

APPENDIX H

U.S. Coast Guard Organization

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U.S. COAST GUARD ORGANIZATION

The basic organization pattern of the USCG reflects an assignment of military command and control with both operational and administrative responsibility, and authority among components in USCG Headquarters, Areas, District Commands, Maintenance and Logistics Commands, and individual units in the field. Duties of the USCG are, in most instances, actually performed by individual operating units such as ships, groups, stations, air stations, and marine safety offices.

The field chain of command is from the Commandant to the Area Commanders, from the Area Commanders to the District Commanders, and from the District Commanders to the Commanding Officer or Officer-in-Charge of an individual operating or logistics unit.

USCG Activities That May Result in Interactions With Endangered Species

Many USCG activities are performed in U.S. territorial waters of the western North Atlantic Ocean, in important habitat areas for species of protected whales and sea turtles.

Performance of several mission activities of the USCG along the Atlantic coast of the United States may result in risk of a harmful interaction with one or more species of the endangered or threatened whales and sea turtles that reside during all or part of the year in U.S. territorial waters of the Atlantic Ocean. Performance of some of these activities provides the USCG with an opportunity to aid in the protection and recovery of local populations of these endangered or threatened marine animals. A brief description of those activities most likely to result in positive or negative interactions between the USCG and whales or sea turtles is provided below.

This description focuses on activities of three USCG Districts and the Atlantic Area Command (LANTAREA) on the Atlantic coast of the United States. These Districts are:

- First District (Boston, MA) Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, and New Jersey south to Shrewsburyport.
- LANTAREA/Fifth District (Portsmouth, VA) New Jersey from Shrewsburyport south, Delaware, Maryland, Virginia, North Carolina.
- Seventh District (Miami, FL and San Juan, PR) South Carolina, Georgia, Florida (Atlantic and Gulf of Mexico coasts), Puerto Rico, U.S. Virgin Islands.

Engineering

The Engineering Directorate provides support in aeronautical, civil, and naval engineering for the USCG. The mission of the office is to provide engineering services, including design, construction, maintenance, outfitting and alteration of vessels, aircraft, aids to navigation, shore establishments, machinery, and utilities.

Under the National Environmental Policy Act of 1969 (NEPA), the USCG is required to perform an environmental analysis (EA) for all construction, repair, and maintenance projects performed in areas

important to endangered or threatened species. Some coastal states may also impose planning requirements on engineering projects in the coastal zone, including construction or repair permits that may include special requirements for protection of endangered species and their habitats.

Marine Environmental Protection

The mission of the Marine Environmental Protection Program is to protect the public, the environment, and U.S. economic interests by the prevention and mitigation of marine pollution. In pursuing this mission, the USCG performs the following activities:

- Establishes and enforces Federal policies and standards for the design, construction, equipping, manning operations, and maintenance of commercial vessels, and for the qualifications of their crews.
- Develops standards for handling hazardous materials onboard vessels and marine facilities.
- Negotiates international maritime safety and environmental protection standards on behalf of the United States.
- Assures compliance of U.S. vessels with domestic and international standards (flag-state responsibilities), and compliance by all vessels and regulated facilities in U.S. ports and waters (port-state responsibilities) through a combination of education, monitoring, and enforcement.
- Controls vessel and facility operations to correct or reduce significant safety, security, or environmental threats.
- Coordinates national protocols for preparedness planning, training, and performing.
- Directs response activities to mitigate the effects of maritime casualties and pollution.

Marine pollution response and marine safety activities along the Atlantic coast of the United States, including Puerto Rico and the U.S. Virgin Islands, are performed primarily by USCG personnel at 12 Marine Safety Offices (MSO) and 2 Captain of the Port (COTP) Offices in the Atlantic coast states. The Atlantic coast offices are:

- MSO Portland, ME
- MSO Boston, MA
- MSO Providence, RI
- COTP Long Island Sound, NY
- COTP New York, NY
- MSO Philadelphia, PA
- MSO Baltimore, MD
- MSO Hampton Rhodes, VA
- MSO Wilmington, NC
- MSO Charleston, SC
- MSO Savannah, GA
- MSO Jacksonville, FL

- MSO Miami, FL
- MSO San Juan, PR

Each MSO and COTP has access to an inventory of several small boats, and emergency pollution equipment.

