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Navy Irregular Warfare and Counterterrorism Operations: Background and Issues for Congress

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Summary

In the years following the terrorist attacks of September 11, 2001, the Navy has carried out a variety of irregular warfare (IW) and counterterrorism (CT) activities. Among the most readily visible of these were operations carried out by Navy sailors serving ashore in the Middle East and Afghanistan, as well as the May 1-2, 2011, U.S. military operation in Abbottabad, Pakistan, that killed Osama bin Laden.

During these years, the Navy took certain actions intended to improve its IW capabilities. For example, the Navy established the Navy Expeditionary Combat Command (NECC) informally in October 2005 and formally in January 2006. NECC consolidated and facilitated the expansion of a number of Navy organizations that have a role in IW operations. The Navy also established the Navy Irregular Warfare Office in July 2008, published a vision statement for irregular warfare in January 2010, and established "a community of interest" (COI) to develop and advance ideas, collaboration, and advocacy related to IW in December 2010.

The Navy during these years also reestablished its riverine force and initiated The Global Maritime Partnership, which was a U.S. Navy initiative to achieve an enhanced degree of cooperation between the U.S. Navy and foreign navies, coast guards, and maritime police forces, for the purpose of ensuring global maritime security against common threats. In addition, the Navy operated the Southern Partnership Station (SPS) and the Africa Partnership Station (APS), which were Navy ships, such as amphibious ships or high-speed sealift ships, that deployed to the Caribbean and to waters off Africa, respectively, to support U.S. Navy engagement with countries in those regions, particularly for purposes of building security partnerships with those countries and for increasing the capabilities of those countries for performing maritime-security operations.

The Navy's current IW and CT activities pose a number of potential oversight issues for Congress, including how much emphasis to place on IW and CT activities in Navy budgets, particularly in a context of constraints on Navy budgets and Navy desires to devote resources to developing "high end" combat capabilities for countering improved conventional military capabilities of countries such as China and Russia.

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Introduction

This report provides background information and potential issues for Congress on the Navy's irregular warfare (IW) and counterterrorism (CT) operations. The Navy's IW and CT activities pose a number of potential oversight issues for Congress, including how much emphasis to place on IW and CT activities in Navy budgets, particularly in a context of constraints on Navy budgets and Navy desires to devote resources to developing "high end" combat capabilities for countering improved conventional military capabilities of countries such as China and Russia. Congress's decisions regarding Navy IW and CT operations can affect Navy operations and funding requirements, and the implementation of the nation's overall IW and CT strategies.

This report focuses on Navy IW and CT operations. Another CRS report discusses U.S. special operations forces (SOF) across the military services.[1]

For an overview of the strategic and budgetary context in which Navy IW and CT operations may be considered, see CRS Report RL32665, *Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress*, by Ronald O'Rourke.

Background

Navy Irregular Warfare (IW) Operations

Note on Terminology

The Navy has sometimes used the phrase confronting irregular challenges (CIC) instead of the term irregular warfare. For purposes of convenience, this report continues to use the term irregular warfare and the abbreviation IW.

Navy IW Operations in Middle East and Afghanistan

In the years following the terrorist attacks of September 11, 2001, the Navy carried out a variety of irregular warfare (IW) and counterterrorism (CT) activities. Among the most readily visible of these were operations carried out by Navy sailors serving ashore in the Middle East and Afghanistan. Regarding current operations in the Middle East, the Department of the Navy (DON) states the following in its FY2020 budget highlights book:

> The Marine Corps has an active duty force of approximately 1,300 Marines ashore in the U.S. CENTCOM area of operations (AOR) and another roughly 850 Marine Reserve members supporting CENTCOM. Beyond the Marines participating in counterinsurgency, security cooperation, and civil-military operations; on any given day there are about 1,000 Sailors ashore and another roughly 6,500 afloat throughout the CENTCOM AOR. These sailors are conducting activities such as air operations, maritime infrastructure protection, combat construction engineering, cargo handling, combat logistics, maritime security, detainee operations, customs inspections, civil affairs, base operations, and other forward presence activities.[2]

[1] CRS Report RS21048, *U.S. Special Operations Forces (SOF): Background and Issues for Congress*, by Andrew Feickert.

[2] Department of the Navy, *Highlights of the Department of the Navy FY 2020 Budget*, 2019, p. 8-2.

Navy IW Operations Elsewhere

In addition to participating in U.S. military operations in the Middle East and Afghanistan, Navy IW operations in the years following the terrorist attacks of September 11, 2011, have also included the following:

- **security force assistance operations**, in which forward-deployed Navy ships have exercised and worked with foreign navies, coast guards, and maritime police forces, so as to improve their abilities to conduct maritime security operations;
- **civic assistance operations**, in which forward-deployed Navy units, including Navy hospital ships, expeditionary medical teams, fleet surgical teams, and naval construction units have provided medical and construction services in foreign countries as a complement to other U.S. diplomatic and development activities in those countries;
- **disaster relief operations**, of which Navy forces have performed several in recent years; and
- **counter-piracy operations**, particularly off the Horn of Africa.

DON states in its FY2020 budget highlights book that

> In the past year, the Marine Corps executed 170 operations, eight amphibious operations, 115 theater security cooperation events and participated in 51 exercises and relief operations for Hurricanes Maria, Florence, and Michael. Within the context of these efforts, Amphibious Ready Groups / Marine Expeditionary Units (ARG/MEU) supported Combatant commands along-side regional partners providing a range of deliberate and crisis response options. Major exercises were held in Romania, Israel, Jordan, Malaysia, and off the coast of Djibouti. The Marine Corps also participated in theater security cooperation (TSC) exercises held in Brazil, Latvia, Jordan, Mexico, and Philippines that enhanced military cooperation, capability, and interoperability with partner nations while sustaining a ready, forward presence in support of the Combatant Commander requirements….
>
> The Navy has active and reserve forces continually deployed in support of contingency operations overseas serving as members of Carrier Strike Groups, Expeditionary Strike Groups, Special Operating Forces, Seabee units, Marine forces, and medical units; some also serve as Individual Augmentees (IAs).[3]

Navy Individual Augmentees (IAs)

Some of the Navy's contributions to IW operations around the world in the years following the terrorist attacks of September 11, 2001, were made by Navy individual augmentees (IAs)—individual Navy sailors assigned to various DOD operations. DON stated in 2014 that

> Navy IAs are providing combat support and combat service support for Army and Marine Corps personnel in Afghanistan. As IAs they are fulfilling vital roles by serving in traditional Navy roles such as USMC support, maritime and port security, cargo handling, airlift support, Seabee units, and as a member of joint task force/Combatant Commanders staffs. Non-traditional roles include detainee operations, custom inspections teams, and civil affairs.[4]

[3] Department of the Navy, *Highlights of the Department of the Navy FY 2020 Budget*, 2019, pp. 2-8 and 8-2.

[4] Department of the Navy, *Highlights of the Department of the Navy FY 2015 Budget*, 2014, p. 7-3.

Navy Counterterrorism (CT) Operations

In General

Navy CT operations (and anti-terrorism/force protection activities) at various points since the late 1990s, and particularly in the years following the terrorist attacks of September 11, 2001, have included the following:

- Operations by Navy special operations forces, known as SEALs (an acronym standing for Sea, Air, and Land), that have been directed against terrorists;[5]
- Tomahawk cruise missile attacks on suspected terrorist training camps and facilities, such as those reportedly conducted in Somalia on March 3 and May 1, 2008,[6] and those conducted in 1998 in response to the 1998 terrorist bombings of U.S. embassies in East Africa;[7]
- surveillance by Navy ships and aircraft of suspected terrorists overseas;
- maritime intercept operations (MIO) that were aimed at identifying and intercepting terrorists or weapons of mass destruction at sea, or potentially threatening ships or aircraft that are in or approaching U.S. territorial waters—an activity that has included Navy participation in the multilateral Proliferation Security Initiative (PSI);[8]
- protection of forward-deployed Navy ships, an activity that was intensified following the terrorist attack on the Navy Aegis destroyer *Cole* (DDG-67) in October 2000 in the port of Aden, Yemen;[9]
- protection of domestic and overseas Navy bases and facilities;
- working with the Coast Guard to build maritime domain awareness (or MDA, meaning a real-time understanding of activities on the world's oceans), and

[5] For an account of a series of missions reportedly conducted by SEALS over a six-week period in November and December 2003 to plant cameras in Somalia for the purpose of conducting surveillance on terrorists, see Sean D. Naylor, "Hunting Down Terrorists," *Army Times*, November 7, 2011: 22.

[6] Edmund Sanders, "U.S. Missile Strike in Somalia Kills 6," *Los Angeles Times*, March 4, 2008; Stephanie McCrummen and Karen DeYoung, "U.S. Airstrike Kills Somali Accused of Links to Al-Qaeda," *Washington Post*, May 2, 2008: A12; Eric Schmitt and Jeffrey Gettleman, "Qaeda Leader Reported Killed In Somalia," *New York Times*, May 2, 2008.

[7] For an article on the 1998 strikes, see Pamela Hess, "Report: 1998 Strike Built bin Laden-Taliban Tie," *NavyTimes.com (Associated Press)*, August 22, 2008.

[8] For more on the PSI, see CRS Report RL34327, *Proliferation Security Initiative (PSI)*, by Mary Beth D. Nikitin.

[9] For a discussion of the attack on the *Cole*, see CRS Report RS20721, *Terrorist Attack on USS Cole: Background and Issues for Congress*, by Raphael F. Perl and Ronald O'Rourke (out of print, but available to congressional clients upon request). A September 13, 2014, press report states the following:

> The first ever attack by the newly-announced Indian Subcontinent branch of Al Qaeda went really, really, poorly. The attack launched last Saturday [September 13] in Pakistan seems to have targeted the wrong ship.
>
> Fighters of the Islamic terror group branch that was unveiled two weeks ago had planned to storm an American aircraft carrier at a Karachi port, but found a Pakistani Navy ship in its place, The Telegraph reports. The attackers suffered heavy casualties as the Pakistani Navy easily overpowered their attempt. Three of the al-Qaeda fighters were killed and seven were arrested according to Pakistani officials. Two Pakistani Naval guards were wounded.
>
> (Andrew Hart, "New Al Qaeda Branch Attacks Wrong Ship," *Huffington Post (www.huffingtonpost.com*), September 13, 2014.)

engaging with the U.S. Coast Guard to use the National Strategy for Maritime Security to more rapidly develop capabilities for Homeland Security, particularly in the area of MDA;

- assisting the Coast Guard in port-security operations;[10]
- developing Global Maritime Intelligence Integration (GMII) as part of Joint Force Maritime Component Command (JFMCC) and Maritime Domain Awareness (MDA); and
- operations by the Naval Criminal Investigative Service (NCIS), for which combating terrorism is a core mission area.[11]

DON stated in 2014 that

> While forward, acting as the lead element of our defense-in-depth, naval forces will be positioned for increased roles in combating terrorism.... Expanded Maritime Interdiction Operations are authorized by the President and directed by the Secretary of Defense to intercept vessels identified to be transporting terrorists and/or terrorist-related materiel that poses an imminent threat to the United States and its allies.....
>
> We have done small, precise attacks against terrorist cells and missile attacks against extremist sanctuaries.[12]

DON stated in 2013 that

> Our defense efforts are aimed at countering violent extremists and destabilizing threats, as well as upholding our commitments to allies and partner states. These armed adversaries such as terrorists, insurgents, and separatist militias are a principal challenge to U.S. interests in East Africa.[13]

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[10] See, for example, Emelie Rutherford, "Navy's Maritime Domain Awareness System 'Up And Running'," *Defense Daily*, September 4, 2008; and Dan Taylor, "New Network Allows Navy To Track Thousands of Ships Worldwide," *Inside the Navy*, September 8, 2008. For more on the Coast Guard and port security, see CRS Report RL33383, *Terminal Operators and Their Role in U.S. Port and Maritime Security*, by John Frittelli and Jennifer E. Lake, and CRS Report RL33787, *Maritime Security: Potential Terrorist Attacks and Protection Priorities*, by Paul W. Parfomak and John Frittelli (out of print, but available to congressional clients upon request).

[11] NCIS states on its website that "the NCIS mission is to investigate and defeat criminal, foreign, and terrorist intelligence threats to the United States Navy and Marine Corps, wherever they operate: ashore, afloat, or in cyberspace," and that combating terrorism is a core mission area for NCIS. Regarding this mission, the website states that

> Protecting the naval forces from violent extremist organizations and individuals is one of NCIS' highest priorities. As the primary law enforcement and counterintelligence component for the naval services, NCIS is focused on countering threats to the physical security of Sailors, Marines, and Department of the Navy (DON) civilian personnel and on preventing terrorist attacks against installations and ships.
>
> NCIS is responsible for detecting, deterring, and disrupting terrorism worldwide through a wide array of offensive and defensive capabilities. Offensive operations aim at identifying and interdicting terrorist activities. In defensive operations, NCIS supports key DON leaders with protective services and performs physical security assessments of military installations and related facilities—including ports, airfields, and exercise areas to which naval expeditionary forces deploy.
>
> (Source: http://www.ncis.navy.mil/CoreMissions/CT/Pages/default.aspx, accessed on November 29, 2011.)

[12] Department of the Navy, *Highlights of the Department of the Navy FY 2015 Budget*, 2014, p. 7-2.

[13] Department of the Navy, *Highlights of the Department of the Navy FY 2015 Budget*, 2013, p. 7-4.

An April 8, 2013, press report about U.S. counterterrorism operations stated, regarding one particular operation, that

> The uncertainties were evident nine months into Mr. Obama's first term, when intelligence agencies tracked down Saleh Ali Saleh Nabhan, a suspect in the attacks on two American embassies in East Africa in 1998.
>
> The original plan had been to fire long-range missiles to hit Mr. Nabhan and others as they drove in a convoy from Mogadishu, Somalia, to the seaside town of Baraawe. But that plan was scrubbed at the last minute, and instead a Navy SEALs[14] team helicoptered from a ship and strafed Mr. Nabhan's convoy, killing him and three others. The SEALs landed to collect DNA samples to confirm the identities of the dead.[15]

May 1-2, 2011, U.S. Military Operation That Killed Osama Bin Laden

The May 1-2, 2011, U.S. military operation in Abbottabad, Pakistan, that killed Osama bin Laden—reportedly called Operation Neptune's Spear—reportedly was carried out by a team of 23 Navy special operations forces, known as SEALs (an acronym standing for Sea, Air, and Land). The SEALs reportedly belonged to an elite unit known unofficially as Seal Team 6 and officially as the Naval Special Warfare Development Group (DEVGRU).[16] The SEALs reportedly were flown to and from Abbottabad by Army special operations helicopters. Bin Laden's body reportedly was flown by a U.S. military helicopter from Abbottabad to a base in Afghanistan, and from there by a Marine Corps V-22 tilt-rotor aircraft to the aircraft carrier *Carl Vinson* (CVN-70), which was operating at the time in the Northern Arabian Sea. A few hours later, bin Laden's body reportedly was buried at sea from the ship. Differing accounts have been published regarding certain details of the operation.[17]

Press reports in July 2010 stated that U.S. forces in Afghanistan included at that time a special unit called Task Force 373, composed of Navy SEALs and Army Delta Force personnel, whose mission is "the deactivation of top Taliban and terrorists by either killing or capturing them."[18]

A July 2015 Government Accountability Office (GAO) report[19] and a separate CRS report[20] provide additional background information on the SEALs. Another CRS report provides further discussion of the operation that killed Osama bin Laden.[21]

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[14] The Navy's special operations forces are known as SEALs; SEAL is an acronym that stands for Sea, Air, and Land.

[15] Scott Shane, "Targeted Killing Comes To Define War On Terror," *New York Times*, April 8, 2013: 1.

[16] See, for example, Sean D. Naylor, "SEAL Team 6 by the Numbers," *Foreign Policy*, July 27, 2015.

[17] See, for example, Nicholas Schmidle, "Getting Bin Laden," *The New Yorker*, August 8, 2011, accessed online August 10, 2011 at http://www.newyorker.com/reporting/2011/08/08/110808fa_fact_schmidle; Peter Bergen, "The Last Days Of Osama Bin Laden," *Time*, May 7, 2012; Mark Bowden, "The Hunt For 'Geronimo,'" *Vanity Fair*, November 2012: 144; Chuck Pfarrer, *SEAL Target Geronimo: The Inside Story of the Mission to Kill Osama bin Laden* (St. Martin's Press, 2011), 240 pp.; Mark Owen (pseudonym) and Kevin Maurer, *No Easy Day: The Firsthand Account of the Mission That Killed Osama Bin Laden* (Dutton Adult, 2012), 336 pp.; Peter Bergen, "Who Really Killed Bin Laden," *CNN.com*, March 26, 2013.

[18] Matthias et al., "US Elite Unit Could Create Political Fallout For Berlin," *Spiegel (Germany)*, July 26, 2010. See also C. J. Chivers et al., "Inside the Fog Of War: Reports From The Ground In Afghanistan," *New York Times*, July 26, 2010: 1.

[19] Government Accountability Office, *Special Operations Forces[:] Opportunities Exist to Improve Transparency of Funding and Assess Potential to Lessen Some Deployments*, GAO-15-571, July 2015, Appendix III (pp. 45-47).

[20] CRS Report RS21048, *U.S. Special Operations Forces (SOF): Background and Issues for Congress*, by Andrew Feickert.

[21] CRS Report R41809, *Osama bin Laden's Death: Implications and Considerations*, coordinated by John W. Rollins.

