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# The Coast Guard and Maritime Security

By BRUCE B. STUBBS



U.S. Coast Guard (Patrick Montgomery)

Providing port security for *USS Cole*.

**T**he mission of the Coast Guard includes safeguarding the maritime interests of the Nation: the exclusive economic zone, areas adjacent to the continental shelf, and other waters of importance collectively known as *deepwater operating areas*. By deploying to deepwater regions for a range of unilateral, joint, interagency, and combined operations, the

fifth service protects American lives, property, and interests, thereby assuring maritime security.

Geopolitical realities, economic globalization, shifting demographics, technological change, finite resources, and fragile environments are dramatically affecting maritime interests. Oceans and waterways, in addition to carrying trade vital for the economy, will continue to act as conduits for transnational issues such as pollution, overfishing, illegal immigration, drug smuggling, terrorism, and proliferation. Moreover, burgeoning foreign economic links will further increase the volume and value of waterborne trade as well as challenges to maritime security.

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South Korean fishing boat under observation.



MH90 helicopter with over-the-horizon inflatable boat.

U.S. Coast Guard

U.S. Coast Guard (F.N. Chaney)

To protect U.S. national interests against threats—known and unknown—the Coast Guard is developing an operational concept for safe-

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guarding deepwater regions. It will include maritime awareness, active and sustained presence, dynamic positioning, and standoff tactics. It is designed to ensure deployment of military, multi-mission, and maritime force packages on-scene when and where needed.

**Knowing the Sea**

Maritime awareness means possessing extensive knowledge of all events and activities that can impact on the maritime security and safety of America and its citizens. Events include vessel transits, fishing activities, pollution incidents, emergencies at sea, and illegal activities.

General awareness involves an overall knowledge of events, activities, and trends in a region. Operational commanders as well as deployed forces need an understanding of maritime

events in areas such as the Gulf of Mexico and the Bering Sea. Focused awareness is detailed knowledge of events and activities occurring in specific areas at all times. Deployed forces require knowledge of events in assigned patrol areas as well as fishing grounds, rookeries, sanctuaries, chokepoints, and shipping lanes or transit corridors. In addition, the closer a threat appears to the United States, the more comprehensive the requirements of the Coast Guard.

Both types of awareness can be achieved by various means, including space-based national sensors, maritime patrol aircraft (MPA), unmanned aerial vehicles, shore-based over-the-horizon radars, all-source intelligence, data links between netted forces, and shipboard sensors such as air- and surface-search radars and passive electronic surveillance systems. Moreover, awareness is not exclusively a service concern but rather a national task achieved by a two-way flow of information between the Coast Guard and other agencies, particularly the Department of Defense.



Mariners disembarking from HH-60J after rescue.

U.S. Coast Guard (Eric Eggen)



Raider boats conducting demonstration.

U.S. Coast Guard (Stephen Baker)

Operational data passes to maritime intelligence fusion centers (MIFCs), one on each coast. Their role is to collect, fuse, and analyze all-source intelligence and operational data and provide it to the Coast Guard in its areas of responsibility to build common situational awareness.

Surveillance of immense maritime regions, a prerequisite for general and total awareness, demands a range of national, shared, and service-specific space-based, air, surface, undersea, and land-based sensors and platforms. The optimal combination of systems reflects a balance between economy and effectiveness. Leveraging information and intelligence assets of other agencies helps

compensate for the size of forces relative to the area covered.

Realizing focused awareness is an immense challenge. It requires integrating surface assets and organic aircraft and boats, supporting MPA, and other systems. General awareness may also be reached by all-source intelligence gathered without committing MPA and surface assets. Such awareness comes from deployed forces that provide active and sustained presence. Dispersed but interconnected, these assets are key to surveillance and detection. A flow of tactical and operational data exists between deployed deepwater elements and MIFCs, each dependent on the other for force-wide situational awareness to determine if events warrant a response.

**Presence**

The Coast Guard seeks to eliminate threats early—at the source, either in international or U.S. territorial waters. Attacking problems at the source involves mobile training teams, marine safety offices overseas, foreign officers training in service schools, foreign naval and coast guard exercises, and multinational bodies such as the International Maritime Organization.



U.S. Coast Guard (Stephen J. Baker)

Coast Guard Cutter  
Albacore off Virginia  
Beach.

**armed helicopters and OTH-RHIBs can generate standoff operational assets that far exceed those available today**

Pursuing security at sea cannot be exclusively reactive. As noted in *The National Oceans Conference Report: America's Ocean Future*, "International maritime criminal activities pose clear threats to our borders, our economy, our environment, and our national security and require strong off-shore law enforcement." The Coast Guard attempts to initially address threats abroad. Failing that, it depends on intelligence and surveillance and on the deployment of forces to deter, contain, or respond before a danger reaches our shores. Consequently, the service maintains an active and sustained presence in domestic and international waters where the United States has vital interests. They will act as a highly visible deterrent and rapid response force.

Active presence embodies and displays U.S. authority and resolve but is broadly acceptable because of the service's reputation as a military, law enforcement, and humanitarian force.

