



# Mid Atlantic Aviation Regional Shore Infrastructure Plan

NAVSTA Norfolk Chambers Field

NAS Oceana

NALF Fentress

NS Norfolk  
Chambers Field

Hampton Roads

Admiral  
Taussig Blvd

Little Creek Rd

Hampton Blvd

Hampton Beltway

Draft  
February 2004





Prepared by  
**ONYX**  
The Onyx Group

for Atlantic Division  
Naval Facilities Engineering Command  
Norfolk, Virginia

**DRAFT SUBMITTAL**  
**February 2004**

**FOR OFFICIAL USE ONLY**  
Distribution of this document is limited to U.S. Government agencies and consultants under contract to the U.S. Government

<b>Table of Contents .....</b>	<b>i</b>		
<b>List of Acronyms .....</b>	<b>v</b>		
<b>List of Figures .....</b>	<b>vi</b>		
<b>1.0 Introduction.....</b>	<b>1-1</b>		
1.1 Purpose of the Study .....	1-1		
1.2 Navy Region Mid-Atlantic .....	1-1		
1.2.1 Mid Atlantic Aviation Regional Shore Infrastructure Plan .....	1-1		
1.2.2 Aviation Mission.....	1-4		
1.3 Goals and Objectives of the RSIP.....	1-4		
1.4 Regional Issues .....	1-4		
1.5 Planning Process and Methodology.....	1-4		
1.5.1 Milestones .....	1-5		
1.5.2 Existing Conditions and Future Needs.....	1-5		
1.5.2.1 Evaluations of Existing Facilities .....	1-5		
1.5.2.2 Concept and Implementation Plan.....	1-6		
1.6 Planning Assumptions .....	1-6		
1.6.1 Broad Assumptions .....	1-6		
1.6.2 Specific Assumptions.....	1-6		
1.7 Report Organization.....	1-7		
<b>2.0 Regional Assets and Requirements.....</b>	<b>2-1</b>		
2.1 Planning Criteria and Definitions .....	2-1		
2.2 Condition of Existing Assets .....	2-1		
2.3 Loading and Requirements .....	2-1		
2.3.1 Aircraft Loading.....	2-1		
2.3.2 Historical and Projected Air Operations Data.....	2-3		
2.3.2.1 Historical Air Operations Data.....	2-3		
2.3.2.1.1 NAVSTA Norfolk Chambers Field.....	2-3		
2.3.2.1.1.1 Rotary-Wing Activity.....	2-3		
2.3.2.1.2 NAS Oceana .....	2-6		
2.3.2.1.3 NALF Fentress.....	2-8		
2.3.2.2 Projected Air Operations Data .....	2-10		
2.3.2.2.1 NAVSTA Norfolk Chambers Field.....	2-10		
2.3.2.2.2 NAS Oceana.....	2-12		
2.3.2.2.3 NALF Fentress .....	2-13		
2.4 Regional Airfield and Aviation Requirements .....	2-15		
2.5 Summary of Existing Assets .....	2-15		
2.5.1 Airfield Pavements .....	2-15		
2.5.1.1 Runways.....	2-15		
2.5.1.2 Helicopter Landing Pads.....	2-15		
2.5.1.3 Aircraft Parking Apron .....	2-17		
2.5.1.4 Other Airfield Pavements.....	2-17		
2.5.1.5 Organizational Level Maintenance .....	2-17		
2.5.1.5.1 Aircraft Maintenance Hangars .....	2-17		
2.5.1.5.1.1 NAVSTA Norfolk Chambers Field .....	2-20		
2.5.1.5.1.2 NAS Oceana .....	2-20		
2.5.1.5.1.3 NALF Fentress .....	2-20		
2.5.1.6. Intermediate Level Maintenance .....	2-20		
2.5.1.7. Depot Level Maintenance .....	2-20		
2.5.1.8 Other Ancillary Airfield Assets.....	2-20		
2.6 Regional Needs Analysis.....	2-21		
2.6.1 Airfield Pavements .....	2-21		
2.6.1.1 Runways.....	2-21		
2.6.1.2 Helicopter Landing Pads.....	2-21		
2.6.1.3 Aircraft Parking Aprons.....	2-21		

