



# Trade PROTECTION

## The Navy's doctrine for defending vital commercial shipping assets falls short

BY MILAN VEGO

**U**ninterrupted maritime trade is one of the most critical requirements for national and global prosperity. About 80 percent of the world's trade is conducted by sea. About 4,000 ports and 46,000 merchant ships are engaged in the world's maritime trade. More than 80 percent of the world's trade is conducted by the sea. Ninety percent of the general cargo is carried in containers. About 30 megaports in Europe and North

America are key hubs for the world's trade. Seventy-five percent of the world's maritime trade and half of the oil trade pass through a handful of international straits and artificial canals.

All maritime countries — and the U.S. is no exception — depend to a large extent on the continuous flow of seaborne trade for the everyday functioning of their economies. Maritime trade defense and protection should be organized and practiced during peacetime. In a high-intensity conflict at sea, a failure to safeguard maritime trade will have highly adverse and often fatal consequences on the war's outcome. Hence, this task is not “defensive,” as the Navy apparently believes, but one of its core missions. Defense and protection of U.S. maritime trade cannot be successfully accomplished without the support of and close cooperation between the Navy and other services, government organizations and private

### **The threat posed by German U-boats on merchant shipping was underestimated before World War I.**

maritime industry. Also, it cannot be successful without close cooperation with NATO and other friendly navies and coalition navies, their government agencies and the private maritime sector.

#### **TRADITION OF NEGLECT**

Before both world wars, most blue-water navies focused almost exclusively on preparing and fighting decisive fleet action. In contrast, such defensive missions as ensuring safety of merchant shipping were given a short shrift. Hence, it was not surprising that this neglect resulted in unacceptable losses to merchant shipping when a major conflict broke out. The main reasons for this inadequate attention to defending merchant shipping was the legacy of the teachings of Rear Adm. Alfred T. Mahan. Mahan consistently emphasized the need to take offensive action, and his teachings were uncritically accepted by almost by all leaders in major navies. However, many of them did not heed another part of Mahan's teachings and his emphasis on the importance of merchant shipping for a sea power. Mahan wrote that "the necessity of a navy, in the restricted sense of the words, springs ... from the existence of peaceful shipping, and disappears with it."

In the interwar years, most of the blue-water navies, in true Mahanian fashion, considered commerce destructive rather inconclusive and indecisive. All three major blue-water navies, the Royal Navy, the U.S. Navy and the Imperial Japanese Navy, underestimated the submarine as a serious threat to one's merchant shipping. For example, a U.S. admiral stated in 1927 that the submarine was not well adapted to lawful war on commerce. Although the Navy played a pivotal role in the defeat of the German U-boats in World War I, it neglected one of its core missions of defense of U.S. merchant shipping. And by 1939, those lessons that had been learned about protecting maritime trade during World War I were almost forgotten. Despite its involvement as a de facto ally of the Royal Navy in defense of convoys in the northern

Atlantic, the U.S. Navy was woefully unprepared to provide an effective defense and protection of U.S. merchant shipping when Nazi Germany declared war on the United States in December 1941.

During the Cold War, the Navy's focus was on defeating a large Soviet submarine force that threatened to interrupt the flow of military ships across the Atlantic in the event of a Soviet-led Warsaw Pact invasion against NATO countries. The Navy remained embedded in the Mahanian tenet of conducting naval offensive in any potential conflict at sea. This offensive spirit still permeates the U.S. naval leadership today. Although the protection of shipping is one of the Navy's core missions, far more attention and resources are given to offensive missions such as strike warfare and ballistic missile defense.

The Navy does not have an all-encompassing operational perspective on defense and protection of U.S. maritime trade across the spectrum of conflict at sea. Although the economic importance of the maritime domain is highlighted in statements by the Navy's senior officials to Congress, no overarching strategic or operational concept is presented on how defense and protection of maritime trade will be accomplished. Protection of U.S. merchant shipping is cursorily mentioned, and emphasis is given almost entirely to the need to protect military sealift forces in support of expeditionary operations on hostile shores. In other words, the Navy's focus is on protecting military shipping.

