

Section 2

South Florida Regional Installations

Figure 2-1 shows the locations of the four South Florida Regional MIRR installations.



Figure 2-1. South Florida Regional Map

South Florida Ocean Measurement Facility

Location The Cities of Dania Beach and Hollywood, Broward County

The SFOMF is located at the mouth of the Stranahan River, on a peninsula of land east of Fort Lauderdale-Hollywood International Airport and Port Everglades, with a beach facing the Atlantic Ocean. The installation resides within the Dr. Von D. Mizell-Eula Jackson State Park. Neighbors include FAU and Nova Southeastern University (NSU). The facility consists of an approximately 8-acre barrier island parcel on the south side of the Port Everglades Inlet with shorelines along the Atlantic Intracoastal Waterway, inlet, and oceanfront.

Figures 2-2 through 2-4 show the SFOMF Study Area, North Site Map, and South Site Map, respectively.

Host Command

U.S. Naval Surface Warfare Center

Co-Located Commands

U.S. Coast Guard Station Fort Lauderdale

Mission

The SFOMF is a one-of-a-kind test range and the only place in the world where the U.S. Navy can measure, test, and train for unique signature mapping and modeling of submarines and surface ships. The main mission of the SFOMF is to perform electromagnetic signature tests of U.S. Navy assets by providing the ability to monitor surface ship,

submarine, and remote vehicle signatures in the near shore environment. Multiple, fixed, in-water electromagnetic and acoustic measurement sites at various depths are controlled from a secure range house. The range encompasses the U.S. Navy's only shallow and deep-water electromagnetic research and development ranges and accommodates both surface and submerged operations.

In addition, the SFOMF offers a means to test and evaluate mine detection, countermeasures, and mine response; perform acoustic measurements; and acquire radar cross section and infrared signatures. Surface and submerged tracking are available on this controlled range. Bottom-mounted acoustic Doppler current profilers; conductivity, temperature, and depth sensor; and an onshore meteorological site provide continuous current monitoring of environmental data of interest for the operations. There are also deep and shallow-water multiplexers on the range, allowing for installation of additional sensors on an "as-needed" basis without the large expense of running new cables.

Unique Value

The nearby ocean environment, as well as proximity to the Atlantic's Gulf Stream current where the SFOMF instrumentation is located, provides unique hydrography, bathymetry, and oceanographic conditions that cannot be replicated anywhere else in the nation. Furthermore, these conditions also closely replicate similar conditions in other regions of the world of vital strategic importance to the United States and help prepare the nation's maritime forces for potential peer-competitor