**3.0 NAVSTA Norfolk Chambers Field.....3-1**

3.1 Background.....3-1

3.2 History .....3-1

3.3 Relationship of Chambers Field and Naval Station .....3-1

3.4 Aviation Activities.....3-5

    3.4.1 Current Permanent Party Aircraft .....3-5

        3.4.1.1 COMHELTACWINGLANT.....3-5

        3.4.1.2 COMAEWWINGLANT .....3-6

        3.4.1.3 Navy and Marine Corps Air Reserve Squadrons.....3-6

        3.4.1.4 Other Permanent Party Aircraft.....3-7

    3.4.2 Current Transient Aircraft.....3-7

    3.4.3 Projected Permanent Party Aircraft.....3-7

        3.4.3.1 COMHELTACWINGLANT.....3-8

        3.4.3.2 COMAEWWINGLANT .....3-8

        3.4.3.3 Navy and Marine Corps Air Reserve Squadrons.....3-9

    3.4.4 Future Transient Aircraft.....3-9

3.5 Summary of Current and Future Air Operations.....3-9

3.6 Summary of Existing Assets and Future Needs.....3-10

    3.6.1 Airfield Pavements.....3-10

        3.6.1.1 Runways .....3-10

            3.6.1.1.1 Fixed Wing Runways .....3-10

        3.6.1.2 Rotary Wing Runway/Helipads.....3-14

        3.6.1.3 Parking Aprons.....3-14

        3.6.1.4 Taxiways .....3-22

        3.6.1.5 Other Airfield Pavements .....3-22

    3.6.2 Aircraft Maintenance Facilities.....3-25

        3.6.2.1 Organizational-Level Maintenance .....3-25

        3.6.2.2 Intermediate-Level Maintenance.....3-31

        3.6.2.3 Depot-Level Maintenance .....3-34

    3.6.3 Other Ancillary Airfield Assets.....3-35

    3.6.3.1 Aircraft Fueling and Dispensing Facilities..... 3-35

    3.6.3.2 Communications and Navigation Aids ..... 3-37

    3.6.3.3 Air Traffic Control Tower..... 3-37

    3.6.3.4 Air Passenger and Air Cargo Terminal ..... 3-37

    3.6.3.5 Air Operations Building..... 3-40

    3.6.3.6 Aviation Training Facilities ..... 3-40

3.10 Development Plan for NAVSTA Norfolk Chambers Field..... 3-42

    3.10.1 East Coast Home Base for the MH-60S Helicopter..... 3-42

    3.10.2 Logistics Support Squadron Aircraft Upgrades ..... 3-42

    3.10.3 Reduce Airfield Safety and Operational Incompatibilities ..... 3-42

    3.10.4 Enhance Operations ..... 3-42

**4.0 NAS Oceana ..... 4-1**

4.1 Background ..... 4-1

4.2 History..... 4-1

4.3 Aviation Activities ..... 4-4

    4.3.1 Current Permanent Party Aircraft..... 4-4

        4.3.1.1 COMFITWINGLANT..... 4-4

        4.3.1.2 COMSTRKFITWINGLANT..... 4-4

        4.3.1.3 Navy Air Reserve Squadron ..... 4-5

        4.3.1.4 Other Permanent Party Aircraft ..... 4-5

    4.3.2 Current Transient Aircraft ..... 4-5

    4.3.3 Future Permanent Party Aircraft..... 4-5

    4.3.4 Future Transient Aircraft ..... 4-5

        4.3.4.1 COMFITWINGLANT..... 4-7

        4.3.4.2 COMSTRKFITWINGLANT..... 4-7

        4.3.4.3 Navy and Marine Corps Air Reserve Squadrons ..... 4-8

        4.3.4.4 Other Permanent Party Aircraft ..... 4-8

        4.3.4.5 Comparison of Projected Aircraft..... 4-8

4.4 Summary of Current and Future Air Operations ..... 4-9

4.5 Summary of Existing Assets and Future Needs ..... 4-9

4.5.1 Airfield Pavements.....	4-9	<b>6.0 Regional Plan .....</b>	<b>6-1</b>
4.5.1.1 Runways.....	4-12	6.1 Introduction .....	6-1
4.5.1.2 Parking Aprons.....	4-12	6.2 Regional Hangar Utilization.....	6-1
4.5.1.3 Taxiways .....	4-19	6.2.1 Regional Opportunities .....	6-1
4.5.1.4 Other Airfield Pavements .....	4-19	6.2.1.1 Fleet Logistics Support Squadron VR-56 .....	6-1
4.5.2 Aircraft Maintenance Facilities.....	4-22	6.2.1.2 Increase Hangar Capacities .....	6-3
4.5.2.1 Organizational-Level maintenance.....	4-22	6.3 Factor that May Impact Future Requirements .....	6-3
4.5.2.2 Intermediate-Level Maintenance.....	4-31	6.3.1 Fleet Response Plan .....	6-7
4.5.2.3 Depot-Level Maintenance .....	4-31	6.3.1.1 NAVSTA Norfolk Chambers Field.....	6-7
4.5.3 Other Ancillary Airfield Assets.....	4-34	6.3.1.2 NAS Oceana.....	6-10
4.5.3.1 Aircraft Fueling and Dispensing Facilities .....	4-34	6.3.2 Naval Reserve Fleet Integration Plan.....	6-12
4.5.3.2 Communications and Navigation Aids.....	4-37	6.3.3 Transition of Marine Squadrons to MV-22 Aircraft .....	6-12
