

# Background Information

# 2.0

## 2.1 Chronology of Events

This JLUS represents continuing coordination between the Navy and jurisdictions in the Hampton Roads area in developing sound land use policies which enable the presence of military operations in the area. Below is a brief narrative highlighting development decisions preceding this JLUS planning process which reflects a foundation of dialogue at various levels, including key stakeholders and community interaction.

Large scale development within the vicinity of NAS Oceana began in the City of Virginia Beach more than 30 years ago. Since the dialogue on land use compatibility/development between Virginia Beach and the Navy began in the 70s, development has been proposed and approved within areas the Navy disagrees should be developed. In other cases, the City has modified or rejected development proposals to address the Navy's concerns. Over the years, conflicts have occurred over land use proposals between the two parties. Varying planning and land use policies were adopted by the City to address this problem. The differences between the two parties escalated during the basing decisions for the F/A-18 E/F Super Hornets and new Navy regulations about AICUZ land use compatibilities during 2002 and 2003. This JLUS effort in 2004 is a direct consequence of these differing attitudes towards development in NAS Oceana's AICUZ.

Development around NALF Fentress, on the other hand, has been less intense over the past decades. However, recent development pressures are pushing new residents further into areas surrounding NALF Fentress. The leaders of the City of Chesapeake have included growth management tools into their long-term planning strategies to keep development incompatible with military operations away from the active airfield. This approach also recognizes wetlands and other environmental constraints to development in this area, as well as agricultural and rural area preservation. However, the City is interested in other measures to address future compatibility issues as the community continues to grow.

An entirely different situation exists for Chambers Field. In this case, significant development existed around the base prior to jet aircraft or modern air operations starting at Chambers Field (formerly Naval Air



*Development around NAS Oceana over time*

Station Norfolk). This development, mostly older residential neighborhoods, is now incompatible with current Navy regulations. Currently, there is little vacant land available for development in Norfolk in the areas adjacent to Chambers Field. Over the years, representatives from the City of Norfolk and Navy have had informal communications, but this JLUS represents the first time both parties have formally addressed this issue.

Community stakeholder groups, particularly in Virginia Beach, have also been part of this dialogue, pushing both the jurisdictions and Navy to address the noise impacts of military operations on the adjacent communities, continuing to expand in geographic scope. Serving as advocates for community health and quality of life, these groups have been active voices in the land use development debates over the years.

A chronology of major events in the evolution of the airfields' development and jurisdiction planning efforts to address compatibility is highlighted below.

- **1918** – Chambers Field commissioned as airfield at Norfolk
- **August 17, 1943** – Oceana commissioned as Naval Auxiliary Air Station
- **October 24, 1951** – Fentress designated a NALF to Oceana
- **April 1, 1952** – Oceana designated a Naval Air Station
- **1954** – NAS Oceana became first naval air facility developed to accommodate jet aircraft
- **January, 1963** - Charter established for the City of Virginia Beach after merger with Princess Anne County
- **November, 1967** – City of Norfolk adopted General Plan
- **July, 1974** – First F-14 aircraft assigned to NAS Oceana
- **October, 1979** – City of Virginia Beach adopted First Comprehensive Plan
- **January, 1985 (Amended August, 1986)** – Second Comprehensive Plan adopted by City of Virginia Beach
- **February 23, 1988** – City of Chesapeake designated lands around NALF Fentress as agricultural use, maintaining compatibility for air operations

- **June 21, 1988** – City of Chesapeake issued Zoning Ordinance Amendment prohibiting major subdivisions in Agricultural District, surrounding NALF Fentress
- **July 24, 1990** – City of Chesapeake adopted Comprehensive Plan
- **October 16, 1990** – Adoption of Fentress Airfield Study and Fentress Overlay District by City of Chesapeake
- **March, 1991** – Third Comprehensive Plan adopted by City of Virginia Beach
- **January, 1992** – City of Norfolk adopted updated General Plan
- **September 21, 1993** – Establishment of Rural Overlay District by City of Chesapeake, designating lands around NALF Fentress in rural district, prohibiting major residential development and extension of public utilities
- **August 23, 1994** – City of Virginia Beach adopted Airport Zoning Program, including an AICUZ ordinance and land use compatibility tables
- **May, 1995** – City of Virginia Beach implemented Agricultural Reserve Program to conserve farmland in AICUZ and southern part of City
- **November, 1997** – Fourth Comprehensive Plan adopted by City of Virginia Beach
- **September 22, 1998** – Amendments approved to Virginia Beach AICUZ Ordinance; noise disclosure included, noise zones renamed, and conditional uses applied to noise zones
- **1998, 1999** – F/A-18 Squadrons arrived at NAS Oceana
- **1999** – Navy published revised AICUZ map for Oceana, Fentress and Chambers Field
- **July, 2002** – Navy released Draft EIS for placement of F/A-18 E/F
- **December, 2002** – CNO released Office of the Chief of Naval Operations Instruction (OPNAVINST) 11010.36B with revised land use compatibility guidelines
- **February, 2003** – Virginia Beach City Council adopted revised land use plan for Transition Area