Bird's-Eye View of the SFOMF North Site, NSU, and Port Everglades

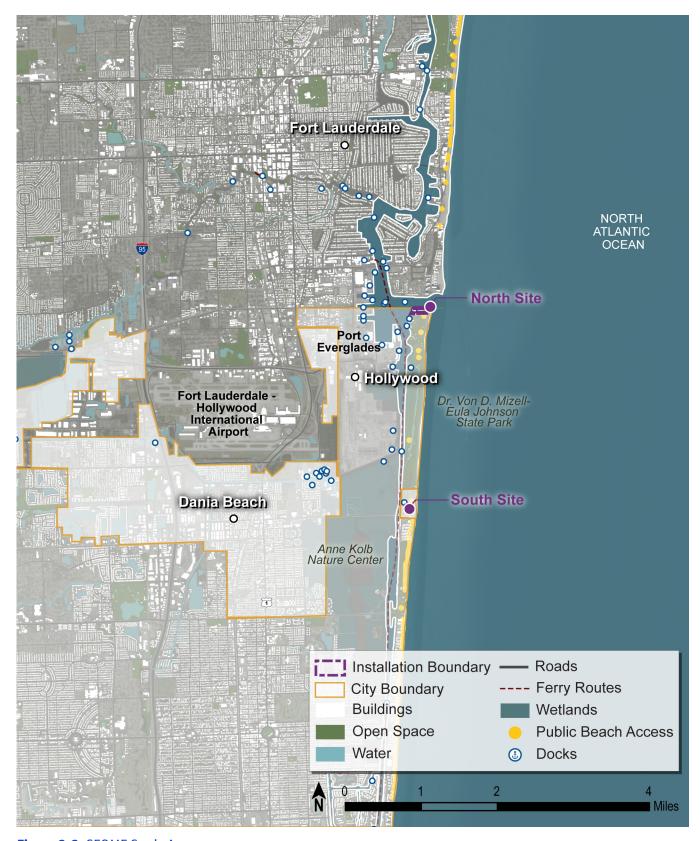


Figure 2-2. SFOMF Study Area



Figure 2-3. SFOMF North Site

threats in the western Pacific. As such, the SFOMF represents a critical, one-of-kind capability for the holistic military range complex across Florida and is important for the testing and training of our nation's military forces.

Additionally, the SFOMF hosts a cable landing site for an important communications link for Headquarters, U.S. Southern Command in Doral, Florida. This particular cable provides secure communications to a forward operating base and Joint Task Force of high importance to national security.

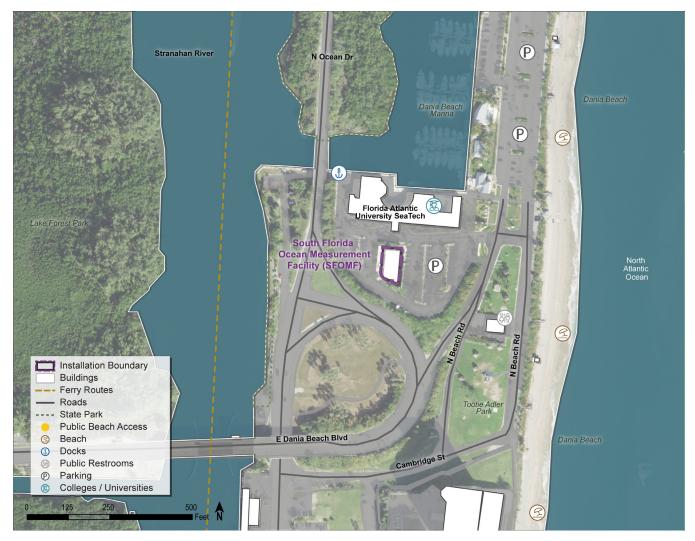


Figure 2-4. SFOMF South Site

Looking to the future, as the National Defense Strategy increasingly pivots away from the war on terrorism-related conflicts and focuses with greater attention on rising potential threats and near-peer competition, China takes on increasing relevance in defense force planning and procurement decisions. As a result, naval and air forces will gain greater prominence in future budgets. In fact Admiral Michael Gilday, the former Chief of Naval Operations, recently called for increasing the fleet size from the current approximate 298 battle force ships to include a total of 500+ ships.

Within that composition, he outlined approximately 150 unmanned vessels. As the Navy moves into the future of autonomous and unmanned surface and subsurface platforms, the SFOMF's instrumentation and testing capabilities can play a vital role in the development and testing of these new warfighting capabilities.

U.S. Army Garrison-Miami/U.S. Southern Command



U.S. Southern Command Headquarters

Location City of Doral, Miami-Dade County

The USAG-Miami/SOUTHCOM is located directly north of Doral Central Park, 6 miles west of Miami International Airport and approximately 5 miles east of the nature preserves buffering Everglades National Park. Neighbors include the Miami-Dade Fire and Rescue Training Center and County Emergency Operations Center, Miami-Dade Police Training Center, Millenia Atlantic University, and a parcel owned by the Federal Aviation Administration (FAA).

Figure 2-5 shows the SOUTHCOM study area.

Host Command

- U.S. Army Installation Management Command/ USAG-Miami
- U.S. Southern Command Headquarters

Tenant Commands

- 410th Contracting Support Brigade
- Logistics Readiness Center-Miami

Mission

SOUTHCOM is one of 11 unified Combatant Commands in the DoD. SOUTHCOM is responsible for providing contingency planning, operations, and security cooperation in its assigned AOR, which includes:

- Central America
- South America
- The Caribbean (except U.S. commonwealths, territories, and possessions)

The Command is also responsible for the force protection of U.S. military resources at these locations, along with ensuring the defense of the Panama Canal. SOUTHCOM is also responsible for ensuring the defense of the Panama Canal. Under the leadership of a four-star commander, SOUTHCOM's staff is organized into directorates, component commands, and Security Cooperation Organizations that represent SOUTHCOM in the region.