The Marine Environmental Protection Program includes:

- The Marine Safety Offices.
- The National Strike Force (NSF), composed of three teams of experts that have been trained and equipped to respond to a wide variety of environmental emergencies.
- The National Response Center (NRC) that functions as a link between reports of pollution and the USCG or EPA Federal on-scene coordinator (FOOSC) who is responsible for evaluating and responding to pollution incidents.
- Multi-mission USCG cutters and aircraft that provide a variety of platforms for surveillance, detection, and response.

In 1993, the Marine Environmental Protection Program of the USCG responded to 2541 oil spill incidents and 113 spills of hazardous chemicals along the Atlantic coast of the United States.

As required by OPA 90, the USCG prepares Area Contingency Plans (ACPs) for the coastal zone and all nearshore waters of the United States. The ACPs are prepared by Area Committees, chaired by the FOOSC (USCG). In preparing the ACPs, the Area Committees, NOAA, USFWS, state fish and wildlife agencies within the area impacted by each plan, state natural resource trustees, and other agencies with responsibilities for coastal zone management and protection should actively collaborate in the Area Committee process.

The ACPs describe the methods and resources that will be used to combat spills of oil and hazardous materials in coastal waters and protect sensitive habitats from harm. They identify environmental sensitivities within each area, and establish priorities and strategies for response based on those sensitivities. There is pending approval, a draft Commandant's Notice which will require ESA Section 7 consultation during the ACP planning process for the use of in-situ burning and dispersants. Each Area Committee identifies the following three types of habitats requiring protection

- Fish and wildlife habitat areas.
- Sensitive habitats (e.g., habitats that may be slow to recover from a spill).
- Human high-use areas.

The first two categories include critical habitats of endangered or threatened whales and marine turtles. Identification and sighting of these habitats is requested from the responsible agencies during the Area Committee planning process.

Sensitive areas are mapped, and natural collection sites, boom sites, and specific response strategies for different types of spilled materials in or near these areas are included on the maps. The maps also show all possible locations of endangered/threatened species (e.g., critical habitat for right whales, nesting beaches for loggerhead turtles) in as much detail as practical.

The USCG also is responsible for enforcing the resolutions of MARPOL 73/78 Annex V concerning dumping of plastics and garbage from vessels and platforms at sea. To promote compliance with this international treaty, the USCG has developed a strategy of progressive education and aggressive enforcement. Floating trash, particularly plastic debris, is a substantial contributor to injury and death of all five species of endangered/threatened sea turtles in the Atlantic. Strict enforcement of the MARPOL regulations will go a long way to aid in the recovery of these turtle populations.

The compliance and response functions of the USCG along the U.S. Atlantic coast are performed by personnel stationed at the 12 MSOs and 2 COTPs on the east coast. In a typical year, in the Atlantic area, the USCG monitors

- 140,000 U.S. commercial vessels (mostly uninspected fishing vessels).
- 8100 foreign vessels calling at U.S. ports.
- 3500 waterfront facilities.
- 3800 offshore platforms (mostly oil/gas production platforms in the Gulf of Mexico).
- 200,000 licensed and documented merchant mariners.
- 238,000 documented U.S. commercial and recreational vessels.

Marine Safety

The objective of the Marine Safety Program is to minimize threats posed by human activities in U.S. waters and the marine environment which may adversely affect the safety and security of U.S. citizens, vessels, port facilities, or national assets. This objective is met through the dual mission areas of marine safety and port security. The goal of the marine safety mission is to minimize the occurrence rate and magnitude of accidents and emergencies on vessels and waterfront facilities in U.S. ports that result in deaths, serious injuries, or significant property damage. The goals of the port security mission are to ensure that each U.S. port area acquires, develops, and maintains its ability to perform essential functions by reducing each port's vulnerability to subversive activity or terrorist incidents during periods of heightened international tensions and mobilization contingencies, and to ensure the security of U.S. citizens when traveling as passengers on cruise ships.

