Site-specific impacts to ecological resources are listed in Table 6-1.

Soil Stability

Information on soil limitations was gathered primarily from county soil survey maps. The soil characteristics were evaluated against identified building site limitations as identified by the NRCS. Site-specific soil characteristics and limitations are identified in Table 6-1.

Cultural Resources

Archaeological Resources. Based on the site file review and archaeological investigations, OLF Sites 3B, 20A, 7C, and 17A contain archaeological resources that have been identified either by previous research or in the course of the archaeological reconnaissance survey undertaken by the Navy.

OLF Site 3B contains a previously identified archaeological site (31PQ78). OLF Site 3B contains sites 31BR113, 31BR114, 31BR115, 31BR116, 31BR117, 31BR118, 31BR119, and 31BR120 (Gardner, *et al.*, 1985). OLF Site 7C and OLF Site 17A each produced archaeological artifacts from seven locations within their footprints (RCGA 2002a and 2002b). These resources have not been evaluated for their NRHP eligibility. Additional archaeological investigations are required to re-locate previously defined sites, delineate the sites found during the Navy reconnaissance survey, and evaluate their significance. In addition, all OLF sites have portions of their surface that have moderate to high archaeological potential, as determined during the course of the reconnaissance survey.

The percentage of areas of moderate to high archaeological potential include:

- Site 3B: 8%,
- Site 20A: 68%,
- Site 7C: 38%,
- Site OP-2: 12%,
- Site 9A: 2%, and

- Site 17A: 100%.

Architectural Resources. The Navy has conducted architectural field investigations to identify historic or potentially historic resources in the vicinity of each of the OLF sites. Based on these investigations, an assessment of each site is presented below.

- Site 3B (Perquimans County, North Carolina). The historic architectural sensitivity of Site A is high. At least seven resources within the APE merit additional intensive investigation to determine their architectural significance. In addition, dozens of other architectural resources in the APE are older than 50 years and include numerous 19th and early 20th century farmhouses that are also potentially significant (RCGA 2002a). Additional surveys, including further identification of resources, mapping, photography, and assessment for NRHP eligibility, will be required.
- Site 20A (Bertie County, North Carolina). One NRHP-eligible resource and nine historical homes and churches will require additional investigation to determine their NRHP eligibility status (RCGA 2002a).
- Site 7C (Washington County, North Carolina). Remains of one late 19th century or early 20th century structure require further investigation to determine their NRHP eligibility (RCGA 2002a).
- Site OP-2 (Hyde County, North Carolina). One architectural resource was determined to require intensive investigation, while other resources require preliminary investigation to determine their NRHP eligibility (RCGA 2002a).
- Site 9A (Craven County, North Carolina). Two resources have been identified that are NRHP eligible, and one other structure will require additional investigation to determine its NRHP eligibility (RCGA 2002a).
- Site 17A (Burke County, Georgia). One resource is on the NRHP list, and two historical homes require additional investigation to determine their NRHP eligibility (RCGA 2002b).

Hazardous Waste Sites

A database search, review of aerial photographs, and site visits indicated that no National Priority List (NPL) or state hazardous waste sites exist within 4 miles of any of the proposed OLF sites.

7 Phase 6: Environmental Impact Statement

7.1 Conclusions and Recommendations

Based on the final site evaluation, the following six sites (see Figures 7-1 through 7-6) have been carried forward and will be considered for construction and operation of an OLF to support the training requirements of the Super Hornet squadrons under various siting alternatives discussed in the *Environmental Impact Statement for Introduction of the F/A-18 E/F Aircraft on the East Coast of the United States* at NAS Oceana, MCAS Cherry Point, and MCAS Beaufort.

- Site 3A: Perquimans County, North Carolina;
- Site 20A: Bertie County, North Carolina;
- Site 7C: Washington County, North Carolina;
- Site OP-2: Hyde County, North Carolina;
- Site 9A: Craven County, North Carolina; and
- Site 17A: Burke County, Georgia.

Key features of each site are summarized in Table 7-1. While no attempt was made to rank the sites, general conclusions about how the sites compare to one another are summarized as follows:

Table 7-1 Significant Site Features

Candidate Sites	Agriculture		Wetland		Population ^a		Churches		Schools		T/E		Distance		Tail Structures		Cultural Resources		Soils		Other Development Constraints	
	Number (acres)	75 DNL Airfield	Number (acres)	75 DNL Airfield	Number (Persons)	>75 DNL	60 DNL	>75 DNL	60 DNL	>75 DNL	Number	Airfield Occurrence (Y/N, Number)	All Contours Occurrence (Y/N, Number)	Number (miles)	>75 DNL	60 DNL	Occurrence (Y/N)	Number	Soils	Prime Farmland (Percent)	Other Development Constraints	
																						Number (acres)
NAS Oceana Study Areas																						
Site 3A	1,399	8,030	47	337	298	1,423	1	8	1	no	no	47	0	0	0	Yes	1%	no major development constraints/impacts to tourism/historic resources				
MCAS Cherry Point Areas																						
Site 9A	0	103	See footnote below	377	0	1,420	0	1	0	no	Yes, 2	26	0	0	Yes	N/A	Craven Correctional					
MCAS Beaufort Study Areas																						
17A	1,003	4,281	143	1,478	170	723	4	8	0	Yes, 2	Yes, 5	58	0	0	1	Yes	5%	Savannah River DOE				
Middle Study Areas																						
7C	2,002	11,656	<1	15	179	723	0	1	0	no	no	72 (NAS Oceana) 50 (MCAS Cherry Point)	0	0	Yes	52%	no major development constraints/impacts to eco-tourism					
OP-2	1,236	7,400	238	2,471	0	339	0	1	0	Yes, 1	Yes, 3	75 (NAS Oceana) 60 (MCAS Cherry Point)	1	3	No	25%	Community of Englehard (65/70 DNL)					
20A	113	1,140	94	1,021	268	1,391	0	0	0	Yes, 3	Yes, 3	61 (NAS Oceana) 67 (MCAS Cherry Point)	0	2	Yes	60%	Residential Development Throughtout Contours					

^a Population estimates are based on an assumption of equal population distribution throughout the noise zones. In actuality, the population within these contours would be considerably lower.

Based on NWI mapping for Site 9A, the proposed airfield location contains an estimated 1,037 acres of forested wetland. Given the land use categories above, the wetland areas were presumably not visible in the DOI interpretation of the satellite imagery, but would be classified within the forested and barren land use acreage provided above.