4.5.3.3 Air Traffic Control Tower.....	4-37	6.4 Future Hangar Needs.....	6-13
4.5.3.4 Air Passenger and Air Cargo Terminal .....	4-38	6.4.1 Regional Aircraft Parking Apron Utilization .....	6-28
4.5.3.5 Air Operations Building .....	4-38	6.4.2 Regional Opportunities .....	6-28
4.5.3.6 Aviation Training Facilities.....	4-38	6.4.3 Factor that Impact Future Apron Requirements.....	6-31
<b>5.0 NALF Fentress .....</b>	<b>5-1</b>	6.4.4 Fleet Response Plan .....	3-31
5.1 Background.....	5-1	6.4.4.1 NAVSTA Norfolk Chambers Field .....	3-31
5.2 History .....	5-1	6.4.4.2 NAS Oceana .....	6-31
5.3 Aviation Activities.....	5-1	6.4.4.3 Naval Reserve Fleet Integration Plan.....	6-36
5.4 Summary of Current and Future Air Operations.....	5-1	6.4.4.4 Transition of Marine Squadrons to MV-22 Aircraft ..	6-36
5.5 Summary of Existing Assets and Future Needs.....	5-2	6.5 Future Pavement Needs.....	6-36
5.5.1 Airfield Pavements.....	5-2	6.6 Regional Aviation Maintenance.....	6-40
5.5.1.1 Runways .....	5-2	6.6.1 Organizational-Level Maintenance .....	6-40
5.5.1.2 Taxiways .....	5-3	6.6.2 Intermediate-Level Maintenance.....	6-40
5.5.1.3 Other Airfield Pavements .....	5-3	6.6.3 Depot-Level Maintenance.....	6-40
5.5.2 Auxiliary Landing Field Support Facilities.....	5-3	6.7 Mid-Atlantic Region Aviation Facilities Development Plan.....	6-40

6.7.1 NAVSTA Norfolk Chambers Field ..... 6-40  
6.7.2 NAS Oceana ..... 6-41  
6.7.3 NALF Fentress ..... 6-41

**Appendices**

- Appendix A: Total Facility Requirements—NAVSTA Norfolk
- Appendix B: Total Facility Requirements—NAS Oceana
- Appendix C: Total Facility Requirements—NALF Fentress
- Appendix D: Aviation Assets Criteria and Definitions

## List of Acronyms

AC.....	Acre	MOD.....	Aircraft Modifications
AGL.....	Above Ground Level	MSL.....	Mean Sea Level
AIRLANT.....	Air Forces US Atlantic Fleet	NADEP.....	Navy Depot
AICUZ.....	Air Installations Compatible Use Zones	NAMTRAGRU.....	Naval Air Maintenance Training Group
AIMD.....	Aircraft Intermediate Maintenance Division	NAS.....	Naval Air Station
AIROPS.....	Air Operations	NALF.....	Naval Auxiliary Landing Field
APZ.....	Accident Potential Zone	NAVFAC.....	Naval Facilities Engineering Command
ASR.....	Airport Surveillance Radar	NEPA.....	National Environmental Policy Act
ATAR.....	Air Traffic Activity Report	NLR.....	Noise Level Reduction
ATC.....	Air Traffic Control	NM.....	Nautical Mile
ATCT.....	Air Traffic Control Tower	OLF.....	Outlying Landing Field
CFR.....	Code of Federal Regulations	OPNAVINST.....	Chief of Naval Operations Instruction
CNO.....	Chief of Naval Operations	OSA.....	Operations Support Aircraft
CNRMA.....	Commander, Navy Region Mid-Atlantic	PAR.....	Precision Approach Radar
COMAEWWINGLANT.....	Commander Airborne Early Warning Wing Atlantic Fleet	PWD.....	Public Works Department
COMFITWINGLANT.....	Commander Fighter Wing Atlantic Fleet	RATCF.....	Radar Air Traffic Control Facility
COMHELTACWINGLANT.....	Commander Helicopter Tactical Wing Atlantic Fleet	RAICUZ.....	Range Air Installations Compatible Use Zones
COMSTRKFITWINGLANT.....	Commander Strike Fighter Wing Atlantic Fleet	RPM.....	Revolutions Per Minute
CSD.....	Customer Service Desk	RSO.....	Regional Supply Officer
CZ.....	Day-night Average Sound Level	SAR.....	Sea Air Rescue
DOD.....	Department of Defense	SFP.....	Strategic Facilities Plan
DON.....	Department of Navy	SF.....	Square Feet
EA.....	Environmental Assessment	SY.....	Square Yards
EIS.....	Environmental Impact Statement	TS.....	Total Syllabus
FAA.....	Federal Aviation Administration	VFR.....	Visual Flight Rules
FAR.....	Federal Aviation Regulation	WTT.....	Weapons Tactical Trainers
FAR.....	Floor Area Ratio		
FCLP.....	Field Carrier Landing Practice		
FRS.....	Fleet Replacement Squadron		
GCA.....	Ground Controlled Approach		
GEMD.....	Ground Electronics Maintenance		
GPS.....	Global Positioning System		
HIRL.....	High Intensity Runway Lighting		
ILS.....	Instrument Landing System		
IMC.....	Integrated Maintenance Concept		
ISR.....	In-Service Repair		
MOA.....	Military Operating Areas		