SOUTHCOM is a joint command comprised of more than 1,200 military and civilian personnel representing the U.S. Army, the U.S. Navy, , the U.S. Air Force (USAF), the U.S. Marine Corps, (USMC), USCG, and several other Federal agencies. The Services provide SOUTHCOM with component commands that, along with their Joint Special Operations component, two Joint Task Forces, one Joint Interagency Task Force, and Security Cooperation Organizations, perform SOUTHCOM missions and security cooperation activities across their AOR.

History

SOUTHCOM was previously located in Panama. With the implementation of the Panama Canal Treaty of 1977, and the Treaty Concerning the Permanent Neutrality and Operations of the Panama Canal, all U.S. military installations in the former Panama Canal Zone were closed and relinquished to the Republic of Panama between 1997 and 2002. In anticipation of these actions, USAG-Miami was established in 1997 to provide base support to relocation of SOUTHCOM Headquarters from Panama.

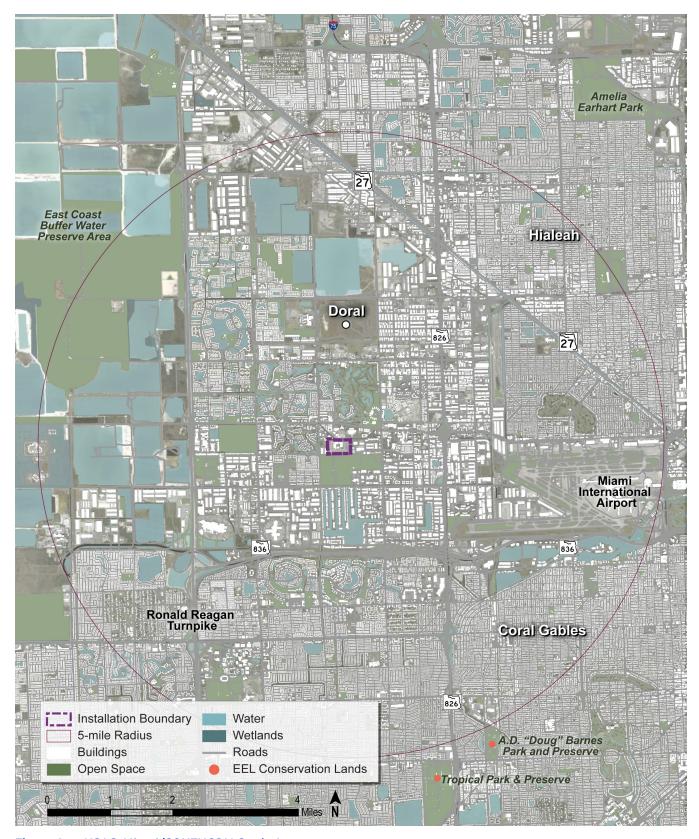


Figure 2-5. USAG-Miami/SOUTHCOM Study Area

The Doral/Miami area was chosen for the new headquarters location over multiple other competing sites due to the existing strong ties to Latin America throughout the greater Miami region. Located near Miami International Airport, USAG-Miami provides a strategic location by which the SOUTHCOM Commander, staff, and partner nation personnel can easily travel throughout the AOR. The Command's location in a densely populated area presents challenges for housing and transportation to and from the Garrison facility.

Unique Value

A resilient headquarters and mission assurance is vital at SOUTHCOM. Three significant trends indicate that the pace of operations in their AOR will continue to grow. First, the AOR is consistently beset with various natural disasters and SOUTHCOM

is routinely called upon to lead and provide the first line of U.S. response efforts. Second, the regression of democracy and growing political instability in the region risks greater tensions and potential conflicts. Finally, aside from direct competition in the western Pacific, perhaps no other region than Latin America has more focused attention by a strategic competitor (China). As a recent SOUTHCOM Commander indicated, China has rapidly expanded its "corrosive, insidious influence" across a range of illegal and questionable activities. Given that these challenges are growing in the U.S. "backyard," the prominence of SOUTHCOM's missions can be expected to grow as well as the need to have mission assurance for their headquarters facility. That base of operations out of the greater Miami area will remain critical for success.