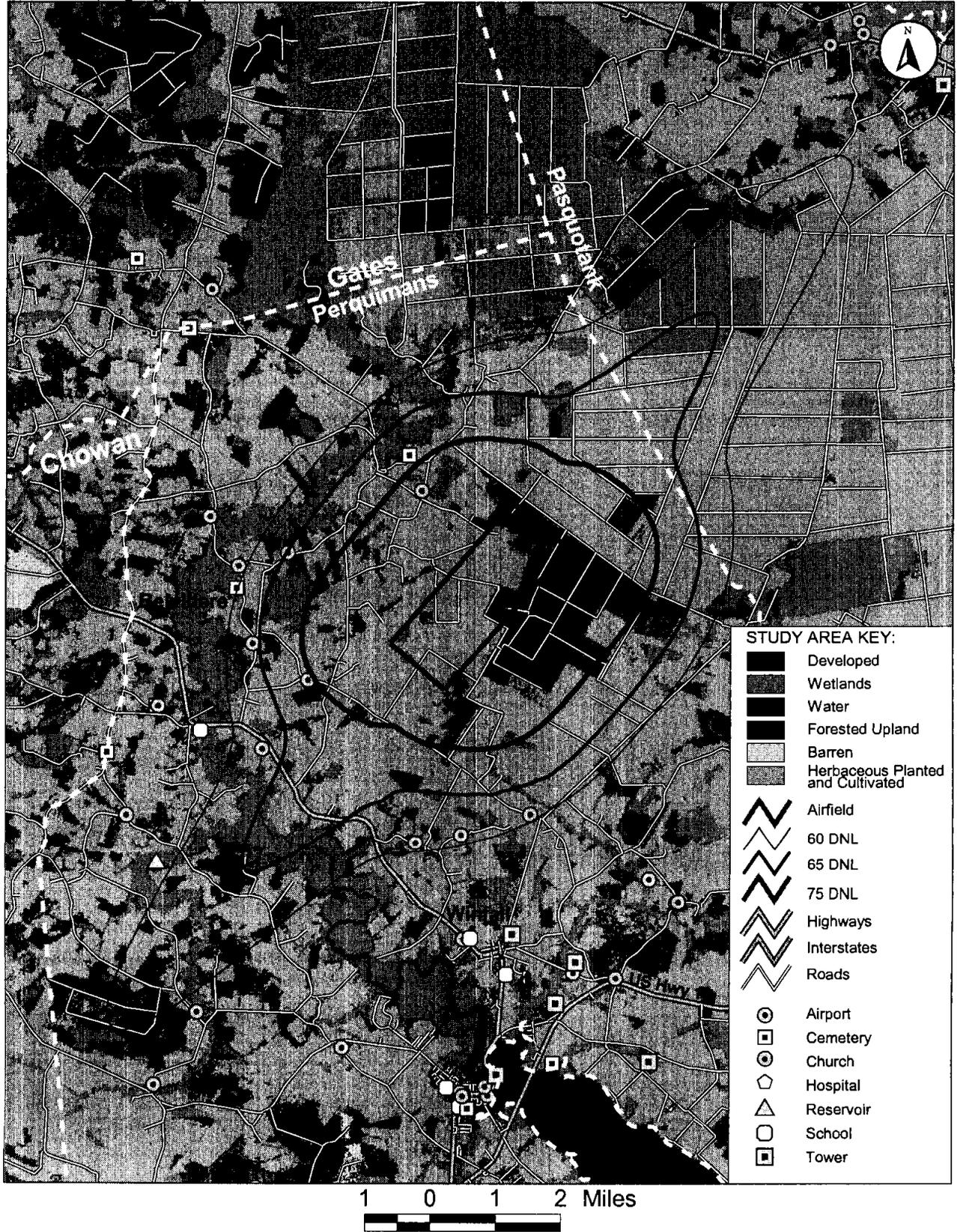


FIGURE 7-1
SITE A PROPOSED OLF LOCATION WITH PROJECTED NOISE CONTOURS
PERQUIMANS COUNTY, NORTH CAROLINA

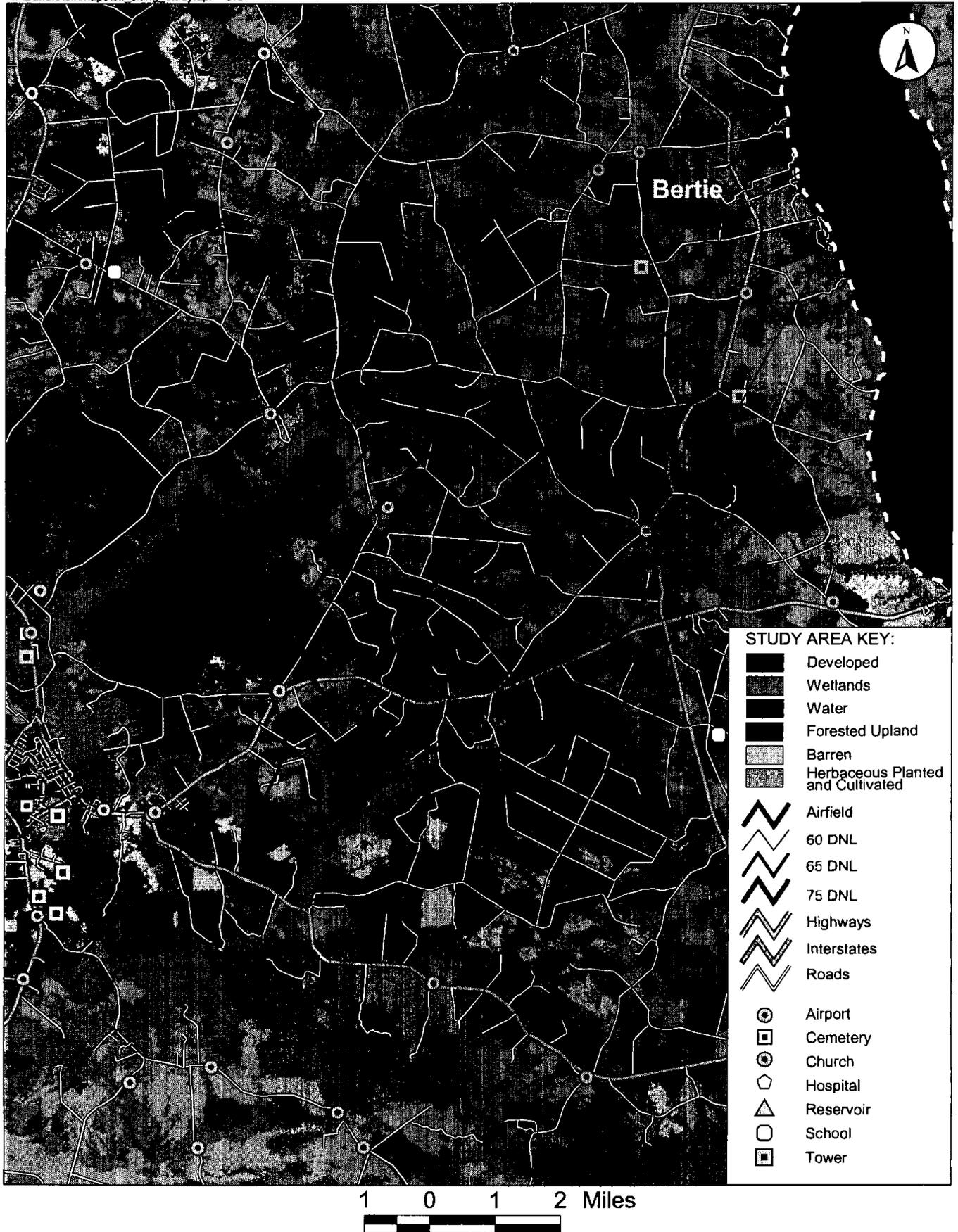


FIGURE 7-2
SITE B PROPOSED OLF LOCATION WITH PROJECTED NOISE CONTOURS
BERTIE COUNTY, NORTH CAROLINA

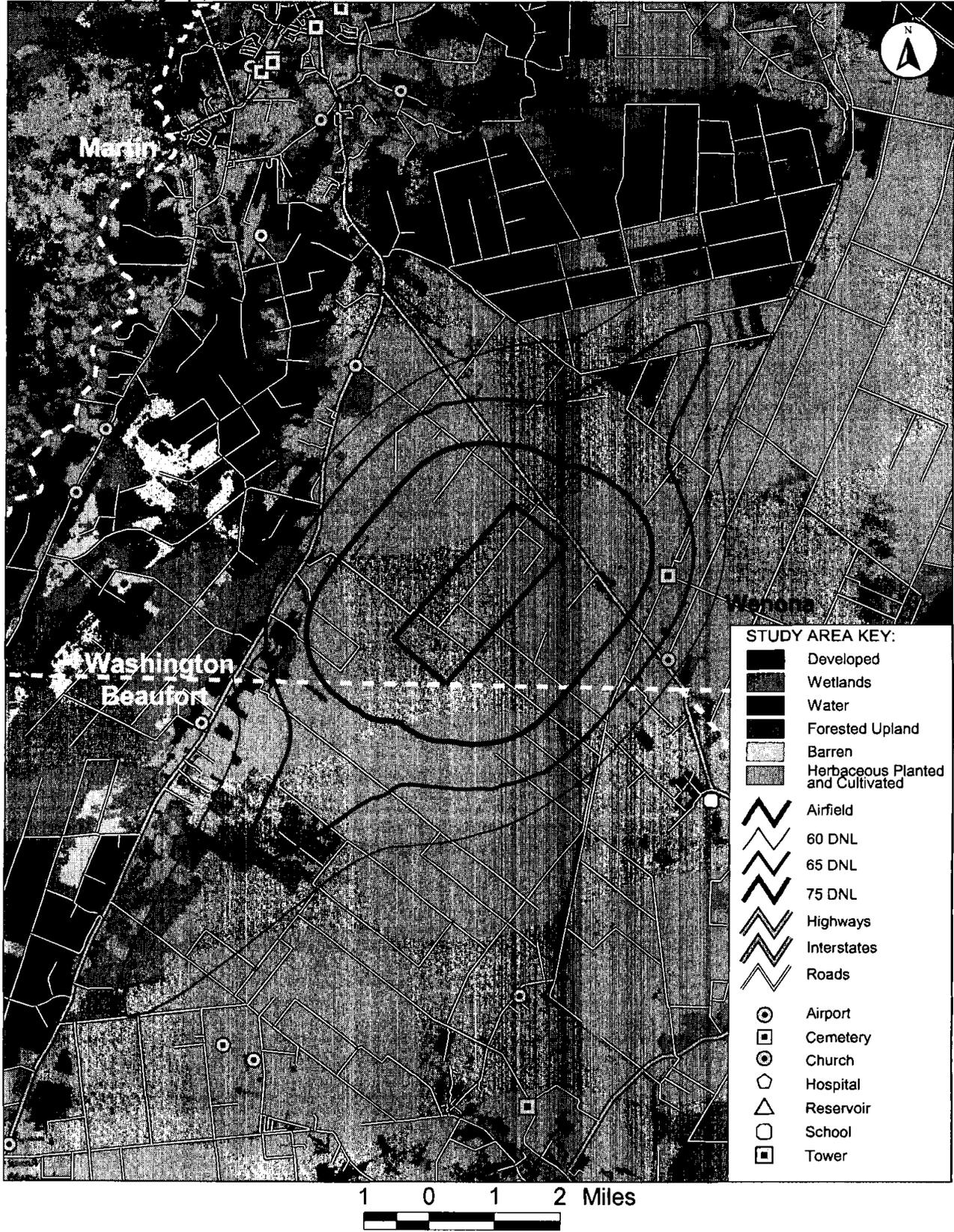


FIGURE 7-3
SITE C PROPOSED OLF LOCATION WITH PROJECTED NOISE CONTOURS
WASHINGTON COUNTY, NORTH CAROLINA

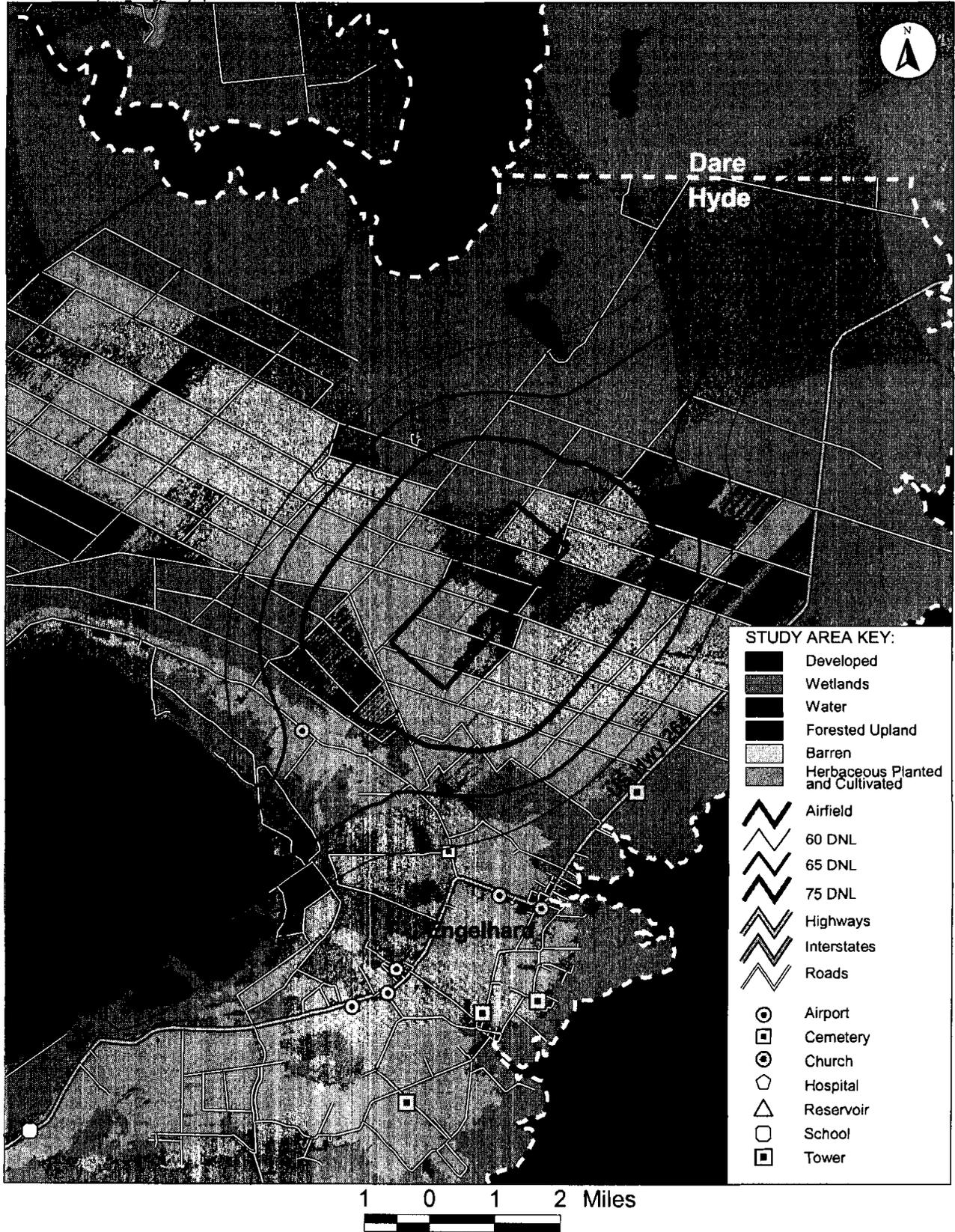


FIGURE 7-4
SITE D PROPOSED OLF LOCATION WITH PROJECTED NOISE CONTOURS
HYDE COUNTY, NORTH CAROLINA

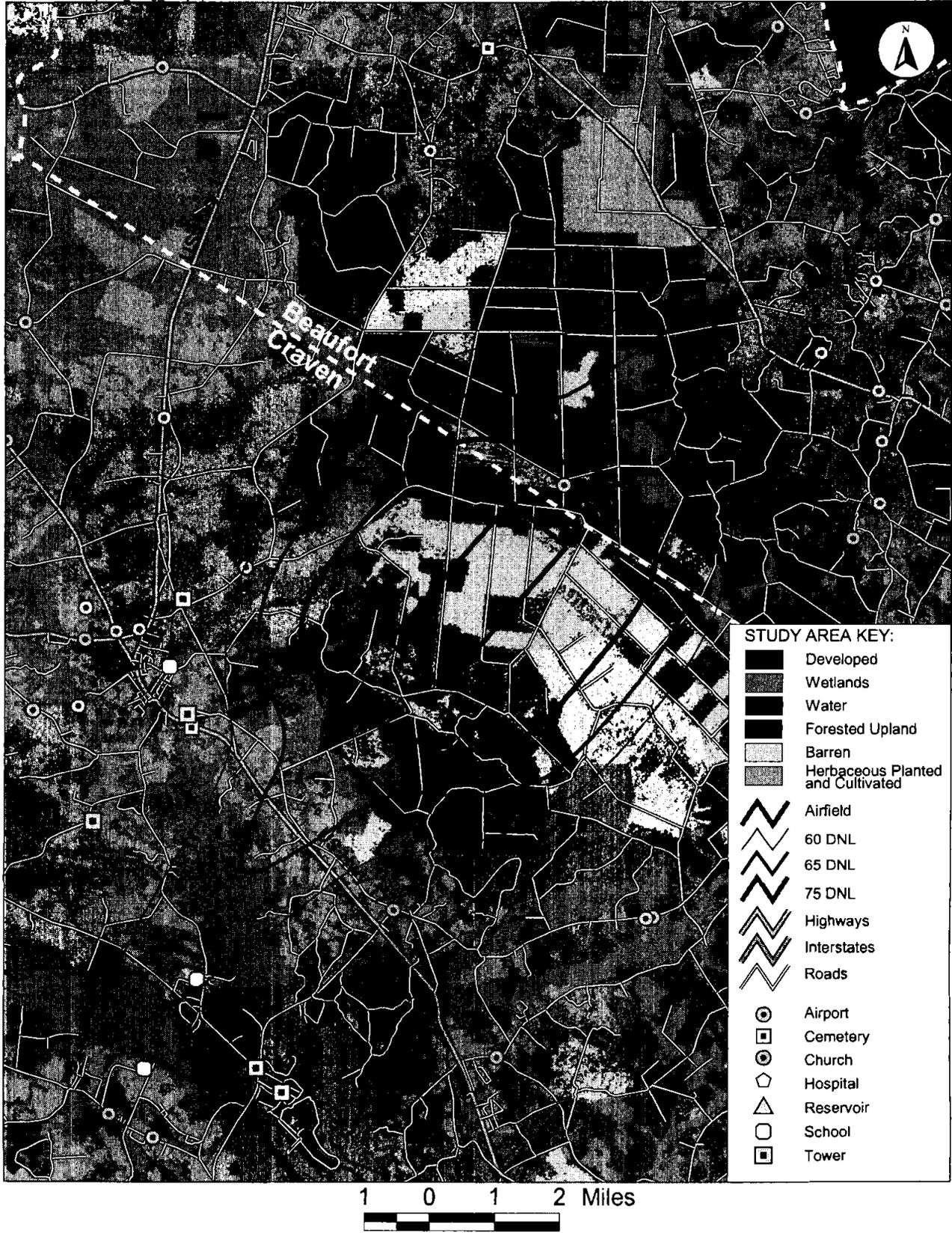


FIGURE 7-5
SITE E PROPOSED OLF LOCATION WITH PROJECTED NOISE CONTOURS
 CRAVEN COUNTY, NORTH CAROLINA

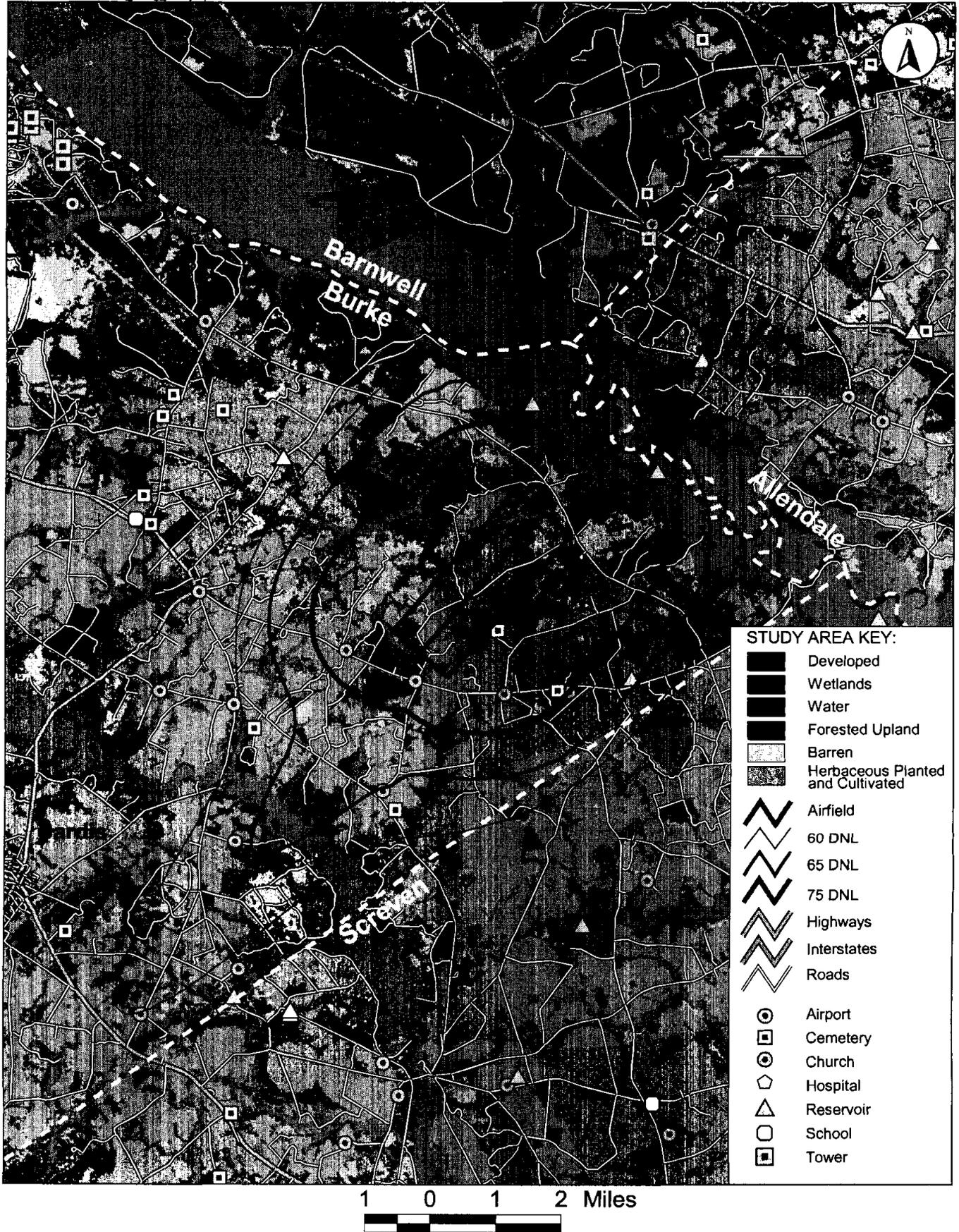


FIGURE 7-6
SITE F PROPOSED OLF LOCATION WITH PROJECTED NOISE CONTOURS
BURKE COUNTY, GEORGIA

- Distances from airfields vary based on the OLF and air station location. The closest location to NAS Oceana is Site 3A, which is approximately 37 miles from NAS Oceana. The closest site to MCAS Cherry Point is Site 9A, at approximately 26 miles. The closest site to MCAS Beaufort is Site 17A, which is approximately 58 miles west of the station.
- Airspace conflicts occur mainly as a result of military restricted airspace and MOAs associated with training ranges. Conflicts with Victor airways are also evident; however, Site OP-2 is surrounded on three sides by restricted airspace (R-5314, R-5313, and R-5306, and several MOAs) associated with the Dare County Range, BT-9, BT-11, and the Stumpy Point Range. R-5314 is located approximately 2 NM to the north and presents significant safety and operational issues to establishing an OLF at Site OP-2. Circumnavigation of these areas by aircraft would increase transit distance, fuel required, and time, resulting in decreased training opportunities.