Detention of Terrorist Suspects on U.S. Navy Ships

An August 16, 2015, press report stated the following:

> After a suspected militant was captured last year to face charges for the deadly 2012 attacks on Americans in Benghazi, Libya, he was brought to the U.S. aboard a Navy transport ship on a 13-day trip that his lawyers say could have taken 13 hours by plane.
>
> Ahmed Abu Khattala faced days of questioning aboard the USS New York from separate teams of American interrogators, part of a two-step process designed to obtain both national security intelligence and evidence usable in a criminal prosecution.
>
> The case, still in its early stages, is focusing attention on an interrogation strategy that the Obama administration has used in just a few recent terrorism investigations and prosecutions. Abu Khattala's lawyers already have signaled a challenge to the process, setting the stage for a rare court clash over a tactic that has riled civil liberties groups but is seen by the government as a vital and appropriate tool in prosecuting suspected terrorists captured overseas.
>
> "I think they view it as important to show that terrorists can be prosecuted in U.S. courts, and this is an attempt to find a compromise between using people they capture as intelligence assets and prosecuting them in U.S. courts," said David Deitch, a former Justice Department terrorism prosecutor. "It's a very hard balance to strike—and may not be possible."
>
> The administration has turned to questioning in international waters as an alternative to past practices in which suspects were sent to the U.S. detention facility at Guantanamo Bay, Cuba, or secret CIA prisons. The process ordinarily begins with questioning from a specialized team of interrogators who collect intelligence that can inform government decisions, such as for drone strikes, but cannot be used in court. Then a team of FBI investigators starts from scratch, advising the detainee of his Miranda rights, such as the right to remain silent, and gathering statements that prosecutors can present as evidence in a trial.
>
> Some legal experts expect the hybrid interrogation technique to survive legal challenges. But defense lawyers are concerned that such prolonged detention can be used to wrangle a confession or amounts to an end-run around the government's obligation to promptly place a suspect before a judge.
>
> "Basically by holding the suspects on a ship and delaying their presentment in federal court, they're able to get a leg up in interrogations," said Seton Hall University law professor Jonathan Hafetz, who has handled terrorism cases.
>
> Abu Khattala is facing charges in Washington in the Sept. 11-12, 2012, attack on the U.S. diplomatic mission in Benghazi that killed U.S. Ambassador Chris Stevens and three other Americans. Following his June 2014 capture in Libya by U.S. special forces, he was placed aboard a Navy ship that his lawyers say made its way to the U.S. as slowly as possible to allow maximum time for interrogation. They say Abu Khattala was questioned for days by representatives from the High Value Detainee Interrogation Group, then for another stretch by FBI agents....
>
> One early point of contention in the court case is the onboard interrogation. Abu Khattala's lawyers submitted court filings this month contending that the government held him "captive on a military ship—without the protection of and in spite of constitutional guarantees—for the explicit purpose of illegally interrogating him for almost two weeks."
>
> Federal prosecutors have yet to respond.

> Whatever a judge decides, the case taps into a broader legal debate about the prosecution of terrorist suspects and presents a rare opportunity for a possible ruling on the admissibility of statements gathered aboard a military vessel.[22]

For additional background information on detention of terrorist suspects on U.S. Navy ships, see **Appendix E**.

Navy Initiatives to Improve Its IW and CT Capabilities

In the years following the terrorist attacks of September 11, 2001, the Navy took certain actions intended to improve its IW and CT capabilities and activities, including those discussed below. Some of the actions the Navy took during those years are described briefly below.

Navy Irregular Warfare Office (NIWO)/Navy Warfare Group (NWG)

The Navy in July 2008 established the Navy Irregular Warfare Office (NIWO) so as to "institutionalize current ad hoc efforts in IW missions of counterterrorism and counterinsurgency and the supporting missions of information operations, intelligence operations, foreign internal defense and unconventional warfare as they apply to [CT] and [counterinsurgency]."[23]

In January 2013, the Navy directed the establishment of a Navy Warfare Group (NWG) "to provide a dedicated organization to systematically evaluate, develop, and implement new strategic concepts deemed useful to the service...." NIWO was disbanded, and its responsibilities were transferred to NWG, which is to "[s]erve as the Navy lead for irregular warfare (IW) to incorporate IW into Navy capstone documents and to inform the PPBE [Planning, Programming, Budgeting, and Execution] process."[24]

2010 Navy Vision Statement for Countering Irregular Challenges

The Navy in January 2010 published a vision statement for countering irregular challenges, which stated the following in part:

> The U.S. Navy will meet irregular challenges through a flexible, agile, and broad array of multi-mission capabilities. We will emphasize Cooperative Security as part of a comprehensive government approach to mitigate the causes of insecurity and instability. We will operate in and from the maritime domain with joint and international partners to enhance regional security and stability, and to dissuade, deter, and when necessary, defeat irregular forces.[25]

The full text of the vision statement is reproduced in **Appendix C**.

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[22] Eric Tucker (Associated Press), "Benghazi Prosecution Focuses Attention on US Interrogation Strategy As Defense Seeks Dismissal," *U.S. News & World Report*, August 15, 2015. See also Spencer S. Hsu, "U.S. Defends Seizure and Interrogation of Benghazi Terrorism Suspect," *Washington Post*, September 2, 2015.

[23] Zachary M. Peterson, "New Navy Irregular Warfare Office Works to Address ISR Shortfall," *Inside the Navy*, September 1, 2008.

[24] Source: Navy administrative message accessed August 19, 2016, at http://www.public.navy.mil/bupers-npc/reference/messages/Documents/NAVADMINS/NAV2013/NAV13014.txt.

[25] Department of the Navy, Chief of Naval Operations, *The U.S. Navy's Vision for Confronting Irregular Challenges*, January 2010, p. 3.

Navy Community of Interest (COI) for Countering Irregular Challenges

The Navy in December 2010 established "a community of interest [COI] to develop and advance ideas, collaboration and advocacy related to confronting irregular challenges (CIC)."[26]

Navy Expeditionary Combat Command (NECC)

The Navy Expeditionary Combat Command (NECC), headquartered at Naval Amphibious Base, Little Creek, VA, was established informally in October 2005 and formally on January 13, 2006. NECC consolidated and facilitated the expansion of a number of Navy organizations that have a role in IW operations. DON stated in 2014 that

> Navy Expeditionary Combat Command (NECC) is a global force provider of expeditionary combat service support and force protection capabilities to joint warfighting commanders. It is responsible for centrally managing the current and future readiness, resources, manning, training and equipping of a scalable, self-sustaining, integrated expeditionary force of active and reserve sailors. Expeditionary sailors are deployed from around the globe, supporting contingency operations and Combatant Commanders' Theater Security Cooperation Plans, providing a forward presence of waterborne and ashore anti-terrorism force protection; theater security cooperation and engagement; and humanitarian assistance and disaster relief.[27]

DON also stated in 2014 that

> The Reserve Component expeditionary forces are integrated with the Active Component forces to provide a continuum of capabilities unique to the maritime environment within NECC. Blending the AC and RC brings strength to the force and is an important part of the Navy's ability to carry out the Naval Maritime Strategy from blue water into green and brown water and in direct support of the Joint Force. The Navy Reserve trains and equips over half of the Sailors supporting NECC missions, including naval construction and explosive ordnance disposal in the CENTCOM region, as well as maritime expeditionary security, expeditionary logistics (cargo handling battalions), maritime civil affairs, expeditionary intelligence, and other mission capabilities seamlessly integrated with operational forces around the world. In addition, Coastal Riverine Group 2 has taken on a new armed escort mission for High Value Units (HVU) which has traditionally been provided by the U.S. Coast Guard. The escort enhances force protection for HVUs while transiting into and out of CONUS ports during restricted maneuvering.[28]

Global Maritime Partnership

The Global Maritime Partnership was a U.S. Navy initiative to achieve an enhanced degree of cooperation between the U.S. Navy and foreign navies, coast guards, and maritime police forces, for the purpose of ensuring global maritime security against common threats. DON stated in 2014 that "through partnerships with a growing number of nations, including those in Africa and Latin America, we will strive for a common vision of freedom, stability, and prosperity."[29]

---

[26] Source: Memorandum dated December 22, 2010, from S. M. Harris, Director, Navy Irregular Warfare Office, on the subject, "Confronting Irregular Challenges Community of Interest (COI) Charter." A copy of the memorandum was posted at InsideDefense.com (subscription required). For an article discussing the Navy's establishment of this community of interest, see Christopher J. Castelli, "Navy Taps Other Services, Elite Forces For Irregular Warfare Advice," *Inside the Navy*, January 17, 2011.

[27] Department of the Navy, *Highlights of the Department of the Navy FY 2015 Budget*, 2014, pp. 3-12 and 3-13.

[28] Department of the Navy, *Highlights of the Department of the Navy FY 2015 Budget*, 2014, p. 3-20.

[29] Department of the Navy, *Highlights of the Department of the Navy FY 2015 Budget*, 2014, p. 7-1. For more on the

Partnership Stations

The Southern Partnership Station (SPS) and the Africa Partnership Station (APS) were Navy ships, such as amphibious ships or high-speed sealift ships, that deployed to the Caribbean and to waters off Africa, respectively, to support U.S. Navy engagement with countries in those regions, particularly for purposes of building security partnerships with those countries, and for increasing the capabilities of those countries for performing maritime-security operations. The SPS and APS can be viewed as specific measures for promoting the above-mentioned global maritime partnership. A July 2010 Government Accountability Office (GAO) report discussed the APS.[30]

Coastal Riverine Force

The Navy in May 2006 reestablished its riverine force by standing up Riverine Group 1 at Naval Amphibious Base, Little Creek, VA (now part of Joint Expeditionary Base Little Creek-Fort Story, or JEBLC-FS). Riverine Group 1 included three active-duty riverine squadrons of 12 boats each that were established in 2006-2007. Operations of the squadrons from 2006 to 2011 included multiple deployments to Iraq for the purpose, among other things, of relieving Marines who until 2006 had been conducting maritime security operations in Iraqi ports and waterways.

On June 1, 2012, the Navy merged the riverine force and the Maritime Expeditionary Security Force (MESF) to create Coastal Riverine Force (CORIVFOR). The Navy stated that CORIVFOR "performs core maritime expeditionary security missions in the green and brown waters, bridging the gap between traditional Navy blue water operations and land-based forces, providing port and harbor security for vital waterways and protection of high value assets and maritime infrastructure."[31] The Navy stated that CORIVFOR was scheduled to reach initial operating capability (IOC) in October 2012 and full operational capability (FOC) in October 2014, and that "all current and scheduled routine deployments will continue as normal."[32]

A July 14, 2014, news report states the following:

> In 2012, the Navy merged Riverine Forces and Maritime Expeditionary Security Forces to form the Coastal Riverine Force. There are currently seven squadrons. Squadrons 1, 3 and 11 are home ported on the west coast and Squadrons 2, 4, 8 and 10 are home ported on the east coast. The force currently consists of both active and reserve service members who man and operate more than 100 boats, ranging from rubber combat raiding crafts to 53-foot command boats that can carry up to 26 personnel.[33]

A January 18, 2013, Navy news report stated the following:

Navy's contribution to multinational antipiracy operations near the Horn of Africa, see CRS Report R40528, *Piracy off the Horn of Africa*, by Lauren Ploch Blanchard et al. (out of print, but available to congressional clients upon request).

[30] Government Accountability Office, *Defense Management[:]Improved Planning, Training, and Interagency Collaboration Could Strengthen DOD's Efforts in Africa*, GAO-10-794, July 2010, 63 pp.

[31] Kay Savarese, "NECC Establishes Coast Riverine Force," *Navy News Service*, June 1, 2012, accessed June 27, 2012, at http://www.navy.mil/submit/display.asp?story_id=67545. See also Corinne Reilly, "New Navy Command To Incorporate Riverines," *Norfolk Virginian-Pilot*, May 16, 2012; Megan Eckstein, "Coastal Riverine Force Expanding Its Reach Following June 1 Merger," *Inside the Navy*, June 11, 2012; and Christopher P. Cavas, "U.S. Navy Reorganizes Post-War Riverine Forces," *Defense News*, May 7, 2012: 4. See also Matthew M. Burke, "Reviving the Riverines," *Stars and Stripes*, November 1, 2012: 1.

[32] Naval Expeditionary Combat Command Public Affairs, "NECC Announces Formation of Coastal Riverine Force," Navy News Service, May 14, 2012, accessed May 15, 2012, at http://www.navy.mil/submit/display.asp?story_id=67167.

[33] Dominique J. Shelton, "Coast Riverine Force: The Brown Water Navy," *Navy News Service*, July 14, 2014.

> Sailors, former Riverines, and family members attended a disestablishment ceremony for Naval Expeditionary Combat Command's Riverine Squadron (RIVRON) 3 at Naval Weapons Station Yorktown, Jan. 17.
>
> The disestablishment marks the merger of offensive Riverine forces with defensive Maritime Expeditionary Security Forces to form the Coastal Riverine Force (CORIVFOR), formally established June 1[, 2012]....
>
> CORIVFOR's primary mission is to conduct maritime security operations across all phases of military operations by defending high value assets, critical maritime infrastructure, ports and harbors, both inland and on coastal waterways, and when commanded, conduct offensive combat operations.
>
> The budget-initiated merger moved portions of the force to San Diego as part of the National Defense Strategy's rebalance to the Pacific, which will bring Riverine capability to the West coast for the first time since 1974, according to Capt. Eric B. Moss, commander of Coastal Riverine Group 1, formerly Maritime Expeditionary Security Group 1.
>
> "The Riverine forces will do what they've always done, which is continuing to hone their skills and work in brown water and green water areas," said Moss. "There is no abatement of requirements. We continue to get missions and are sourced to meet those requirements. We're doing the same with less."
>
> The merge cuts the former seven active Maritime Expeditionary Security Force (MESF) squadrons and three active RIVRONs down to three active Coastal Riverine squadrons and four reserve squadrons.
>
> "This is a reduction in capacity, but not in capability," said Moss. "I would say this is a very affordable force. We are light, expeditionary, and bring a lot capability in small packages. We are familiar with disaggregated operations, so immediately we give the combatant commander a tailor-able and scalable force."...
>
> Commissioned July 6, 2007, RIVRON 3 served two deployments in Iraq, fulfilling a total of 502 combat missions, 268 water security operations and countless U.S./Iraq tactical convoy operations.[34]

Other Organizational Initiatives

Other Navy initiatives in recent years for supporting IW and CT operations include establishing a reserve civil affairs battalion, a Navy Foreign Area Officer (FAO) community consisting of officers with specialized knowledge of foreign countries and regions, a maritime interception operation (MIO) intelligence exploitation pilot program, and an intelligence data-mining capability at the National Maritime Intelligence Center (NMIC).

Appendices with Additional Background Information

For additional information on Navy and Marine Corps special operations forces, see the prepared statements of the Navy and Marine Corps witnesses for an April 1,1 2018, hearing before the Senate Armed Services Committee reprinted in **Appendix A**.

The Navy outlined its IW activities as of 2011 in its prepared statement for a November 3, 2011, hearing on the services' IW activities before the Emerging Threats and Capabilities subcommittee of the House Armed Services Committee. For the text of the Navy's prepared statement, see **Appendix B**.

[34] Shannon M. Smith, "RIVRON 3 Disestablishes at Naval Weapon Station Yorktown," *Navy News Service*, January 18, 2013.

As noted earlier, for the text of the Navy's January 2010 vision statement for irregular warfare, see **Appendix C**.

A 2012 report on maritime irregular warfare from RAND Corporation, a research firm, provides additional background information on U.S. maritime irregular warfare operations, both historical and more recent (i.e., up to the time of the report's writing).[35] The report also made a series of findings and recommendations relating to U.S. maritime irregular warfare; for a summary of these findings and recommendations, see **Appendix D**.

As noted earlier, for additional background information on detention of terrorist suspects on U.S. Navy ships, see **Appendix E**.

FY2020 Funding Request

Overview

DON states that the proposed FY2020 budget "continues funding to counter the Islamic State of Iraq and the Levant (ISIL) and for operations in Afghanistan, the Horn of Africa, and other locations in theater, as well as for the European Deterrence Initiative," and "supports building a more experienced, better trained, and more capable force by increasing the number of Marines with special skills, like those required for special operations, intelligence operations, electronic, information, and cyber warfare."[36] Special Operations Command's (SOCOM's) proposed FY2020 budget requests, among other things,

- $72.6 million in the FY2020 Research, Development, Test, and Evaluation, Defense-Wide (RDT&EDW) account for Program Element (PE) 1160483BB,[37] maritime systems (line 263 in the FY2020 RDT&EDW account), including $45.2 million for Project S0417: Underwater Systems, and $27.4 million for S1684: Surface Craft; and
- $59.0 million in the FY2020 Procurement, Defense-Wide (PDW) appropriation account for procurement of underwater systems for SOCOM (line 63 in the FY2020 PDW account).

For additional background information on the FY2020 funding requests for lines 263 and 63, see **Appendix F**.

Potential Oversight Issues for Congress

Degree of Emphasis on IW in Navy Budgets

One potential oversight issue for Congress concerns how much emphasis to place on IW activities in Navy budgets, particularly in a context of constraints on Navy budgets and Navy desires to devote resources to developing "high end" combat capabilities for countering improved conventional military capabilities of countries such as China and Russia.[38] Although the Navy, as

[35] Molly Dunigan et al., *Characterizing and Exploring the Implications of Maritime Irregular Warfare*, RAND Corporation, Santa Monica (CA), 2012, 111 pp.

[36] Department of the Navy, *Highlights of the Department of the Navy FY 2020 Budget*, 2019, pp. 8-1, 2-7.

[37] In DOD research and development accounts, line items are referred to as program elements, or PEs.