The Navy's perspective is also tactical rather than operational. This is illustrated by the Navy's description of the Sea Shield, one of the three main components of the Sea Power 21 transformational road map published in 2003. For instance, the Navy's Future ASW Warfighting Vision, a part of Sea Shield, contemplates the creation of so-called "protected passage" of the sea line of communications aimed at defending U.S. naval forces during their transit to the operating area. The purpose is to deny submarine access to the operating areas and to have the ability of what the authors of Sea Power 21 called "hold at risk" enemy submarines throughout the maritime theater. The Navy's approach in implementing this new concept is almost entirely based on fielding new anti-submarine warfare technologies.

The new U.S. maritime strategy, unveiled in October 2007, should have included a section on maritime trade protection and provided a badly needed framework for the Navy's operational level of war doctrine. Unfortunately, the document

**MILAN VEGO** is a professor of operations at the Joint Military Operations Department at the Naval War College. The views expressed here are his own and do not necessarily reflect those of the Navy or Defense Department.

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provided few details on this critically important issue. After highlighting the economic importance of maritime domain, it declared that U.S. maritime forces “will be deployed to protect and sustain the peaceful global system comprised of interdependent networks of trade, finance, information, law, people and governance.” Among core capabilities of the U.S. maritime forces, the new maritime strategy emphatically stated that the Navy “will not permit an adversary to disrupt the global supply chain by attempting to block vital sea-lines of communications and commerce.” In discussing the employment of U.S. maritime forces in war, the maritime strategy focused on imposing local sea control, overcoming challenges to access, forcing entry, and projecting and sustaining power ashore, reinforced by a robust sealift capability. The sealift capability, in turn, depends on maintaining “a strong U.S. commercial maritime transportation industry and its critical intermodal assets.” The maritime strategy addresses only briefly the important role of the U.S. maritime forces in screening ships bound to U.S. ports as part of their overall employment in homeland defense.

### **NATIONAL STRATEGY**

In contrast, the White House’s document National Strategy for Maritime Security issued in September 2005 explained in more detail and in more understandable language the critical need to defend and protect U.S. maritime trade. In this document, three plans dealt specifically with critical components of maritime trade — the maritime infrastructure recovery plan, maritime transportation system security plan and maritime commerce security plan. Among strategic actions, this document listed establishing multilayered security and ensuring the continuity of the marine transportation system. Multilayered security would consist of fully integrated domestic and international security measures to deter, pre-empt, prevent, interdict and protect the maritime transportation system from terrorist and criminal acts in ports and on ships en route. It would include physical cargo inspection, interdiction of personnel and materials that pose a threat to the U.S. and maritime domain, and military and law enforcement response.

The key elements in defense and protection of U.S. maritime trade are commercial shipping, military sealift forces, ports and critical infrastructure on the coast related to maritime trade.

Sealift forces are merchant ships available to the Defense

Department to execute the sealift requirements of the Transportation Department across a range of military operations. It is composed of active government-owned or -controlled shipping, government-owned reserve or inactive shipping, U.S. privately owned and operated commercial shipping, foreign flag commercial shipping, and foreign-owned and -operated commercial shipping.

The U.S. has 326 ports with more than 3,700 cargo and passenger terminals. The largest 50 ports account for 90 percent of all cargo tonnage, and the top 25 account for 98 percent of all container shipments (more than 9 million marine containers enter U.S. ports each year). Critical infrastructure encompasses the marine transportation system, cargo/passenger terminals and cybernetworks.