- Although all of the remaining OLF sites have land use characteristics (i.e., existing land use and future development potential) that could potentially support siting of an OLF, existing land use is most ideal at OLF Site 7C, with the entire airfield site (2,000 acres/100%) and almost the entire site (32,000 acres/86%) categorized as agriculture. Additionally, Site 7C presents limited potential for future development.
- Wetland impacts would be greatest at Sites 17A and OP-2. An estimated 143 and 238 acres of wetlands occur within the proposed airfield sites at Sites 17A and OP-2, respectively. OLF Site 7C presents the most minimal impact to wetlands with <1 acre of wetland occurring in the airfield site. Based on the extent of hydric soils and mapped NWI wetlands that occur on site, wetland impacts at Site 9A would be unavoidable. Because almost the entire 2,000-acre parcel is maintained as pine plantation, existing wetlands within the site have been previously disturbed. In fact, because of clear-cutting activities, vegetation is sparse or altogether absent on much of the Site E property. Additionally, drainage of Site E to facilitate timbering activities has altered natural flow patterns.
- Impacts to sensitive ecological resources, such as threatened and endangered species, differ among the sites, but not substantially. Sites 20A, OP-2, and 17A were identified as containing three, three, and five federally protected species potentially occurring in the general vicinity, respectively. No federally listed threatened and endangered species were identified as occurring within the immediate area of the airfield site for sites 3A and 7C. Because all of the sites are located on the eastern seaboard and within the Atlantic Flyway, all of the sites have the potential to attract flocks of birds; however, the greatest potential exists with Site OP-2.

As mentioned previously, the initial OLF site screening was conducted using the greater than 60 DNL noise zones, encompassing 53,000 acres. The 53,000-acre noise

zone area was developed based on preliminary noise information that existed for the Super Hornet during the early phases of the project. These noise zones represented a conservatively estimated noise impact area and ensured that an adequate area of noise impact for the new OLF was analyzed.