- **June, 2003** – Navy representatives met with Virginia Beach Planning Department and Planning Commission to discuss new OPNAVINST 11010.36B land use compatibility table
- **September, 2003** – Final Record of Decision (ROD) released on F/A-18 E/F EIS basing
- **December, 2003** – Fifth Comprehensive Plan adopted by City of Virginia Beach
- **March, 2004** – JLUS Committee Working Group conducted orientation meeting with OEA
- **April, 2004** – HRPDC staff developed JLUS Request for Proposal
- **June, 2004** – Consultant selected to conduct JLUS, in coordination with jurisdictions
- **July 1, 2004** – JLUS began

## 2.2 Economic Impacts of the Installations

NAS Oceana and Chambers Field each have significant impacts on the economic health of the surrounding community. The military and civilian payroll, coupled with spending on goods and services, results in billions of dollars infused into the regional economy.

NAS Oceana, the largest employer in Virginia Beach, had a gross annual payroll of over \$750 million and spent another \$400 million for goods and services in 2003. In that year, over 12,000 personnel were on the payroll, comprised of nearly 9,800 military and over 2,500 civilian employees. Most of these employees live within the community, infusing additional benefits into the local economy, primarily through spending and spousal employment salaries. When considering the personal impact of the military in the community, the economic benefit exceeds \$1 billion annually.

Chambers Field is part of NS Norfolk, which is the largest naval base in the United States with a significant economic contribution in the billions spread throughout the Hampton Roads region. Although ship operations dominate activities at the Station, air operations at Chambers Field represent a major on-going naval activity that contributes substantially to local employment and economic benefits to Norfolk and the other Tidewater communities. In 2003 alone, Chambers Field employed over 5,000 personnel with a payroll of almost \$350 million and related goods and services purchases in the millions.

## 2.3 Military Mission and History

The military presence in the Hampton Roads region is significant, totaling approximately 85,000 active duty service members alone in 2003. When factoring in reservists, retirees, and family members, a total of nearly 232,000 military-associated people reside in the region. Non-military are also dependent on this presence, with nearly 28,000 federal civilian workers employed in the region in 2003.

### NAS Oceana

Oceana was originally carved out of 328 acres of swampland in 1940 as an Auxiliary Airfield. Wartime growth pushed its status to a Naval Air Auxiliary Station on August 17, 1943 and by war's end the number of men and aircraft aboard had tripled. In 1952, Oceana was designated a Naval Air Station (NAS) and the Master Jet Base concept was taking shape. (A Master Jet Base is defined by the Navy as a location with permanent basing and homeporting of carrier air groups, and the provision of one or more auxiliary landing fields for their use in concentrated field carrier landing practice.) By 1953, Oceana was an all-weather air station, and by 1957, it was officially designated a Master Jet Base. The longest runways in Hampton Roads and its location within the city of Virginia Beach, Virginia, near the warming currents of the Atlantic Gulf Stream enable Oceana to operate when other airfields cannot. Over the years, Oceana has grown to more than 16 times its original size.

### NS Norfolk (Chambers Field)

The land on which Naval Station (NS) Norfolk is located was originally the site of the 1907 Jamestown Exposition. A bill was passed in 1917 for the purchase of 474 acres; it set aside the sum of \$1.2 million as payment for the property and an additional \$1.6 million for the development of the base, including piers, aviation facilities, storehouses, facilities for fuel and oil storage, a recruit training station, a submarine base and recreation grounds for fleet personnel.

NS Norfolk Chambers Field is the name for the airfield facility formerly belonging to NAS Norfolk. Chambers Field was commissioned in 1918, supporting transport, surveillance, and attack aircraft throughout its history. The field consists of two heliports, six helipads, and one east-west runway.

## NALF Fentress

Both Naval Auxiliary Landing Field (NALF) Fentress in Chesapeake and Chambers Field in Norfolk are under the command of NAS Oceana. The Fentress landing field was established as a part of NAS Oceana during World War II and has been used since then as a training facility for aircraft stationed at both Oceana and Norfolk. The field was designated a NALF to Oceana in October, 1951.