### **SOUND DOCTRINE**

One of the key prerequisites for success in defense and protection of maritime trade in wartime is to have a sound and fully tested doctrine. The Navy and NATO navies use several doctrinal publications pertaining to naval control of shipping. The principal documents used are NWP 3-07.12: Naval Control and Protection of Shipping, published in 1996, and NTTP 3-07.12: Naval Cooperation and Guidance for Shipping. The NATO navies have used since 2001 the ATP-2 (A) Volume 1: Allied Naval Control of Shipping Manual. This document was replaced in November 2007 by Change 1 to ATP (B) Volume I: Naval Co-operation and Guidance for Shipping (NACAGS). At press time, Change 2 was to be sent for ratification to NATO allies in October. Joint Publication 4-01.2: Sealift Support to Joint Operations (31 August 2005) is the only doctrinal document referring to the employment of sealift. All of the Navy’s publications are focused primarily on protection of commercial and military shipping. There is not a single document in use by the Navy that explains the employment of combat forces to defend and protect maritime trade. The existing doctrinal documents are largely out of date and need to be revised. None of them was written based on the guidance and framework provided by maritime strategy or servicewide (operational) doctrine (the revised NDP-1 Naval Warfare is not signed yet).

During the Cold War, the main method used for organizing protection of U.S. and NATO shipping was Naval Coordination and Protection and Naval Control of Shipping. They were created at a time when the Soviet Navy posed a global threat. The U.S. and NATO allies envisaged the extensive use of large

convoys and naval escorts. However, the Navy revised its NTTP 3-07.12 in October 2003 to Naval Cooperation and Guidance for Shipping (NCGAS). NATO and some other friendly navies made similar changes to their doctrine. This was not just a change in terminology, but also a significant departure from the then-prevalent practices. Instead of trying to defend and protect U.S. and friendly shipping, the emphasis is now on cooperation and guidance. One of the reasons for this change was the emergence of transnational terrorism at sea as one of the potentially serious

threats to the safety of friendly shipping. Hence, the main need for the U.S. commanders was to obtain accurate and timely information for enhancing maritime domain awareness. The new organization supposedly was created to take advantage of the advances in the new technology. However, what was ignored was the fact that the threat of conventional war at sea still exists in some of the world's flashpoints, specifically on the Korean Peninsula, the Taiwan Strait and the Persian (Arabian) Gulf. In short, one should not go from one extreme to another in justifying the need for a significant change of doctrine to protect shipping.

Another reason for change of the U.S. and NATO doctrine on naval control of shipping was the ever-increasing emphasis on efficiency combined with steadily reduced number of escort ships that are given multiple missions. A return to more forceful and effective methods of control and protection is unlikely unless there is an outbreak of a large-scale conflict at sea. However, defense of merchant shipping and maritime trade in particular is a complex task that cannot be successfully accomplished in an emergency or after the conventional conflict breaks out. Before the procedures and techniques are successfully applied, the U.S. and its allies and other friends could suffer unacceptably high losses of their shipping in a conflict with a strong opponent at sea.

Responsibility for ensuring safety of merchant shipping, military sealift forces and port security is highly fragmented



**Sprawling commercial shipping container terminals, like this one in Hamburg, Germany, are vulnerable to terrorist and criminal activity.**

because authority and responsibilities are divided among the military and numerous federal agencies. At the national level, the Homeland Security and Justice departments, and in some cases also the State Department (when diplomacy is needed), bear the responsibility to integrate and coordinate all U.S. government maritime security programs and initiatives into a comprehensive national effort including appropriate state and local agencies, the private sector, and other nations. Maritime administration is responsible for ensuring that U.S. merchant marine

shipping is sufficient to meet the needs of national defense or national emergency, and also can support the domestic and foreign commerce.

The NCGAS organization, formally subordinate to U.S. Fleet Forces Command in Norfolk, Va. (part of U.S. Joint Forces Command), is responsible for facilitating cooperation between the military and private sectors of maritime industry, thereby finding ways to minimize the adverse economic impact of operating commercial shipping in the vicinity of naval vessels. The NCGAS' main purpose is to provide the geographic combatant/operational commander a near-real-time picture of the operational situation in regard to merchant shipping and operations of naval forces, and to deconflict the movement of merchant shipping and naval vessels. It also makes recommendations to the geographic combatant commander on the extent and type of protection necessary to merchant shipping within his area of responsibility. Liaison officers are responsible for giving recommendations to the operational commander and interacting with business leaders in the private maritime industry.