[38] For more on China's military capabilities, see CRS Report RL33153, *China Naval Modernization: Implications for*

discussed earlier in this report, took actions in the years following the terrorist attacks of September 11, 2001, that were intended to improve its IW capabilities, the Navy in more recent years has taken other actions that might be viewed as reflecting a reduced Navy emphasis on IW. In that connection, the following points were provided to CRS by the Joint Staff J-7 Irregular Warfare office in August 2016:

- "US Navy IW funding and force structure have declined over the last few years."
- "NIWO's responsibilities now belong to OPNAV N515 [i.e., the office within the Chief of Naval Operations that oversees the NWG], with dedicated IW staff decreasing from 13 government/military personnel along with 6 contractors led by a RDML [rear admiral] to 2 contractors and one O-5 [an officer that in the Navy is a commander] under O-6 [an officer that in the Navy is a captain] oversight."
- In May 2014, the Navy closed its Maritime Civil Affairs and Security Training Command (MCAST), an action "which reduced civil affairs (CA) and security force assistance (SFA) capacity. The MCAST's mission was to train sailors to perform civil-military affairs and security force assistance missions. It also provided approximately 50 percent of Navy expeditionary training.... MCAST functions are now distributed across the Navy. The Naval Education and Training Security Assistance Field Activity serves as the focal point for security assistance training issues. The Expeditionary Combat Readiness Center processes individual augmentees for deployment. Civil affairs functions were not replaced." A July 2015 Navy memo states "that the Navy does not 'possess dedicated CA units or members.'"
- The Navy's FY2017 budget requested funding to preserve Helicopter Sea Combat (HSC) Squadron 85, a unit that "supports Naval Special Warfare and other SOCOM [Special Operations Command] assets," which was "a positive development." On the other hand, the Navy in March 2016 "disbanded HSC 84, a sister squadron providing similar support.... This action essentially cut experienced, operational capacity in half. Whether the TSUs [i.e., the two Tactical Support Units that are to be stood up under the Navy's proposed FY2017 budget] will meet SOF requirements remains to be seen."
- The Navy Community of Interest (COI) for Countering Irregular Challenges "does not extend beyond the Navy Analytic Group. This body, tied to the Community of Interest, submits IW program gap, technical demonstration, and study initiatives to N515 for funding. Members include Fleet Forces Command, the NECC, the Navy Undersea Warfare Center, and the Navy War College. The larger COI has not [as of August 2016] had a formal meeting in approximately 3 years."[39]

A January 17, 2019, press report stated:

> After spending the better part of the past two decades supporting wars in a desert region, the U.S. Navy is starting to bring the SEALs back into the fold as it faces threats from major powers such as China and Russia.

U.S. Navy Capabilities—Background and Issues for Congress, by Ronald O'Rourke, and CRS Report R44196, *The Chinese Military: Overview and Issues for Congress*, by Ian E. Rinehart.

[39] Source: Email to CRS from Joint Staff J-7 Irregular Warfare office, August 18, 2016.

> The Navy is incorporating its elite special warfare teams into strategic calculations for every potential major power combat scenario, from China and Russia to Iran and North Korea, said Vice Chief of Naval Operations Adm. Bill Moran in a round-table with reporters at the Surface Navy Association's annual symposium.
>
> The movement toward reconnecting with the blue water force (the Navy's regular ships, aircraft and submarine forces) started under former Naval Special Warfare Command head Rear Adm. Brian Losey, who retired in 2016. The effort has continued to grow under subsequent commanders, said Moran.
>
> "It's to the point now where we include them in all of our exercises, our war games, our tabletops — because as much as it is their chance to 're-blue,' it's our chance to reconnect from the blue side," he added. "We've grown used to not having them in a lot of those situations. Now as we've done the tabletops, the exercises and the war games, we see: 'Wow, there is some great capability here that can set the conditions for the kind of operations in every single one of those campaigns.' And that will continue to grow, I think."
>
> There have been indications that the SEALs are specifically eyeing environments similar to those in the South China Sea. A recent environmental assessment obtained by the Honolulu Star Advertiser revealed that the SEALs were looking to triple the amount of training time spent in the Hawaiian islands, expanding from Oahu and Hawaii island to Kauai, Maui, Molokai and Lanai.[40]

A January 30, 2019, press report similarly stated:

> Having spent 17 years conducting counterinsurgency and counterterrorism operations in the deserts and mountains of the Middle East, the Naval Special Warfare community is shifting its focus to threats from China, Russia and aspiring adversaries.
>
> Navy operations planners are including Navy SEALs in all aspects of planning and training, such as war games, exercises and tabletop scenarios, Vice Chief of Naval Operations Adm. Bill Moran told reporters Jan. 16 at the Surface Navy Association's annual conference.
>
> The shift began in 2013 when Rear Adm. Brian Losey, then-commander of Naval Special Warfare Command, began making "a concerted effort to talk to his teams about getting back to the 'blue side,'" Moran said, referring to the Navy's large fighting forces of ships, submarines and aircraft.
>
> That focus has continued since Losey retired in 2016, Moran added.
>
> "[Losey] saw the 'great power competition,' he saw the threats of an emerging Russia, China, North Korea and Iran," Moran said. [SEALs] have a very specific and important role to play in all situations."
>
> Since the U.S. insertion into Afghanistan in 2001, special operations forces, including the SEALs, have focused on a specific selection of their skill sets, including small-scale strikes and offensive actions, counterinsurgency, hostage rescue, counterterrorism and countering weapons of mass destruction.
>
> But these forces have other expertise that is relevant to both large-scale military conflicts as well as the type of posturing and competing for regional and global dominance that currently is happening, according to a 2017 report by David Broyles and Brody Blankenship, analysts at CNA, an Arlington, Virginia-based think tank that concentrates on the U.S. Navy.

[40] David B. Larter, "After years Fighting Terrorism, the SEALs Turn Their Eyes Toward Fighting Big Wars," *Defense News*, January 17, 2019.

> Those skills include preparing an environment for operations, reconnaissance, unconventional operations, military information support operations and foreign humanitarian assistance, according to the report, The Role of Special Operations Forces in Global Competition.
>
> "Special operations forces have a greater role to play in today's global competition through a counteractive approach to adversary maneuvers," Broyles and Blankenship wrote. "The United States has only recently recognized that adversaries are exploiting the U.S. view of 'preparing for future war' vice 'competing in the here and now.' "
>
> Moran agreed that Navy SEALs have a unique talent set that the "blue side" had largely forgotten.
>
> "We've grown used to not having them in a lot of situations. ... Wow, there are some great capabilities here that can set the conditions in the world for the kind of operations we are going to need in every single one of our campaigns," he said.
>
> A draft environmental assessment published by the Navy on Nov. 8 indicated that the SEALs are planning to increase training in Hawaii, asking to increase the number of exercises from the 110 events allowed now on non-federally owned land to as many as 330 training events on non-federal land or waterways and 265 training events on federal property.
>
> The proposed training also would expand the area for conducting exercises to include Kauai, Lanai, Maui and Molokai, in addition to Oahu and Hawaii.
>
> The training, in a location relatively near to and similar in climate to the South China Sea, where China continues to assert its dominance, is necessary to enhance the Navy Special Warfare Command's traditional skill sets, including diving and swimming; operating with submersibles and unmanned aircraft systems; insertion and extraction; reconnaissance and parachuting; and rope suspension training activities, according to the report.
>
> Moran said the SEALs' return to their roots will bolster lethality of the Navy as a whole.
>
> "As much as it's their chance to re-blue, it's our chance to reconnect from the blue side," he said. "That will continue to grow, I think."[41]

Potential oversight questions for Congress include the following:

- How do current Navy IW capabilities and capacity compare with those of 5 or 10 years ago? Under proposed Navy budgets, how will Navy IW capabilities and capacity in coming years compare to those of today?
- In a context of constraints on Navy budgets and Navy desires to devote resources to developing "high end" combat capabilities for countering improved conventional military capabilities of countries such as China and Russia, is the Navy striking the right balance between funding for IW capabilities and capacity and funding for other Navy priorities?
- Does Congress have sufficient visibility into the operations of U.S. SOF, including Navy SEALs, to support congressional oversight over those operations?[42]

[41] Patricia Kime, "As Russia, China Threaten, Navy SEALs Get a New Focus," *Military.com*, January 30, 2019.

[42] For articles relating to this issue, see, for example, Wesley Morgan, "Behind the Secret U.S. War in Africa, Despite Pentagon Assertions, Secret Programs Allow American Troops to Direct Combat Raids in Somalia, Kenya, Niger and Other African nations," *Politico*, July 2, 2018; Nick Turse, "Special Operations Forces Continue to Expand Across the World—Without Congressional Oversight, *The Nation*, July 17, 2018.

Role of Naval Special Warfare Development Group (Seal Team 6)

Another potential oversight issue for Congress concerns the role of Seal Team 6 in Navy CT and IW operations. A June 6, 2015, press report states the following:

> They have plotted deadly missions from secret bases in the badlands of Somalia. In Afghanistan, they have engaged in combat so intimate that they have emerged soaked in blood that was not their own. On clandestine raids in the dead of the night, their weapons of choice have ranged from customized carbines to primeval tomahawks.
>
> Around the world, they have run spying stations disguised as commercial boats, posed as civilian employees of front companies and operated undercover at embassies as male-female pairs, tracking those the United States wants to kill or capture.
>
> Those operations are part of the hidden history of the Navy's SEAL Team 6, one of the nation's most mythologized, most secretive and least scrutinized military organizations. Once a small group reserved for specialized but rare missions, the unit best known for killing Osama bin Laden has been transformed by more than a decade of combat into a global manhunting machine.
>
> That role reflects America's new way of war, in which conflict is distinguished not by battlefield wins and losses, but by the relentless killing of suspected militants.
>
> Almost everything about SEAL Team 6, a classified Special Operations unit, is shrouded in secrecy—the Pentagon does not even publicly acknowledge that name—though some of its exploits have emerged in largely admiring accounts in recent years. But an examination of Team 6's evolution, drawn from dozens of interviews with current and former team members, other military officials and reviews of government documents, reveals a far more complex, provocative tale.
>
> While fighting grinding wars of attrition in Afghanistan and Iraq, Team 6 performed missions elsewhere that blurred the traditional lines between soldier and spy. The team's sniper unit was remade to carry out clandestine intelligence operations, and the SEALs joined Central Intelligence Agency operatives in an initiative called the Omega Program, which offered greater latitude in hunting adversaries.
>
> Team 6 has successfully carried out thousands of dangerous raids that military leaders credit with weakening militant networks, but its activities have also spurred recurring concerns about excessive killing and civilian deaths....
>
> When suspicions have been raised about misconduct, outside oversight has been limited. Joint Special Operations Command, which oversees SEAL Team 6 missions, conducted its own inquiries into more than a half-dozen episodes, but seldom referred them to Navy investigators. "JSOC investigates JSOC, and that's part of the problem," said one former senior military officer experienced in special operations, who like many others interviewed for this article spoke on the condition of anonymity because Team 6's activities are classified.
>
> Even the military's civilian overseers do not regularly examine the unit's operations. "This is an area where Congress notoriously doesn't want to know too much," said Harold Koh, the State Department's former top legal adviser, who provided guidance to the Obama administration on clandestine war....
>
> Like the C.I.A.'s campaign of drone strikes, Special Operations missions offer policy makers an alternative to costly wars of occupation. But the bulwark of secrecy around Team 6 makes it impossible to fully assess its record and the consequences of its actions, including civilian casualties or the deep resentment inside the countries where its members

operate. The missions have become embedded in American combat with little public discussion or debate.[43]

Legislative Activity for FY2020

DOD's proposed FY2020 budget requests, among other things,

- $72.6 million in the FY2020 Research, Development, Test, and Evaluation, Defense-Wide (RDT&EDW) account for Program Element (PE) 1160483BB,[44] (Special Operations Command [SOCOM]) maritime systems (line 263 in the FY2020 RDT&EDW account), including $45.2 million for Project S0417: Underwater Systems, and $15.6 million for S1684: Surface Craft; and
- $27.4 million in the FY2020 Procurement, Defense-Wide (PDW) appropriation account for procurement of underwater systems for SOCOM (line 63 in the FY2020 PDW account).

Table 1 summarizes congressional action on the above funding requests.

Table 1. Congressional Action on FY2020 Funding Request

Millions of dollars, rounded to nearest tenth

		Authorization			Appropriation		
	Request	HASC	SASC	Conf.	HAC	SAC	Conf.
Research and Development, Defense-Wide							
[SOCOM] Maritime Systems (line 263)	72.6	72.6	72.6		75.6		
Procurement, Defense-Wide							
[SOCOM] Underwater systems (line 63)	59.0	59.0	59.0		59.0		

Source: Table prepared by CRS based on DOD's FY2020 budget submission, committee and conference reports, and explanatory statements on FY2020 National Defense Authorization Act and FY2020 DOD Appropriations Act.

Notes: HASC is House Armed Services Committee; **SASC** is Senate Armed Services Committee; **HAC** is House Appropriations Committee; **SAC** is Senate Appropriations Committee; **Conf.** is conference agreement.

FY2020 National Defense Authorization Act (H.R. 2500/S. 1790)

House

The House Armed Services Committee, in its report (H.Rept. 116-120 of June 19, 2019) on H.R. 2500, recommended the funding levels shown in the HASC column of **Table 1**.

Senate

The Senate Armed Services Committee, in its report (S.Rept. 116-48 of June 11, 2019) on S. 1790, recommended the funding levels shown in the SASC column of **Table 1**.

[43] Mark Mazzetti et al., "SEAL Team 6: A Secret History of Quiet Killings and Blurred Lines," *New York Times*, June 6, 2015.

[44] In DOD research and development accounts, line items are referred to as program elements, or PEs.

FY2020 DOD Appropriations Act (H.R. 2968)

House

The House Appropriations Committee, in its report (H.Rept. 116-84 of May 23, 2019) on H.R. 2968, recommended the funding levels shown in the HAC column of **Table 1**. The recommended increase of $3.0 million for line 263 is for "Program increase—diver propulsion." (Page 296)

Appendix A. April 2018 Navy and Marine Corps Testimony on Special Operations Forces

This appendix reprints the prepared statements of Rear Admiral Tim Szymanski, U.S. Navy, Commander, Naval Warfare Special Warfare Command, and Major General Carl E. Mundy, III, U.S. Marine Corps, Commander, U.S. Marine Corps Forces Special Operations Command, for an April 11, 2018, hearing the Special Operations Command's efforts to transform the force for future security challenges.

Prepared Statement of Rear Admiral Szymanski

The text of Admiral Szymanski's statement is as follows:

> Chairwoman Ernst, Ranking Member Heinrich and distinguished Members of the Committee, I am honored to appear before you, and proud to provide an update on your Navy's Special Operations Force and the U.S. Special Operations Command's maritime component.
>
> As you are aware, the security challenges facing our nation today are numerous, and are made more difficult by adversaries who are exploiting emerging technologies and gaining ground. We will continue to face Violent Extremist Organizations (VEOs), while the battlefield expands and becomes more complex and chaotic. Today, our most pressing security concerns involve the aggressive, coercive, and disruptive actions of near-peer competitors and rogue regimes. Exerting power by fighting below the level of armed conflict favors these players to the point that they are gaining advantages that threaten our national security. We must continue to be smarter, stronger, quicker, and more lethal than our adversaries, in order to protect our nation in a world that grows more complex every day.
>
> As an enterprise of nearly 10,000 personnel—2,810 SEALs; 780 Special Warfare Combatant-craft Crewmen; 4,100 support personnel; 780 reservists; 1,240 civilians—your Naval Special Warfare (NSW) Command accounts for only 2.4 percent of the Navy's personnel. Our budget accounts for less than one percent of the Department of the Navy's budget, and approximately 12 percent of U.S. Special Operations Command (USSOCOM) budget.
>
> We continue to have a global presence—operating in more than 35 countries on any given day. We are networked with the U.S. Navy and Joint Forces, the interagency, and allies and foreign partners, executing missions in support of USSOCOM, the U.S. Navy, geographic Combatant Commanders, and ultimately, national objectives across a full range of political and operational environments.
>
> NSW's ALIGNMENT TO THE NATIONAL DEFENSE STRATEGY
>
> The National Defense Strategy (NDS) published earlier this year charged the Department of Defense (DoD) to be more agile, more lethal, and more innovative in order to maintain our competitive advantage. The Chief of Naval Operations, in turn, laid out the maritime responsibilities articulated in the NDS, focusing on increasing Naval Power through balancing capability and capacity with readiness and sustainment.
>
> As the Commander, my challenge is to man, train, and equip the Force to be better positioned to support the NDS, the National Military Strategy and the Navy's Strategy for Maintaining Maritime Superiority, while supporting the operational requirements of the theater commanders. Furthermore, the long-term sustainment, health, and well-being of our people remains my highest priority.

NSW RESOURCING

After nearly 17 years of war in Afghanistan and Iraq, we are focused on reasserting our capabilities as the maritime component to Special Operations, properly postured to meet the threats of the future, enhancing our partnership with the Navy and exploring opportunities for increased integration and interoperability, while building capabilities and capacity with fleet, submarine, aviation and cyber forces.

Acknowledging that manpower requirements have outpaced authorized and actual growth, we have spent the last year taking a hard look at our force structure to determine how we can best use the resources we have to optimize the impacts we are making on the battlefield. We looked at how to eliminate redundancy, redirect resources and merge assets to build depth and agility and how to meet transregional threats and provide increased combat lethality to the Theater Special Operation Commands. Optimizing our Force is paramount to meeting current operational requirements and provide greater agility to meet future requirements.

We recently collaborated with the Naval Post graduate school to conduct a maritime, multi-thread experiment in Southern California. The exercise allowed us to explore a realistic scenario using unmanned systems in a multi-domain (sea, air and land) environment. We learned a lot and advanced the potential use of artificial intelligence and human-machine teaming in current conflicts which will eventually increase our lethality while reducing risk.

We have made necessary investments aimed at increasing our lethality, and refining our capabilities that enable access to contested areas.

We have made significant increases in our unmanned aerial vehicle lethality by adding targeting capabilities, increasing the capabilities of current sensor suites, and using algorithms and artificial intelligence to speed up the targeting cycle.

We have modernized numerous small arms systems, including procuring a purpose built, full-time suppressed, medium range weapons system; a lighter weight medium machine gun that matches and, in some cases, surpasses the effective range of a .50 caliber machine gun; a sniper weapons system with optics and wind sensing technology; and shoulder-launched munitions that allow for very precise engagements through hardened structures.

We have made great strides in modernizing our maritime mobility platforms. In fact, our partnerships with maritime industries has never been stronger.

We have introduced high performance surface combatant craft into our fleet to serve across the spectrum of maritime operations. They include our new Combatant Craft Assault which replaced the NSW 11-meter rigid-hull inflatable boat and our Combatant Craft Medium which replaced the Mark V Special Operations Craft and the introduction of the new Combatant Craft Heavy.