The four primary field activities performed by the USCG in the area of Marine Safety are:

- **Vessel Boardings.** Boardings are performed to verify and enforce compliance with a wide variety of statutes, regulations, and international requirements.
- **Anchorage Administration.** The USCG designates anchorages in ports and coastal waters for vessels of different types and for different designated uses, and enforces anchorage regulations.
- **Harbor Patrols.** The USCG performs harbor patrols in vessels or on land for detection, deterrence, and prevention of marine casualties through enforcement of safety and pollution prevention regulations.
- **Marine Events.** The USCG issues permits for and monitors marine events, such as regattas and boat races, enforcing safety regulations and ensuring that these events do not have a significant adverse effect on endangered or threatened species in the area.
- **Managing Vessel Traffic.** The USCG manages the movement of vessels (recreational and commercial) to prevent or mitigate the immediate threats to lives, property, or the environment.

Coast Guard Aviation

The mission of Coast Guard Aviation is operational and logistics support of all USCG programs. The USCG employs a wide variety of fixed-wing and rotary aircraft throughout its mission area. (Table B-1) Long-range and medium-range surveillance missions are performed by HC-130 Hercules and HU-25 Guardian fixed-wing aircraft, respectively. Ordinarily, these aircraft operate at altitudes greater than 500 ft. However, they may perform reconnaissance missions in support of the FOSC in oil and hazardous materials spill response operations at altitudes below 500 ft. Fixed-wing aircraft may also operate at low altitude during drops of rescue or emergency equipment or to identify a vessel. The USCG operates 22 fixed-wing aircraft in the Atlantic area. Ninety-five percent of USCG air missions are within 20 miles from shore, but some may extend out to the edge of the exclusive economic zone (EEZ) or beyond.

Two helicopters, the HH-60J Jayhawk and the HH-65A Dolphin, perform medium- and short-range recovery missions. The USCG operates 44 helicopters within the LANTAREA area of responsibility. During SAR operations, the helicopters often must fly below 500 ft. Recovery of people from the water or delivery of rescue equipment often requires flying and hovering at even lower altitudes. These low-level operations are kept to a minimum because of safety concerns. Another low-level flying operation involves helicopters which are used to "sling load" equipment to offshore sights for maintenance of aids to navigation. Commanding Officers are required to take necessary steps to prevent unnecessary flying over known habitats of wildlife, including endangered species. An altitude of at least 3000 ft should be maintained while flying over such habitats, if it is not detrimental to the mission.

The 22 fixed-wing aircraft and 44 helicopters assigned within LANTAREA's area of responsibility flew 24,591 sorties in fiscal year 1995. Breakdown of the total sorties is as follows: entire Seventh District (16,643), LANTAREA/Fifth District (3,229), and First District (4,719).

Table B-1. USCG Aircraft Stationed on Atlantic Coast

First District		Fifth District		Seventh District	
Location	Type (#)	Location	Type (#)	Location	Type (#)
Cape Cod, MA	HU-25As (3) HH-60Js (4)	Elizabeth City, NC	HH-60Js (3) HC-130Hs (5)	Savannah, GA	HH-65As (5), to include ops at air fac Charleston, SC.
Brooklyn, NY	HH-65As (4)	Cape May, NJ	HH-65As (3)	Clearwater, FL	HH-60Js (12) HC-130Hs (7)
				Miami, FL	HU-25Cs (6) HH-65As (9) VC-4 (1)
				Borinquen, PR	HH-65As (4)

Law Enforcement

The USCG is the nation's leading maritime law enforcement agency. In this role, it coordinates its activities with other Federal, state, and local law enforcement agencies, and with international law enforcement bodies. The Enforcement of Laws and Treaties (ELT) Program focuses primarily on protecting fisheries and other living marine resources, combating illicit drug trafficking, and interdicting illegal migrants at sea. In performance of its law enforcement mission, the USCG utilizes a wide variety of water craft ranging from small inflatable boats to 378-ft cutters. Fixed-wing aircraft and helicopters also are used. USCG resources are supplemented by U.S. naval ships and smaller vessels, various shore-based sensor systems, interagency communications systems, and support personnel.