Homestead Air Reserve Base



F-4 Static Display at HARB

Location Adjacent to the City of Homestead, Miami-Dade County

HARB is located 5 miles west of the Mangrove Preserve buffering the Biscayne Bay, and approximately 11 miles east of Everglades National Park. The City of Homestead borders the southwest side of the installation, with Miami-Dade County to the northwest and agricultural lands to the east.

Figure 2-6 provides the study area at HARB.

Host Command

USAF 482nd Fighter Wing

Tenant Commands

Florida Air National Guard

- 125th Fighter Wing, Detachment 1
- 50th Readiness Support Group

United States Special Operations Command

Special Operations Command SOUTH

United States Customs and Border Patrol

Miami Air and Marine Operations Branch

Mission

HARB is an enduring strategic location providing value to both the region and the nation in peace, crisis, and war since 1942. Currently, HARB not only provides basing to the 482nd Fighter Wing, but it also serves as a home base for a variety of mission partner tenant commands providing them with regional access both domestically and internationally. HARB's ability to support both current and future missions is unmatched.

From the perspective of sustaining aviation support for advanced fighter missions, HARB and the surrounding region in Florida offer unparalleled advantages over most other basing options around the country. Decades of work with Miami-Dade County and surrounding communities have ensured that various planning guidance, easements, and ordinances have protected vital areas around the installation perimeter. Compared to the other installations in the South Florida MIRR, HARB offers some of the least encroachment and environmental issues and it has excellent noise compliance profiles (the majority of an F35's noise contour falls within the installation boundary and 97% is in the assessed "green" minimal-to-no impact zone). There is minimal encroachment and noise issues on both approach and departure flight profiles with no Clear Zone or Accident Potential Zone (APZ) issues for 5th generation fighter employment.

Unique Value

Equally important are the training infrastructure and adjacent range complexes. Within minutes of take-off, HARB-based pilots can access multiple, fully capable, unrestricted 5th generation capable training ranges in air-to-air, air-to-ground, liveordnance, and electronic countermeasure missions with supersonic flight profiles from surface to 70,000 feet. HARB is adjacent to the largest overwater and least restrictive training areas in the U.S.; coordinated use with NASKW allows daily joint and large force training capability. They can consistently achieve this with 200+ mile engagement setups and use of a fully instrumented air-combat maneuvering range for both individual and large, composite force training. This is coupled with weather friendly, 300+ Visual Flight Rules flying days annually allowing more effective

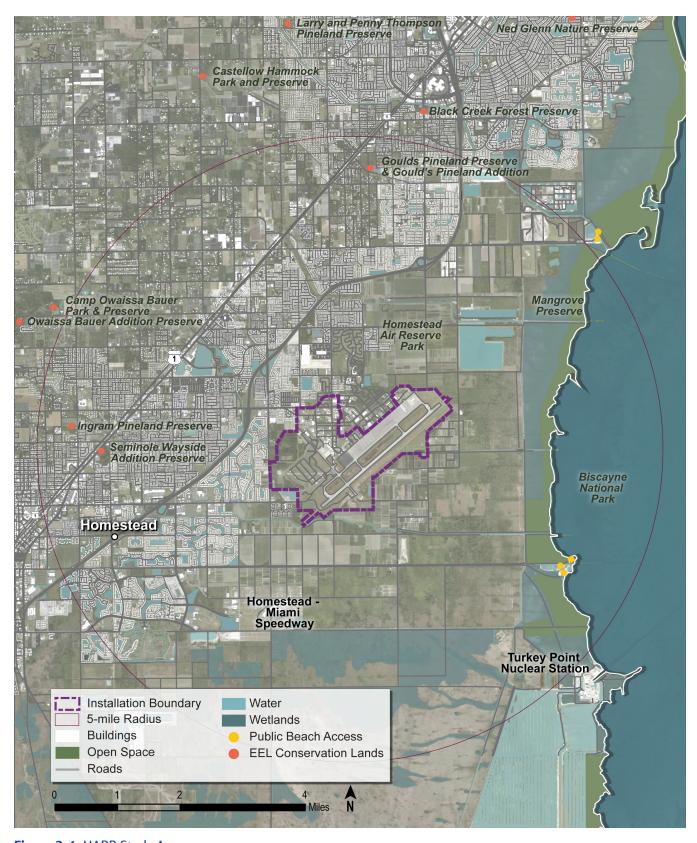


Figure 2-6. HARB Study Area

training missions per year. This capability is unmatched!