During the secondary screening phase of the study, refined noise data for the Super Hornet based on actual flight operations became available. These data showed the greater than 60 DNL noise zone to encompass 38,000 acres. Additionally, during the secondary screening analysis, sites were reconfigured to reduce community impacts. The proposed airfield location and 38,000-acre noise zones were adjusted to avoid population areas while remaining within the 53,000-acre area assessed during the initial OLF site screening.

The six sites that are being carried forward and analyzed in the Super Hornet EIS were subsequently renamed Sites A through F. This naming system orients the sites geographically from north to south as follows:

- Site A (3B), Perquimans County, North Carolina;
- Site B (20A), Bertie County, North Carolina;
- Site C (7C), Washington County, North Carolina;
- Site D (OP-2), Hyde County, North Carolina;
- Site E (9A), Craven County, North Carolina; and
- Site F (17A), Burke County, Georgia.

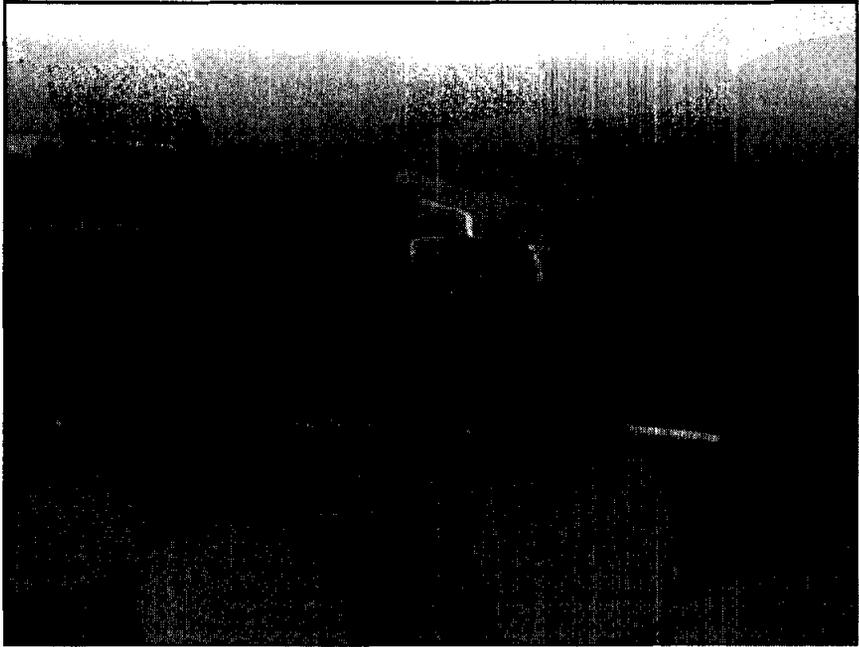
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_____, 2000b National Oceanic and Atmospheric Administration, National Ocean Service, *Washington Sectional Aeronautical Chart, 68th Edition*, August 10, 2000, published in accordance with Interagency Air Cartographic Committee, Washington, D.C., data on controlled airspace, SUA, and MTRs for MCAS Beaufort and MCAS Cherry Point.

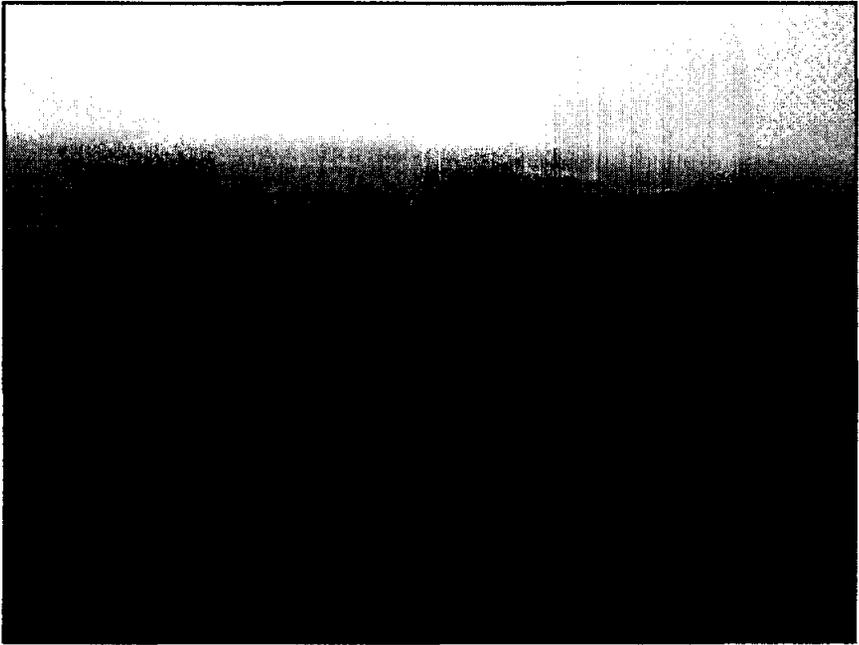
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Site 1A - Oceana Study Area
Typical Land Use along Water of James River



Site 1A - Oceana Study Area
Mixed Forest and Clear-Cut Areas



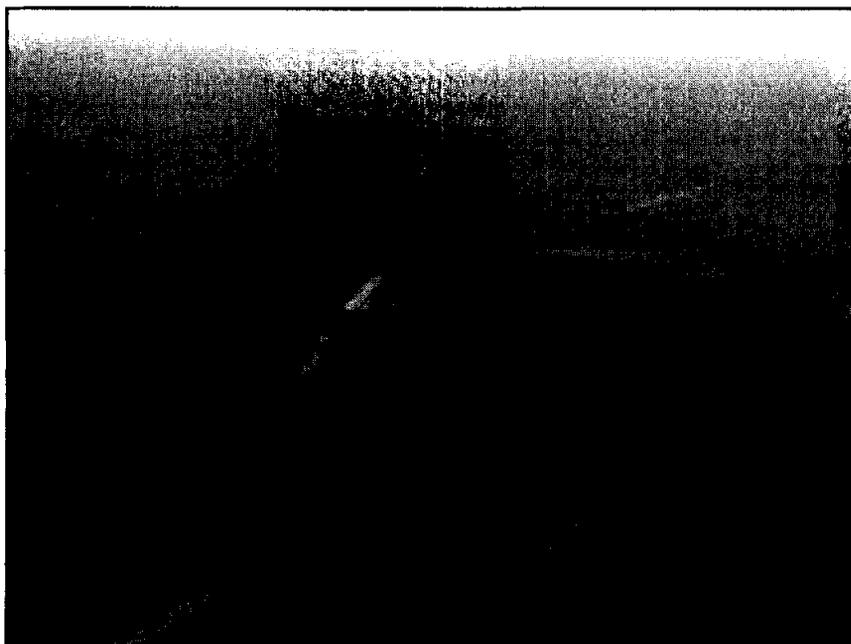
Site 1A - Oceana Study Area
Large Woodlots and Clear-Cut Areas



Site 1B - Oceana Study Area
Airfield Conference Center:
Southeast 4-H Educational Center



Site 1B - Oceana Study Area
Proposed Subdivision



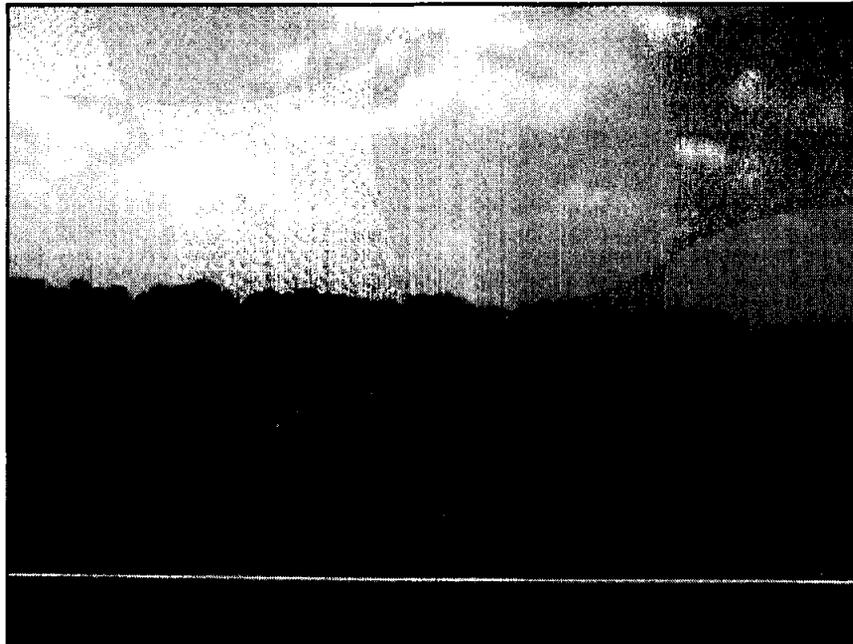
Site 1B - Oceana Study Area
Mixed Forest and Clear-Cut Areas