In performing its law enforcement responsibilities, the USCG routinely

- Patrols with cutters and aircraft to perform surveillance and to identify potential violators of the law.
- Intercepts and boards suspected violators.
- Performs random interceptions, and boardings of boats and vessels to maintain an effective deterrent.

In the area of living marine resources, the role of the USCG is to provide law enforcement support that ensures compliance with laws and regulations intended to support the conservation and management of the living marine resources of the United States. The USCG shares enforcement responsibility in this area with the National Marine Fisheries Service (NMFS). The USCG has authority to perform law enforcement activity on the high seas and waters subject to U.S. jurisdiction for the prevention, detection, and suppression of violations of U.S. law, as well as to provide support to NMFS to meet its management goals for protected marine mammals and sea turtles. The USCG and NMFS are equally responsible for enforcing the legal requirements of the Endangered Species Act. Enforcement activities performed by the USCG include the following:

- Patrolling the perimeter of the U.S. EEZ to prevent encroachment and harvesting of U.S. marine resources, including endangered species and products made from them, by foreign commercial fishing vessels.
- Patrolling within the EEZ to ensure that U.S. fishing vessels comply with fishery resource management regulations, such as use of turtle exclusion devices (TEDs) in shrimp trawls.
- Protecting anadromous fish (e.g., salmon) originating in U.S. territory throughout their migratory range, including areas of the high seas outside the EEZ.
- Patrolling areas of the high seas beyond the EEZ to monitor compliance of U.S. and foreign fishing vessels with international agreements (e.g., the UN moratorium on large-scale high-seas pelagic drift net fishing).

As part of its enforcement authority, the USCG is expected to participate in the enforcement of provisions of several Federal statutes, including

- The Marine Mammal Protection Act (16 USC 1361, et seq.)
- The Endangered Species Act (16 USC 1536, et seq.)
- The Whaling Convention Act (16 USC, 916, et seq.)

- The Marine Protection, Research, and Sanctuaries Act (16 USC 1402, et seq.)
- The High Seas Driftnet Fisheries Enforcement Act (P.L. 102-582)
- The Fish and Wildlife Conservation Act (16 USC 2901, et seq.)
- The Magnuson Fishery Conservation and Management Act of 1986, as amended (16 USC 1801, et seq.)

The USCG also participates in the enforcement of other Federal and international regulations dealing with the protection of threatened or endangered species of marine animals and their critical habitats. Each USCG district has developed an Endangered Species Act (ESA) guide that describes methods that will be used to protect and aid in the recovery of endangered and threatened species in that district.

Search and Rescue

Under the statutory authority of Title 14, Sections 2, 88, and 141 of the U.S. Code, the USCG develops, establishes, maintains, and operates SAR facilities, and may render aid to distressed persons, and protect and save property on and under the high seas and waters subject to the jurisdiction of the United States. The USCG may also use its SAR resources to assist other Federal and state entities. The USCG is the coordinator of maritime SAR activities and, as such, is responsible for organizing available SAR facilities in waters subject to the jurisdiction of the United States, and in waters stretching from U.S. territory far into the Atlantic and Pacific Oceans, the Bering and Beaufort Seas, and the Gulf of Mexico.

More than 90% of all SAR cases involve a disabled or endangered vessel in a known position in need of assistance. The USCG response vessel or aircraft proceeds to the appropriate position at maximum safe speed (defined with regards to personnel safety) and provides the appropriate assistance that usually involves towing the vessel back to port at the most economical speed. Most USCG SAR vessels have a maximum speed of 25 knots or higher, a towing speed of 8 to 10 knots, and a cruising speed of 15 to 20 knots.

SAR cases occur all along the east coast of the United States, with 95% of these cases occurring within 20 miles of shore. Ninety percent of SAR cases are non-emergent in nature, meaning that USCG resources need not respond at maximum safe speed or even directly to the incident.