## 2.4 Current and Future Military Operations

### NAS Oceana

NAS Oceana has grown to become one of the largest and most advanced air stations in the world with an area of 5,331 acres and an additional 3,680 acres in restrictive easements. Its runways, measuring 8,000 feet and 12,000 feet, are designed for high-performance aircraft. NAS Oceana's primary mission is to train and deploy the Navy's East Coast Strike/Fighter squadrons—the F-14 Tomcats and the F/A-18 Hornets and Super Hornets. Pilots stationed at NAS Oceana fly more than 200,000 training operations each year.

The airspace under control tower jurisdiction and immediately adjacent to the runways is defined by the Federal Aviation Administration (FAA) as "Class D" airspace. At NAS Oceana, "Class D" is that airspace from the surface to 2,500 feet within a 4.3 nautical mile radius from the center of the airport. The pattern altitude at NAS Oceana is 1,000 feet. Flight operations that are conducted into and out of NAS Oceana as part of the typical training syllabus for flight crews include departures, arrivals, touch and go landings, practice radar approaches, flights to and from NALF Fentress, and flights to and from offshore training areas. Flights operating within NAS Oceana's Class D airspace may be routed anywhere within the 4.3 mile radius at an altitude above 1,000 feet, or lower when necessary for takeoff or landing.

Aircraft loading is currently changing at NAS Oceana. The Super Hornet transition now underway is based on the results of the East Coast Basing strategy of the new airframe. Due to this transition, the overall number of aircraft based at NAS Oceana is projected to decrease in the future, with a different mix of aircraft from today's current state. Current and projected aircraft based at NAS Oceana are provided in Table 2.1.



**Table 2.1 Current and Projected Aircraft Loading at NAS Oceana**

Aircraft Type	Wing Type	Current (2004)	Projected (2012)
F-14	Fixed Wing	63	0
F-18 C/D	Fixed Wing	145	85
F-18 E/F	Fixed Wing	7	120
F-18 A	Fixed Wing	12	12
C-40	Fixed Wing	0	4
Other Aircraft		14	14
TOTAL		241	235

Source: Mid-Atlantic Aviation Regional Shore Infrastructure Plan, NAVFAC Atlantic 2004

### NS Norfolk (Chambers Field)

Today, Naval Station Norfolk occupies about 4,300 acres of Hampton Roads real estate on a peninsula known as Sewells Point. Naval Air Station Oceana, Air Detachment Norfolk, maintains and operates airfield and heliport facilities at Chambers Field on the Station, repairs and maintains airfield Ground Electronic Equipment, provides logistical support to joint commanders and Naval Air Logistics Office, and operates the UC-12B/M and RC-12M Fleet Replacement School.

Chambers Field consists of two heliports, four helipads, and an 8,000-foot runway. Its current inventory includes: the E-2 Hawkeye, the C-9 Skytrain, the C-12 Super King Air, the C-2 Greyhound, the CH-46 Sea Knight, the CH-53 Sea Stallion, the CH-53E Super Stallion, the H-3 Sea King, and the H-60 Seahawk. Additionally, Chambers Field is home to the Air Mobility Command (AMC) Passenger and Air Cargo Terminal located on the south side of the airfield. The AMC Terminal processes 12,000 passengers and more than 800 tons of cargo each month for military missions worldwide. Pilots perform approximately 100,000 flight operations annually at Chambers Field. Current and projected aircraft based at NS Norfolk (Chambers Field) are provided in Table 2.2.

A transition in airframes is also underway at Chambers Field, with increases in the number of rotary wing (helicopter) aircraft, specifically, the H-60S. Additionally, the C-9s are projected to move from Chambers Field to NAS Oceana in the near future. The changes in rotary airframes will result in no modifications of Accident Potential Zones (APZs) and noise contours due to the presence of fixed wing contours dominating the airfield and surrounding environs.