Site 3A - Oceana Study Area
C.N. Basic Learning and Day Care Center



Site 3A - Oceana Study Area
D.F. Walker Elementary and Middle School



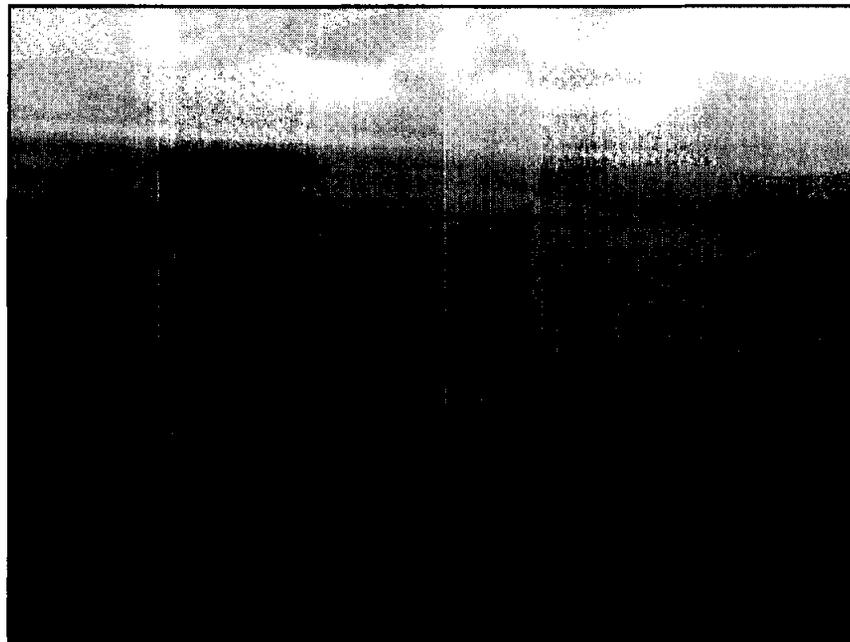
Site 3A - Oceana Study Area
Agricultural Land



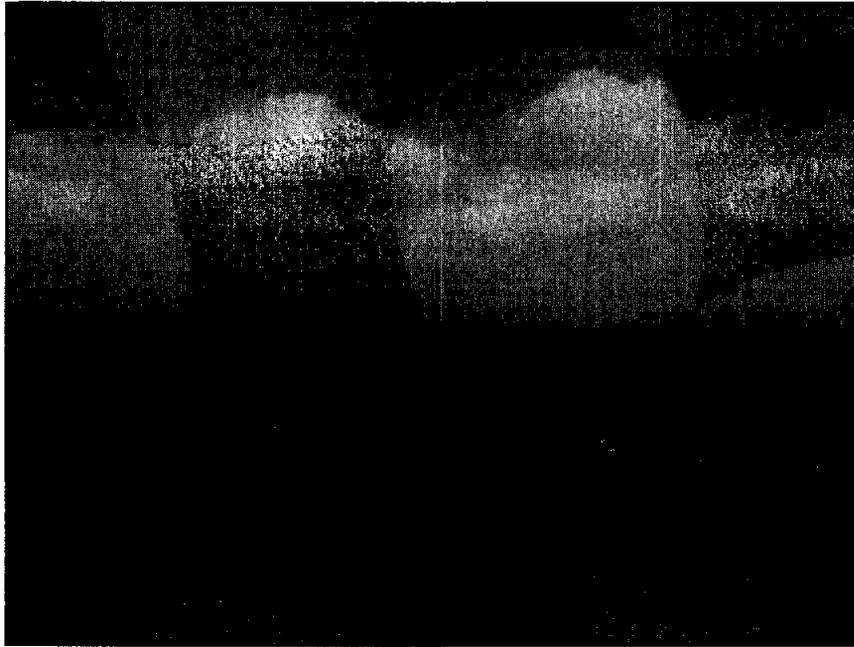
Site 3B - Oceana Study Area
Logging Road with Surrounding
Mixed Forest and Agricultural Land



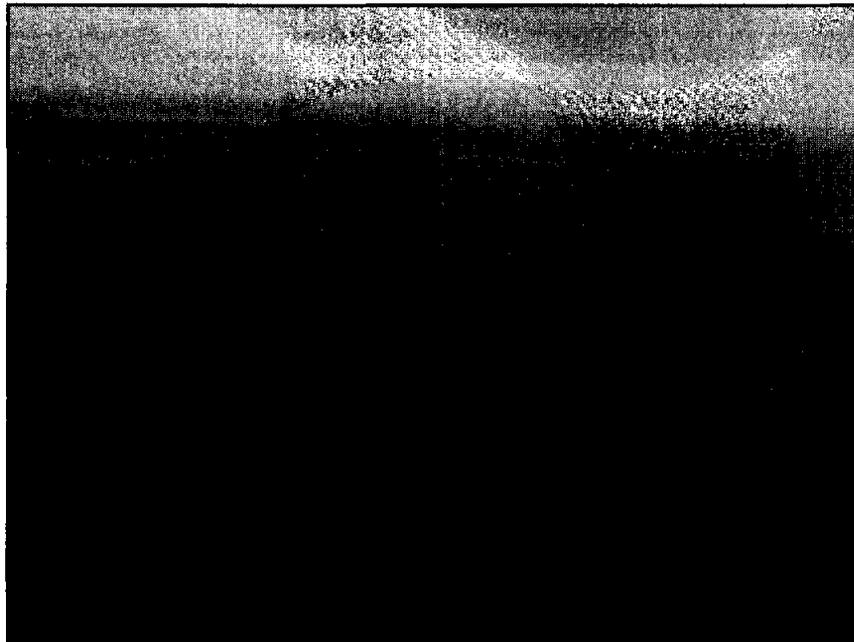
Site 3B - Oceana Study Area
Grass Airfield Used for Crop Dusting



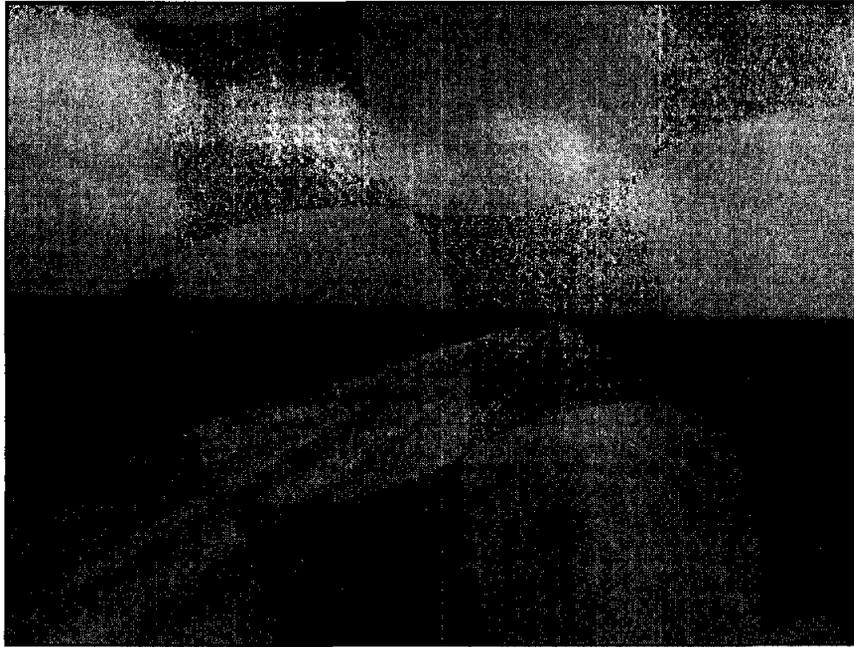
Site 3B - Oceana Study Area
Agricultural Land



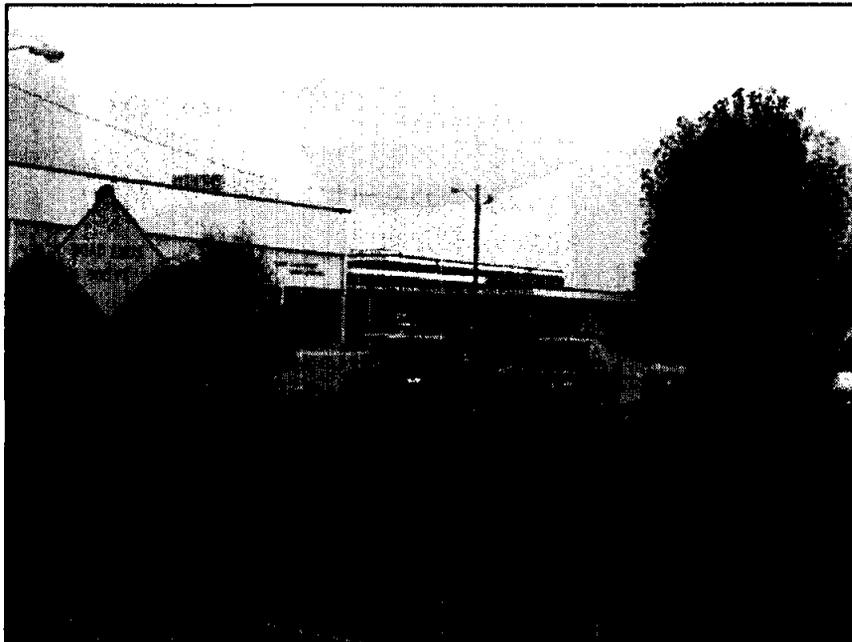
Site 5A - Oceana Study Area
Agricultural Land