**Dynamic Positioning**

The Coast Guard does not maintain a constant presence in every deepwater area. Instead it relies on dynamic maritime positioning based on intelligence and cuing. Just as police forces field their heaviest presence in high-crime areas, the bulk of deepwater presence is deployed in areas that most threaten maritime security. Intelligence and cuing, when combined with advanced command, control, communications, computers, intelligence, surveillance, and reconnaissance (C<sup>4</sup>ISR), add to deployed, highly mobile assets that place forces in the right place at the right time.

Overall awareness of maritime events guides dynamic positioning. Combining all sources of intelligence, including historical knowledge of trends in threats and real-time surveillance data, the Coast Guard can shift efforts and forces between areas. This requires highly mobile assets and flexible command, control, and logistics systems.

Forward-patrolling forces will generally respond to an event. They may be reinforced in response to larger contingencies or to conduct coordinated campaigns.

**Standoff Maritime Tactics**

The capabilities of planned deepwater replacement forces must be increased. By exploiting cutting edge technologies and the speed, range, and endurance of both armed helicopters and over-the-horizon, rigid-hull-inflatable-boats (OTH-RHIBs), it can generate standoff operational assets that far exceed the capabilities of those available today.

Because of advances in technology and operational doctrine, it is no longer necessary to put cutters alongside surface vessels to conduct a mission from start to finish. Instead a major cutter with armed helicopters or OTH-RHIBs can quickly make contact with ships within eyesight or 100 nautical miles away, depending on weather and tactical scenarios. With such means for delivering boarding teams, the role of cutters is reduced in the active portion of a law enforcement mission, providing true standoff capability for a quantum change in flexibility and usefulness.

Development of robust, integrated standoff capabilities also will require the Coast Guard to organize its forces into multimission maritime action units (MAUs). These units would maintain focused awareness within 200 nautical miles of a deployed cutter and influence events in that area. The air and boat assets deployed as well as the dedicated MPA would act as extensions of cutter



U.S. Coast Guard (Robin Reissler)

Boarding fishing vessel in North Atlantic.

sensors and weapons. Units would establish a robust C<sup>4</sup>ISR system to receive, evaluate, and act on information obtained by cutter-deployed and supporting assets. Aircraft, OTH-RHIBs, and maritime mission teams would transfer video and data for rapid analysis and decision. Cutters would exchange tactical data via voice and data-link channels. MIFC on each coast would aid units by providing tailored offboard intelligence while the major cutter would pass operational data back to MIFC. Data shared with other agencies would be fused into the overall MAU tactical picture.

### Putting It Together

Commanders determine the type and level of Coast Guard presence and response capability needed in their areas of responsibility. Matching forces with operational demands, they apportion forces to subordinate commands during periodic scheduling conferences.

On the operational level, surveillance and detection of threats are conducted in several ways. MIFCs may analyze intelligence and information from numerous sources and detect a threatening trend, such as increased smuggler, alien migrant, or illegal fishing traffic. Conversely, the centers may receive reports of a specific activity from deployed Coast Guard maritime action units, patrol aircraft, other forces or agencies, ship manifests, private individuals, or commercial ships. In both cases, the intelligence centers update their situational awareness.

To counter an adverse long-term trend, commanders may react to increased threats by the allocation of MAUs or MPAs to conduct additional surveillance, deter activity, or rapidly respond to incidents. If a major emergency like mass

migration is involved, commanders may initiate these activities and surge added Coast Guard maritime action units and other forces. The assets reinforce the on-scene units or sustain an active presence in areas vacated by other MAUs.

Once forces are committed, operating and supporting commands as well as elements from other services have access to a distributed common operational picture. Coast Guard headquarters and other Federal agencies can also access pertinent data, helping build situational awareness across commands, echelons, and organizations 24 hours a day, every day.

On-station maritime action units get tasking and information from commanders. They also receive from and provide data to the center, Coast Guard units, and DOD or other force providers. A unit responds to potential or actual maritime events as directed by an operational commander or the judgment of a major cutter commanding officer (or commander of a multicutter task unit), who is acting within the limits of standing orders. Tactically, individual units retain command authority, but they have access to a range of information. Hence, although a unit may be the only presence in a given area, it is not isolated from intelligence flows and assistance from higher commands.

A maritime action unit relies on sensors aboard its boats and aircraft and assigned MPA, as well as data generated offboard, to build tactical situational awareness. Once committed to prosecuting a contact, it fuses operational and tactical data to generate total maritime awareness of the area, including classification and identification of both threats and legitimate contacts and activities.

The nature of the prosecution phase is determined by the mission and particular situation. The object of MAU efforts can be people in the water or escaping drug-laden boats. Consequently the maritime action unit must tailor its operations to the task at hand. The major cutter acts as the C<sup>4</sup>ISR interface with other forces and sometimes supports operations with its embarked assets.

Finally, once the situation has been resolved, the unit is ready for immediate retasking. By dint of training and multimission equipment, it can redeploy to any new assignment.

The unique instrument of national power contributed by the Coast Guard that upholds maritime security is focused on awareness, active and sustained presence, dynamic positioning, and standoff tactics. It doesn't depend on exotic new technologies, but rather on efficiently exploiting capabilities that are present or on the horizon, both inside and outside the service. **JFQ**