List of Figures

**Chapter 1**

**Figures**

1-1 ..... Regional Location Map  
 1-2 ..... Area Maps

**Chapter 3**

**Figures**

3-1 ..... Aerial View of Areas at Chambers Field  
 3-2 ..... Development Constraints  
 3-3 ..... Chambers Field Aircraft Pavements  
 3-4 ..... Chambers Field Primary Arrival and Departure Flight Tracks  
 3-5 ..... Chambers Field Rotary Arrival and Departure Flight Tracks  
 3-6 ..... Existing Aircraft Parking LF Area  
 3-7 ..... Existing Aircraft Parking SP Area  
 3-8 ..... Existing Aircraft Parking LP North Area  
 3-9 ..... Existing Aircraft Parking LP South Area  
 3-10 ..... Chambers Field Other Aircraft Pavements  
 3-11 ..... AIMD Facilities  
 3-12 ..... Aircraft Fuel Facilities  
 3-13 ..... Air Passenger and Air Cargo Terminal  
 3-14 ..... Training Facilities  
 3-15 ..... Development Plan LF Area  
 3-16 ..... Development Plan SP Area  
 3-17 ..... Development Plan LP North Area  
 3-18 ..... Development Plan LP South Area

**Chapter 4**

**Figures**

4-1 ..... Aerial View of NAS Oceana  
 4-2 ..... Development Constraints  
 4-3 ..... NAS Oceana Airfield Pavements  
 4-4 ..... NAS Oceana Primary Flight Tracks  
 4-5 ..... Existing Aircraft Parking Northwest Ramp  
 4-6 ..... Existing Aircraft Parking Northeast Ramp  
 4-7 ..... NAS Oceana Other Aircraft Pavements  
 4-8 ..... Hangar 111 Proposed Utilization Plan  
 4-9 ..... Hangar 122 Proposed Utilization Plan  
 4-10 ..... Hangar 145 Proposed Utilization Plan  
 4-11 ..... Hangar 200 Proposed Utilization Plan  
 4-12 ..... Hangar 404 Proposed Utilization Plan  
 4-13 ..... Hangar 500 Proposed Utilization Plan  
 4-14 ..... AIMD Facilities  
 4-15 ..... Aircraft Fuel Facilities  
 4-16 ..... Training Facilities  
 4-17 ..... Development Plan Northwest Ramp  
 4-18 ..... Development Plan Northeast Ramp

**Chapter 5**

**Figures**

5-1 ..... NALF Fentress Airfield Pavements  
 5-2 ..... NALF Fentress Primary Flight Tracks  
 5-3 ..... NALF Fentress Support Facilities  
 5-4 ..... Development Plan Fentress

**Chapter 6**

Figures

6-1..... Regional Changes  
6-2..... Proposed Squadron Relocation Chambers Field  
6-3..... Proposed Hangar Utilizations Hangar 200 NAS Oceans  
6-4..... Development Plan LF Area  
6-5..... Development Plan SP Area  
6-6..... Development Plan LP North Area  
6-7..... Development Plan LP South Area  
6-8..... Development Plan Northwest Ramp  
6-9..... Development Plan Northwest Ramp  
6-10..... Development Plan Fentress



**Chapter 1**  
**Introduction**

---

## 1.0 INTRODUCTION

### 1.1 Purpose of the Study

Regional Shore Infrastructure Planning (RSIP) is a Chief of Naval Operations (CNO)-directed process. It capitalizes on the regional pattern of the shore establishment and focuses on achieving gains in infrastructure efficiency while maintaining mission effectiveness. Comprehensive regional planning recognizes and meets the CNO objective to “ensure the planning process maintains the Navy’s strategic direction and sustainability of the shore establishment.”

The RSIP process generates two levels of regional plans, the Overview Plan and the Functional Plan. The Overview Plan addresses all functional areas in a region and how they relate to one another across traditional organizational boundaries. The scope of the Overview Plan is broad and includes functional relationship issues and larger infrastructure strategies across the region.

The Functional Plan focuses on a specific functional area and develops distinct functional solutions. Its scope is deep, addressing specific issues and identifying detailed infrastructure solutions and strategies for a given functional area. The Functional Plan seeks reductions in infrastructure, reductions in overhead and gains in operational efficiency that can reduce the Navy’s fiscal burden. Through potential development initiatives that focus on specific functional areas, long-term planning solutions are recommended to increase the efficiency of facility use while maintaining or improving the quality of service for Navy personnel and dependents.