The remaining 10% of SAR missions involve searching for a lost or unlocated vessel. In these cases, the SAR operation usually involves an area search. Vessels and aircraft are deployed to a specific area to search the area along specified search patterns. Strict adherence to the optimal search pattern is required to maximize the likelihood of finding the missing vessel or person(s); therefore, the USCG can not ordinarily divert from the designated search pattern to avoid a protected area.

USCG resources for SAR operations performed throughout the U.S. include the following:

- A network of 42 USCG Groups. Several are combinations of Group/Air Station or Group/MSO that are managed by the other program.
- A network of 163 USCG stations. These units are multi-mission units, performing the SAR program mission in addition to many other USCG program missions.
- More than 1700 standard and non-standard small boats (16 to 52 ft) used to provide immediate response to mariners in distress.

- An extensive VHF-FM, MF, and HF communications network for distress alerting and response coordination.
- A command and control system consisting of Area and District Rescue Coordination Centers, Section Rescue Sub-Centers, and Group operation centers.
- Personnel assigned to Groups/Stations and District staff functions supporting these activities.
- Three operational computer systems to aid in implementing various aspects of the SAR program, including a Computerized Assisted Search Planning (CASP) system; the automated Mutual Vessel Reporting (AMVER) system; and the COSPAS-SARSAT Emergency Position Indicating Radio Beacon (EPIRB) system.

The USCG operates 82 small boat units along the U.S. Atlantic coast (Table B-2). The vessels of many of these units are shared with other USCG operational programs. There are 35 small boat units in the First District, 32 in the Fifth District, and 15 in the Seventh District. The USCG also has 95 cutters stationed at 39 home ports along the U.S. Atlantic coast (Table B-3). Most of the patrol boats are stationed in the First District. The USCG Atlantic fleet includes about 242 vessels ranging in length from 21 ft to 378 ft. Many of the vessels are underway on SAR sorties or other at-sea activities for more than 100 days per year. The total SAR sortie activity for the USCG in the Atlantic Ocean and adjacent coastal waters in 1995 amounted to 216,274.6 hours. Actual boat sortie hours totaled 38,463.6 hours, distributed among the Seventh District(14,618.2 hours), LANTAREA/Fifth District(10,972.9 hours), and the First District(12,872.5). Aircraft operations in support of SAR were distributed with 3080 sorties in the Seventh District, 787 sorties in the LANTAREA/Fifth District, and 745 sorties in the First District.

Table B-2. U.S. Atlantic Coast USCG Small Boat Units for Search and Rescue Missions

First District	LANTAREA/Fifth District	Seventh District
Eastport, ME Jonesport, ME Southwest Harbor, ME Rockland, ME Boothbay Harbor, ME South Portland, ME Portsmouth Harbor, NH Merrimac River, MA Gloucester, MA Boston, MA Point Allerton, MA Scituate, MA Cape Cod Canal, MA Provincetown, MA Chatham, MA Brant Point, MA Woods Hole, MA Menemsha, MA Castle Hill, RI Point Judith, RI Fishers Island, CT New London, CT New Haven, CT Block Island, NY Montauk, NY Shinnecock, NY East Moriches, NY Fire Island, NY Jones Beach, NY Rockaway, NY Eatons Neck, NY Fort Totten, NY New York, NY Sandy Hook, NJ Shark River, NJ Manasquan Inlet, NJ	Barnegat Light, NJ Beach Haven, NJ Atlantic City, NJ Great Egg, NJ Townsends Inlet, NJ Cape May, NJ Fortescue, NJ Salem, NJ Philadelphia, PA Roosevelt Inlet, DE Indian River Inlet, DE Ocean City, MD Crisfield, MD Taylors Island, MD Stillpond, MD Annapolis, MD Curtis Bay, MD St. Inigoes, MD Chincoteague, VA Parramore Beach, VA Cape Charles, VA Milford Haven, VA Portsmouth, VA Little Creek, VA Elizabeth City, NC Oregon Inlet, NC Hatteras Inlet, NC Ocracoke, NC Hobucken, NC Fort Macon, NC Swansboro, NC Wrightsville Beach, NC Oak Island, NC	Georgetown, SC Charleston, SC Tybes, GA Brunswick, GA Mayport, FL Ponce de Leon Inlet, FL Port Canaveral, FL Fort Pierce, FL Lake Worth Inlet, FL Fort Lauderdale, FL Miami Beach, FL Islamorada, FL Marathon, FL Key West, FL San Juan, PR

