





MARITIME VIOLENT NON-STATE ACTORS: RECOMMENDED THREAT MITIGATION

Maj Garett Hallman

JCSP 44

SERVICE PAPER

Disclaimer

Opinions expressed remain those of the author and do not represent Department of National Defence or Canadian Forces policy. This paper may not be used without written permission.

© Her Majesty the Queen in Right of Canada, as represented by the Minister of National Defence, 2018.

PCEMI 44

ÉTUDE MILITAIRE

Avertissement

Les opinons exprimées n'engagent que leurs auteurs et ne reflètent aucunement des politiques du Ministère de la Défense nationale ou des Forces canadiennes. Ce papier ne peut être reproduit sans autorisation écrite.

© Sa Majesté la Reine du Chef du Canada, représentée par le ministre de la Défense nationale, 2018.



CANADIAN FORCES COLLEGE – COLLÈGE DES FORCES CANADIENNES JCSP 44 – PCEMI 44 2017 – 2018

SERVICE PAPER - ÉTUDE MILITAIRE

MARITIME VIOLENT NON-STATE ACTORS: RECOMMENDED THREAT MITIGATION

Maj Garett Hallman

"This paper was written by a student attending the Canadian Forces College in fulfilment of one of the requirements of the Course of Studies. The paper is a scholastic document, and thus contains facts and opinions, which the author alone considered appropriate and correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada and the Canadian Department of National This paper may not be Defence. released, quoted or copied, except with the express permission of the Canadian Department of National Defence."

Word Count: 2561

"La présente étude a été rédigée par un stagiaire du Collège des Forces canadiennes pour satisfaire à l'une des exigences du cours. L'étude est un document qui se rapporte au cours et contient donc des faits et des opinions que seul l'auteur considère appropriés et convenables au sujet. Elle ne reflète pas nécessairement la politique ou l'opinion d'un organisme quelconque, y compris le gouvernement du Canada et le ministère de la Défense nationale du Canada. Il est défendu de diffuser, de citer ou de reproduire cette étude sans la permission expresse du ministère de la Défense nationale."

Compte de mots: 2561

MARITIME VIOLENT NON-STATE ACTORS: RECOMMENDED THREAT MITIGATION

AIM

1. The aim of this paper is to explore the current and future threats of violent non-state actors (VNSAs) in the maritime/littoral environment, outline VNSA current and emerging capabilities, discuss use of VNSAs by states to wage a proxy war while maintaining deniability, and recommend potential mitigating measures for adoption by the Royal Canadian Navy (RCN).

INTRODUCTION

2. This service paper is written to fulfill the requirements of DS 545 Component Capabilities as part of the Joint Command and Staff Program (JCSP) Serial 44. It is written from the perspective of an Infantry Officer with experience operating against Violent Extremist Organizations (VEOs) in Afghanistan. As the Maritime environment is not the author's background, this paper seeks to present recommendations to the RCN from an outsider's perspective with experience operating against the same types of threats on land.

3. The RCN's Leadmark 2050 document makes frequent reference to Canada requiring a "blue-water navy" while emphasising that this refers to capabilities and not the locations where it is limited to operating. The RCN states in the document that they want to be capable of conducting operations across the spectrum of conflict. Conversations with Naval Warfare

Officers (NWOs) and observations of their training and exercises indicate a proclivity to focus on high intensity conflict scenarios in a blue water environment, such as anti-submarine warfare (ASW), which are arguably the traditional core role of navies. This tendency to focus on, and fund, traditional high risk, low frequency/probability situations that validate previous experience is common throughout the military. Military forces typically do not reorient and fund capabilities to counter a threat until they have suffered loses from this new threat. While the RCN has recently generated some enhanced capabilities, observation of their training from the perspective of those who have recently faced the VNSA threat indicates that there is still some improvements and refinements that can be made. This paper will outline current and emerging threats from VNSAs and some recommendations that could be adopted relatively quickly by the RCN to counter VNSAs.