### 1.2 Navy Region Mid-Atlantic

Regionalization is the consolidation or realignment of functions either geographically or organizationally to streamline and achieve savings through the elimination of duplicative positions. The Commander, Navy Region Mid-Atlantic is an echelon III commander, subordinate to the Commander, U.S. Atlantic Fleet (COMLANTFLT). The current

regional area of responsibility includes the five-state area of Virginia, West Virginia, Maryland, Pennsylvania and Delaware, less those areas assigned to Naval District Washington (the Washington Capital Region).

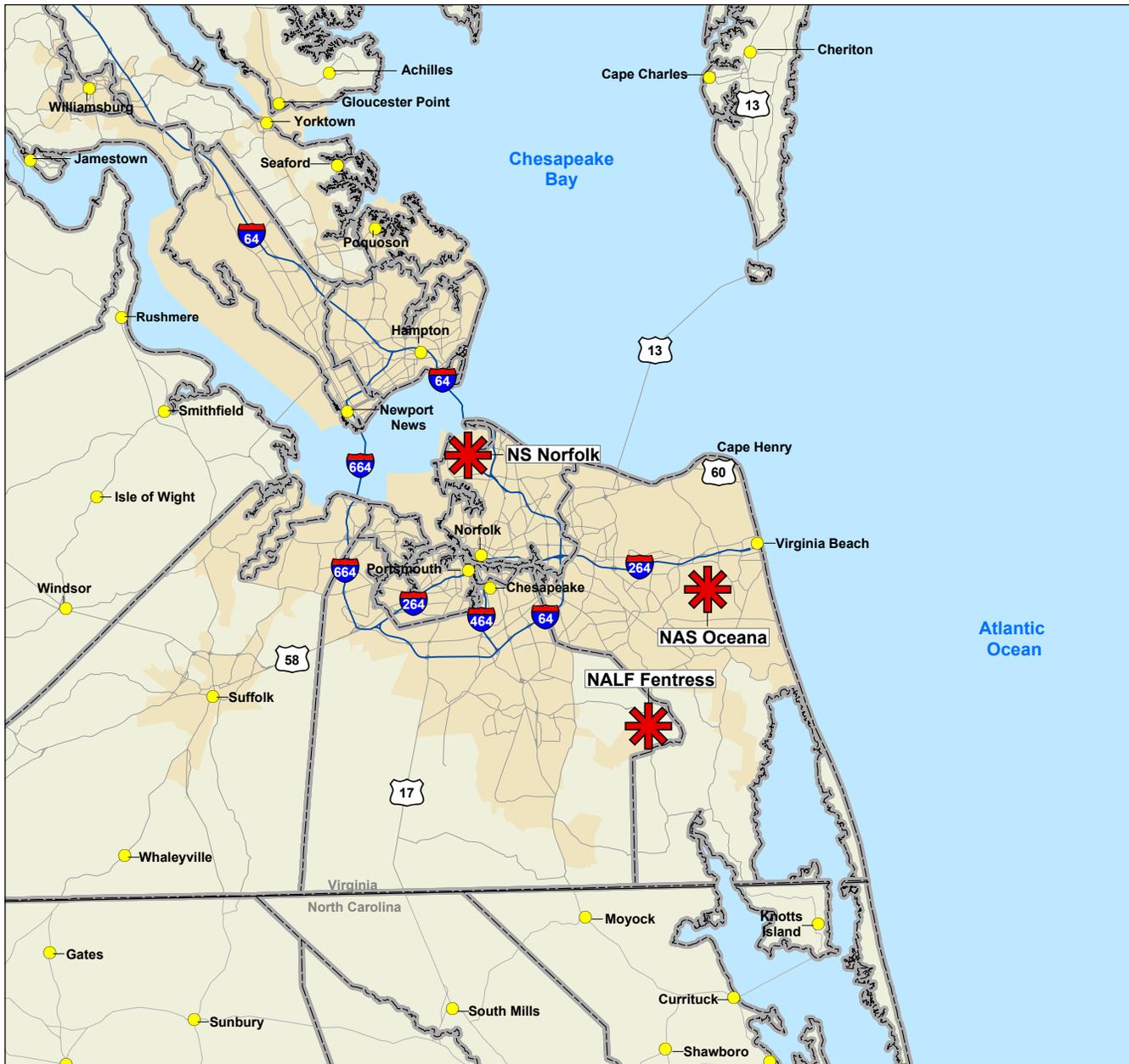
#### 1.2.1 Mid-Atlantic Aviation Regional Shore Infrastructure Plan

The Mid-Atlantic Aviation RSIP provides a functional and operational long-term plan for air installations within the Mid-Atlantic (MIDLANT) region. These installations include:

- Naval Station (NAVSTA) Norfolk, Chambers Field
- Naval Air Station (NAS) Oceana
- Naval Auxiliary Landing Field (NALF) Fentress

See Figure 1-1 for a regional location map and Figure 1-2 for base specific location maps.