From an installed infrastructure perspective, HARB has features that provide strategic advantage and reserve:

- Runway and airfield electrical system completely upgraded to state of the art technology in 2007
- 230+ acres of available ramp to support contingency and exercise operations
- Operational "hot cargo" and live weapons loading area
- Largest munitions storage area in Air Force Reserve Command; 120+ acres covered storage for 2+ million pounds

Beyond the USAF aviation capabilities, HARB provides a unique South Florida location for multiple mission partners including:

- SOUTHCOM contingency plans support
- Homeland Security Task Force Southeast contingency plans support
- Special Operations Command SOUTH Headquarters and operations

- Florida Air National Guard 24x7 alert NOBLE EAGLE/NORAD support
- U.S. Customs and Border Patrol aviation operations
- USCG Maritime Safety and Security Teams base and training
- Regional chemical, biological, radiological, nuclear, and explosives defense capability
- Florida National Guard 50th Readiness Support Group

Additionally, Major General John Haas, the Adjutant General of Florida, is in the process of rebalancing the Florida Guard's basing and laydown posture across the state to better reflect demographic and population changes within Florida. A site contiguous with HARB and access to the airfield has been chosen and planning is underway for approximately \$65 million in new facilities and an increase of 500 jobs to leverage the capabilities provided by co-locating at HARB.

Naval Air Station Key West



Boca Chica Airfield at NASKW

Location City of Key West, Monroe County

NASKW is located on Boca Chica Key, with annexes on multiple other keys:

- Sigsbee Compound on Dredgers Key
- Fleming Key
- Trumbo Point and Truman Annex on Key West

The installation is surrounded by the Florida Keys National Marine Sanctuary. Neighbors include Fort Zachary Taylor State Park and Southernmost Point.

Figures 2-7 through 2-9 show the study area at NASKW, Boca Chica, and Key West, respectively.

Host Command

U.S. Naval Air Station Key West

Tenant Commands

- Fighter Squadron Composite 111 (VFC-111) Sun Downers
- Strike Fighter Squadron 106 (VFA-106) Gladiators, Detachment Key West
- JIATF-S