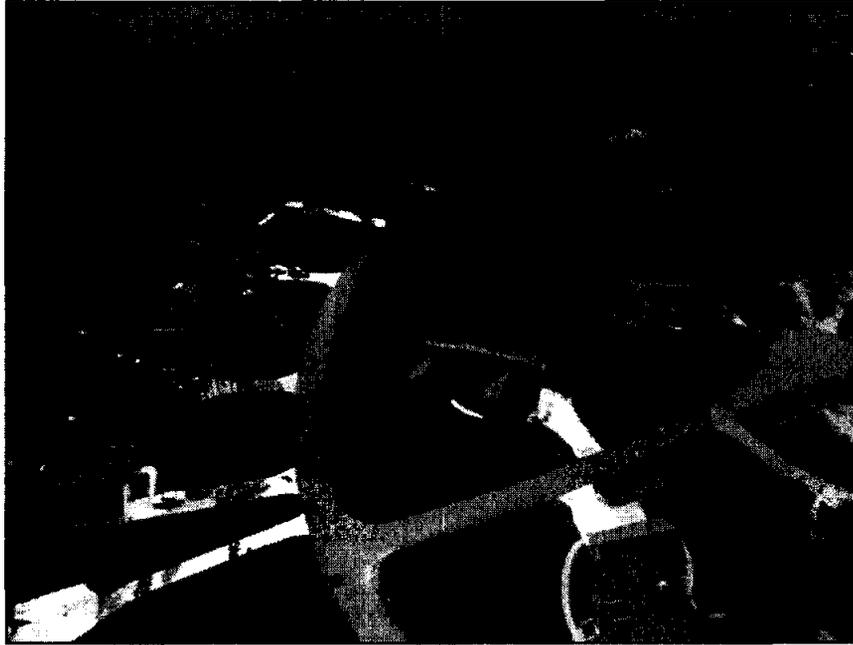
Site 5A - Oceana Study Area
Agricultural Land



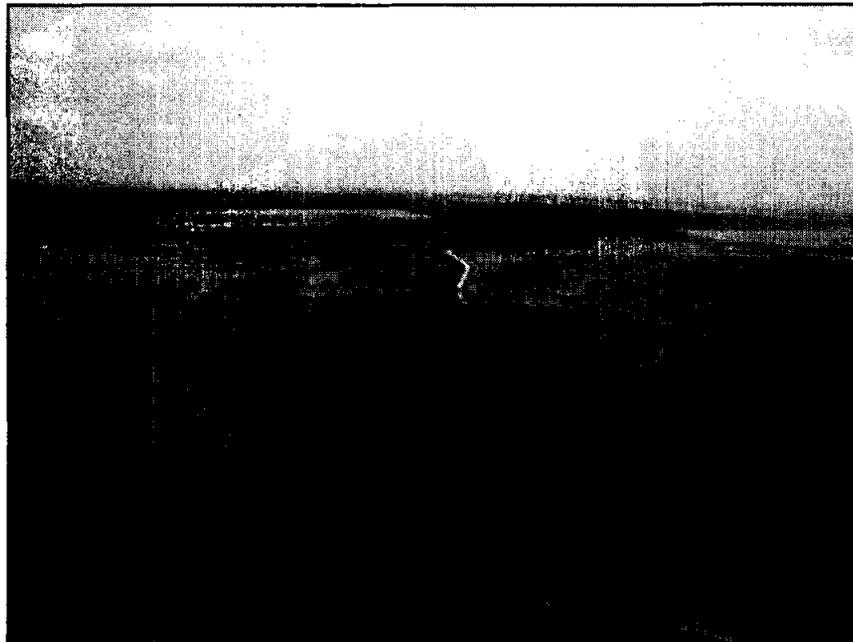
Site 5A - Oceana Study Area
Agricultural Land



Site 6A - Cherry Point Study Area
East Carteret High School



Site 6A - Cherry Point Study Area
Beaufort Residential Development



Site 6A - Cherry Point Study Area
Tidal Wetlands off North River Estuary



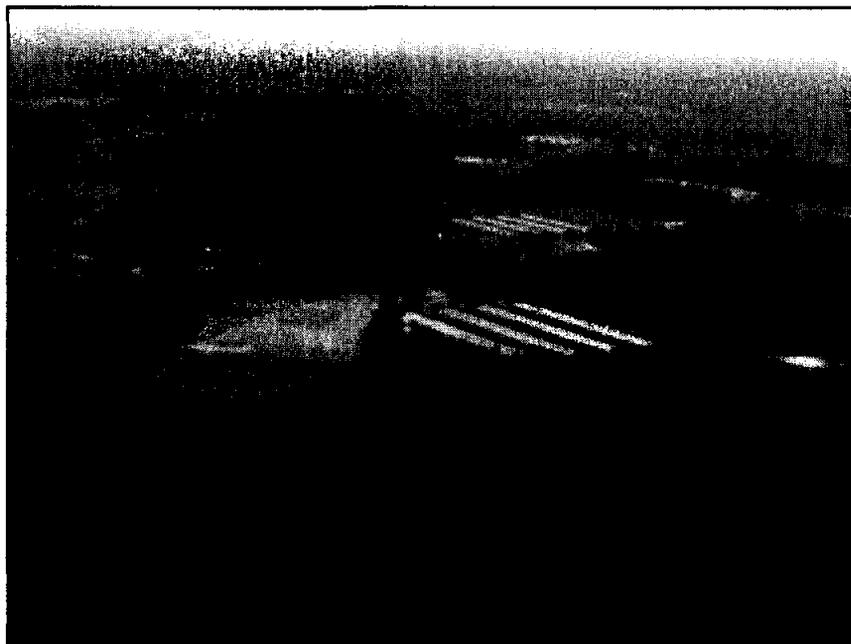
Site 7A and 7B - Middle Study Area
Morning Star Church of Christ



Site 7A and 7B - Middle Study Area
Terra Ceia School and Church



Site 7A and 7B - Middle Study Area
Agricultural Land



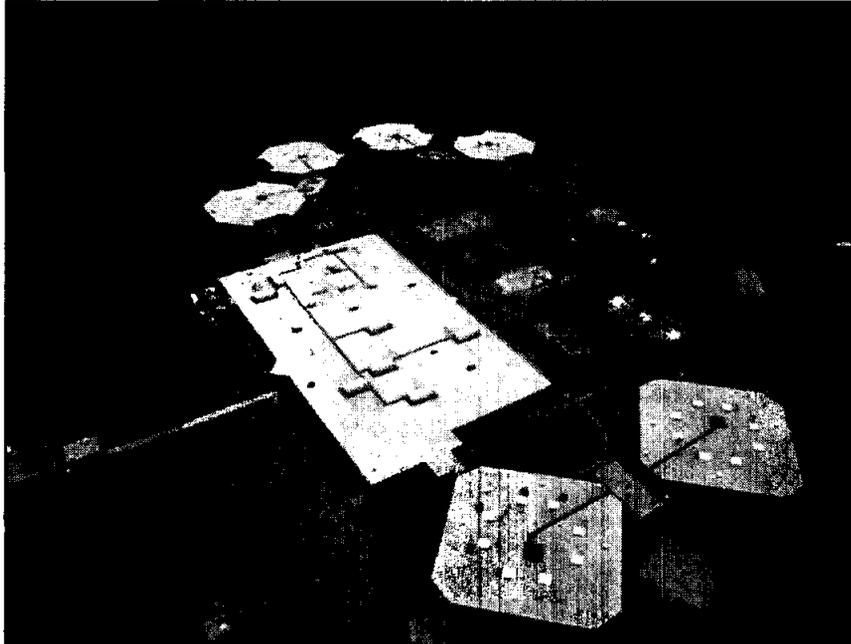
Site 8A - Cherry Point Study Area
Poultry Houses and Agricultural Fields



Site 8A - Cherry Point Study Area
Characteristic Small Parcel Development



Site 8A - Cherry Point Study Area
Albert J. Ellis Airport



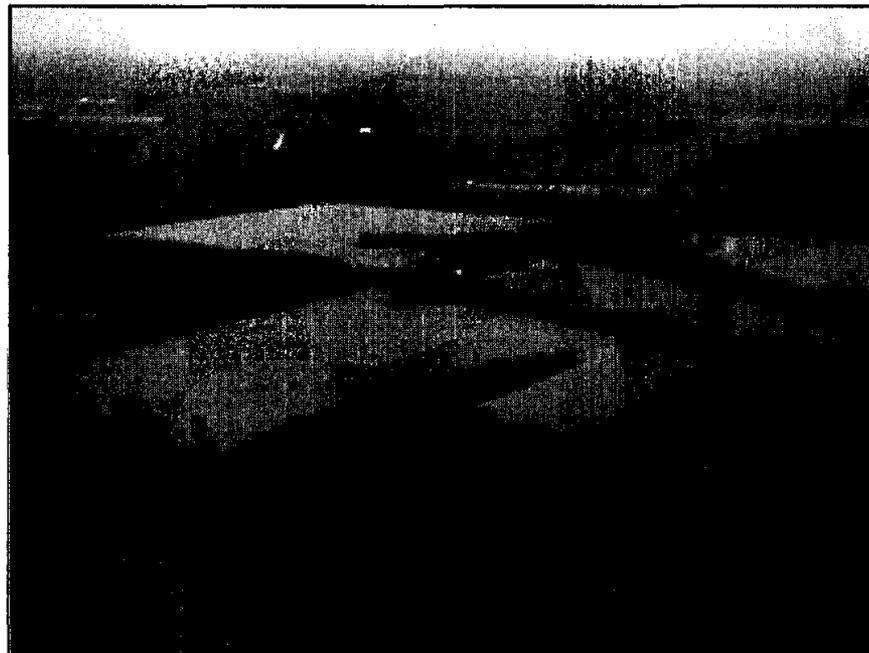
Site 9A - Cherry Point Study Area
Craven Correctional Institution



Site 9A - Cherry Point Study Area
Waterfront Property (in the Blounts Bay Area)