Special Operations Force (SOF) undersea mobility platforms provide uniquely capable, clandestine means to access peer/near-peer locations. To that end, we expect to introduce two new undersea submersibles this year– the Shallow Water Combat Submersible (SWCS), which will replace our legacy SEAL Delivery Vehicle (SDV), and the Dry Combat Submersible (DCS), a new platform to our inventory.

Nearly a year ago, we piloted a deliberate effort to realize the Secretary of Defense's guidance of exploiting Industry's investment in technology to relentlessly pursue innovative and advanced operational capabilities for our warfighters at a greater speed, relevant to the pace of technology in order to outpace our adversaries. This venture allowed us to understand and take advantage of new DoD contracting and procurement authorities as well as maximizing the utilization of DoD and USSOCOM outreach-to-industry platforms such as Defense Innovation Unit Experimental (DIUx) and SOFWERX.

NSW has learned and applied how to effectively make use of these and other new and emerging opportunities to rapidly bring future operational concepts to the present: such as our realization of Artificial Intelligence-Autonomy of ISR Drones. This example among others, show promise to have exponential impacts on our capabilities to accomplish our mission in a more agile, lethal and sustainable manner. Our efforts—to rapidly prototype, experiment with and lead in new and emerging technologies are aimed at delivering capabilities at the speed of relevancy to our warfighters.

Finally, bottom up, operator-inspired innovation drives experimentation during exercises, and training eventually equates to relevancy and leads to greater success on the battlefield. With our component partners and throughout USSOCOM, innovation is happening at the unit level up and through headquarters. Our focus on innovation is driven by our people – buying down risk to our force while increasing our speed, accuracy, and lethality.

PEOPLE: THE FIRST SOF TRUTH

Our primary weapons system remains The Operator. We continue to invest heavily in our personnel, whether it's to train, retain or sustain them. We select, train and maintain persons of character, who are mature, highly skilled, culturally attuned and trusted to execute our nation's most sensitive missions.

Thank you for your role in the preservation of our Force with the 10-year, $1 billion Silver Strand Training Center-South, the single most important military construction effort impacting the current and future operational readiness of the NSW Force. Once complete, the complex will consolidate the training requirements of today's force, creating efficiencies and synergy of improved operational planning and preparedness, but also allow our operators to spend more time with their families and communities.

We remain committed to the physical and mental health of our operators, as we have a moral obligation to ensure their well-being. Preservation of the Force and Families, our Human Performance Program, and our most important initiatives involving Cognitive Health are about keeping our warriors in the fight, extending their service life, and giving them a high quality life post-service.

With strong Congressional support, the USSOCOM Preservation of the Force and Family program continues to meet and exceed the intent to build resilience and facilitate the long-term care of our operators and their families, while never forgetting our fallen teammates with ongoing support to our Gold Star Families.

Embedded professional care providers working within validated programs have helped turn the corner on many of the negative trends that have impacted those who have been in this long fight. Our usage data shows an increase in service members and families going to see clinical psychologists, licensed clinical social workers, nurse case managers, which speaks directly to de-stigmatization and trust. Similarly, there is a high number of cross referrals among the various care providers that demonstrates mutual support and clinical trust and reliance.

In regard to Human Performance, our athletic trainers, strength coaches and physical therapists provide tailored and operationally relevant programs have resulted in injury reduction and increased recovery time from injuries with a direct impact to overall team readiness.

Our Warrior and Family Support staff provide hands on, personal touch and connection to our families and children, connecting them to all the Service-provided and SOF-unique programs that are so vital to the strength and resilience of our family members.

We have also learned that long-term physical and psychological challenges may result in impacts to one's memory, attention, processing speed, problem-solving, visuospatial function and impulse control which can affect operational performance and mission

accomplishment. Given that we are in the longest continuous stretch of armed conflict in our history, learning about the cognitive health of our force is a critical initiative.

We have initiated a Cognitive Surveillance Program that will be a more pre-emptive approach to intervention where cognitive impacts are indicated. More broadly, this initiative will seek to identify injuries earlier, track individual trends, and assist in developing comprehensive treatment plans to aid in the recovery of our service members. The end-state is to get NSW operators back into the fight while contributing to their long-term wellness.

The Surveillance Program entails an initial baseline screening of all SEAL/SWCC operators within NSW by 30 June 2018; and ongoing re-testing every two years to assess significant change, similar to other routine exams such as dental or audiogram.

Aggressive efforts include increasing awareness of potential issues and not waiting for perfect solutions. Therefore, we are actively 'driving the science' through our blast exposure research efforts, ultimately looking to create a 'dive-table-like' approach to heavy weapons/breaching exposure levels and mitigation needs.

NSW continues to seek and offer best practices as we develop our cognitive health emphases. We rely on education, informed research efforts, and leadership support across the continuum of care to help mitigate the range of brain injuries and increase recovery rates for our members.

Part of that continuum of care focuses on our transitioning veterans, whether at four years or after forty, with a holistic, SOF-unique initiative called Future Former Frogmen, or F3. F3 focuses on ensuring the successful transition of our active duty into civilian life by leveraging our neurocognitive science initiatives, continuum of leadership development efforts, readiness support programs, and veteran's resources. F3 provides structure, process and guidance throughout the complex transition experience giving the service member access to existing programs to ensure NSW veterans remain resilient. SOF for Life, a powerful support network, continues from active duty life to veteran life.

Today in Coronado, California, at the Basic Underwater and Demolition / SEAL school, otherwise known as BUD/S, there are approximately 100 of America's best and brightest going through training to be part of the Navy's elite special operations maritime force as part of the most recent class, Class 330.

Just like those seeking to be part of my brethren's communities, those seeking to be part of the SEAL community, those who succeed in the 63-week course will earn their Trident.

At the end of 63 weeks, each student will have swam 48 miles; hiked or patrolled over 150 miles; and conducted at least 40 dives while spending a minimum of 60 hours, or two and a half days under water. As a class, at the end of those 63 weeks, they will have completed the equivalent of swimming from Cuba to the southern tip of Florida, then running to New York City.

And that is just a snapshot of what we ask them to do before they have taken their first step into their first operation in defense of our country. It is precisely because of what we ask them to do, starting in Coronado, then around the world, through operation after operation, that we are focused on their long-term health, and the well-being of our Force and Families.

Naval Special Warfare Command will continue to place priority on strengthening, equipping and protecting our people; outpacing our enemies in the employment of new technologies and accelerating trends, enabling us to compete below the threshold of conflict. We will refine and adapt our organizational structure to ensure Naval Special Warfare remains relevant and lethal, and when necessary, stands ready, willing and able to engage in combat to fight and win decisively for many years to come.

Thank you for your time, your care for our Naval Special Warfare community, and I welcome the opportunity today to answer your questions.[45]

Prepared Statement of Major General Mundy

The text of Major General Mundy's statement is as follows:

Introduction

Marine Raiders are the Marine Corps' contribution to United States Special Operations Command (USSOCOM). Through specialized and advanced training, MARSOC builds upon its unique attributes and ethos as Marines to produce agile, scalable, fully-enabled, and responsive special operations forces (SOF) comprised of operators and special operations-specific combat support and combat service support specialists. MARSOC formations task organize for every assigned mission and leverage their robust command and control capability and their ability to fuse operations with intelligence down to the team level. All of these factors enable our Raiders to succeed in distributed environments and enable partners at the tactical and operational levels of war. MARSOC contributes to the SOF enterprise and US combatant commands by providing full spectrum special operations capabilities to combat complex transregional problems.

Established in 2006, our organization continues to address the most immediate threats to our Nation and has become a key participant in the ongoing fight against violent extremist organizations. Accepting this, we are also cognizant that we must work to minimize pressure on our force and our families as we simultaneously prepare for future threats. We ensure preparedness by adapting our training methods using feedback from currently deployed forces to better prepare our Raiders for what they will encounter while deployed. Simultaneously, we minimize pressure on the force by ensuring adequate access to Preservation of the Force and Families (POTFF) resources. We recognize that our operational capability ultimately rests upon a foundation of outstanding individuals and their families. In order to safeguard and sustain MARSOC's human capital, our most valuable resource, we continually strive to balance operational commitments with time Raiders spend at home station. Part of our effort to take care of families involves ensuring that our POTFF program not only delivers responsive and effective support, but that it continues to evolve with changing demands and needs of our force.

Background

During my tenure as the Commander of MARSOC, I have continually been impressed by the caliber of our individuals, be they Marines, Sailors, or civilians. They are well trained, well equipped, and provide the full spectrum special operations capability that has been crucial to success on the modern battlefield in places as diverse as Mali in West Africa, contested areas of Iraq, and Marawi in the Philippines. Twelve years on, MARSOC is maturing into a full and integral member of the SOF enterprise just as it continues to provide Raiders to counter our Nation's threats. Taking into account where MARSOC is today, we would be remiss if we did not acknowledge some of the formative episodes in the history of our Marine Corps that got us here.

The United States Marines Corps' rich history is one that is replete with expeditionary operations against what we know today as irregular threats. These actions serve as the foundation for what is Marine Corps Special Operations today. Although the United States Marine Corps (USMC) did not provide a service component to the United States Special Operations Command (USSOCOM) until 2005, the Marine Corps has demonstrated an ability to conduct and support special operations throughout its history.

[45] Statement of Rear Admiral Tim Szymanski, U.S. Navy, Commander, Naval Special Warfare Command, before the Senate Armed Services Committee subcommittee on Emerging Threats and Capabilities, April 11, 2018, 9 pp.

In the early years of America's involvement in World War II, President Franklin Delano Roosevelt was determined to bring the war to our enemies as rapidly as possible. Because of the Marine Corps' historical successes in small wars and its recent development of amphibious operational concepts, it was considered to be the ideal parent organization for the president's vision for "commando" operations.

In January 1942 the United States Marine Corps established two Raider battalions. The mission of the new Raider units was to spearhead amphibious landings, conduct raiding expeditions against Japanese held territory, as well as conduct guerilla-type operations behind enemy lines for extended periods. Marine Raiders were intellectually dynamic, morally disciplined, and physically fit with an irrepressible sense of duty, loyalty to one another, and imbued with a "Gung Ho" spirit in the face of adversity… much like the Marines and Sailors we select and train as Raiders today.

During the Vietnam War and throughout the Cold War era, the Marine Corps did not formally possess a specialized unit. However, many Marines were members of specialized Joint and certain, tailored conventional units, such as force reconnaissance and Marine Expeditionary Units (Special Operations Capable). These units performed some of the types of missions we associate with Special Operations today. The complex global environment produced by the end of the Cold War as well as the world changing events of September 11, 2001, prompted an almost immediate need for additional special operations capacity capable of achieving operational and strategic effects. In light of these events and the pressing need for more SOF, Secretary of Defense Donald Rumsfeld called for the Marines to work more closely with USSOCOM.

After validating an initial proof of concept in 2004 known as the Marine Corps Special Operations Command Detachment (DET One), the Secretary of Defense directed the Marine Corps to provide a permanent contribution to USSOCOM – what would become Marine Corps Forces, Special Operations Command – in November 2005. On 24 February 2006, MARSOC activated at Camp Lejeune, North Carolina as a service component assigned to USSOCOM. MARSOC today comprises a headquarters, one Marine Raider Regiment, one Marine Raider Support Group, and the Marine Raider Training Center. The Command has forces on both the east coast at Camp Lejeune, North Carolina, and on the west coast at Camp Pendleton, California. Presiding over a total force of approximately 3,000 Marines, Sailors, and 200 Federal Civilians, the Command is employed across the globe executing special operations missions in support of SOCOM and the geographic combatant commands that span the SOF core activities. With a focus on counterterrorism, direct action, special reconnaissance, foreign internal defense, security force assistance, and counterinsurgency, your modern-day Raiders also have the capability to directly support hostage rescue and recovery, countering of weapons of mass destruction, unconventional warfare, foreign humanitarian assistance, military information, and civil affairs operations. In order to achieve success and provide full spectrum capability across this wide swathe of core activities, we must prioritize our efforts.

MARSOC Priorities

Understanding our role as a force provider and capability generator within the SOF enterprise, we have taken the SOCOM Commander's priorities of "Win, Transform, and People," and applied them to how we prepare our forces to accomplish assigned missions. To this end, MARSOC currently focuses on four priority areas: the provision of integrated full spectrum SOF, capabilities integration between SOF and Marine Air Ground Task Forces (MAGTF), future force development, and the preservation of the force and families.

Priority 1: Force Provider

Our first priority is to provide integrated full spectrum SOF that are task organized, trained and equipped to accomplish assigned special operations tasks. At any given point in the year, MARSOC has approximately 400 Raiders deployed across 18 countries carrying out

assigned missions. We maintain three, forward task organized Marine Special Operations Companies; one each in Central Command, Africa Command, and the Pacific Command areas of responsibility. In addition to company-level deployments, we maintain one persistent O-5 (Lieutenant Colonel) level Special Operations Task Force in Central Command and a one-third rotational split with Naval Special Warfare Command for an O-6 (Colonel) level Combined/Joint Special Operations Task Force Headquarters, also in Central Command. At every level, these deployed formations bring integrated capabilities across all functional areas and allow us to operate across the full range of special operations missions. We believe that it is these high-end capabilities that provide our forces with a competitive edge against the adversaries we face.

Providing our force begins with the recruitment process and continues through our assessment, selection, and individual training pipeline. We are focused on recruiting the best individuals from across the Marine Corps. Based on the results of our deployed forces and feedback from supported commanders, our recruiting and selection methods are working. Our training is progressive. As individuals earn new special operations specialties, they are moved to teams or special skills training environments. This training continues until deployment and covers everything from individual skill sets to high-end, advanced, complex unit collective training.

In order to assess and certify Marine Special Operations Companies for deployment, MARSOC has created the RAVEN exercise. Held six times each year, RAVEN emphasizes realistic decision making for company and team commanders and provides a venue to practice the full planning, decision, execution, and assessment cycle. Alternating between Gulfport, Mississippi and Smyrna, Tennessee, RAVEN is a living exercise that enables MARSOC to incorporate the most current lessons from our deployed units as well as anticipated enemy actions inform and support ongoing joint contingency planning. For example, our most recent RAVEN conducted in Tennessee, featured a more robust foreign intelligence threat that undertook both physical and technical surveillance against our Marine Special Operations Teams. During this RAVEN we also exposed our teams to the degraded communications environment we would expect to encounter when facing a near-peer/emerging competitor.

The training environments we create are dynamic. Not only do they prepare our Raiders for the current operational challenge, but they also evolve based on emerging threats and our expected participation in support of standing operational plans. Another benefit of the RAVEN exercises is its utility as a venue for integrating conventional Marine Corps resources into what is otherwise a SOF-centric exercise.

Priority 2: Capabilities Integration with MAGTFs (Interoperability, Integration, and Interdependence)

Second, we provide a bridge for routine capabilities integration with SOF and the deployed Marine Air Ground Task Forces to fully maximize the complimentary capabilities of each formation; especially in light of near-peer/emerging competitors. Given the threats present on contemporary battlefields and considering those we expect to face in the future, it has become increasingly important for SOF to be able to integrate "seamlessly" with the conventional forces and vice versa. Conventional forces offer capabilities and a capacity that simply do not exist in our small formations. In today's complex operating environment, the extent to which we, across the Joint Force, are able to leverage one another's strengths, and thereby offset our vulnerabilities, could determine the difference between success and failure. Cyber and space based capabilities, intelligence exploitation, mobility, fire support, logistics and medical support, are all examples of capabilities that we partially rely on conventional forces to provide– especially in scenarios involving high intensity combat.

Examples of interoperability and capabilities integration occur every day across the globe from Syria and Iraq, Afghanistan, the Philippines and remote locations in Africa. With

deliberate efforts to participate in each other's wargames, exercises, and training, we can institutionalize these efforts to the point that they become routine.

Priority 3: Future Force Development

As the operating environment evolves and more complex threats emerge, MARSOC must adapt its force to meet these new challenges. Constant and deliberate innovation, and evolution is critical to our success. Our concept for development is based on both a bottom-up driven process that incorporates immediate battlefield feedback into our training curricula, equipment research, testing, procurement; and a top-down approach that combines more traditional capability acquisition processes with longer-term future concept and wargaming efforts.

Regarding equipment development and acquisition, we are tightly integrated with SOCOM and the Marine Corps and look forward to benefiting from the ongoing efforts of SOCOM's Acquisition Technology &Logistics, SOFWERX, and the Marine Corps' Rapid Capabilities Office. All of these organizations offer us an expedited procurement process for emerging technology. We have already taken steps to bring our vision to fruition with regard to capability development in particular technology areas. These include freeze dried plasma, semi-autonomous seeing and sensing capability, organic precision fires, counter-UAS rapid self-defense, unmanned cargo UAS and ground systems, rapid fusion of big data analytics and machine assisted learning, broadband tactical edge communications, and specialized insertion capabilities. As we research and improve our warfighting capabilities, we must kept in mind that our near-peer/emerging competitors are also making similar advances and investing in emerging technology. It is critical that we ensure that the technological capabilities we opt for are able to operate, communicate, and self-heal in a signals degraded environment.

Likewise from a training perspective, we recognize the need to simulate operations in a degraded/denied communications environment that reflect what we might face when confronting near-peer/emerging competitors. We also plan to continue to improve our proficiency in the critical combined arms skills that both increase our lethality and allow us to maintain a tactical advantage over our adversaries. Last, we acknowledge that we must be able to operate in any clime and place, therefore we are committed to training in environments that replicate the full range of what we may experience on the battlefield.

Complementing our near and mid-term efforts at capability development is longer term work on the development of a MARSOC-specific futures concept. Although this concept bears a resemblance to similar initiatives undertaken with the Department, it very much reflects MARSOC's unique place within SOF and interpretation of what the future operating environment might look like. We see a world overwhelmingly influenced by a resurgence of regional competition and instability. As these two themes collide, the complexity of the operating environment will dramatically challenge the ability of leaders at all levels to first, understand what is happening and, second, make sound decisions. This is the very situation in which Raider formations of the future must be prepared to operate; an urgent, volatile, complex, high-stakes problem that comprises multiple actors and defies the application of traditional US strengths and solutions.