**Table 2.2 Current and Projected Aircraft Loading at Chambers Field**

Aircraft Type	Wing Type	Current (2004)	Projected (2012)
H-3	Rotary Wing	16	0
H-60S	Rotary Wing	15	92
H-46 (USN)	Rotary Wing	11	0
H-46 (USMC)	Rotary Wing	12	12
MH-53	Rotary Wing	15	15
HH-60H	Rotary Wing	8	8
E-2C	Fixed Wing	36	32
C-2A	Fixed Wing	17	17
C-9	Fixed Wing	5	0
C-12	Fixed Wing	5	3
TOTAL		140	179

Source: Mid-Atlantic Aviation Regional Shore Infrastructure Plan, NAVFAC Atlantic 2004

### NALF Fentress

NALF Fentress is located approximately seven miles southwest of NAS Oceana. It comprises 2,560 acres, with an additional 8,780 acres in restrictive easements. NALF Fentress has one 8,000 foot runway equipped to simulate an aircraft carrier flight deck. It is used by squadrons stationed at NAS Oceana or NS Norfolk Chambers Field for Field Carrier Landing Practice (FCLP) operations. These operations are intended to familiarize the pilot with carrier landings and must be conducted under both daytime and nighttime operational conditions. Prior to deployments, the local community may experience increased operations, as pilots complete training exercises. Pilots perform approximately 100,000 operations at NALF Fentress annually. The pattern altitude at NALF Fentress is 800 feet.



## 2.5 Regional Demographics and Growth Trends

Much of the Hampton Roads region has experienced significant growth over the past decades, with the current trend anticipated to continue into the future (See Tables 2.3 and 2.4). Residential growth has fueled the demand for new services, resulting in new commercial development primarily in Virginia Beach and Chesapeake. Future growth in these jurisdictions is projected to be significant, with both cities expected to grow over 20 percent in the next 20 years. The level of development in Norfolk, on the other hand, has remained relatively steady, with much of the neighborhood surrounding Chambers Field at NS Norfolk already developed. Future trends indicate a modest increase in population in Norfolk over the next 20 years.

## **NAS Oceana**

Land surrounding NAS Oceana is largely developed, with high concentrations of residential uses around much of the installation and more intensive commercial development to the north-northeast of the airfield. Over 140,000 people, which represents approximately 33% of the City of Virginia Beach's population, live in areas affected by military operations, whether noise or safety related (See Table 2.5). According to the 2000 Census, much of the housing stock is owner-occupied, with a low vacancy rate around 5%.

Virginia Beach is expected to continue growing over the next 20 years, with much of the opportunity for new growth occurring either through redevelopment infill or new development in the Princess Anne Corridor. The comprehensive planning policy for the jurisdiction notes strategic areas for growth throughout the jurisdiction, half of which lie within the area affected by air operations at Oceana.

## **NS Norfolk (Chambers Field)**

Almost 8,000 people (approximately 3% of Norfolk's population) reside in the noise zones and APZs of Chambers Field (See Table 2.5). Approximately 8% of the housing units in that area were vacant, according to the 2000 census. The area surrounding the airfield is already developed, with utilities and infrastructure provided. Future growth in this area would be almost entirely in the form of infill redevelopment.

## **NALF Fentress**

Over 11,000 people, (approximately 5% of the City population) currently live in the Chesapeake AICUZ (See Table 2.5). Although growth in the City at large has been much greater, recent growth in the census tract around NALF Fentress has been steady, hovering around 3% since 2000. This translates into a net gain of approximately 30 new residential units a year over the entire census tract. Much of the land surrounding NALF Fentress is zoned agricultural or conservation, helping maintain the low rate of residential growth within this area.

**Table 2.3 Census Variables**

Census 2000 Variables	Chesapeake	Norfolk	Virginia Beach
Total Population	199,184	234,403	425,257
Total Households	69,900	86,210	150,325
Total Families	64,158	51,915	110,953
Total Housing Units	72,672	94,416	162,277
Average Household Size	2.79	2.45	2.70
Average Family Size	3.17	3.07	3.14
Median Household Income	\$50,743	\$31,815	\$48,442
Per Capita Income	\$20,949	\$17,372	\$22,365

Source: 2000 U.S. Census

**Table 2.4 Projected Population 2026**

	Total Population 2000	Estimated Population 2003	Projected Population 2026	% Change 2003– 2026
Chesapeake	199,184	207,199	264,900	27.8
Norfolk	234,403	241,727	243,724	8.3
Virginia Beach	425,257	439,467	534,278	21.6

Source: 2000 U.S. Census

**Table 2.5 Estimated Population in Hampton Roads AICUZ Zones (excluding military population living on base)**

AICUZ Zones	Estimated Chesapeake Population*	Estimated Norfolk Population*	Estimated Virginia Beach Population*
65-70 db	7,200	3,500	48,000
70-75 db	3,000	1,600	41,800
> 75 db	1,200	2,600	50,700
<b>Total</b>	<b>11,400</b>	<b>7,700</b>	<b>140,500</b>

\* Calculated as proportion of U.S. Census Block 2003 population (estimates compiled by ESRI Business Information Solutions) within AICUZ boundaries for each jurisdiction.