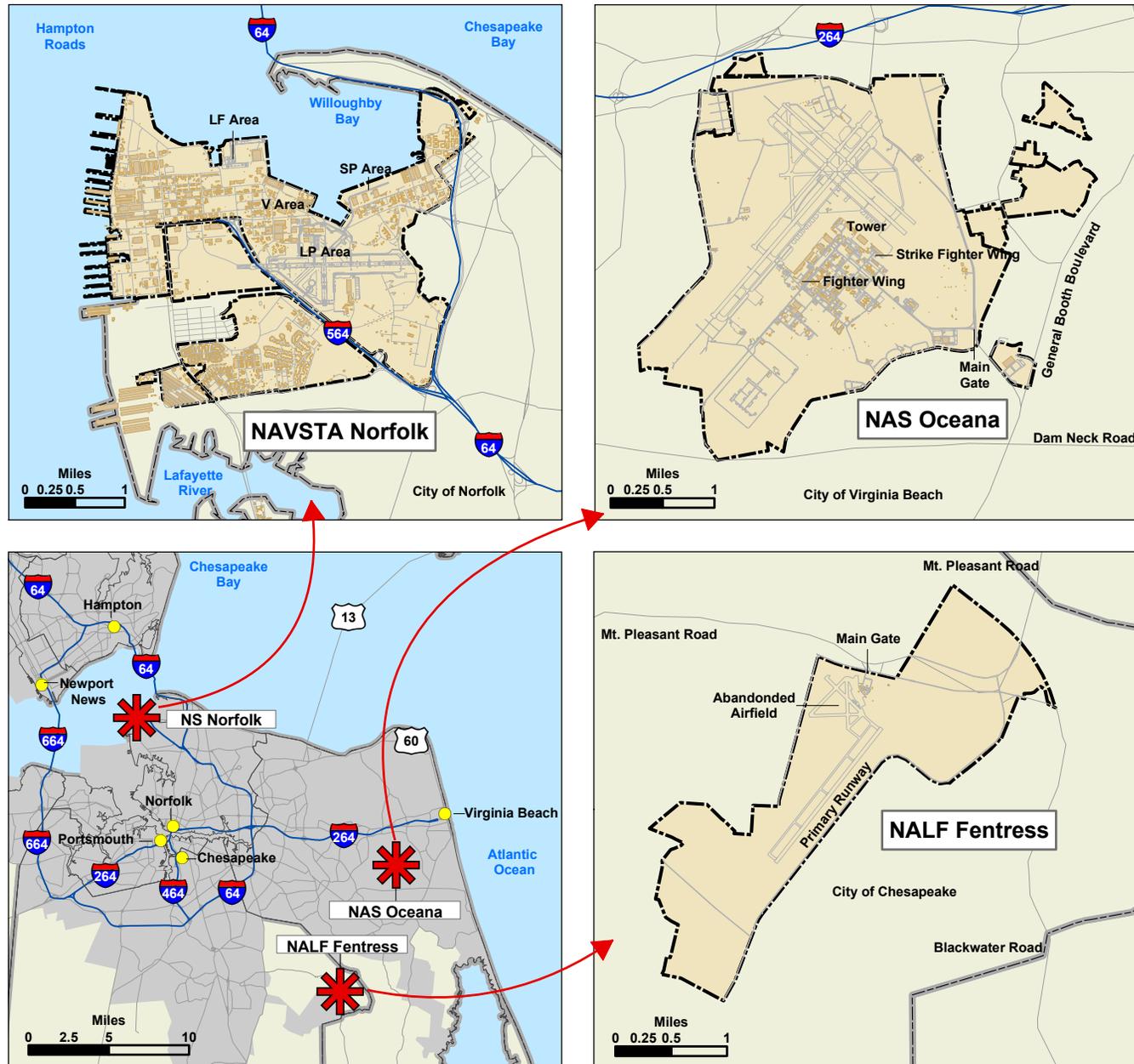
The shore-based aviation facilities and resources in the MIDLANT Region are under the authority of the Commanding Officer (CO) of NAS Oceana.



**Figure 1-1**  
**Regional Location Map**

-  Installations
-  Urban Areas





**Figure 1-2  
Area Maps**

**Notes**

**NAVSTA Norfolk Chambers Field**  
 Area- 1,900 Acres  
 Primary Runway- 10/28  
 Helicopter Runways - 2 Total  
 Helipads - 2 Total

**NAS Oceana Apollo Soucek Field**  
 Area- 5,331 Acres  
 Primary Runways- 5R/23L and 5L/23R  
 Crosswind Runways- 14R/32L and 14L/32R

**NALF Fentress**  
 Area- 2,560 Acres  
 Primary Runway- 5/23

### 1.2.2 Aviation Mission

The MIDLANT aviation mission is to support Navy Aircraft Carrier Battle Groups, Marine Corps, Coast Guard, Army, Air Force, and National Guard in maintaining optimum combat readiness. The MIDLANT aviation mission is to maintain readiness at optimum levels, continually monitor and improve all Supply and Aviation Intermediate Maintenance Division (AIMD) performance, and provide continuous availability of airfield service at NAS Oceana, NALF Fentress, Chambers Field, and Dare County training areas.<sup>1</sup>

