

1.0 PURPOSE AND NEED FOR PROPOSED ACTION

1.1 INTRODUCTION

This Draft Environmental Impact Statement (DEIS) evaluates the potential direct, indirect, and cumulative environmental effects that may result from the United States (U.S.) Department of the Navy (DoN or Navy) proposed action to support and conduct airfield operations at Naval Air Station (NAS) Key West. The Navy's mission is to maintain, train, and equip combat-ready naval forces capable of winning wars, deterring aggression, and maintaining freedom of the seas. Title 10 United States Code (USC) Section 5062 directs the Chief of Naval Operations (CNO) to train all naval forces for combat. The CNO meets that direction, in part, by supporting and conducting aircraft training operations at NAS Key West and within the nearby Key West Range Complex in accordance with the Navy's Fleet Response Plan.

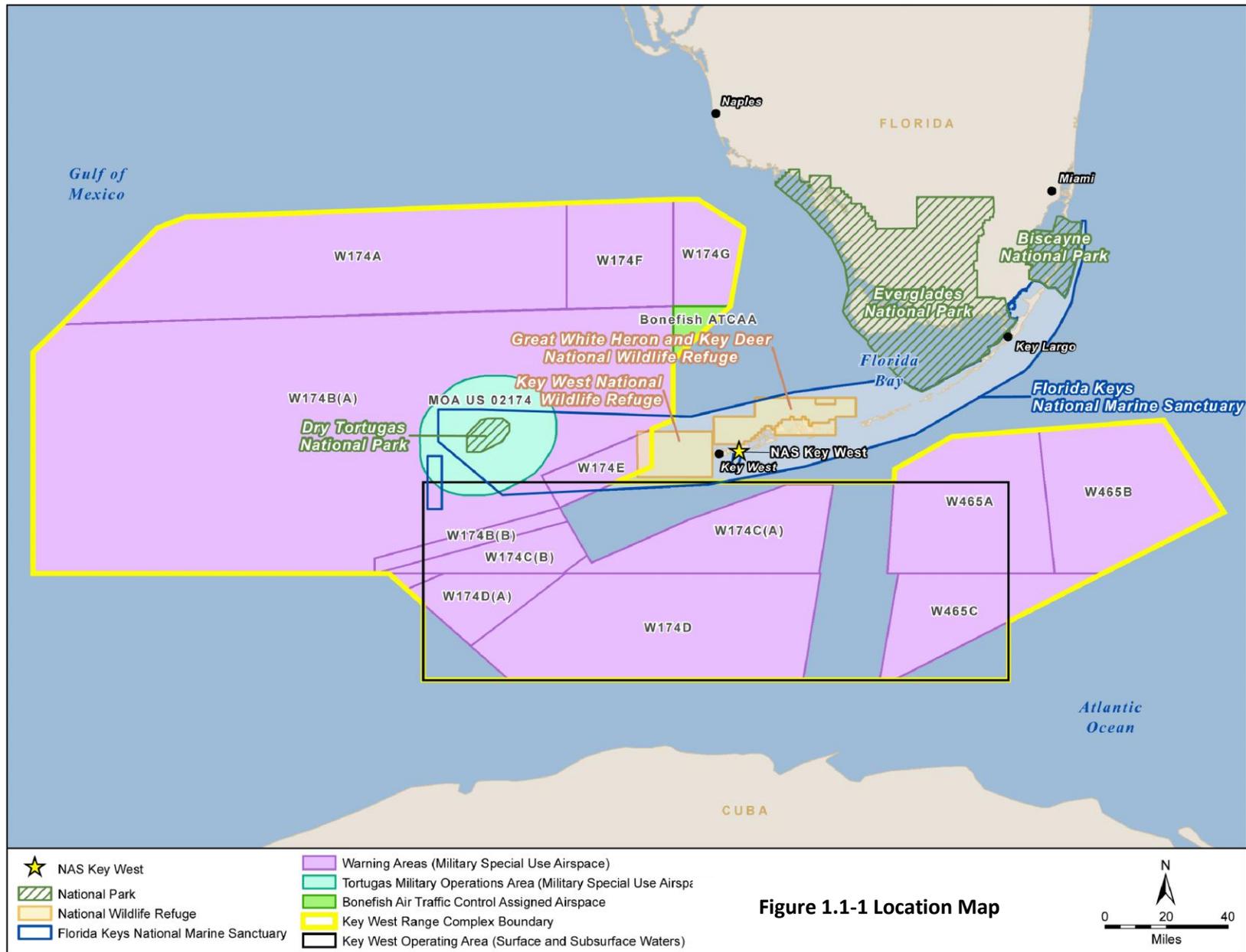
The activities analyzed in the DEIS include transitioning to next generation aircraft, and current and potential future airfield operations. Specifically, in considering the proposed action, the decision-maker is addressing maintaining current/baseline airfield operations, supporting airfield operations by new types of aircraft, and modifying airfield operations as necessary in support of the Fleet Readiness Training Plan. The Fleet Readiness Training Plan implements the Navy's Fleet Response Plan at the U.S. Navy Fleet Forces Command level and is essential to the readiness of U.S. naval forces. The Navy's Fleet Response Plan, adopted in 2003, addresses the achievement of a higher level of capability to rapidly deploy trained naval battle forces *in addition to* those currently deployed (surge capability). NAS Key West provides an ideal aviation training site in the Lower Florida Keys with year-round, quick, and efficient access to offshore training areas of the Key West Range Complex (Figure 1.1-1). The study area is centered on NAS Key West Boca Chica Field and includes the surrounding area that could be directly, indirectly, or cumulatively affected by the airfield operations that occur at the Air Station.