Table B-3. USCG Atlantic Coast Cutters (65ft. and larger)

First District		Fifth District		Seventh District	
Location	Name (Type)	Location	Name	Location	Name
West Johnsport, ME	Point Hannon (WPB)	Cape May, NJ	Vigorous (WMEC)	Charleston, SC	Dallas (WHEC)
Rockland, ME	Thunder Bay (WTGB)		Matinicus (WPB)		Gallatin (WHEC)
	Tackle (WYTL)		Point Franklin (WPB)		Metompkin (WPB)
	White Lupine (WLM)		Point Batan (WPB)		Madrona (WLB)
South Portland, ME	Jefferson Island (WPB)		Hornbeam (WLB)		Rambler (WLIC)
	Wrangell (WPB)	Philadelphia, PA	Red Wood (WLM)	Savannah, GA	Key Largo (WPB)
	Spar (WLB) (planned to decom in FY97)		Captstan (WYTL)	Brunswick, GA	Smilax (WLI)
	Shackle (WYTL)		Cleat (WYTL)	Mayport, FL	Pea Island (WPB)
Southwest Harbor, ME	Bridle (WYTL)	Chincoteague, VA	Point Highland (WPB)		Laurel (WLB)
New Castle, NH	Reliance (WMEC)	Yorktown, VA	Morro Bay (WTGB)		Hammer (WLIC)
Gloucester, MA	Grand Isle (WPB)	Portsmouth, VA	Bear (WMEC)	Port Canaveral, FL	Confidence (WMEC)
Boston, MA	Escanaba (WMEC)		Forward (WMEC)		Vigilant (WMEC)
	Seneca (WMEC)		Harriet Lane (WMEC)		Drummond (WPB)
	Spencer (WMEC)		Legare (WMEC)	Panama City, FL	Courageous (WMEC)
	White Heath (WLM)		Northland (WMEC)		Kodiak Island (WPB)
	Pendant (WYTL)		Tampa (WMEC)	Fort Pierce, FL	Point Barnes (WPB)
New Bedford, MA	Campbell (WMEC)		Aquidneck (WPB)		Point Martin (WPB)
	Tahoma (WMEC)		Red Cedar (WLM)	Fort Lauderdale, FL	Point Glass (WPB)

First District		Fifth District		Seventh District	
Location	Name (Type)	Location	Name	Location	Name
Woods Hole, MA	Monomoy (WPB)		Chock (WYTL)	Miami, FL	Valiant (WMEC)
	Sanibel (WPB)		Kennebec (WLIC)		Farallon (WPB)
	Bittersweet (WLB)	Norfolk, VA	Point Bonita (WPB)		Manitou (WPB)
Newport, RI	Point Turner (WPB)		Point Huron (WPB)		Matagorda (WPB)
	Juniper (WLB)	Crisfield, VA	Chokeberry (WLI)		Maui (WPB)
	Willow (WLB) (planned commissioning in FY96)		Tackle (WYTL)		Baranof (WPB)
	Ida Lewis (WLM)	Baltimore, MD	Red Birch (WLM)		Chandeleur (WPB)
New London, CT	Point Francis (WPB)		Sledge (WLIC)		Hudson (WLIC)
New Haven, CT	Bollard (WYTL)	Atlantic Beach, NC	Staten Island (WPB)	Key West, FL	Thetis (WMEC)
Montauk, NY	Point Wells (WPB)		Block Island (WPB)		Mohawk (WMEC)
Sandy Hook, NJ	Adak (WPB)		Gentian (WLB)		Sitkinak (WPB)
	Bainbridge Island (WPB)		Primrose (WLI)		Padre (WPB)
Bayonne, NJ	Red Beech (WLM)	Wilmington, NC	Diligence (WMEC)		Nantucket (WPB)
	Penobscot Bay (WTGB)	Caswell, NC	Blackberry (WLI)		Monhegan (WPB)
	Sturgeon Bay (WTGB)	Wrightsville Beach, NC	Point Warde (WPB)	San Juan, PR	Attu (WPB)
	Hawser (WYTL)			Roosevelt Roads, PR	Nunivac (WPB)
	Line (WYTL)				Ocracoke (WPB)
	Wire (WYTL)				Vachon (WPB)