DISCUSSION

4. <u>Current VNSA Threats.</u>

a. <u>Piracy:</u> Many piracy hotspots still exist with many locations in South America, Africa, the Middle East and Asia being listed as active at the time of writing. Of particular note, littoral locations in South East Asia, East Africa/Arabian Peninsula, and West Africa remain significant problem areas.¹ The efforts of counter piracy patrols in the worst hit areas such as the Straits of Malacca and off the coast of Somalia have had a

¹ Administrator. "Piracy & Armed Robbery Prone Areas and Warnings." ICC Commercial Crime Services. July 07, 2017. Accessed February 04, 2018. https://www.icc-ccs.org/index.php/piracy-reporting-centre/prone-areas-and-warnings.

substantial effect in reducing the threat but they have also increased the militarization of the oceans by drawing in both cooperating and competing nations to the problem.

b. <u>Violent Extremist Organizations (VEOs)</u>: While the presence of VEOs in the Maritime environment overlaps with piracy, as some piracy is conducted to fund VEOs, VEOs have demonstrated their willingness and ability to conduct attacks in the Maritime/Littoral environment. The withdrawal of large land formations from Iraq and Afghanistan potentially raises the threat to Maritime forces as VEO accessibility to Western military targets is reduced. The spread of VEOs from their traditional areas in the Middle East throughout North Africa, Sub-Saharan Africa, South Asia and South East Asia make the equatorial East Atlantic region, the Mediterranean, Indian Ocean, and Western Pacific Ocean all areas where Maritime Forces could encounter VEO attacks. Hezbollah's (and other VEOs) presence around Margarita Island, Venezuela (amongst other locations in the Western Hemisphere) extends the possibility of a VEO attack into the Caribbean.² VEO attacks throughout Western Europe also raise the threat level in this region. Aggregated, this covers a significant portion of the world's littoral areas.

5. <u>Emerging Threats.</u>

a. <u>Use of VNSA as Proxies:</u> Part of the danger of VNSAs to Western militaries is the demonstrated willingness of Eastern states to work with VNSAs to further their

² Ginsberg, Amb. Marc. "Tehran's Tango: Iran's Terror Beachhead South Of The Border." The Huffington Post. October 11, 2011. Accessed February 04, 2018. https://www.huffingtonpost.com/amb-marc-ginsberg/terror-tango-irans-terror_b_1006093.html.

interests. Lieutenant General (retired) Michael Flynn made extensive allegations in his book "The Field of Fight" that Western democratic nations "...face a working coalition that extends from North Korea and China to Russia, Iran, Syria, Cuba, Bolivia, Venezuela, and Nicaragua."³ These alleged alliances between VNSAs and states with incompatible ideologies seem mind boggling to many in the West, yet more and more information has made it into credible media sources confirming these alliances. This includes the above referenced long standing collusion between Venezuela and Hezbollah/Iran and also includes the recently released information confirming Iran's support for Al Qaeda following 9/11.⁴ Russia's collusion with Syria and Iran to maintain the control of the Assad regime is public knowledge and more and more information is being reported in the media of Russia's support for the Taliban.⁵ China had diplomatic relations direct with Taliban leader Mullah Omar before 9/11 and signed a "Memorandum of Understanding on Economic and Technical Cooperation with the Taliban."⁶ China's interests in Afghanistan have increased with plans to build a Chinese military based in Afghanistan recently emerging.⁷

³ Flynn, Michael T., and Michael Arthur Ledeen. *The field of fight: how we can win the global war against radical Islam and its allies*. New York: St. Martins Press, 2017. Pg 87

⁴ Scott-Clark, Adrian Levy and Cathy. "Al-Qaeda Has Rebuilt Itself-With Iran's Help." The Atlantic. November 11, 2017. Accessed February 04, 2018. https://www.theatlantic.com/international/archive/2017/11/al-qaeda-iran-cia/545576/.

⁵ Ramani, Samuel. "Understanding the Russia-Taliban Connection." The Diplomat. January 13, 2018. Accessed February 04, 2018. https://thediplomat.com/2017/08/understanding-the-russia-taliban-connection/.

⁶ Toktomushev, Kemel. "China's Military Base in Afghanistan." The Diplomat. January 18, 2018. Accessed February 04, 2018. https://thediplomat.com/2018/01/chinas-military-base-in-afghanistan/.