Aircraft with an existing or planned permanent presence in the MIDLANT region include:

- F-14 Tomcat
- F/A-18(A/B/C/D) Hornet
- F/A-18(E/F) Super Hornet
- H-3 Sea King
- T-34 Mentor
- E-2C Hawkeye
- C-2A Greyhound
- MH-60S Knighthawk
- MH-53 Sea Dragon
- HH-60H Seahawk
- CH-46 Sea Knight
- C-12 Huron
- C-9 Skytrain
- C-40A Clipper



<sup>1</sup> NAS Oceana Web site, Mission of NAS Oceana July 2003

## 1.3 Goals and Objectives of the RSIP

The goals of the RSIP encompass three overarching themes:

- Long-Term Vision
- Regional Investment Analysis
- Implementation Recommendations

Efficient and effective utilization of existing infrastructure while maximizing operational readiness is the real challenge of this RSIP. The Plan identifies opportunities for consolidation of facilities and functions within the MIDLANT region.

## 1.4 Regional Issues

A number of significant aviation topics are covered in this RSIP. They include, but are not limited to:

- The transition of the helicopter community at Chambers Field
- The transition of the fighter community at NAS Oceana
- The transition of the fleet logistics support squadron at Chambers Field

## 1.5 Planning Process and Methodology

COMLANTFLT initiated this study to create a forward-thinking plan that serves as a strategic framework to manage extensive changes in infrastructure, management, business practices, and the aviation community within the Mid-Atlantic Region. To oversee this effort, the Mid-Atlantic Region assembled a working team composed of representatives from a variety of commands, including:

- Commanding Officer, Naval Air Station Oceana
- Commanding Officer, Naval Station Norfolk
- Commander, U.S. Atlantic Fleet
- Commander, Naval Air Forces U.S. Atlantic Fleet

- Commander, Naval Air Reserve Force
- Commander, Navy Region Mid-Atlantic
- Commander, Naval Air Systems Command
- Commander, Helicopter Tactical Wing U.S. Atlantic Fleet
- Commander, Airborne Early Warning Wing U.S. Atlantic Fleet
- Commander, Fighter Wing U.S. Atlantic Fleet
- Commander, Naval Aviation Depot Jacksonville
- Commander, Atlantic Division, Naval Facilities Engineering Command

The Mid-Atlantic Aviation RSIP planning process began in the summer of 2002 with a kickoff meeting and interviews with the aviation stakeholders at each installation. On the basis of the information gathered during this phase of this project, preliminary concepts were developed focusing on opportunities for consolidation of aviation assets at the regional level, as well as improvements to aviation facilities at the installation level. A series of specific focus sessions followed. These included detailed work sessions related to the homebasing of the MH-60 Sierra (S) Knighthawk helicopter at Chambers Field and homebasing of the F/A-18E/F Super Hornet at NAS Oceana. A concept plan was developed for both Chambers Field and NAS Oceana. These concepts were presented at two different forums in February 2003 and April 2003 at Chambers Field and NAS Oceana.

### 1.5.1 Milestones

Significant milestones in the development of the MIDLANT Aviation RSIP include:

- **July–October 2002:** Kickoff meeting, stakeholder interviews, site visits, data collection
- **November 2002–June 2003:** Concepts for Chambers Field and NAS Oceana developed and presented to stakeholders
- **September 2003:** Record of Decision issued for East Coast basing of the F/A-18E/F Super Hornet

- **December 2003:** Draft Report completed and distributed for review
- **January 2004:** Final Report completed

### 1.5.2 Existing Conditions and Future Needs

Collaborating with members of the working group, consultant engineers and planners conducted a thorough review of the three Navy air installations within the Mid-Atlantic Region. On the basis of information collected from site visits to each installation and from data received from the Navy, the Existing Conditions and Future Needs Assessment was prepared. This portion of the plan documents the condition and capability of aviation assets based on current planning and design criteria, airfield safety criteria, and existing facility conditions. On the basis of projected personnel and aircraft loading, this plan develops requirements including airfield pavements, aircraft maintenance facilities, and other ancillary airfield assets (e.g. airfield fueling and dispensing facilities, communications and navigational aids, aircraft training facilities, and aircraft operational buildings).

#### 1.5.2.1 Evaluation of Existing Facilities

A major aspect of the existing conditions and future needs is the evaluation of existing facilities against appropriate criteria to determine the adequacy of these facilities. For purposes of evaluating the existing facilities, aviation assets were grouped into three primary categories:

- **Airfield Pavements**—runways, taxiways, and aircraft parking aprons. Other airfield pavements include ordnance handling pads, combat aircraft loading areas (CALAs), washracks, and rinse areas.
- **Aircraft Maintenance Facilities**—aircraft maintenance hangars and aircraft maintenance shops.
- **Ancillary Airfield Assets**—aircraft fueling and dispensing facilities, communications and navigational aids, air traffic control tower, air passenger terminal, air cargo terminal, airfield operations building, and aviation training facilities.