The results of our futures analysis, conducted over the past 18 months, have provided broad implications for the force as well as options which MARSOC can use to shape future capability to meet the challenges posed by the future operating environment. Throughout our internal wargame series, four discrete concepts or 'themes' consistently emerged. Each theme describes a distinct aspect of a vision for MARSOC, but at the same time each built upon the others such that the four are interconnected and mutually supporting. Together they provide a strong conceptual basis for a future MARSOC force that outpaces changes in the operating environment and remains a reliable force across warfighting and Title X functions. Collectively, these themes have come together to form the four, core pathways

of innovation: MARSOF as a Connector, Combined Arms for the Connected Arena, The Cognitive Operator, and Enterprise Level Agility.

Our futures vision document, MARSOF 2030 explains each of these innovation pathways in depth and also explores how they interconnect with one another. I will briefly introduce them here for the benefit of the committee. 'MARSOF as a Connector' is intended to capture MARSOC's facility in building cohesive, task organized teams. It is the idea that MARSOC can be the ideal integrator and synchronizer of U.S. Governmental capabilities with USSOF and partner nation actions. It also acknowledges the non-military nature of many of the problems we face and the need to look beyond for more durable solutions that involve tools other than the military.

'Combined Arms for the Connected Arena' aims to get at the requirement to 'sense' and 'make sense of' what is happening in diverse and multi-dimensional environments. This second pathway also speaks to the use of cyber and information 'domains' as potential venues for conflict now, but certainly with increasing relevance as we look toward the future. From our standpoint, we must become as comfortable operating in these 'virtual' domains as we are in the physical.

Perhaps the most foundational of all of our innovation pathways is 'the Cognitive Operator'. This pathway touches all others. At its core is the idea that the future requires a SOF operator with an equal amount of brains to match the brawn; foresight in addition to fortitude. Your future Raiders must preside over expanded capabilities that include the ability to influence allies and partners; understand complex problems; apply a broad set of national, theater, and interagency capabilities to those problems; and fight as adeptly in the virtual space as the physical.

The last innovation pathway, 'Enterprise Level Agility', leverages MARSOC's relatively small size as an advantage. MARSOC possesses the advantage of being a relatively small force with its own component headquarters – this allows the command to rapidly reorient the organization to confront new challenges as they emerge. In other words, MARSOC's organizational dexterity can provide SOCOM with an agile, adaptable force to meet unexpected or rapidly changing requirements. In this context, MARSOC's small size becomes a strength; one that can provide both institutional and operational agility to the SOCOM Commander.

Priority 4: Preservation of the Force and Families

Calling to mind the SOF Truth that "people are more important than hardware," our fourth priority is the preservation of our force and families program that provide our Raiders and their families with the access to resources promoting personal resiliency increasing longevity in service. Although listed as my fourth priority, preservation of the force and families is equally as important as the previous three priorities because people are at the heart of all we do. Currently, MARSOF special operators average 1 day overseas for every 1.9 days at home. Our capability specialists that enable communications, intelligence, air support, explosive ordnance disposal, and our canine handlers, vary by occupational specialty but average between 1 to 1.7 and 1 to 1.2 days deployed as opposed to days spent at home station. What these numbers do not reflect is the additional time that is spent away from home while training in CONUS. Although difficult to measure, Personnel Tempo or PERSTEMPO receives significant attention at all leadership levels within the Command such that we aim to balance our service members' schedules between training at and training away from home station.

Because of this high operational tempo, POTFF has become an integral tool for maintaining the overall health of our force through programs that are focused on improving human performance, providing resources for behavioral health, developing spiritual fitness, and offering other family-oriented opportunities that are designed to strengthen the

family unit. We appreciate the continual support from Congress on providing the funding for programs and specialized capabilities to make these programs effective.

Culture of accountability:

Closely tied to these efforts, in concert with both SOCOM and the Marine Corps, is our command-wide push to enhance our culture of accountability as it relates to issues such as sexual misconduct, illicit drug use, personal accountability, and unauthorized media release. As an example, our reported number of sexual assault cases remains in the low single digits and we have not had any victim reported incidents in Fiscal Year 18. We attribute this low number of incidents to our constant command level messaging campaign and our strong Sexual Assault Prevention and Response (SAPR) program. While we believe that even a single incident is one too many, we continue to strive to eradicate sexual and other forms of misconduct from our force. We strive each day to provide you SOF personnel that continue to embody the values of accountability, integrity, and commitment in honorable service to our nation.

Conclusion:

In conclusion, I am committed to providing Marine Raiders that provide the nation with full spectrum special operations capability and whose actions continually demonstrate our motto of Spiritus Invictus, or 'unconquerable spirit'. Your Marine Special Operators will remain always faithful, always forward. I thank the committee for your continued support of our military members and their families and also for your commitment to national security.[46]

[46] Statement of Major General Carl E. Mundy, III, U.S. Marine Corps, Commander, U.S. Marine Corps Forces Special Operations Command, before the Senate Armed Services Committee subcommittee on Emerging Threats and Capabilities, April 11, 2018, 10 pp.

Appendix B. November 2011 Navy Testimony on Navy IW Activities

This appendix presents the text of the Navy's prepared statement for a November 3, 2011, hearing before the Emerging Threats and Capabilities subcommittee of the House Armed Services Committee on the IW activities of the military services. The text of the statement, by Rear Admiral Sinclair Harris, Director, Navy Irregular Warfare Office, is as follows:

> Chairman Thornberry, Congressman Langevin, and distinguished members of the House Armed Services Emerging Threats and Capabilities Subcommittee, it is an honor for me to be here with you today to address the U.S. Navy's efforts to institutionalize and develop proficiency in irregular warfare mission areas. These efforts are vital to our national interests and, as part of a comprehensive approach for meeting complex global challenges, remain relevant in a time of uncertainty and constant change. To meet these challenges Admiral Greenert, Chief of Naval Operations, recently provided his Sailing Directions to our Navy emphasizing the mission to deter aggression and, if deterrence fails, to win our Nation's wars. Today, the Navy is engaged around the world conducting preventive activities that stabilize, strengthen, and secure our partners and allies providing regional deterrence against state and non-state actors, while at the same time fighting, and winning, our Nation's wars. We expect the demand for these activities to increase in the future security environment as a capacity constrained Navy seeks to maintain access and presence. Emphasis on increased training and education will enable our continued readiness to effectively meet global demand.
>
> As demand for our Navy continues to grow, we continue to leverage our Maritime Strategy with our partners, the Marine Corps and Coast Guard. The maritime domain supports 90% of the world's trade and provides offshore options to help friends in need, and to confront and defeat aggression far from our shores as part of a defense in depth approach to secure our homeland. CNO's Sailing Directions, coupled with an enduring Maritime Strategy, underscore the Navy's focus on multi-mission platforms and highly trained Sailors that conduct activities across the operational spectrum. Key tenets of the force are readiness to fight and win today while building the ability to win tomorrow; to provide offshore options to deter, influence, and win; and to harness the teamwork, talent and imagination of our diverse force. While the Maritime Strategy spans the spectrum of warfare, the Navy's Vision for Confronting Irregular Challenges (CIC), released in January 2010, addresses mission areas of irregular warfare as well as maritime activities to prevent, limit, and interdict irregular threats and their influence on regional stability through, insurgency, crime, and violent extremism.
>
> The CIC Vision is derived from our Maritime Strategy with the intention to implement steps towards increasing the Navy's proficiency in supporting direct and indirect approaches that dissuade and defeat irregular actors who exploit uncontrolled or ungoverned spaces in order to employ informational, economic, technological, and kinetic means against civilian populations to achieve their objectives. The CIC Vision is guiding the alignment of organizations, investments, innovation, procedures, doctrine, and training needed to mainstream CIC capabilities within the Fleet. These efforts are focused on outcomes of increased effectiveness in stabilizing and strengthening regions, enhancing regional awareness, increasing regional maritime partner capacity, and expanding coordination and interoperability with joint, interagency, and international partners. These outcomes support promoting regional security and stability and advancing the rule of law allowing good governance and promoting prosperity by helping partners better protect their people and resources. In addition to preventive activities, the Vision guides efforts to inhibit the spread of violent extremism and illicit, terrorist, and insurgent activities. To achieve these outcomes, the Navy is actively reorienting doctrine and operational

approaches, rebalancing investments and developmental efforts, and refining operations and partnerships to better support a comprehensive approach to U.S. efforts. These efforts will provide a Navy capable of confronting irregular challenges through a broad array of multi-mission capabilities and a force proficient in the CIC missions of security force assistance, maritime security, stability operations, information dominance, and force application necessary to support counterinsurgency, counterterrorism, and foreign internal defense missions.

In line with its strategy for confronting irregular challenges the Navy has leveraged key force providers, such as the Navy Expeditionary Combat Command, and established Maritime Partnership Stations, and Maritime Headquarters with Maritime Operations Centers to meet the demands and missions consistent with its strategy and vision. The evolution of intelligence and strike capabilities has enabled the Navy to meet urgent Combatant Commander requirements for counterterrorism and counterinsurgency operations and highlighted further opportunities for the Navy as an important joint partner. While these operational organizations and activities deliver Navy capabilities in theater, the Navy Irregular Warfare Office, established by the CNO in July 2008, has guided the implementation and institutionalization of the CIC Vision. The Navy Irregular Warfare Office, working closely with USSOCOM, other Combatant Commanders, Services, interagency and international partners, has rapidly identified and deployed Navy capabilities to today's fight, and is institutionalizing confronting irregular challenges concepts in the Navy's planning, investment, and capability development.

The Navy Irregular Warfare Office operates under three primary imperatives consistent with the Maritime Strategy, CNO's Sailing Directions, and the Navy's Vision for Confronting Irregular Challenges. They provide integration and institutionalization in CIC mission areas and are; (1) improve the level of understanding concerning the maritime contribution to the joint force; (2) increase proficiency of the whole of Navy to confront irregular challenges; and (3) drive maritime and special operations forces to seamless integration in addressing irregular challenges. These three imperatives focus the Navy's implementation efforts and mainstream the concept that preventing wars is as important as winning them. Our Navy must be ready to transition seamlessly between operational environments, with the capability and training inherent in the Fleet.

Department of Defense Directive 3000.07 directs the services to "improve DoD proficiency for irregular warfare, which also enhances its conduct of stability operations" and directs reporting to the Chairman of the Joint Chiefs of Staff annually. Navy efforts to institutionalize and provide proficiency in confronting irregular challenges, includes proficiency in irregular warfare missions along with missions of maritime security operations and information dominance, a key enabler for CIC. Currently, the Navy leverages its access and persistent presence to both better understand and respond to irregular challenges and is actively evolving its proficiency to prevent and counter irregular threats while maintaining its ability to conduct the full spectrum of naval warfare. Its access, presence, and emphasis on maritime partnerships enable broader government efforts to address underlying conditions of instability that enhance regional security. Through its mix of multi-mission capabilities, the Navy provides political leaders with a range of offshore options for limiting regional conflict through assurance, deterrence, escalation and de-escalation, gaining and maintaining access, and rapid crisis response. In addition to its inherent ability to protect the maritime commons, its effectiveness in building maritime partner capability and capacity contributes to achieving partner security and economic objectives. Operating in and from the maritime domain with joint and international partners, the Navy is enhancing regional security while dissuading, deterring, and when necessary, defeating irregular threats.

The Navy acknowledges the complexity of the future security environment and continues to explore balanced approaches. Following are the Navy's current focus areas:

Fleet-SOF Integration: Navy's afloat basing support to special operations forces has extended their reach into denied or semi-permissive areas enabling highly successful counterterrorism missions. Navy provides inherent combat capabilities, multi-mission ships and submarines collecting mission critical information, approval for 1052 support billets for Naval Special Warfare, two dedicated HCS squadrons, and shipboard controlled UAV orbits supporting counterterrorism operations. The Navy is aligned to improve this integration through pre-deployment training, mission rehearsals, improvements to fleet bandwidth allocation, shipboard C4I enhancements, and C2 relationships needed to prosecute time sensitive targets.

Maritime Partnerships: Establishing enduring maritime partnerships is a long-term strategy for securing the maritime commons. Legal, jurisdictional, and diplomatic considerations often complicate efforts to secure the maritime commons, especially from exploitation by highly adaptive irregular actors. In recognition of these considerations, the Navy is emphasizing partnership engagements with U.S. and international maritime forces to strengthen regional security.

Information Sharing Initiatives: In an information dominated environment, initiatives that link joint warfighters, the technology community, and academia are crucial to rapidly fielding solutions to emerging irregular challenges. These initiatives are the basis for longer-term efforts to adapt and improve proficiency of Navy platforms to address irregular challenges.

Doctrine: Development of Tri-Service (Navy, Marine Corps, and Coast Guard) Maritime Stability Operations doctrine that will enable a more effective response to instability in the littorals.

Organization: Navy Expeditionary Combat Command, which continues to provide in-demand capabilities such as Maritime Civil Affairs Teams, Riverine Forces, Maritime Security Forces, Explosive Ordnance Disposal Teams, and Expeditionary Intelligence Teams.

Today, the Navy continues to meet planned global operational commitments and respond to crises as they emerge. Overseas Contingency Operations continue with more than 12,000 active and reserve Sailors serving around the globe and another 15,000 at sea in Central Command. Navy's Carrier Strike Groups provide 30 percent of the close air support for troops on the ground in Afghanistan and our Navy and Marine Corps pilots fly almost 60% of electronic attack missions. Yet, as our national interests extend beyond Iraq and Afghanistan, so do the operations of our Navy. Over the last year, more than 50 percent of our Navy has been underway daily; globally present, and persistently engaged. Last year, our Navy conducted counter-piracy operations in the Indian Ocean and North Arabian Sea with a coalition of several nations, trained local forces in maritime security as part of our Global Maritime Partnership initiatives in Europe, South America, Africa and the Pacific and forces in the Sixth Fleet supported NATO in complex operations in Libya. Navy responded with humanitarian assistance and disaster relief to the earthquake in Haiti, the flooding in Pakistan, and the earthquake and tsunami in Japan; and, conducted the world's largest maritime exercise, Rim of the Pacific (RIMPAC), which brought together 14 nations and more than 20,000 military personnel, to improve coordination and trust in multi-national operations in the Pacific. Our Sailors continue to deploy forward throughout the world, projecting US influence, responding to contingencies, and building international relationships that enable the safe, secure, and free flow of commerce that underpins our economic prosperity and advances the mission areas that address irregular challenges.

The future vision of the Navy in meeting the uncertain challenges around the globe remains a force forward, present, and persistent in areas critical to the national interests of the

United States. CNO, in previous testimony,[47] stated: *Our Navy continues to conduct a high tempo of global operations, which we expect to continue even as forces draw down in Afghanistan. Global trends in economics, demographics, resources, and climate change portend an increased demand for maritime presence, power, and influence. America's prosperity depends on the seas… and as disruption and disorder persist in our security environment, maritime activity will evolve and expand. Seapower allows our nation to maintain U.S. presence and influence globally and, when necessary, project power without a costly, sizeable, or permanent footprint ashore. We will continue to maintain a forward-deployed presence around the world to prevent conflict, increase interoperability with our allies, enhance the maritime security and capacity of our traditional and emerging partners, confront irregular challenges, and respond to crises.* To continue as a global force in the preventive and responsive mission areas that confront irregular challenges, including those of irregular warfare, the Navy will be faced with increasing demand in a fiscally induced capacity constrained environment. Constrained capacity requires a prioritization of areas requiring persistent presence, to include those regions of current or forecast instability. Also required is an understanding of the risk incurred to mission, and to force, if we do not get that priority correct. We must ensure our Navy remains the finest, best trained, and most ready in the world to sustain key mission areas that support confronting irregular challenges, and has the ability to face a highly capable adversary. The Navy looks forward to working with Congress to address our future challenges and thank you for your support of the Navy's mission and personnel at this critical crossroads in U.S. history.[48]

[47] At this point, the statement includes a footnote citing the prepared statement of Admiral Jonathan Greenert before the House Armed Services Committee on July 26, 2011. Greenert became the Chief of Naval Operations on September 23, 2011.

[48] Statement of Rear Admiral (Lower Half) Sinclair Harris, Director, Navy Irregular Warfare Office, before the House Armed Services Committee, Subcommittee on Emerging Threats and Capabilities, November 3, 2011. Italics as in original.

Appendix C. 2010 Navy Irregular Warfare Vision Statement

This appendix reproduces the Navy's January 2010 vision statement for irregular warfare.[49]

[49] Department of the Navy, Chief of Naval Operations, *The U.S. Navy's Vision for Confronting Irregular Challenges*, January 2010, 7 pp. (including the cover page).

The U.S. Navy's

Vision for Confronting Irregular Challenges

January 2010

CNO Foreword

Our Navy has a history of confronting *irregular challenges* at sea, in the littorals, and on shore. In the face of significant shifts in the nature and character of the threats our nation faces, this Navy Vision for Confronting Irregular Challenges will guide our efforts to prevent, limit, and interdict irregular threats and adversaries. We will focus on the full range of capabilities the Naval force can uniquely project, in and from the maritime domain, in countering *irregular challenges* associated with regional instability, insurgency, crime, and violent extremism.

The *Cooperative Strategy for 21st Century Seapower* places as much emphasis on preventing wars as it does on winning wars, and is the cornerstone of our approach to confronting *irregular challenges.* The six capabilities of our Maritime Strategy, from winning the nation's wars to stabilizing regions with our partners, draws upon the cooperative and preventive capabilities of maritime and joint forces. Our Navy will realize the broadened and balanced capabilities directed in our Maritime Strategy and Defense guidance by making investments to ensure the agility, flexibility, and adaptability necessary to address the range of emergent challenges to our national security. We will enhance integration and interoperability with our traditional maritime partners, the U.S. Marine Corps and U.S. Coast Guard, along with other joint, interagency, private and non-governmental organizations, and international partners in all stages of this effort.

This Vision emphasizes the importance of the maritime contribution to addressing *irregular challenges* in a dynamic and evolving global security environment. The steps we take now will ensure our Navy is prepared fully to work with partners to stabilize regions at risk, and when necessary, dissuade, deter, and defeat irregular actors who seek to undermine security, stability, and prosperity.