The NCGAS employs 200 personnel. It consists of four subunits. Each of these deploys shipping coordination teams (SCTs) ashore or afloat to establish or augment shipping coordination centers (SCCs). SCTs manage and transmit

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information on regional commercial shipping information. The SCCs comprise a permanent organization tasked with establishing and maintaining links with the military, merchant shipping, and Homeland Security Department and its lead federal agency responsible for maritime homeland security, the Coast Guard. They support geographic combatant commanders through joint force maritime component commander (JFMCC)/combined joint force maritime component commander (CFMCC) to improve maritime domain awareness relating to merchant shipping other than military sealift. The NCGAS as part of JFMCC/CFMCC also works closely with the Coast Guard. NCGAS liaison officers are deployed onboard merchant ships to provide a liaison between the ship's master and military authorities.

Defense and protection of sealift forces is normally the responsibility of the Navy component commander or geographic combatant commander when these ships operate within their area of responsibility. The MSC ships are civilian-manned and, hence, their crews may not be protected by a status-of-forces agreement and are not governed by military rules of engagement. Because the MSC-operated vessels have smaller crews than their naval counterparts, in addition to their legal status, it is not possible to assign crew members to full-time security duties. They usually carry only small arms and can use deadly force only to protect human life.

In general, military force should be used to either eliminate the threat so merchant ships can transit unopposed at any time or to provide direct protection. During the transit of the MSC-operated vessels through the threat area, the Navy component commands, as directed by the geographic combatant commander, will be tasked with establishing and implementing plans to provide surface and air escort or the protection of merchant shipping. The JP 4-01.2 acknowledges that the need to conduct other missions such as strikes, maritime interdiction and ballistic missile defense most likely will result in a shortage of naval escorts. The same publication, in typical Mahanian spirit, stated that the Navy's offensive actions to reduce threats to sealift shipping also may eliminate the need for naval escorts and be a more efficient use of resources. These actions may involve use of air, ground or naval power, as appropriate. Yet this goes contrary to all logic and experience. Shipping safety cannot be secured by relying on offensive action only. Escorts must be assigned to small convoys transiting the high-threat area, especially in the enclosed or semi-enclosed seas. Another problem is that the operational commander might not have sufficient time and forces to neutralize threats to friendly shipping by acting offensively only. He has much less control to deal with all threats, especially in a high-intensity conflict. The operational commander might have some geographic and rules-of-engagement limitations that considerably restrict his freedom of action to prevent hostile acts against friendly shipping. In addition, the presence of neutral shipping, state sovereignty and territorial concerns can preclude some offensive actions by the U.S. naval commander aimed at defending friendly shipping.

As in many other warfare areas, the Navy lacks a coherent and compressive approach in resolving successful defense of

merchant shipping and military sealift forces. Because of its excessive focus on offensive warfare, it seems to pay attention only to protecting sealift forces, which is one of the key elements in projecting power on hostile shores. The Navy needs to broaden its perspective level and focus on defense and protection of maritime trade as a whole. The new maritime strategy and the revised NDP-1 Naval Warfare need to provide a broad framework and guidance for writing a new and all-encompassing doctrine for defending and protecting maritime trade. It is simply too risky to have doctrine that is focused almost exclusively on protecting shipping in peacetime and in operations short of war.

The possibility of a high-intensity conflict at sea is not a fantasy. Hence, any sound doctrine should encompass several operational concepts covering defense and protection of maritime trade across the entire spectrum of conflict. Afterward, such a doctrine must be fully tested through exercises at sea and war games.

The Navy and NATO navies also should develop a theory of defense and protection of maritime trade; otherwise, a sound doctrine simply cannot be written. Finally, the Navy needs a cultural change and should consider maritime trade protection not as a defensive aspect of warfare that is somehow less important than other warfare areas. This change cannot happen soon, but the strong efforts in that direction must be made; otherwise, the Navy might find itself ill-prepared if a high-intensity conflict at sea breaks out. **AFJ**

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