Expanded definitions of primary aviation assets are presented in Appendix xx.

### 1.5.2.2 Concept and Implementation Plan

This section of the plan provides a detailed analysis of recommendations resulting from the collaborative efforts of planners and key aviation operations and facilities stakeholders and the development of a “roadmap” for implementation. Development plans, implementation plans, and analysis were developed for each installation as well as on a regional basis. It documents the regional components and recommendations including a description of the long-term vision of Navy assets located within the Mid-Atlantic Region.

## 1.6 Planning Assumptions

The Mid-Atlantic Aviation RSIP is based on several broad and specific planning assumptions:

### 1.6.1 Broad Assumptions

- The plan takes a long-term view and is therefore based on peacetime operations and requirements. World events at the time of writing have resulted in increased operations throughout the U.S. military, and the three activities that are the subject of this study, may be affected by current military operations in southwest Asia and in the Middle East. The long-term time period of the plan, however, assumes that surge conditions will not be sustained.
- The plan focuses on aviation assets and those support assets directly contributing to aviation operations. Crossover functions, such as transient housing; Morale, Welfare and Recreation (MWR); Galley and vehicular transportation are outside the scope of this study and will be addressed in subsequent functional RSIPs.
- Reutilization and conversion of existing facilities is a high priority to minimize military construction (MILCON) requirements.
- Hampton Roads, because of its strategic location, harbor assets, and the scale of present investment, will remain the major fleet concentration area on the East Coast for the next 50 years.

- The home-ported fleet size (five aircraft carriers) will not change substantially in the near term. The majority of naval aviation activities now located in Hampton Roads are essential to fleet operations. Facilities needed to support these activities will remain a vital part of the national defense.
- The MIDLANT Aviation basic mission will remain fundamentally the same over the next 10–15 years.
- Projects for needed infrastructure will continue to be dependent on the availability of funds within a highly competitive funding environment.
- Although the aviation missions will not fundamentally change over the next 10–15 years, facility requirements will continue to be driven by evolving operations and advanced technologies.
- Development at MIDLANT will require an ongoing balance of operational needs and environmental concerns, such as management, protection, and preservation of the island’s abundant natural and cultural resources.

### 1.6.2 Specific Assumptions

- The Basic Facility Requirements (BFRs) reflect the requirements at the time of plan preparation. Future changes in requirements will trigger a review and /or revision to the plan.
- The F-14 Tomcat aircraft will retire from the US Navy consistent with the introduction of the F/A -18 E\F “Super Hornet”.
- The MH-60S Knighthawk aircraft is scheduled to be located at NAVSTA Norfolk as noted in the Environmental Assessment of the Homebasing of MH60R/S on the East Coast of the United States completed in May 2002. This plan assumes a phased retirement of older aircraft such as the H-3 Sea King and Navy CH-46 Sea Knight. The MH-53E and Marine Corps CH-46 aircraft are assumed to remain in service.
- The F/A-18 E/F Super Hornet aircraft is scheduled to be located at NAS Oceana as noted in the Record of Decision of the Environmental Impact Statement for the Introduction of F/A-18 E/F

(Super Hornet) Aircraft on the East Coast of the United States, dated July 2003.

- NAS Oceana and NAVSTA Norfolk Chambers Field both have AIMD operations. This document assumes that such operations will not change significantly in the foreseeable future.
- NS Norfolk and NAS Oceana will continue to support the need to meet fleet readiness requirements and the Navy's contingency requirements.

## 1.7 Report Organization

This report documents and summarizes the results of the planning process as described in the following chapters:

**Chapter 1.0 Introduction** Describes the planning process, methodology, and assumption used in the preparation of this plan.

**Chapter 2.0 Regional Assets and Requirements** Provides summary information on aviation assets and needs in the Region

**Chapter 3.0 NAVSTA Norfolk Chambers Field Activity Summary** Provides an overview of NAVSTA Norfolk Chambers Field along with in-depth discussion of aviation assets and requirements. A summary needs analysis is provided from which development recommendations are formulated with a list of projects and implementation plan.

**Chapter 4.0 NAS Oceana Activity Summary** Provides an overview of NAS Oceana along with in-depth discussion of aviation assets and requirements. A summary needs analysis is provided from which development recommendations are formulated with a list of projects and implementation plan.

**Chapter 5.0 NALF Fentress Activity Summary** Provides an overview of NALF Fentress along with in-depth discussion of

aviation assets and requirements. A summary needs analysis is provided from which development recommendations are formulated with a list of projects and an implementation plan.

**Chapter 6.0 Regional Concept and Development Plan** Presents the regional planning concept and development plan including implementation costs and phasing plans.

### Appendices:

- A. Total Facility Requirements Worksheets
- B. Definition of Aviation Assets