G. ROUGHEAD
Admiral, U.S. Navy

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I. The Vision for Confronting Irregular Challenges - Pursuing a Capability Balance for 21st Century Operations

Vision Statement

The U.S. Navy will meet irregular challenges through a flexible, agile, and broad array of multi-mission capabilities. We will emphasize Cooperative Security as part of a comprehensive government approach to mitigate the causes of insecurity and instability. We will operate in and from the maritime domain with joint and international partners to enhance regional security and stability, and to dissuade, deter, and when necessary, defeat irregular threats.

Recognizing the strategic impact of global threats associated with regional instability and insecurity, our Navy has instituted this Vision to guide efforts aimed at confronting *irregular challenges*. In today's interconnected and technically advanced world, **terrorists and criminals prey upon unstable and failing regions and pose an increasing threat to our national interests**. With three-quarters of the world's population, four-fifths of its capital cities, and almost all of its productive capacity located within 200 miles of a coastline, **our Navy is uniquely positioned and suited to counter threats to stability, while operating in and from the maritime domain.** This includes helping countries at risk build sustainable indigenous capacity to secure their resources, protect their populations, and stabilize their regions.

Our Navy must continue efforts to balance emphasis and investments between countering irregular threats and countering near peer forces to successfully meet today's and tomorrow's dynamic and interrelated security challenges. This Vision is derived from our Maritime Strategy and sets a course toward increasing proficiency in supporting direct and indirect approaches to dissuade and defeat *irregular challenges* -- wherein states and non-state actors leverage uncontrolled or ungoverned space to employ informational, economic, technological, and kinetic methods against civilian populations and targets to achieve their objectives. **We will confront *irregular challenges* by focusing on the following outcomes**:

- **Increased effectiveness in stabilizing and strengthening regions**, by securing and leveraging the maritime domain, with and in support of national and international partners.
- **Enhanced regional awareness** of activities and dynamics to include a deeper understanding of ethnic, cultural, and socioeconomic characteristics and norms.
- **Increased regional partner capacity** for maritime security and domain awareness.
- **Expanded coordination and interoperability** with joint, interagency, and international partners.

These outcomes support promoting regional security and stability, advancing the rule of law, promoting good governance and prosperity, and help partners better protect their people and resources. They will inhibit the spread of violent extremism and its associated terrorist, insurgent, and criminal activities.

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The Navy will leverage its history of presence, international engagement, and security enforcement, and will ensure our sailors, platforms, and systems are ready to address the hybrid nature of 21st Century challenges. The Navy brings global scope, unique access, and a breadth of capabilities to confront *irregular challenges.* We will promote Cooperative Security to mitigate instability in regions with limited governance that give rise to *irregular challenges.* We will enhance proficiency and effectiveness in security force assistance, maritime security, stability operations, information dominance, and other force applications necessary to support U.S. and partner counterinsurgency, counterterrorism, and foreign internal defense operations.

II. Opportunity: Leveraging the Maritime Domain to Confront Irregular Challenges

"Covering three-quarters of the planet, the oceans make neighbors of people around the world. They enable us to help friends in need and to confront and defeat aggression far from our shores."

A Cooperative Strategy for 21st Century Seapower

Our Navy's inherent contribution to the irregular contest is our capacity and ability to leverage access to the maritime domain and cooperate with partner navies and security forces to dissuade, deter, and defeat irregular threats at sea and ashore. While often overlooked in the context of *irregular challenges*, **the maritime domain enables proximate populations to partner and enhance their wealth and well-being, but also provides sanctuary and freedom of movement to criminals, terrorists, and insurgents.** The maritime domain provides for over 90% of the flow of information, people, goods, and services that sustain and create opportunities for regional economic prosperity. This economic opportunity promotes stability and helps prevent vulnerable populations from turning to terrorist or criminal enterprises.

The maritime domain similarly provides irregular actors with operating space and the ability to conduct the illicit flow of information, weapons, money, technicians, and cadres upon which much of their income and effectiveness relies. As such they are able to use the maritime environment to exploit, disrupt, or destabilize regions or governments, and to affect the will of civilian populations through insurgency, terrorism, crime, and the proliferation of radical ideologies.

The Navy's global maritime access and sustained presence forward enable U.S. Government-wide partnerships with nations and their forces to provide security and training assistance. At sea and ashore, the Navy works with partners to secure vulnerable maritime approaches and maritime resources, while improving collective capabilities to counter emerging threats such as piracy, trafficking, and weapons proliferation. Partners can appreciate the Navy's dependable but impermanent presence, which requires neither a footprint ashore nor infringement on their sovereignty. Our partners in turn add capability and capacity to our own through their contributions of forces, technologies, and operating concepts, as well as the understanding and ability to navigate local political, ethnic, and cultural contexts.

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Today, the Navy is globally engaged to confront *irregular challenges* in sustained joint and interagency operations at sea and ashore. This includes support for counter-terrorist and counterinsurgency missions, development, humanitarian assistance, disaster response, and maritime security capacity building with partner militaries. Some examples include:

- Support for Joint Special Operations Task Force – Philippines which provides security force training, anti-terrorist forces, and delivered humanitarian relief and disaster response following storm induced flooding.
- Contributions to Joint Task Force – Horn of Africa whose East African Maritime Center of Excellence, security capacity building, and interagency policy efforts are enhancing indigenous capacities to stabilize the region and counter threats of piracy.
- Counter-piracy operations in the Gulf of Aden and the Horn of Africa which remove financial support to terrorists ashore and reduce instability and criminality at sea.
- Training and equipping partners for maritime security and fisheries enforcement in the Gulf of Guinea that many of the region's countries depend for economic stability.
- With coalition partners, the protection of oil platforms in the northern Arabian Gulf, that includes training for Iraqi naval personnel to assume this economically critical mission.
- Expeditionary Training Teams and Global Fleet Stations (Africa, South America, Pacific) dedicated to security force training and assistance through multi-mission employment of amphibious ships, tactical aircraft, and helicopters.
- The over 23,000 Navy personnel engaged in CENTCOM, with 14,000 ashore, conducting maritime security, river patrol, ordnance disposal, surveillance and reconnaissance, electronic warfare, and combat support operations, as well as providing non-naval augmentation for detainee affairs, security, and reconstruction.
- The procurement and employment of evolving multi-mission platforms oriented to lower end operations against *irregular challenges* including: Littoral Combat Ship mission modules, Riverine squadrons tailored for security force assistance, persistent manned and unmanned surveillance platforms, and investments in training capacity for language, cultural, and hybrid mission sets.
- The employment of multi-mission platforms able to work across the spectrum of conflict to include P-3 for surveillance against terrorists and insurgents, tactical aircraft for armed reconnaissance, and submarines and surface combatants in counter-drug operations.

The Navy will continue to pursue balanced approaches to confronting evolving irregular and conventional challenges by maximizing the multi-purpose effectiveness of our Navy's capabilities, personnel, and platforms. We will emphasize building partner capacity using dedicated training forces, periodic deployments and recurring exercises. In the end we will achieve the greatest effectiveness against the most likely 21st Century threats through an agile, flexible, and adaptable force.

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These goals support the outcomes presented in this Vision:

- **Enhance and formalize interoperability** with U.S. government, public and private organizations, allied maritime and land forces, and regional partners.
- **Build partner capacity** by forming enduring, trust-based relationships, promoting shared interests in collective security, and providing training and resources to enhance indigenous security force capacity.
- **Improve our regional awareness and understanding of complex environments and challenges** through intelligence and information systems, training, education, and more culturally adept approaches.
- **Achieve an improved understanding and ability to counter illicit and extremist actors** as they leverage and maneuver in their maritime and shore environments.
- **Enhance and broaden the multi-mission capabilities and applications of today's force** to maximize effectiveness in complex regions and scenarios.
- **Identify necessary and distinct shifts in emphasis and investment to confront *irregular challenges***, to include modifications to training, doctrine, and existing forces, and where necessary, new investments in processes, platforms, and systems.

In pursuing these goals for confronting *irregular challenges* the Navy will employ its broad capabilities to enable partners, improve maritime security, and conduct cooperative and decisive operations at sea and ashore. Specifically, we will operate to deny unregulated actors use of the maritime and littoral environment, assist in securing critical infrastructure to ensure the safe flow of resources, and apply a broad spectrum of maritime and overland capabilities to combat irregular threats while improving the lives of affected populations.

III. Implementing the Vision

Implementation will require a Navy-wide organizational approach. This effort demands changes in our thinking, our force and its preparation, and requires clear strategic communications within and outside the organization. We will comprehensively align our organizations, investments, procedures, doctrine, and training with the set of emerging approaches necessary to address these challenges.

Our Navy will pursue the outcomes and goals outlined in this Vision through these supporting implementation objectives.

1. **Advance our Navy's doctrinal, strategic, and operational approaches to addressing *irregular challenges*.**
   - Increase our Navy's application of related Defense and Joint strategic and operational guidance.
   - Define the strategic and operational tenets and approaches for our Navy to apply across our general purpose and special operation forces.
   - Integrate the desired outcomes, priorities, and capabilities needed to confront *irregular challenges* into Navy's force development and management processes.

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2. **Organize, train, and equip our Navy to confront *irregular challenges* more effectively through balancing shifts in our investments and efforts.**
   - Enhance our ability to address, refine, validate, and incorporate urgent and emerging requirements to confront *irregular challenges* in the Planning, Programming, Budgeting, and Execution process.
   - Identify the advocates and resource sponsors responsible for resource allocation and comprehensive program execution for existing and emerging Navy-unique and joint multi-mission capabilities to confront *irregular challenges*.
   - Introduce the necessary supporting training and education requirements, to include organizations, curricula, and processes across our manpower enterprise.
   - Institutionalize concepts, processes, and organizations for training and building the capacity of partners through dedicated assistance operations, regular exercises, and the deployments and visits of multi-mission ships and aircraft.

3. **Emphasize interoperability and effectiveness for confronting *irregular challenges* across U.S. government, public, private, and international partners.**
   - Leverage Navy's multi-mission capabilities with other services, interagency and coalitions to build partner security capacity.
   - Integrate and coordinate efforts with the U.S. Marine Corps and U.S. Coast Guard in support of the imperatives and approaches in the Maritime Strategy.
   - Support the development of joint, interagency, and international operational concepts and supporting CONOPS.
   - Support Defense efforts to integrate joint and interagency planning processes.
   - Ensure capabilities to confront *irregular challenges* are addressed and captured in U.S. Navy and Defense legal policy development.
   - Provide Combatant Commanders with applicable naval capabilities to support critical mission requirements outside the scope of Navy core mission areas.

IV. Conclusion

Our Navy recognizes the importance of developing opportunities while being prepared to address irregular threats. Our general and special purpose forces are immediately applicable to the broad array of capabilities required to achieve regional security and stability. The Navy is uniquely positioned to assist emerging nations and fragile states, and to dissuade, deter, and when necessary, defeat irregular threats. We will build on our inherent strengths to lead and support national and international efforts.

The *Cooperative Strategy for 21st Century Seapower* places as much emphasis on preventing conflicts as on winning conflicts. This underscores the importance of securing and fostering long-term cooperative relationships based on mutual understanding and respect for each party's strategic interests, as well as increasing partners' ability to ensure their own security and stability. It recognizes the value of presence, of "being there," to maintain adequate levels of security and awareness across the maritime domain, and restrain the destabilizing activities of non-state actors. It makes clear our Navy will work alongside other U.S. services and agencies through a comprehensive government approach to advance international partnerships.

This Vision will guide and shape our Navy's actions, and will enhance our Navy's proficiency in capabilities to counter *irregular challenges*, now and in the future.

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Appendix D. 2012 RAND Corporation Report Findings and Recommendations

This appendix presents findings and recommendations from a 2012 report on maritime regular warfare by RAND Corporation, a research firm.

Findings

The report made the following findings, among others:

> The study's main findings span the strategic, operational, and tactical levels. Several are specific to MIW, while others have implications both for MIW [maritime irregular warfare] and for IW operations more broadly.
>
> First, *the maritime force is generally considered to play a supportive role to ground forces in IW and therefore has the potential to be underutilized even in IW operations conducted in a predominantly maritime environment....*
>
> Second, *countries that have a prevalent maritime dimension associated with an insurgency could potentially benefit from the enhancement of civil-military operations (CMOs) in the maritime arena....*
>
> Third, *maritime operations in IW can allow the United States to scale its ground involvement in useful ways....*
>
> Fourth, if one assumes that future MIW engagements that entail building a partner's capacity will resemble OEF-P [Operation Enduring Freedom—Philippines], *it is important to manage strategic expectations based on realistic assessments of the partner's capabilities....*
>
> Fifth, *when building partner capacity, either in MIW or land-based IW, the United States should make efforts to provide equipment and technology that the partner will be able to maintain and operate without difficulty....*
>
> Sixth, *with regard to operational methods, coastal maritime interdiction can play an instrumental role in setting the conditions for success in IW by cutting the supply lines that sustain an insurgency....*
>
> Seventh, *as the [1980s] Nicaragua case illustrates, U.S. partners in MIW may only have to influence and monitor the sensibilities of a local population, but the legitimacy of U.S. involvement may be tested in worldwide public opinion....*
>
> Finally, *international cooperation in confronting MIW adversaries is often necessary, and the U.S. Navy should make an effort to ensure that it is tactically and operationally interoperable with partner navies in order to facilitate coordination....*[50]

Recommendations

The report made the following recommendations, among others:

> The findings presented here have several direct implications for the U.S. conventional Navy and Naval Special Warfare Command (NSW). First, U.S. naval forces should continue to provide U.S. partners with suitable equipment that they will be able to operate and maintain and should continually strive to increase their interoperability with partner

[50] Molly Dunigan et al., *Characterizing and Exploring the Implications of Maritime Irregular Warfare*, RAND Corporation, Santa Monica (CA), 2012, pp. xv-xviii (italics as in original).

> forces. Second, U.S. naval forces may have to continue or expand training of partner forces to confront future MIW threats. Third, when conducting MIW, operating from a sea base offers advantages to NSW. However, due to the costs of such a practice, both NSW and the conventional Navy must also recognize that decisions regarding when and where to support sea basing of this sort need to be made carefully. Fourth, in support of future MIW operations, NSW is likely to have ongoing requirements for maritime interdiction and containment. Fifth, the United States could benefit from maintaining operational and tactical capabilities with which to assist its partners in surveillance, particularly against small submarines and mining threats. Sixth, NSW should consider increasing its capacity to conduct maritime-based CMOs.

Conventional U.S. naval forces should similarly consider their role in supporting significant irregular ground operations launched from the sea, as well as their role in interdiction and containment campaigns. In contrast to those of NSW, conventional U.S. Navy capabilities to support IW might entail CMOs and related activities to a greater extent than direct action.[51]

[51] Molly Dunigan et al., *Characterizing and Exploring the Implications of Maritime Irregular Warfare*, RAND Corporation, Santa Monica (CA), 2012, pp. xix-xx.

Appendix E. Detention of Terrorist Suspects on U.S. Navy Ships

This appendix presents additional background information on detention of terrorist suspects on U.S. Navy ships.

On July 6, 2011, it was reported that

> The U.S. military captured a Somali terrorism suspect [named Ahmed Abdulkadir Warsame] in the Gulf of Aden in April and interrogated him for more than two months aboard a U.S. Navy ship before flying him this week to New York, where he has been indicted on federal charges....
>
> Other U.S. officials, interviewed separately, said Warsame and another individual were apprehended aboard a boat traveling from Yemen to Somalia by the U.S. military's Joint Operations Command. The vessel was targeted because the United States had acquired intelligence that potentially significant operatives were on board, the officials said. Court documents said the capture took place April 19.
>
> One of the senior administration officials who briefed reporters said that the other suspect was released "after a very short period of time" after the military "determined that Warsame was an individual that we were very much interested in for further interrogation."
>
> According to court documents, Warsame was interrogated on "all but a daily basis" by military and civilian intelligence interrogators. During that time, officials in Washington held a number of meetings to discuss the intelligence being gleaned, Warsame's status and what to do with him.
>
> The options, one official said, were to release him, transfer him to a third country, keep him prisoner aboard the ship, subject him to trial by a military commission or allow a federal court to try him. The decision to seek a federal indictment, this official said, was unanimous.
>
> Administration officials have argued that military commission jurisdiction is too narrow for some terrorism cases - particularly for a charge of material support for terrorist groups - and the Warsame case appeared to provide an opportunity to try to prove the point.
>
> But some human rights and international law experts criticized what they saw as at least a partial return to the discredited "black site" prisons the CIA maintained during the Bush administration....
>
> Warsame was questioned aboard the ship because interrogators "believed that moving him to another facility would interrupt the process and risk ending the intelligence flow," one senior administration official said.
>
> The official said Warsame "at all times was treated in a manner consistent with all Department of Defense policies" - following the Army Field Manual - and the Geneva Conventions.
>
> Warsame was not provided access to an attorney during the initial two months of questioning, officials said. But "thereafter, there was a substantial break from any questioning of the defendant of four days," court documents said. "After this break, the defendant was advised of his Miranda rights" - including his right to legal representation – "and, after waiving those rights, spoke to law enforcement agents."
>
> The four-day break and separate questioning were designed to avoid tainting the court case with information gleaned through un-Mirandized intelligence interrogation, an overlap that has posed a problem in previous cases. The questioning continued for seven days, "and the defendant waived his Miranda rights at the start of each day," the documents said....