This DEIS has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969; the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508); and DoN's procedures for implementing NEPA (32 CFR 775). The Navy is the lead agency for the proposed action; there is no cooperating agency (per 40 CFR 1501.6).

1.2 PURPOSE AND NEED

1.2.1 Background

NAS Key West provides aviation training facilities, services, and access to training ranges for tactical (i.e., jet aircraft with fighter or attack missions) aviation squadrons. NAS Key West's weather/climate supports year-round fleet training, and its location provides quick and efficient access to the nearby Key West Range Complex, a key training venue regularly used by Department of Defense (DoD) and U.S. federal agency aircrews from around the country to fulfill operational and air-to-air combat readiness training requirements. The primary users of NAS Key West are Navy Strike Fighter Squadrons (VFAs). Other units that utilize NAS Key West airfield are other Navy fleet and fleet replacement squadrons,



Marine Fighter Attack Squadrons, Chief of Naval Air Training squadrons, Air Force squadrons, Department of Homeland Security, U.S. Coast Guard, other federal agencies, and allied aviation units. Most primary users of NAS Key West are not homebased there; they are aviation squadrons that travel to, or “detach” to, NAS Key West for several weeks at a time in order to fulfill certain training requirements. NAS Key West provides and maintains facilities and services for these transient squadrons.

Additionally, NAS Key West is home to two squadrons that conduct frequent airfield operations at NAS Key West:

- Composite Fighter Squadron (VFC)-111, which flies F-5N Tiger aircraft and acts as an opposing force in air-to-air combat training in the Key West Range Complex, and
- VFA-106 Detachment Key West, which is part of the VFA-106 squadron based at NAS Oceana, Virginia that flies FA-18 C/D Hornet and FA-18 E/F Super Hornet aircraft and prepares fleet pilots for assignment to deploying FA-18 squadrons.

Other units based at NAS Key West (which include Joint Interagency Task Force-South, U.S. Coast Guard, U.S. Army Special Forces Underwater Operations School, and others) conduct less frequent airfield operations, primarily with helicopter and military transport aircraft. The NAS Key West airfield supports approximately 50,000 “flight operations” per year. A flight operation consists of one use of the runway; each take-off or landing is separately counted as a flight operation.

The strategic location of NAS Key West (see Figure 1.1-1) affords the Navy efficient and effective means to support nearby in-flight and at-sea training and to provide logistics and maintenance support for aircraft. The NAS Key West airfield consists of three runways; primary Runway 07/25 is 10,000 feet (ft) by 200 ft and Runways 03/21 and 13/31 are both 7,000 ft by 150 ft. Runways 03, 07, and 13 are configured to conduct Field Carrier Landing Practice (FCLP). Runway 07 is designated the instrument/calm wind runway, and is normally used when the surface wind is 10 knots or less (regardless of wind direction), when prevailing easterly winds are greater than 10 knots, and when operationally advantageous.

1.2.2 Purpose and Need

The purpose of the proposed action is to sustain fleet training conducted at and associated with the NAS Key West airfield for Navy tactical aviation and use by other DoD and federal agencies, while introducing new aircraft. The proposed action is needed in order to maintain the level of readiness mandated in Title 10 United States Code (USC) Part 5062. The Department of the Navy needs to continue use of NAS Key West to accomplish Navy and Marine Corps required aviation training. The Navy and DoD need to maintain the long-term viability of NAS Key West as a fleet training station for tactical aviation squadrons and for airfield operations and associated training in the Key West Range Complex by other DoD and federal agencies. Specifically, use of NAS Key West is necessary so that the Navy can:

- achieve and sustain required aviation training, thereby supporting the timely deployment of naval units;

- achieve and sustain readiness of squadrons to quickly surge significant combat power in the event of a national crisis or contingency operation consistent with the Fleet Readiness Training Plan; and
- support required flight operations of other federal agencies.