Figure 2-7. NASKW Study Area

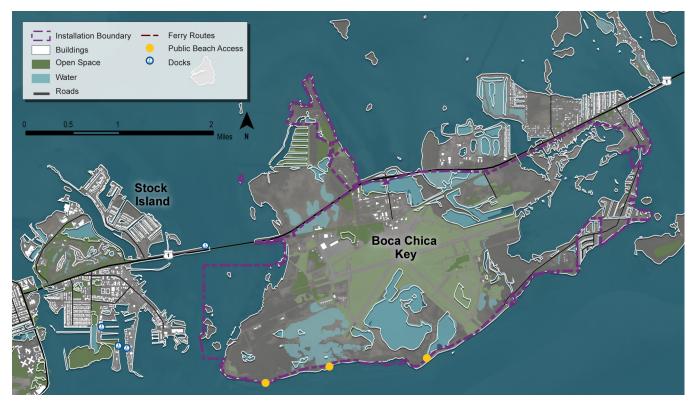


Figure 2-8. NASKW Boca Chica Study Area

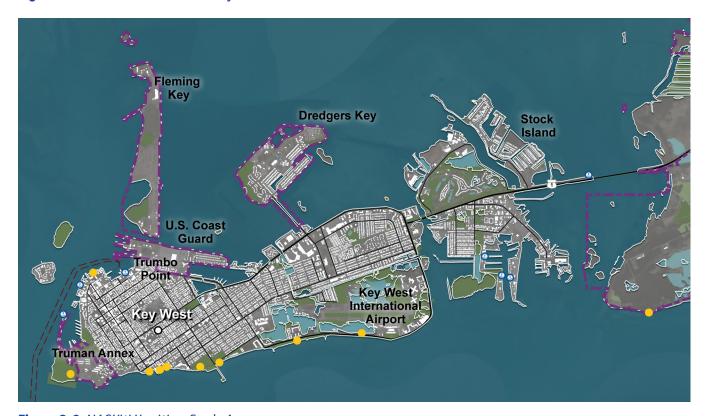


Figure 2-9. NASKW Key West Study Area

- U.S. Army Special Forces Underwater Operations School
- USCG Sector and Station Key West
- Naval Air Warfare Center Aircraft Division Atlantic Targets and Marine Operations (ATMO) Detachment Key West

Unique Value

Dating back 200 years, the U.S. Navy's presence in Key West started with chasing pirates in the Caribbean and now entails high-performance tactical aircraft training and support to multiple joint and inter-agency partners. Spread primarily across Key West and Boca Chica Key, NASKW supports the Fighter Squadron Composite 111 (VFC-111) "SunDowners," the U.S. Navy's premier Fleet Reserve Adversary squadron tasked with training and preparing our nation's front-line fighter aircraft to ensure their effectiveness. The squadron operates the supersonic and highly maneuverable Northrop F-5 Tiger II, enhancing training for visiting U.S. Navy strike fighter, USMC fighter attack, and U.S. Navy carrier airborne early warning squadrons for unit level training and Strike Fighter Advanced Readiness Program training.

The U.S. Navy's Key West Complex airspace under the auspices of NASKW is comprised of a system of overwater warning areas to the south between the Florida Keys and the island of Cuba, to the west beyond the Dry Tortugas, and to the northwest over the Gulf of Mexico. Warning Area 174 (W-174), Warning Area 465 (W-465), the Key West OPAREA, and the Bonefish Air Traffic Control Assigned Airspace define the U.S. Navy Key West Complex airspace.

The majority of the airspace is covered by the Tactical Aircrew Combat Training System range that continuously tracks aircraft positions and maneuvering parameters, recording everything for later playback during mission debrief. In coordination with USAF ranges in northwest Florida, surface warships and submarines can also employ the BGM/RGM/UGM-109 series Tomahawk land attack missile for test and training operations in the U.S. Navy Key West Complex airspace and water space, with said missiles utilizing warning areas of the Eastern Gulf of Mexico Range Complex and the

Eglin Range Complex, with the missiles impacting one of two designated impact areas ashore in the eastern portion of the Eglin Range. As such, NASKW and its surrounding operating areas form the "southern anchor" to the entire Eastern Gulf/Eglin Test and Training Range Complex shown in Figure 2-10.

The W-174 Warning Area is extremely active and one of the busiest training areas of the entire Gulf Complex with air, surface, and subsurface operations controlled and supported from NASKW.

Other unique range space in the local NASKW area includes a one-of-a-kind training site and hosting of the U.S. Army's Special Forces (SOF) Underwater Operations School which combines the best of a shallow-water dive training area as well as proximity to deep water enabling SOF/ship and submarine integration training unlike any other East Coast locations on a year-round basis. The NASKW-based Naval Air Warfare Center ATMO Detachment provides testing of developmental anti-submarine warfare hardware and other capabilities in the open ocean environment based on NASKW and using the nearby ranges.

In addition to the localized use of the Key West range areas, with future growth of 5th and 6th generation aircraft inventory, along with hypersonics development and other long-range systems, the importance of this protected Eastern Gulf range region will only increase as the only location in the continental United States with the sea/airspace to accommodate the related test, evaluation, training, and exercises with these systems. Sample of some of the anticipated range use for long-range systems are shown in Figure 2-11.