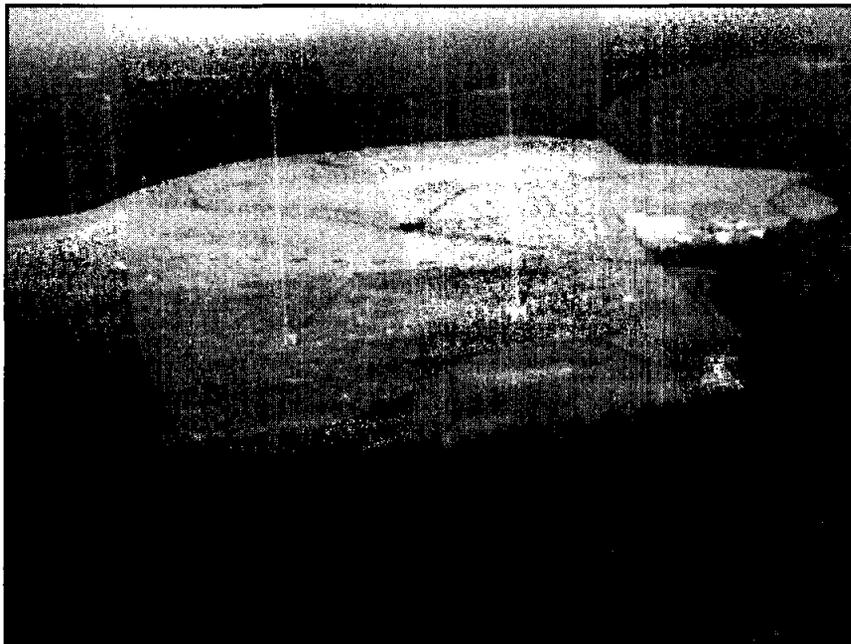
Site 9A - Cherry Point Study Area
West Craven High School



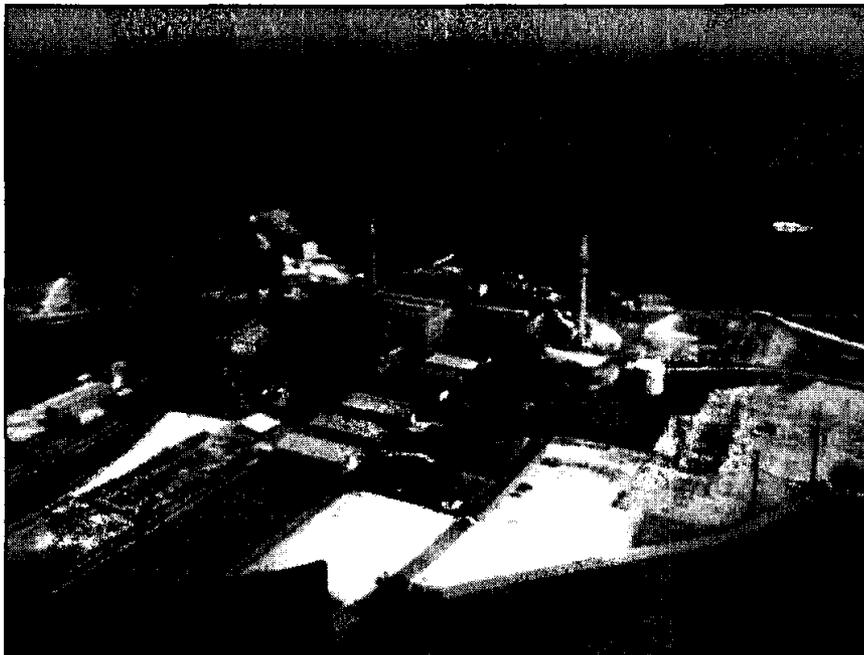
Site 11A - Beaufort Study Area
Agricultural Land and Timber Production



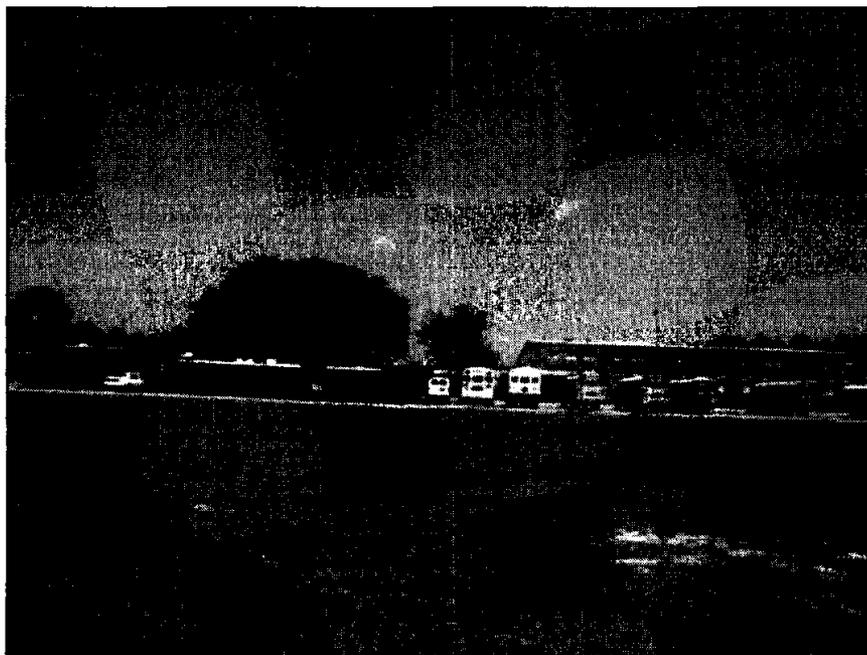
Site 11A - Beaufort Study Area
Oakton Hill Estates



Site 11A - Beaufort Study Area
WSHB International Broadcast Station
15 Towers, 90'-370' in Height



Site 12A - Beaufort Study Area
Canady's Power Station



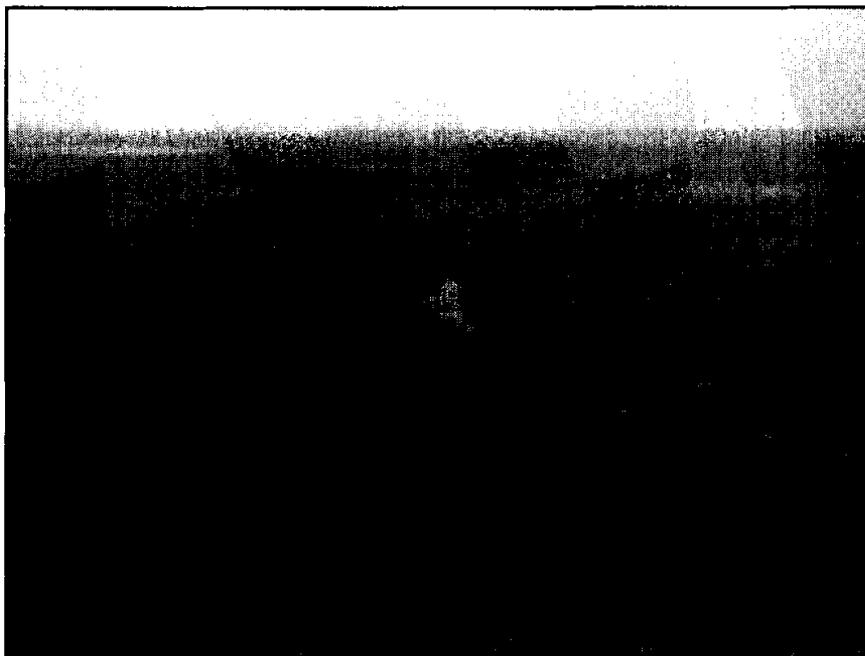
Site 12A - Beaufort Study Area
Ruffin High School



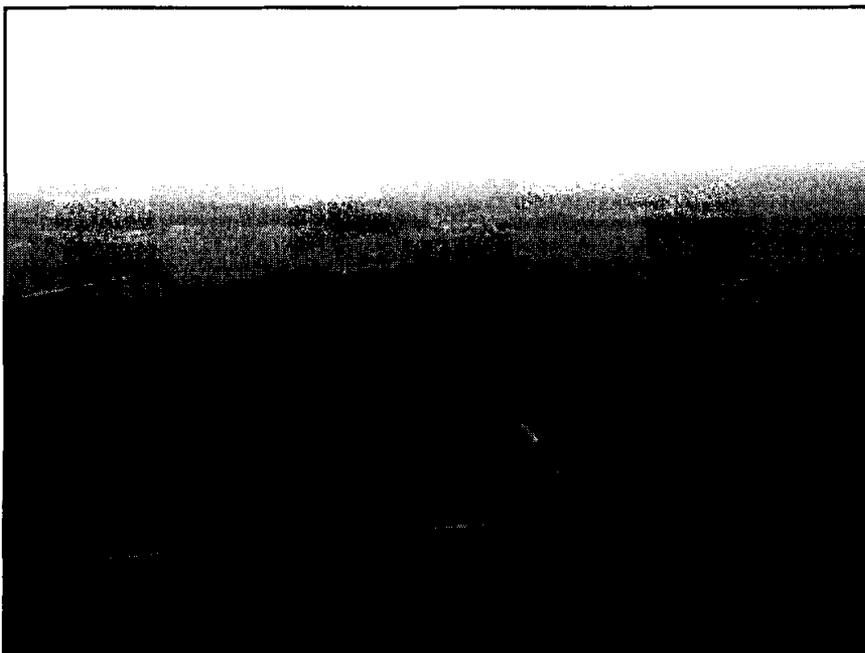
Site 12A - Beaufort Study Area
Agricultural Fields and Scattered Homes



Site 17A - Beaufort Study Area
Savannah River Site



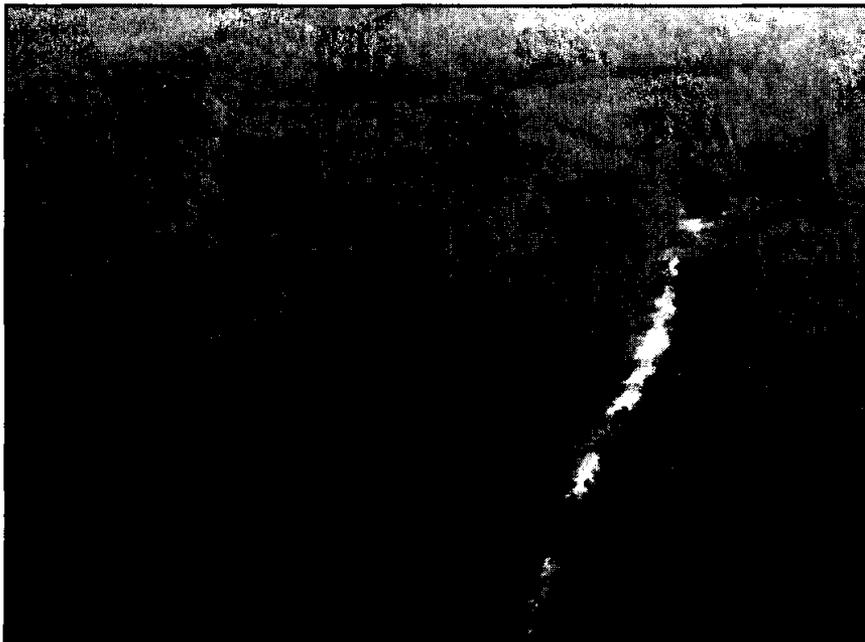
Site 17A - Beaufort Study Area
Savannah River