1.3 RELEVANT PRIOR ENVIRONMENTAL DOCUMENTS

Relevant recent actions taken by the Navy at NAS Key West are reviewed below. These actions provide context, but are separate and distinct from the proposed action evaluated in this DEIS.

1.3.1 Environmental Assessment for Fleet Support and Infrastructure Improvements at NAS Key West

The *Environmental Assessment for Fleet Support and Infrastructure Improvements at NAS Key West*, completed in 2003 (DoN 2003a), evaluated projects to modernize ship and aircraft support functions and facilities at NAS Key West, including projects at the airfield to improve re-fueling capability and aircraft traffic control. These actions were required to modernize and meet new training requirements. The Environmental Assessment (EA) addressed the Navy's transition from the F-14 Tomcat aircraft to the FA-18 E/F Super Hornet and associated changes to airfield safety zones and noise exposure.

1.3.2 EIS for the Restoration of Clear Zones and Stormwater Drainage System at Boca Chica Field

The *Environmental Impact Statement for the Restoration of Clear Zones and Stormwater Drainage Systems at Boca Chica Field, Naval Air Station Key West, Florida* (DoN 2007), completed in 2007, addressed environmental impacts and mitigations necessary to remove vegetation from adjacent runway areas to meet airfield clear zone requirements. Clear zones are obstruction free, fan-shaped areas extending outward from the ends of airfield runways and are necessary for a safe airfield environment. The proposed action involved both restoration and long-term maintenance in various locations at Boca Chica Field. Long-term maintenance measures addressed in the Environmental Impact Study (EIS) included trimming and/or removal of vegetation that protrudes into vertically controlled airfield surfaces or those that should not be present in laterally controlled surfaces, clearing and grubbing, grading, filling low areas, replanting some areas with native salt marsh vegetation, and supplemental improvements to drainage conditions.

1.3.3 EA/Overseas EA for Atlantic Fleet Training in the Key West Range Complex

The *Environmental Assessment/Overseas Environmental Assessment for Atlantic Fleet Training in the Key West Range Complex*, completed in 2010 (DoN 2010a), evaluated the environmental impacts related to fleet training activities within the at-sea Key West Range Complex. The relationship between the airfield operations that occur at NAS Key West airfield and the training operations that occur in the Key West Range Complex is evaluated in this EIS in Chapter 5, "Cumulative Impacts."

1.3.4 EIS and Overseas EIS for Navy Atlantic Fleet Training and Testing

On July 15, 2010, the Navy issued a Notice of Intent (NOI) to prepare an EIS and Overseas EIS for Navy Atlantic Fleet Training and Testing. This document will evaluate the potential environmental effects associated with military readiness training and research, development, testing, and evaluation activities

conducted within the Atlantic Fleet Training and Testing study area. The at-sea Key West Range Complex is one of nine range complexes in the Atlantic Fleet Training and Testing study area, which also includes the western North Atlantic Ocean along the east coast of North America, the Chesapeake Bay, and the Gulf of Mexico. Also included are select Navy pierside locations and channels (NAS Key West pierside sonar testing is not anticipated) (DoN 2010a).

1.4 NAS KEY WEST

NAS Key West is comprised of approximately 6,500 acres of land distributed over several properties located in the Florida Keys, Monroe County, Florida. The approximately 4,700 acre Boca Chica Field property is NAS Key West's primary site and includes the airfield that is the subject of this EIS, as well as administrative and industrial facilities and recreational areas. Boca Chica Field is located on Boca Chica Key, approximately 5 miles east of the city of Key West in Monroe County, 156 miles southwest of Miami, and 90 air miles north of Cuba. Key West is the closest point in the United States to Cuba, South America, and the Caribbean Sea, making NAS Key West a significant military and homeland security asset, independent of its role as an aviation training venue.