First District		Fifth District		Seventh District	
Location	Name (Type)	Location	Name	Location	Name
	Katherine Walker (WLM) (planned commissioning in FY97)				Cushing (WPB) (planned in FY96)

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- WHEC High Endurance Cutter
 - WMEC Medium Endurance Cutter
 - WTGB Icebreaker Tug
 - WPB Patrol Boat
 - WYTL Harbor Tug, Small
 - WLB Seagoing Buoy Tender, Seagoing
 - WLM Buoy Tender, Coastal
 - WLI Buoy Tender, Inland
 - WLIC Construction Tender

Aids to Navigation

The USCG maintains several thousand aids to navigation along the Atlantic coast. These aids include large, shore-based lighthouses with fog signals, deep-water moored buoys, small single-pile structures, and unlighted buoys in shallow water. Aids to navigation provide the navigational signals needed by commercial and recreational vessels to navigate inshore and oceanic waterways safely (keeping vessels in designated channels and away from shoal areas, navigational hazards, and protected habitats).

Operation and servicing of aids to navigation along the U.S. Atlantic coast currently are performed from 23 sea-going, coastal, inland construction, and inland buoy tenders. Additional aids-to-navigation work is performed by 27 Aids-to-Navigation teams operating boats (21 ft to 55 ft) from shore-based facilities. These operations are performed along the Intercoastal Waterway, and from the inner harbor of navigable ports out to the sea buoy which often is several miles off shore. The majority of work is conducted in water less than 50 ft deep. Maintenance of the aids to navigation includes a routine servicing visit of one to two hours once a year, or more often if the aid is compromised (extinguished light, off assigned position, buoy struck, etc.). Buoy tenders also assist with SAR operations, environmental cleanup, and other missions. Sea-going buoy tenders assist NOAA in servicing 19 weather buoys operated by the NDBC, some of which are located 100 miles offshore.

Traffic Separation Schemes

In consultation with the IMO, the USCG is responsible for vessel routing measures, such as traffic separation schemes (TSS) in U.S. waters and offshore. TSSs are used to improve the safety of navigation in areas where the density of traffic is great or where freedom of movement of shipping is inhibited by restricted searoom, by the existence of obstructions to navigation, by limited depths, or by unfavorable meteorological conditions. TSSs may also be used to prevent or reduce the risk of pollution, harm to endangered species, or other damage to the marine environment from ship collisions or groundings in coastal areas and in critical marine habitats.

Vessel Traffic Services

The Vessel Traffic Services (VTS), operated by the USCG, are the eyes and ears of the port. VTS usually is the first to hear about or detect anything out of the ordinary. It then uses its suite of communications equipment to report the incident to the responsible authority or to the mariner for appropriate action. It also has the sensors to monitor or manage appropriate responses to the incident. The VTS does not actively control vessels of any type. It does, however, advise mariners on hazards to navigation. On the east coast of the United States, the USCG operates one VTS, located for vessel traffic in New York Harbor and its approaches from the sea.

NAVTEX transmitters are located in Boston, Massachusetts, Portsmouth, Virginia, and Miami, Florida. The NAVTEX system is a maritime radio warning system consisting of a series of coastal stations transmitting radioteletype safety messages on the international-standard, medium-frequency (518 kHz). Each station has a range of 100 to 500 NM day and night. NAVTEX coverage is reasonably continuous to 200 NM offshore. NAVTEX transmissions include distress, urgent, and safety messages; gale, storm, and hurricane warnings; and offshore marine weather forecasts. Recently, the NAVTEX system has been used during the calving season (winter) to broadcast sightings of all right whales, including mothers with calves, along the southeast U.S. coast. Routine messages normally are broadcast four to six times daily; urgent messages are broadcast upon receipt, unless an adjacent station is already transmitting.