Site 17A - Beaufort Study Area
Large Agricultural Expanses with Mixed Forest Interspersed



Site 20A - Middle Study Area
Green's Cross Church



Site 20A - Middle Study Area
Timberland



Site 20A - Middle Study Area
Ashland Baptist Church

AirNav

airports

nav aids

fix

Aviation Fuel

nilotshon

Allen C Perkinson Airport/Blackstone Army KBKT Airfield

Blackstone, Virginia, USA

FAA INFORMATION EFFECTIVE 07 JULY 2005

[Loc](#) | [Ops](#) | [Rwys](#) | [IFR](#) | [FBO](#) | [Links](#)
[Com](#) | [Nav](#) | [Svcs](#) | [Stats](#) | [Notes](#)

Location

FAA Identifier: BKT

Lat/Long: 37-04-26.2040N / 077-57-08.9740W
37-04.436733N / 077-57.149567W
37.0739456 / -77.9524928
(estimated)

Elevation: 439 ft. / 134 m (estimated)

Variation: 09W (2000)

From city: 2 miles E of BLACKSTONE, VA

Zip code: 23824

Area around KBKT (Allen C Perkinson
Airport/Blackstone Army Airfield)

Airport Operations

Airport use: Open to the public

Sectional chart: [WASHINGTON](#)

Control tower: yes

ARTCC: WASHINGTON CENTER

FSS: LEESBURG FLIGHT SERVICE STATION
[1-866-225-7410]

NOTAMs facility: DCA (NOTAM-D service available)

Attendance: UNATNDD

Wind indicator: lighted

Segmented circle: yes

Lights: DUSK-DAWN

WHEN ATCT CLSD ACTVT MIRL RY
04/22 - CTAF.

Beacon: white-green (lighted land airport)

Road maps at: [MapQuest](#) [MapPoint](#) [Yahoo!](#)
[Maps](#) [Google](#) [Rand McNally](#)
Topographic chart at: [TopoZone](#)
Satellite photo at: [TerraServer](#)

Aerial photo of KBKT (Allen C Perkinson
Airport/Blackstone Army Airfield)

Airport Communications

CTAF/UNICOM: 122.95

BLACKSTONE TOWER: 126.2 241.0 [SEE RMRKS]

- APCH/DEP SVC PRVDD BY WASHINGTON ARTCC

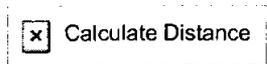
Airport distance calculator

Flying to Allen C Perkinson
Airport/Blackstone Army Airfield? Find the
distance to fly.

From to KBKT

ON FREQS 118.75/353.9 (GREEN BAY RCAG).

- OPERS BY NOTAM.



Sunrise and sunset

Times for 03-Aug-2005

	Local (UTC-4)	Zulu (UTC)
Morning civil twilight	05:51	09:51
Sunrise	06:19	10:19
Sunset	20:16	00:16
Evening civil twilight	20:45	00:45

Nearby radio navigation aids

VOR radial/distance	VOR name	Freq	Var
LVLr359/15.5	LAWRENCEVILLE VORTAC	112.90	08W
FAKr198/27.9	FLAT ROCK VORTAC	113.30	06W
RICr239/39.6	RICHMOND VORTAC	114.10	09W

METAR

KPTB 031240Z AUTO 36004KT 7SM CLR
22nm E 28/23 A3002 RMK AO2

KAVC 031237Z AUTO 34006KT 7SM CLR
24nm S 27/24 A3009 RMK AO1

KFVX 031239Z AUTO 00000KT 7SM CLR
28nm NW 27/24 A3005 RMK AO2

KEMV 031240Z AUTO 30003KT 4SM CLR
33nm SE 26/21 A3003 RMK AO1

KRZZ 031254Z AUTO 32005KT 4SM HZ
40nm S CLR 27/22 A3002 RMK AO2
SLP163 T02720222

KRIC 031154Z 36008KT 6SM HZ CLR
40nm NE 26/21 A3000

TAF

KRIC 031120Z 031212 35004KT P6SM
40nm NE SKC
FM1700 06004KT P6SM SCT040
FM0100 VRB03KT P6SM SCT080
FM0800 00000KT 4SM BR SKC

NDB name	Hdg/Dist	Freq	Var	ID
<u>BLACKSTONE</u>	I35/5.4	326	09W	BKT - . . . - . - -
<u>PETERSBURG</u>	267/18.4	284	08W	PTB . - - . - - . . .
<u>JONES</u>	019/28.0	373	09W	AEA . - . . -
<u>FARMVILLE</u>	133/28.6	367	07W	FVX . . - - -
<u>EMPORIA</u>	327/37.3	261	10W	ELQ . . - . . - - . -
<u>RAPIDS</u>	351/39.8	407	08W	RZZ . - . - - . . - - . .

Airport Services

- Fuel available: 100LL JET-A
FUEL 24 HR PPR 804-645-6291.
- Parking: hangars and tiedowns
- Airframe service: NONE
- Powerplant service: NONE
- Bottled oxygen: NONE
- Bulk oxygen: NONE

Runway Information

Runway 4/22

Dimensions: 4632 x 150 ft. / 1412 x 46 m	
Surface: concrete, in good condition	
Runway edge lights: medium intensity	
RY 22 FIVE THLD LGTS ON CENTERLINE EACH RECESSED 11/2 INCHES DEEP AND 30 INCHES ACROSS.	
RUNWAY 4	RUNWAY 22
Latitude: 37-04.122817N	37-04.751550N
Longitude: 077-57.419867W	077-56.879583W
Elevation: 401.0 ft.	438.0 ft.
Traffic pattern: left	left
Runway heading: 044 magnetic, 035 true	224 magnetic, 215 true
Markings: basic, in good	basic, in good

condition	condition
Touchdown point: yes, no lights	yes, no lights
Obstructions: 70 ft. tree, 2056 ft. from runway, 262 ft. left of centerline, 26:1 slope to clear	58 ft. tree, 1712 ft. from runway, 173 ft. left of centerline, 26:1 slope to clear

Runway 1/19

Dimensions: 4032 x 75 ft. / 1229 x 23 m

Surface: concrete, in fair condition

Runway edge lights: medium intensity

RY 01/19 MIRL OTS INDEFLY.

RUNWAY 1**RUNWAY 19**

Latitude: 37-04.155783N

37-04.819950N

Longitude: 077-57.781200W

077-57.768950W

Elevation: 417.0 ft.

426.0 ft.

Traffic pattern: left

right

Runway heading: 010 magnetic, 001
true190 magnetic, 181
trueMarkings: basic, in good
conditionbasic, in good
condition

Touchdown point: yes, no lights

yes, no lights

Obstructions: 67 ft. tree, 2293 ft.
from runway, 157 ft.
left of centerline,
31:1 slope to clear90 ft. tree, 1681 ft.
from runway, 107 ft.
right of centerline,
16:1 slope to clear**Airport Operational Statistics**

Aircraft based on the field: 8

Aircraft operations:

Single engine airplanes: 6

avg 60/day

Ultralights: 2

91% military

- ACFT ON FLD DURING
SUMMER EXERCISES

5% transient general
aviation4% local general
aviation

<1% air taxi

Additional Remarks

- MIL OPNS CALL 804-292-8506/2227.

- RY 22 HAS 700 FT RELCTD THLD; RY 04 HAS 700 FT
FULL LOAD BEARING OVRN/HIGH SPEED TWY.

- CTC PTS DIV FT PICKETT 804-292-8534 OR 804-292-8506.

- JET AND MIL TRNG WITHIN 20 NM RADIUS.EXTN C130
TFC AND FREQ PRCHT DROPS.

- PPR FOR LDG RY 04/22 CALL 804-292-2193.

- LDG RY 01 & TKOF RY 19 NOT AUTHORIZED.

Instrument Procedures

NOTE: All procedures below are presented as PDF files. If you need a reader for these files, you should [download](#) the free Adobe Reader.

NOT FOR NAVIGATION. Please procure official charts for flight. FAA instrument procedures published for use between 7 July 2005 at 0901Z and 9 August 2005 at 0900Z.

IAPs - Instrument Approach Procedures

- NDB OR GPS-A [download](#) (186KB)
- NDB-B [download](#) (118KB)
- GPS RWY 04 [download](#) (181KB)
- GPS RWY 22 [download](#) (178KB)
- NOTE: Special Take-Off Minimums apply [download](#) (31KB)

Other nearby airports with instrument procedures:

- [KLVL](#) - Lawrenceville/Brunswick Municipal Airport (20 nm SE)
- [KPTB](#) - Dinwiddie County Airport (22 nm E)
- [KAVC](#) - Mecklenburg-Brunswick Regional Airport (24 nm S)
- [KFCI](#) - Chesterfield County Airport (29 nm NE)
- [KFVX](#) - Farmville Regional Airport (29 nm NW)

FBOs, Fuel Providers, and Aircraft Ground Support

Business Name	Contact	Services / Description	Fuel Prices	Comments
			Shell	
Allen C Perkinson Airport	434-292-7251	Airport management, Aviation fuel, Aircraft parking (ramp or tiedown), Passenger terminal and lounge	100LL Jet A \$2.90 \$2.50 Updated 20-May-2005	1 view add
<input type="button" value="Update Fuel"/>				

Would you like to see your business listed on this page?

If your business provides an interesting product or service to pilots, flight crews, aircraft, or users of the Allen C Perkinson Airport/Blackstone Army Airfield, you should consider listing it here. To start the listing process, click on the button below

Other Pages about Allen C Perkinson Airport/Blackstone Army Airfield

<http://www.airnav.com/depart?http://www.flyvirginia.com/airport/bkt>

Add a link

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