> U.S. Navy Vice Adm. William H. McRaven alluded to the captures in testimony before a Senate committee last week in which he lamented the lack of clear plans and legal approvals for the handling of terrorism suspects seized beyond the war zones of Iraq and Afghanistan.
>
> At one point in the hearing, Sen. Carl Levin (D-Mich.), the chairman of the Senate Armed Services Committee, referred to "the question of the detention of people" and noted that McRaven had "made reference to a couple, I think, that are on a ship."
>
> McRaven replied affirmatively, saying, "It depends on the individual case, and I'd be more than happy to discuss the cases that we've dealt with."[52]

Another press report on July 6, 2011, stated the following:

> In a telephone briefing with reporters, senior administration officials said Mr. Warsame and another person were captured by American forces somewhere "in the Gulf region" on April 19. Another official separately said the two were picked up on a fishing trawler in international waters between Yemen and Somalia. That other person was released.
>
> Mr. Warsame was taken to a naval vessel, where he was questioned for the next two months by military interrogators, the officials said. They said his detention was justified by the laws of war, but declined to say whether their theory was that the Shabab are covered by Congress's authorization to use military force against the perpetrators of the Sept. 11, 2001, attacks; whether the detention was justified by his interactions with Al Qaeda's Yemen branch; or something else.
>
> The officials also said interrogators used only techniques in the Army Field Manual, which complies with the Geneva Conventions. But they did not deliver a Miranda warning because they were seeking to gather intelligence, not court evidence. One official called those sessions "very, very productive," but declined to say whether his information contributed to a drone attack in Somalia last month.
>
> After about two months, Mr. Warsame was given a break for several days. Then a separate group of law enforcement interrogators came in. They delivered a Miranda warning, but he waived his rights to remain silent and have a lawyer present and continued to cooperate, the officials said, meaning that his subsequent statements would likely be admissible in court.
>
> Throughout that period, administration officials were engaged in deliberations about what to do with Mr. Warsame's case. Eventually, they "unanimously" decided to prosecute him in civilian court. If he is convicted of all the charges against him, he would face life in prison.
>
> Last week, Vice Adm. William H. McRaven, who was until recently in charge of the military's Joint Special Operations Command, told a Senate hearing that detainees are sometimes kept on Navy ships until the Justice Department can build a case against them, or they are transferred to other countries for detention.
>
> Another senior administration official said Tuesday that such detentions are extremely rare, and that no other detainees are now being held on a Navy ship.[53]

A July 7, 2011, press report stated the following:

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[52] Karen DeYoung, Greg Miller, and Greg Jaffe, "Terror Suspect Detained On Ship," *Washington Post*, July 6, 2011: 6.

[53] Charlie Savage and Eric Schmitt, "U.S. To Prosecute A Somali Suspect In Civilian Court," *New York Times*, July 6, 2011: 1.

> In interrogating a Somali man for months aboard a Navy ship before taking him to New York this week for a civilian trial on terrorism charges, the Obama administration is trying out a new approach for dealing with foreign terrorism suspects.
>
> The administration, which was seeking to avoid sending a new prisoner to Guantánamo Bay, Cuba, drew praise and criticism on Wednesday [July 6] for its decisions involving the Somali suspect, Ahmed Abdulkadir Warsame, accused of aiding Al Qaeda's branch in Yemen and the Shabab, the Somali militant group.[54]

A July 6, 2011, entry in a blog that reports on naval-related events stated that the U.S. Navy ship to which Warsame was taken was the amphibious assault ship *Boxer* (LHD-4).[55]

An October 24, 2012, press report stated the following:

> Over the past two years, the Obama administration has been secretly developing a new blueprint for pursuing terrorists, a next-generation targeting list called the "disposition matrix."
>
> The matrix contains the names of terrorism suspects arrayed against an accounting of the resources being marshaled to track them down, including sealed indictments and clandestine operations. U.S. officials said the database is designed to go beyond existing kill lists, mapping plans for the "disposition" of suspects beyond the reach of American drones.
>
> Although the matrix is a work in progress, the effort to create it reflects a reality setting in among the nation's counterterrorism ranks: The United States' conventional wars are winding down, but the government expects to continue adding names to kill or capture lists for years....
>
> The database is meant to map out contingencies, creating an operational menu that spells out each agency's role in case a suspect surfaces in an unexpected spot. "If he's in Saudi Arabia, pick up with the Saudis," the former official said. "If traveling overseas to al-Shabaab [in Somalia] we can pick him up by ship. If in Yemen, kill or have the Yemenis pick him up."
>
> Officials declined to disclose the identities of suspects on the matrix. They pointed, however, to the capture last year of alleged al-Qaeda operative Ahmed Abdulkadir Warsame off the coast of Yemen. Warsame was held for two months aboard a U.S. ship before being transferred to the custody of the Justice Department and charged in federal court in New York.
>
> "Warsame was a classic case of 'What are we going to do with him?'" the former counterterrorism official said. In such cases, the matrix lays out plans, including which U.S. naval vessels are in the vicinity and which charges the Justice Department should prepare.[56]

An October 6, 2013, press report stated the following:

> An accused operative for Al Qaeda seized by United States commandos in Libya over the weekend is being interrogated while in military custody on a Navy ship in the

[54] Charlie Savage, "U.S. Tests New Approach To Terrorism Cases On Somali Suspect," *New York Times*, July 7, 2011: 10. See also Dave Boyer, "Interrogation At Sea Skirts Obama Pledge," *Washington Times*, July 7, 2011: 1.

[55] See "The STRATCOM [Strategic Communications] Opportunity of Ahmed Abdulkadir Warsame*," Information Dissemination (www.informationdissemination.net)*, July 6, 2011, accessed online July 6, 2011, at http://www.informationdissemination.net/2011/07/stratcom-opportunity-of-ahmed.html.

[56] Greg Miller, "The Permanent War, U.S. Set To Keep Kill Likes For Years," *Washington Post*, October 24, 2012: 1. Bracketed material as in original.

> Mediterranean Sea, officials said on Sunday [October 6]. He is expected eventually to be sent to New York for criminal prosecution.
>
> The fugitive, known as Abu Anas al-Libi, is seen as a potential intelligence gold mine, possessing perhaps two decades of information about Al Qaeda, from its early days under Osama bin Laden in Sudan to its more scattered elements today.
>
> The decision to hold Abu Anas and question him for intelligence purposes without a lawyer present follows a pattern used successfully by the Obama administration with other terrorist suspects, most prominently in the case of Ahmed Abdulkadir Warsame, a former military commander with the Somali terrorist group Shabab....
>
> "Warsame is the model for this guy," one American security official said....
>
> Abu Anas is being held aboard the U.S.S. San Antonio, a vessel brought in specifically for this mission, officials said.[57]

A June 27, 2014, press report stated the following:

> Right now, a suspected terrorist is sitting in the bowels of a U.S. Navy warship somewhere between the Mediterranean Sea and Washington, D.C. Ahmed Abu Khattala, the alleged leader of the September 2012 attack on the U.S. embassy in Benghazi, Libya, is imprisoned aboard the USS New York, likely in a bare cell normally reserved for U.S. military personnel facing disciplinary action at sea. En route to the United States for more than a week, he's being questioned by military and civilian interrogators looking for critical bits of intelligence before he's read his Miranda rights, formally arrested, and transferred to the U.S. District Court in Washington, where he'll face trial. Meanwhile, the sailors aboard are going about the daily business of operating an amphibious transport ship—even as the ship's mission has been redefined by the new passenger in their midst.
>
> This isn't the first time the Navy has played such a critical, curious, and largely under-reported role in U.S. counterterrorism efforts. In 2011, Ahmed Abdulkadir Warsame, a military commander for the Somali terrorist group al-Shabab, was captured aboard a fishing boat in the Gulf of Aden and detained by the Navy, on the high seas, for two months. In 2013, Abu Anas al-Libi, the alleged mastermind of the 1998 terrorist attacks on American embassies in Kenya and Tanzania, was held aboard the USS San Antonio—an identical ship to the one being used this week. Both men were interrogated at sea before being flown to the United States to face criminal charges in federal courts....
>
> In many ways, it's not surprising that the U.S. government has been turning Navy assets into floating prisons for these dangerous men. Taking the slow route back to the United States offers interrogators the time and space to gather crucial intelligence from high-value sources like al-Qaeda-linked operatives. During the two months that Warsame was at sea, a select team of FBI, CIA, and Defense Department officials, part of the Obama administration's High-Value Detainee Interrogation Group, questioned the Somali terrorist on "all but a daily basis." He was cooperative throughout and some reports suggest that subsequent U.S. counterterrorism operations, including a drone attack in Somalia shortly after his capture, were a direct result of intelligence Warsame provided to authorities. While al-Libi was only detained at sea for about a week—a chronic medical condition prevented him from being held on a ship for an extended period—reports suggest that similar intelligence-collection efforts were underway in his case as well.
>
> The U.S. government has also embraced the approach because it has limited options for holding and interrogating men like Abu Khattala after capture. The Obama administration remains committed to ending detention operations at Guantánamo Bay, Cuba. While the

[57] Benjamin Weiser and Eric Schmitt, "U.S. Said to Hold Qaeda Suspect on Navy Ship," *New York Times*, October 6, 2013. See also Mark Hosenball and Phil Stewart, "Elite U.S. Team Questions Seized al Qaeda Leader on Navy Ship," *Reuters.com*, October 7, 3013.

facility is still home to almost 150 alleged terrorists, the United States has not sent any new detainees there since March 2008. Detaining suspected terrorists at other overseas facilities is likewise not an option. For a time, U.S.-run prisons in Afghanistan were a possibility. But the detention facility in Parwan is now an Afghan-run prison, and using facilities in other countries would raise a host of legal, operational, and humanitarian concerns. Even if U.S. officials were willing to forgo the opportunity to question Abu Khattala before he's arraigned in federal court and provided with a lawyer, flying alleged terrorists to the United States immediately presents its own set of problems. Seemingly small operational and political considerations about the ways in which the United States transports terrorists captured abroad have major strategic implications, particularly given lingering questions about U.S. rendition efforts under the Bush administration. In this context, the Navy has taken on the role of high-seas prison warden, even as lawyers continue to debate whether and what international legal rules apply to terrorists captured abroad and detained, temporarily, on a ship.[58]

[58] Marisa Porges, "America's Floating Prisons," *The Atlantic (www.theatlantic.com)*, June 27, 2014. See also "The USS Guantanamo," *Wall Street Journal*, June 22, 2014.

Appendix F. Background Information on FY2020 Funding Requests for Lines 263 and 63

As noted earlier in this report, DOD's proposed FY2020 budget requests, among other things,

- $72.6 million in the FY2020 Research, Development, Test, and Evaluation, Defense-Wide (RDT&EDW) account for Program Element (PE) 1160483BB,[59] (Special Operations Command [SOCOM]) maritime systems (line 263 in the FY2020 RDT&EDW account), including $45.2 million for Project S0417: Underwater Systems, and $15.6 million for S1684: Surface Craft; and
- $27.4 million in the FY2020 Procurement, Defense-Wide (PDW) appropriation account for procurement of underwater systems for SOCOM (line 63 in the FY2020 PDW account).

Research and Development for Maritime Systems (Line 263)

Regarding the FY2020 funding request for line 263, DOD states that

> This program element provides for engineering and manufacturing development (EMD) of Special Operations Forces (SOF) Surface and Undersea Mobility platforms. This program element also provides for pre-acquisition activities to quickly respond to new requirements for SOF surface and undersea mobility, looking at multiple alternatives to include cross-platform technical solutions, service-common solutions, Commercial-Off-The-Shelf technologies, and new development efforts. Middle-Tier Acquisition (2016 NDAA, Section 804) to accommodate rapid prototyping, may be utilized.
>
> The Underwater Systems project provides for EMD of combat submersibles, SOF operator diving systems, underwater support systems, and underwater equipment. This project also provides for pre-acquisition activities (material solutions analysis, advanced component, prototype development, and exploitation of emerging technology opportunities to deliver enhanced capabilities) to respond to emergent requirements. These submersibles, equipment, and diving systems are used by SOF in the conduct of infiltration/extraction, personnel/material recovery, hydrographic/inland reconnaissance, beach obstacle clearance, underwater ship attack, and other missions. The capabilities of the submersible systems, diving systems, and unique equipment provide small, highly trained forces the ability to successfully engage the enemy and conduct clandestine operations associated with SOF maritime missions.
>
> The Surface Craft project provides for EMD of medium and heavy surface combatant craft, combatant craft mission equipment, and pre-planned product improvement and technology insertion engineering changes to meet the unique requirements of SOF. This project element also provides for pre-acquisition activities (materiel solutions analysis, advanced component development and prototypes) to quickly respond to new requirements for maritime craft and subsystems. The craft capabilities and unique equipment provide small, highly trained forces the ability to successfully engage the enemy and conduct operations associated with SOF maritime missions….
>
> [S0417: Underwater Systems] provides for engineering and manufacturing development of combat underwater submersibles, Special Operations Forces (SOF) operator diving systems, underwater support systems, and underwater equipment. This project also provides for pre-acquisition activities (materiel solutions analysis, advanced component development and prototypes) to respond to emergent requirements. Middle-Tier

[59] In DOD research and development accounts, line items are referred to as program elements, or PEs.

acquisitions to accommodate rapid prototyping may be utilized. These submersibles, equipment, and diving systems are used by SOF in the conduct of infiltration/extraction, personnel/material recovery, hydrographic/inland reconnaissance, beach obstacle clearance, underwater ship attack, and other missions. The capabilities of the submersible systems, diving systems, and unique equipment provides small, highly trained forces the ability to successfully engage the enemy and conduct clandestine operations associated with SOF maritime missions….

[Within Project S0417, the subproject for Shallow Water Combat Submersible (SWCS)] provides for the design, development, test, manufacturing and sustainment of one Engineering Development Model (EDM) and ten production units to replace the legacy MK 8 MOD 1 Seal Delivery Vehicle (SDV) system. SWCS is a free-flooding combat submersible mobility platform suitable for transporting and deploying SOF and their payloads for a variety of SOF missions. SWCS will be deployable from a Dry Deck Shelter (DDS), surface ships, and land. The SWCS system includes the SWCS vehicle and SWCS support Equipment, comprised of Mission Support Equipment (MSE), Pack-Up Kit (PUK), and Transportation and Handling (T&H). It also includes integration efforts with the current Dry Deck Shelter (DDS) and development of product improvements accomplished throughout the lifecycle of the system….

[The sub-project for Dry Deck Shelter (DDS) Modernization] provides for the pre-planned product improvements, testing, and integration of specialized underwater systems to meet the unique requirements of SOF, and compatibility with the submarine fleet. The current DDS is a certified diving system which attaches to modified host submarines that provides for insertion of SOF forces and platforms. Funding supports product improvements to the current DDS, as well as associated diver equipment for in-service submarine support systems, unmanned underwater vehicles, and follow on development efforts for future SOF payloads….

[The sub-project for combat diving] is a Middle Tier of Acquisition designated program which provides for the development, testing, and rapid fielding and prototyping of SOF peculiar diving equipment providing the SOF combat diver the ability to engage the enemy and conduct operations. SOF Combat Diving will support the SDV, SWCS, and DCS with the conduct of infiltration/extraction, material recovery, underwater ship attack, beach clearance, and other missions. Technologies include, but are not limited to, commercial and developmental life support, maneuverability and propulsion, diver navigational accuracy and situation awareness, environmental protection, and communications between dive teams as well as between divers and external vessels/craft….

[The sub-project for Undersea Craft Mission Equipment (UCME)] provides a rapid response capability to support SOF underwater craft and diver systems, subsystems, and their emerging requirements. UCME provides technology refresh efforts to correct system deficiencies, improve asset life, and enhance mission capability to leverage and exploit emerging technologies within the maritime Special Operations Forces undersea capability portfolio….

[Project S1684: Surface Craft] provides for engineering and manufacturing development of medium and heavy surface combatant craft, combatant craft mission equipment, and preplanned product improvement (P3I) and technology insertion engineering changes to meet the unique requirements of Special Operations Forces (SOF). This project also provides for pre-acquisition activities (materiel solutions analysis, advanced component development and prototypes) to quickly respond to new requirements for maritime craft and subsystems Middle-Tier acquisition to accommodate rapid prototyping, may be utilized. The craft capabilities and unique equipment provide small, highly trained forces the ability to successfully engage the enemy and conduct operations associated with SOF maritime missions….

[The sub-project for Combatant Craft Medium (CCM) Mk 1] is a semi-enclosed multi-mission combatant craft for platoon-size maritime mobility in maritime denied environments. It is multi-mission capable, including Maritime Interdiction, Insert / Extract, and Visit, Board, Search, and Seizure (VBSS) Operations. CCM is Naval Special Warfare's (NSW) craft-of-choice for long-range, high-payload SOF mobility operations in denied environments up to high threat. CCM has NSW's best Iron Triangle: 40 knot (kt) speed; 4 crew + 19 passengers (pax) / 10,000 pound (lb) payload; and 600 nautical miles (nm) range. CCM Mk 1 payload capacity enables inclusion of shock mitigating seats, which is critical for ride quality, operator tactical readiness, and operator health. At 60 feet long, CCM is C-17 / C5 transportable and can launch/recover by well deck or shore based trailer….

[The sub-project for Combatant Craft Heavy (CCH)] represents a family of solutions that provides platoon-size maritime surface mobility. The current CCH is the Sea, Air, Land Insertion, Observation, and Neutralization (SEALION) craft. SEALION is a fully-enclosed, climate- controlled, semi-submersible craft that operates in denied environments up to high-threat. SEALION is NSW's most versatile and survivable combatant craft and the craft-of-choice for sensitive maritime intelligence, surveillance, and reconnaissance missions. Iron Triangle: 40 kt speed; 7 crew + 12 pax / 3,300 lb payload; and 400 nm range. SEALION payload capacity enables inclusion of shock mitigating seats, which is critical for ride quality, operator tactical readiness, and operator health. At 77+ feet long, SEALION is C-17/C-5 transportable and can launch/recover by well deck or shore based mobile travel lift or crane….

[The sub-project for Combatant Craft Mission Equipment (CCME)] provides a rapid response capability to support SOF combatant craft systems, subsystems, and their emerging requirements. CCME provides technology refresh efforts to correct system deficiencies, improve asset life, and enhance mission capability. Demonstrations and modifications may be made to support emerging capability enhancements such as, but not limited to, conformal antennas, identification friend-or-foe capabilities, enhanced communications, weapon integration, software refresh, and navigation subsystems in support of future missions. Solutions to these emerging requirements may be commercial-off-the-shelf leveraged from other government agencies, or new solutions….