The Navy's presence in Key West dates back to 1823 when a naval base was established to stop piracy in the area. This base was expanded during the Mexican War (1845-1848) and the Spanish-American War (1898) when the battleship *Maine* sailed from Key West to Havana, Cuba, where it suddenly exploded and sank in Havana harbor. The sinking of the *Maine* precipitated the United States declaration of war on Spain; the entire U.S. Atlantic Fleet moved to Key West for the duration of the war (DoN 2007). During World War I (1914-1918), naval facilities in Key West were enlarged (to include piers, barracks, communication facilities, submarine basin, and other buildings) as Key West served as a strategic defense center to shipping lanes throughout the war. When the United States entered the war in 1917, a Naval Air Station was constructed near the northwest end of Key West, in an area now known as Trumbo Point; the seaplane base consisted of a seaplane training center, a dirigible hanger, barracks, and administration buildings (U.S. Army Corps of Engineers [USACE] 2003).

NAS Key West was established at its present location on Boca Chica Key during World War II (1941-1945). Boca Chica Field originated as a civilian airfield. It was leased to the Army in 1942 when three paved runways were built and was transferred to the Navy in December 1942. During the war, the Air Station was used to train carrier pilots and housed 4,000 personnel; nearby Saddlebunch Key was used as a practice bombing range. During the Cuban missile crisis (1962), operational and reconnaissance flights were flown from the Air Station in support of the blockade around Cuba. After the Cuban missile crisis, permanent missile sites were constructed at various locations around the Air Station and alert aircraft were maintained at the airfield. Although much of the military presence in the Lower Keys was disestablished in March 1979, a decision was made to keep NAS Key West as a fully operational Naval Air Station (USACE 2003). Airfield operations at NAS Key West in the late 1970s were estimated at 85,000 per year, with approximately 400 airfield operations per day estimated on a busy day (DoN 1977). Since then, NAS Key West has been training location for many types of DoD aircraft and a variety of airfield training operations have been conducted at the airfield, including touch and goes, FCLPs, and other pattern operations. As with other Navy airfields, the volume of annual airfield operations at NAS

Key West fluctuates from year-to-year based on factors such as training needs, national defense missions, relief/humanitarian efforts, surge requirements, and airfield construction/repair projects.

Throughout the decades, the southernmost Naval Air Station in the continental U.S. has proven to be an ideal year-round training facility with rapid access to the open sea-lanes and ideal flying conditions. NAS Key West has been a home base to various squadrons and squadron detachments flying antisubmarine warfare, tactical electronic warfare, reconnaissance, attack, combat adversary, and strike fighter aircraft. Most recently, in January 2006, VFC-111 was based at NAS Key West. Military units have routinely utilized detachments at NAS Key West for aviation training at the airfield and offshore range complex and the Air Station has served important roles in support of operations in South America and for disaster assistance and other world events. These roles continue at NAS Key West. Currently, the Air Station employs approximately 3,500 military and civilian personnel, is homebase to 22 aircraft, and can support up to approximately 80 visiting aircraft and 1,200 visiting personnel at one time, as well as provide port operations for visiting ships.

1.5 PUBLIC INVOLVEMENT

1.5.1 Scoping Process

NEPA regulations require an early and open process for determining the scope of issues that should be addressed prior to implementation of a proposed action. The Navy initiated the public scoping process on May 12, 2010, by publishing an NOI to prepare an EIS in the Federal Register (Volume 75, No. 91, pp 26739-26740), and sending copies of the NOI to federal, state, tribal, and local agencies, and other parties known or expected to be interested in the proposed action. In addition, the Navy published information regarding the public scoping meeting in newspapers identified in Table 1.5-1.

Table 1.5-1 Newspaper Display Ad Schedules

Newspapers	Publication Days/Dates
The Key West Citizen	May 19, 25, 26, and 27, 2010
The Keynoter	May 22 and 26, 2010
The Southernmost Flyer	May 21, 2010

Appendix C provides more public participation information. Two public scoping meetings were held in Key West, Florida as outlined in Table 1.5-2.

Table 1.5-2 Scoping Meeting Locations

Meeting Date	Meeting Location
26 May 2010	Doubletree Grand Key Resort 3990 S. Roosevelt Blvd, Key West, FL 33040
27 May 2010	Tennessee Williams Theater at Florida Keys Community College 5901 College Rd, Key West, FL 33040

Overall, 23 members of the public attended the meetings over a 2-day period, including elected and appointed officials from the City of Key West and Monroe County. No comments were received during the scoping meetings; however, 21 comments were received via the project website (www.keywesteis.com) and 2 comments were received via mail during the scoping period.

The issues raised during the public scoping period are categorized by issue and summarized below in Table 1.5-3. See Appendix C for specific comments.