NASKW also serves as a unique host location supporting the JIATF-S, a two-star level command component of U.S. Southern Command. JIATF-S is assigned the mission of detection and monitoring of threats for the southern approaches to the United States. Additionally, USCG Sector Key West and Station Key West are surrounded and supported by the NASKW Complex. Sector Key West has command oversight for various cutters and patrol boats homeported in Key West, an Aids to Navigation Team, as well as two other remote stations in Marathon and Islamorada located

farther north in the chain of islands. Six cutters are homeported including: U.S. Coast Guard Cutter (USCGC) Charles David, Jr. (WPC-1107); USCGC Charles Sexton (WPC-1108); USCGC Kathleen Moore (WPC-1109); USCGC Raymond Evans (WPC-1110); USCGC William Trump (WPC-1111); and USCGC Isaac Mayo (WPC-1112).

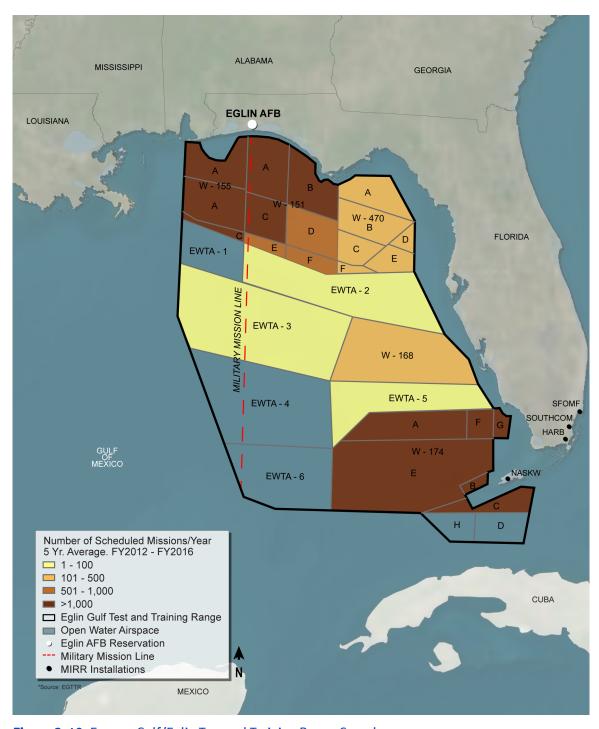


Figure 2-10. Eastern Gulf/Eglin Test and Training Range Complex

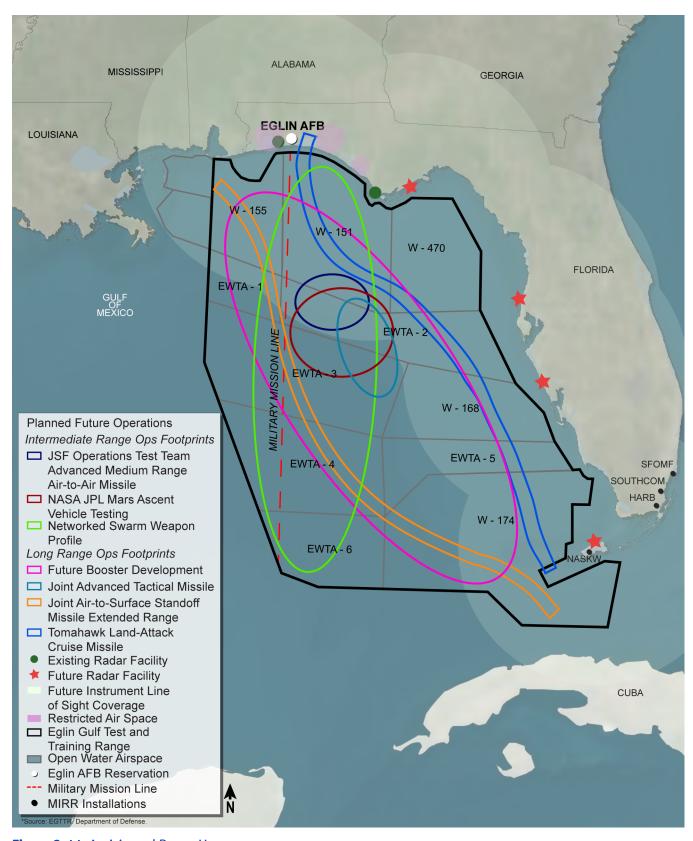


Figure 2-11. Anticipated Range Use