[The sub-project for Combatant Craft Assault (CCA)] is a combatant craft for squad-size maritime mobility operations in maritime denied environments. CCA is NSW's best craft for VBSS in maritime denied environments up to and including medium threat. It is the craft-of-choice for maritime interdiction and boarding operations because of the open deck space, maneuverability, and interoperability with an Afloat Forward Staging Base. Iron Triangle: 40 kt speed; 3 crew + 12 pax / 5,000 lb payload; and 300 nm range. At 41 feet long, CCA is air transportable by C-130 / C-17 / C-5 and can launch/recover by crane, davit, well deck, or shore based trailer….

[The sub-project for Threat Awareness System (TAS)] provides SOF with an Electronic Intelligence capability for enhanced force protection of SOF in Maritime denied environments by allowing them to identify and avoid enemy detection capabilities. TAS will utilize technological advancements to gain significant improvements in capability such as miniaturization and marinization to enable seamless craft integration….

[The sub-project for Maritime Precision Engagement (MPE)] is a family of standoff, loitering, man-in-the-loop weapons systems deployed on combatant craft and capable of targeting individuals, groups, vehicles, high value targets, and small oceangoing craft with low collateral damage. The program consists of combatant craft alterations, launcher systems, and munitions.[60]

[60] *Department of Defense, Fiscal Year (FY) 2020 Budget Estimates, United States Special Operations Command*

Procurement of Underwater Systems (Line 63)

Regarding the FY2020 funding request for line 63, DOD states that

> The Underwater Systems line item procures dry and wet combat submersibles, modifications, field changes to the Dry Deck Shelter (DDS), and various systems and components for Special Operations Forces (SOF) Combat Diving. Current acquisition procurement programs of record are the Shallow Water Combat Submersible (SWCS) program, Dry Combat Submersible (DCS), SOF Combat Diving and Dry Deck Shelter (DDS). Middle-Tier Acquisition (2016 NDAA, Section 804) to accommodate rapid fielding, may be utilized. SWCS is the next generation free-flooding combat submersible that transports SOF personnel and their combat equipment in hostile waters for a variety of missions. SOF units require specialized underwater systems that improve their warfighting capability and survivability in harsh operating environments. The DCS will provide the capability to insert and extract SOF and/or payloads into denied areas from strategic distances. The program is structured to minimize technical, cost, and schedule risks by leveraging commercial technologies, procedures, and classing methods to achieve an affordable DCS. SOF Combat Diving supports the unique requirements impacting fully equipped operators while conducting underwater, real-world missions. Examples of underwater systems and maritime equipment include, underwater navigation, diving equipment, and underwater propulsion systems. These systems and equipment are used for infiltration/extraction, reconnaissance, beach obstacle clearance, and other missions. The capabilities of submersible systems and unique equipment provides small, highly trained forces the ability to successfully engage the enemy and conduct operations associated with SOF maritime missions….
>
> Justification:
>
> 1. DDS: The DDS is a certified diving system that attaches to modified host submarines and provides for insertion of SOF forces and platforms. SOCOM has a cost share agreement with the Navy to support the modernization of the DDS in order to accommodate current and future Naval Special Warfare payloads as well as large U.S. Navy payloads.
>
> FY 2020 PROGRAM JUSTIFICATION: Funding continues the support of the DDS modernization effort, which includes relocation of equipment inside the DDS Hangar to support current and future payloads. Funding also includes field changes for product improvements developed to overcome obsolescence and Diminishing Manufacturing Sources and Material Shortages (DMSMS).
>
> 2. SWCS: Shallow Water Combat Submersible (SWCS) is a free-flooding combat submersible mobility platform suitable for transporting and deploying SOF and their payloads for a variety of SOF missions. SWCS will be deployable from a DDS, surface ships, and land.
>
> FY 2020 PROGRAM JUSTIFICATION: Purchases two SWCS vehicles and support equipment, Government Furnished Equipment (GFE), engineering change proposals (ECP), detachment deployment packages, and initial spares.
>
> 3. DCS: The DCS provides SOF with a dry diver lock-in and lock-out capability that transports personnel and their combat equipment in hostile waters for a variety of missions.
>
> FY 2020 PROGRAM JUSTIFICATION: Purchases initial spares, GFE, ECP, system integration lab, and simulator.

Defense-Wide Justification Book Volume 5 of 5, Research, Development, Test & Evaluation, Defense-Wide, March 2019, pp. 235, 237-239, 252-255.

4. SOF Combat Diving: This is designated a Middle-tier Acquisition program allowing for rapid fielding which provides the transition of SOF peculiar diving technologies for the SOF combat diver while conducting underwater, real-world missions.

FY 2020 PROGRAM JUSTIFICATION: Procures total of 10 divers' maritime environmental protection and diver navigation.[61]

Press Reports

A November 30, 2016, press report states the following:

> USSOCOM is currently pursuing two programmes to enhance the sub-surface capabilities of US Navy (USN) SEALs including the Shallow Water Combat Submersible (SWCS) and Dry Combat Submersible (DCS). Both solutions are fully enclosed vehicles for operators, thereby reducing any requirement for teams to wear rebreathing equipment during mission insertions and extractions....
>
> The main difference between SWCS and DCS is range, with the latter solution providing a longer insertion distance with a greater depth capability.
>
> The SWCS, for example, is being designed to replace legacy Mk 8 Mod 1 SEAL Swimmer Delivery Vehicles (SDVs), bringing an improved electronic architecture and software on top of the requirements list for NSWC. SOF sources associated with USSOCOM explained to IHS Jane‘s how the first SWCS could be delivered to the Command in 2017. This would be followed by extensive operational evaluation with NSWC elements ahead of initial and full entry into service, sources added.
>
> According to USSOCOM officials, a total of two SWCS platforms will be procured by the DoD in 2017, along with associated batteries, trailers, mission system suites, and spares. Capable of transporting six operators at low-level depths close to the surface, the SWCS can carry a total payload of 10,000 lb (4,535 kg). SWCS contractor Teledyne Brown Engineering was unable to provide further details to IHS Jane’s because of operational security reasons. However, industry sources have suggested that the SWCS measures approximately 22 ft (6.7 m) in length and 5 ft in width.
>
> The SWCS has yet to be officially designated, but the nomenclature Mk 9 is expected to be granted to the platform type. Teledyne Brown Engineering beat the incumbent manufacturer of the Mk 8 Mod 1, Columbus Group, to the programme in 2011 when it was awarded a USD383 million contract by the DoD.
>
> Ahead of SWCS’s entry into service, General Dynamics Information Technology (GDIT) continues to assist the NSWC with ongoing support for legacy Mk 8 Mod 1 SDV systems. Work will include projects relating to SDVs as well as other NSWC-specific efforts associated with the Maritime Mission Systems Division. The latest support contract, worth USD4 million, was signed in December 2015.
>
> Elsewhere, the DCS solution has been designed as a dry diver lock-in/lock-out solution, capable of inserting and extracting personnel and all associated combat equipment, including in hostile waters, according to USSOCOM sources. The development of this option follows the cancellation of the Advanced SEAL Delivery System (ASDS) in 2006.
>
> Designed to carry six operators, the DCS has a larger payload capacity than the SWCS, with the ability to carry up to 40,000 lb at depths as low as 58 m. Sources also informed IHS Jane’s that the DCS could have a maximum operating range of 60 n miles.

[61] *Department of Defense, Fiscal Year (FY) 2020 Budget Estimates, United States Special Operations Command Defense-Wide Justification Book Volume 1 of 2, Procurement, Defense-Wide*, March 2019, pp. 141-142.

> In July 2016, it was announced that Lockheed Martin and Submergence Group would jointly design, develop, and manufacture the DCS for USSOCOM, with industry figures reiterating the vessel's ability to provide improved endurance and operating depths.
>
> According to Lockheed Martin, a USD166 million contract will involve the delivery of three DCS vehicles over a five-year period, with the gross weight for each vessel being more than 30 tons. A company spokesperson explained to IHS Jane's how NSWC concepts of operations would see the DCS launched at a stand-off position from surface vessels, before inserting SEAL operators over "long distances underwater" onto objectives and target areas....
>
> Details regarding the DCS design remain scarce. However, sources indicated to IHS Jane's that the solution will feature technology drawn from Lockheed Martin's S302 Manned Combat Submersible (MCS) craft, which is capable of carrying six personnel as well as a pilot and navigator.
>
> According to Lockheed Martin company literature, "The dry one-atmosphere environment of these vehicles provides an alternative to traditional wet submersibles being used by the US and international Special Forces communities today, and will deliver operators to their destination in better physical condition to complete a mission."
>
> Vessels are fitted with standard inertial navigation systems and Doppler velocity logs, as well as a communications suite featuring an underwater telephone and a UHF radio; obstacle avoidance sonar; and fathometer. Additional sensor payloads, dependent upon mission requirements, can also be integrated, Lockeed Martin explained.
>
> The S302 MCS measures 31 ft in length, and can operate 100 m below the surface for more than 24 hours. The craft can travel up to 60 n miles at a 5 kt cruising speed, although it has a top speed of more than 7.5 kt for rapid reaction.
>
> USSOCOM continues to integrate Dry Deck Shelter (DDS) technology on board a variety of Ohio-class nuclear-powered ballistic missile submarines (SSBNs) and Virginia-class nuclear-powered attack submarines (SSNs) for special operations support....
>
> Although a total of six DDS systems are currently in service with the USN and USSOCOM, by the end of 2016 nine submarines will possess DDS capabilities, enabling them to launch and recover SDVs, sources explained.
>
> Featuring automated launch-and-recovery technology, DDS enables combat divers to enter and leave the dry dock individually, as was explained during a press briefing by NSWC officials at the Special Operations Forces Industry Conference (SOFIC) in Tampa, Florida, in May 2016.
>
> In 2017, the USN aims to concentrate on a series of modifications to the DDS in order to allow for the integration of DCS and SWCS, including the relocation of equipment stowage in the DDS and upgrades in lighting, cameras, and mechanical noise reduction.
>
> Industry sources have noted that DDS solutions are being extended by 50 inches to enable the integration of DCS and SWSC variants, thereby supporting a 'mothership' concept of operations (CONOPS) for maritime special forces. This would enable SOF teams to insert at greater distances from submarines and surface vessels, before entering the water at a suitable stand-off range from target areas and inserting via onboard DCS or SWCS craft.[62]

A September 15, 2016, press report states the following:

> SEALs will soon have new underwater vehicles delivering them to targets that officials say will make a huge difference during missions.

[62] Andrew White, "Spec ops at sea: Technologies for maritime SOF insertion," *IHS Jane's International Defence Review*, November 30, 2016.

SEALs now use a delivery vehicle that one SEAL described as a kind of underwater sled.

SEALs ride in the sled in full scuba gear completely exposed to the water, in often freezing cold and in "pure blackout" conditions and total silence for eight to 10 hours.

Ask a SEAL what that's like, and they'll say it's like being locked in a cold, dark, wet closet for hours....

The new vehicles, which are called dry combat submersibles, will be akin to mini-submarines, and allow SEALs to stay warmer and drier for longer, and more physically ready, as they close in on their target.

That's a huge advantage for missions that one retired SEAL who is now a congressman described as "can't fail."...

The vehicles will also allow the SEALs to communicate before a mission, compared with "only seeing your buddy's eyes" and a glow stick for 10 hours, the SEAL joked.

The first submersible is due to arrive in July 2018, and it will be operational as early as the fall. Final testing is to be completed in 2019.

As SEALs await the delivery of the first vehicle, they have two "demonstrator" vehicles to experiment with....

That demonstrator is about 39 feet long, is about 7 to 8 feet in diameter, and weighs about 30 tons. So far, it has gone up to five knots for 60 nautical miles....

It is also surface-launched, which means it is launched into the water by a crane or from a surface ships with a crane, versus from a submarine.

The vehicle is able to hold up to eight SEALs and their gear, in addition to a pilot and navigator.

The submersible consists of three compartments: a swimmers' compartment where the SEALs will ride for the duration of the time, a "line in and line out" compartment where they exit and enter the submersible, and a compartment for the navigator and pilot.

The swimmers' compartment is only about 10 to 12 feet long, which could be a tight squeeze for eight SEALs.

Still, officials say it'll be a huge improvement over the current systems.

"The DCS Program is on track to provide a capability that our warfighters have not had in a long time," said Navy Capt. Kate Dolloff, who is in charge of all maritime programs for Special Operations Command Acquisition, Technology and Logistics.

"We still have a long way to go, but a stepped approach using technology demonstrators to mitigate risk and a close relationship with the user community has been extremely successful to date and led to contract award," she said.

The U.S. Special Operations Command (SOCOM) finalized a contract in July with Lockheed Martin for the first submersible to be delivered in July 2018, with the option of two more by 2020—an unusually fast schedule for acquiring new technology.

The total cost for the three submersibles is $236 million.

The timeline and cost is years shorter and hundreds of millions cheaper than a previous submersible program, which was killed in 2006 after cost overruns and other issues.

That program would have cost $1 billion for one submersible and have taken two to three times longer to build, officials said.

Officials say the costs are much lower because they're taking off-the-shelf commercial technology developed by Lockheed Martin and modifying it to fit their needs, whereas the previous program started from scratch.

> Officials say the new vehicles will have 80 to 90 percent of the same capability, but will be delivered much faster at a much lower cost.
>
> The new program also comes with a "fixed price incentive fee" structure, where the cost of the program is fixed and any overruns are shared with the manufacturer.[63]

A July 22, 2016, press report states that

> ... a new 'missile sub' promises to deliver to battle underwater far more easily—and keep them dry when they travel.
>
> Called the Swimmer Delivery Vehicle, it will be built by Lockheed Martin and Submergence Group after winning a US$166 million contract to supply the US Special Operations Command (USSOCOM) with a new class of combat submersibles.
>
> According to Lockheed, the three 30-ton (27-tonne) DCS [Dry Combat Submersible] vehicles that it is contracted to build will allow warfighters to travel deeper and farther underwater than today.
>
> The craft are dry submersibles that support two operators (pilot and navigator) plus up to six swimmers with the ability to lock them out and in.
>
> 'The dry one-atmosphere environment of these vehicles provides an alternative to traditional wet submersibles being used by the U.S. and international Special Forces communities today, and will deliver operators to their destination in better physical condition to complete a mission,' Lockheed Martin says....
>
> It will carry two pilots and six passengers, have a depth rating of 328 ft (100 m), a lock-out depth of 98 ft (30 m), and a top speed of 5 knots (6 mph, 9 km/h).
>
> Lockheed says the new DCS will boast improved hydrodynamics and propulsion compared to the previous vehicles.[64]

An August 20, 2014, blog post states the following:

> The U.S. Navy is hard at work developing new underwater transports for its elite commandos. The SEALs expect the new craft—and improvements to large submarine "motherships" that will carry them—to be ready by the end of the decade.
>
> SEALs have ridden in small submersibles to sneak into hostile territory for decades. For instance, the special operators reportedly used the vehicles to slip into Somalia and spy on terrorists in 2003.
>
> Now the sailing branch is looking to buy two new kinds of mini-subs. While details are understandably scarce, the main difference between the two concepts appears to be the maximum range.
>
> The Shallow Water Combat Submersible will haul six or more naval commandos across relatively short distances near the surface. The SWCS, which weighs approximately 10,000 pounds, will replace older Mark 8 Seal Delivery Vehicles, or SDVs.
>
> The other sub, called the Dry Combat Submersible, will carry six individuals much farther and at greater depths. The most recent DCS prototype weighs almost 40,000 pounds and can travel up to 60 nautical miles while 190 feet below the waves.
>
> Commandos could get further into enemy territory or start out a safer distance away with this new vehicle. SEALs could also use this added range to escape any potential pursuers.

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[63] Kristina Wong, "Navy SEALS Are About to Get More Lethal," *The Hill*, September 15, 2016.

[64] Mark Prigg, "The $166m 'Missile Sub' Set to Take Special Forces Soldiers Silently Into Combat," *Daily Mail (UK)*, July 22, 2016.

Both new miniature craft will also be fully enclosed. The current SDVs are open to water and the passengers must wear full scuba gear—seen in the picture above.

In addition, the DCS appears to pick up where a previous craft, called the Advanced SEAL Delivery System, left off. The Pentagon canceled that project in 2006 because of significant cost overruns.

But the Navy continued experimenting with the sole ASDS prototype for two more years. The whole effort finally came to a halt when the mini-sub was destroyed in an accidental fire.

Special Operations Command hopes to have the SWCS ready to go by 2017. SOCOM's plan is to get the DCS in service by the end of the following year.

Underwater motherships

SOCOM and the sailing branch also want bigger submarines to carry these new mini-subs closer to their targets. For decades now, attack and missile submarines have worked as motherships for the SEALs.

Eight Ohio- and Virginia-class subs currently are set up to carry the special Dry-Deck Shelter used to launch SDVs, according to a presentation at the Special Operations Forces Industry Conference in May.

The DDS units protect the specialized mini-subs inside an enclosed space. Individual divers also can come and go from the DDS airlocks.

The first-in-class USS Ohio—and her sisters Michigan, Florida and Georgia—carried ballistic missiles with nuclear warheads during the Cold War. The Navy had expected to retire the decades-old ships, but instead spent billions of dollars modifying them for new roles. Today they carry Tomahawk cruise missiles and SEALs.

The Virginias—Hawaii, Mississippi, New Hampshire, North Carolina and the future North Dakota—are newer. The Navy designed these attack submarines from the keel up to perform a variety of missions.

SOCOM projects that nine submersible motherships—including North Carolina as a backup—will be available by the end of the year.

The Navy has a pool of six shelters to share between the subs. SOCOM expects the DDS to still be in service in 2050.

But prototype DCS mini-subs cannot fit inside the current shelter design. As a result, a modernization program will stretch the DDS units by 50 inches, according to SOCOM's briefing.

The project will also try to make it easier to launch undersea vehicles and get them back into the confines of the metal enclosure. Right now, divers must manually open and close the outside hatch to get the SDVs out.

Crews then have to drive the craft back into the shelter without any extra help at the end of a mission—underwater and likely in near-total darkness. The sailing branch wants to automate this process.

With any luck, the SEALs will have their new undersea chariots and the motherships to carry them ready before 2020.[65]

[65] Joe Trevithick, "U.S. Navy SEALs Are Getting New Mini-Subs," *Real Clear Defense (www.realcleardefense.com)*, August 20, 2014.

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