Table 1.5-3 Issues Identified During Public Scoping

Topic	Issue identified in Comment
Purpose and Need	<ul style="list-style-type: none"> • Discussion of the vital nature of NAS Key West
Alternatives	<ul style="list-style-type: none"> • Concern regarding current flight tracks • Concern over increase in future operations and the replacement of legacy aircraft with jets that some have speculated would be louder (e.g., F-35 Joint Strike Fighter)
Noise	<ul style="list-style-type: none"> • Some local residents want actual noise measurements to be taken at various sensitive receptors throughout Key West • Concern that the Navy’s current noise modeling software (NOISEMAP) may not adequately address the noise impacts of newer aircraft • Perceived discrepancies in the 2004/2007 Air Installations Compatible Use Zones studies
Socioeconomics	<ul style="list-style-type: none"> • The effects of Navy training at NAS Key West on residential property values • The effects of Navy training at NAS Key West on the local economy
Health and Safety	<ul style="list-style-type: none"> • Safety of citizens living under NAS Key West flight tracks • Health problems associated with prolonged exposure to jet noise
Natural Resources	<ul style="list-style-type: none"> • Concern over the Navy polluting the natural environment surrounding naval installations
Other	<ul style="list-style-type: none"> • The need for open communication between the local community and those preparing the EIS on behalf of the Navy

In addition to the comments received during the scoping period, the Board of County Commissioners of Monroe County, Florida submitted comments on July 13, 2010 requesting that the following concerns be addressed in the EIS analysis:

- baseline assumptions and future aircraft mix;
- impacts from different runways, flight paths, and wind directions;
- impacts to the natural and developed environment;
- impacts due to changes in Air Installations Compatible Use Zones (AICUZ) noise contours;
- impacts of jet noise on human health and the environment;
- use of the most advanced and approved noise modeling technology;
- actual noise measurements at sensitive receptors throughout Key West;
- impacts of Navy training on the local economy and property values; and
- a method for verifying the results and conclusions presented in the EIS.

1.5.2 DEIS Review

The DEIS will be published for comment by elected officials, agencies, and the interested public and distributed as detailed in Appendix C. The DEIS is available at the project website www.keywesteis.com and at the following libraries:

- Key West Library; 700 Fleming St; Key West, FL; 33040
- Florida Keys Community College Library; 5901 College Rd; 2nd Floor, Building A; Key West, FL; 33040

The 45-day DEIS review period began with the publication of the *Federal Register* Notice of Availability and Notice of Public Meetings on TBD June 2012. The Navy plans to hold two public meetings to solicit comments on the DEIS on the following dates, locations, and times: TBD. Following public review of the DEIS, comments are considered and integrated into the Final EIS, which includes identification of the Navy's preferred alternative and is re-released for public review. The Navy then makes a determination on how to implement the proposed action based in part on the analysis provided in the Final EIS. This determination will be made public in a Record of Decision.

1.6 SCOPE AND ORGANIZATION OF THIS DEIS

NEPA requires all federal agencies to consider potential environmental impacts of their proposed actions and to consider various and reasonable alternatives in making decisions about those actions. With public involvement and environmental analysis, the NEPA process helps the Navy arrive at the most informed possible decision. Informed decisions are based on a candid and factual presentation of potential environmental impacts. These facts come from collecting information on a variety of resource areas (for example, threatened and endangered species, water quality, and land use) potentially affected by the proposal, and then identifying the type and extent of potential impacts resulting from the proposal. This information has been compiled into this DEIS.

This DEIS is organized into nine chapters. Chapter 1 contains a description of the proposed action, purpose and need, relevant prior environmental documents, background information on NAS Key West, and a discussion of agency coordination and public involvement. Chapter 2 provides background information on the airfield infrastructure, homebased aircraft, airspace and air traffic control at NAS Key West, a description of the proposed action, detailed description of the no action and action alternatives, a discussion of the alternatives considered but eliminated from further analysis, and a comparison of the potential environmental impacts of the alternatives. Chapter 3 contains a characterization of the affected environment, or existing environmental conditions. Chapter 4 describes the environmental consequences that would potentially result from implementation of the no action and proposed action alternatives. Chapter 5 provides an analysis of potential cumulative impacts. Chapter 6 addresses other considerations including consistency and compliance with other plans, policies, and regulations; unavoidable adverse environmental effects; relationship between short-term use of man's environment and maintenance and enhancement of long-term productivity; and irreversible and irretrievable commitments of resources. Chapter 7 outlines the environmental management actions that the Navy will implement along with the proposed action. Chapter 8 lists the references cited and Chapter 9 lists the preparers of this document. Supporting technical documents are provided as appendices.