⁷ Hermesauto. "China in talks over military base in remote Afghanistan: Officials." The Straits Times. February 01, 2018. Accessed February 05, 2018. http://www.straitstimes.com/world/middle-east/china-in-talks-over-military-base-in-remote-afghanistan-officials.

b. <u>Russia.</u> While the Russian military transformation in the last decade and their New Generation Doctrine has been demonstrated in the Land, Air and Cyber domains primarily in Ukraine, it hasn't made such a public appearance in the Maritime environment. The Russian "Gerasimov Doctrine" "...posits that the rules of war have changed, that there is a "blurring of the lines between war and peace," and that "nonmilitary means of achieving military and strategic goals has grown and, in many cases, exceeded the power of weapons in their effectiveness."⁸ It is logical to assume that Russia's "Hybrid Force", which includes extensive use of unmarked Russian forces and proxies, will be used in the Maritime environment as well.

c. <u>China.</u> China's actions are similar to Russia's as evidenced by the Chinese fleet of civilian fishing vessels known as the Chinese Maritime Militia (CMM).⁹ A senior Chinese military commander stated that the CMM "...should serve as "mobile sovereignty markers."¹⁰ This leader stated that this force conducts "...militia sovereignty operations...and defending China's "ancestral seas," territorial waters "belonging to China since ancient times."¹¹ While China has a robust presence in the waters closer to their homeland, they have also significantly increased their persistent presence throughout the Indian Ocean. This is apparent with China's establishment of a base in Djibouti and has provoked India's persistent presence of approximately 12 ships spread

⁸ Farah, | Douglas. "The Gerasimov Doctrine." The Cipher Brief. November 06, 2017. Accessed February 04, 2018. https://www.thecipherbrief.com/the-gerasimov-doctrine.

⁹ Pickrell, Ryan. "China has a covert naval fleet disguised as fishing boats." Business Insider. June 08, 2017. Accessed February 04, 2018. http://www.businessinsider.com/china-has-covert-naval-fleet-disguised-fishing-boats-2017-6.

¹⁰ Ibid.

¹¹ Ibid.

between both ends of the Indian Ocean.¹² While China, as such a predominant manufacturing/exporting state, has perfectly valid reasons to establish a base in Djibouti to assist in "...maintaining security of international strategic seaways...", it places them in the same area of operations conducting the same mission as the 32 nation Combined Maritime Forces (CMF) multinational maritime partnership.¹³ China's poor performance on peacekeeping operations in Africa, as demonstrated by their abandonment of their posts and refusal to deploy their Quick Reaction Force (QRF) in South Sudan in July, 2016, undermines their claims that their base in Djibouti is there for altruistic purposes.¹⁴

6. <u>VNSA Capabilities</u>. Western maritime forces could potentially face a range of VNSAs when operating at sea, most likely in shipping lanes, choke points, littoral areas and in ports. These VNSAs could be operating independently in pursuit of objectives in line with their ideologies or as proxies for a state actor. It is likely that VNSAs will be included in the opposing force during the struggle for sea control, fight for information superiority, choke point control efforts and maritime trade warfare actions.¹⁵

a. <u>Most Likely</u>. The types of threats that Western maritime forces will face from VNSAs, whether they are operating as proxies or not, are similar to the threats that land forces will face. The majority of VNSAs receive support from states to some extent. A main characteristic of operating in this grey area is that the state actors want to maintain

¹² Ganapathy, Nirmala. "India increases its presence in Indian Ocean, with an eye on China." The Straits Times. November 07, 2017. Accessed February 04, 2018. http://www.straitstimes.com/asia/south-asia/india-increases-its-presence-in-indian-ocean-with-an-eye-on-china.

¹³ "China sets up base in Djibouti." China sets up base in Djibouti - Xinhua | English.news.cn. Accessed February 04, 2018. http://www.xinhuanet.com/english/2017-07/11/c_136435716.htm.

¹⁴ "UNDER FIRE: The July 2016 Violence In Juba and UN Response." Center for Civilians in Conflict. Accessed February 05, 2018. https://civiliansinconflict.org/wp-content/uploads/2017/09/civic-juba-violence-report-october-2016.pdf

¹⁵ Navy planning. Washington, D.C.: Office of the Chief of Naval Operations, Dept. of the Navy, 2013.

deniability which means that the majority of the weapons employed by the VNSAs will be small arms and improvised weapons/explosives. Recent events in the Middle East have demonstrated the relatively robust capabilities of VNSAs to improvise weapons and explosive devices, including mounting explosive devices on commercially available unmanned aerial systems (UAS).¹⁶ It is also likely that some form of Information Operations will be used to shape the population in the maritime/littoral environment they are operating in. A past example of these threats include the attack by Al Qaeda on the USS Cole with two suicide bombers in a boat containing a shaped charge of C4 explosives.¹⁷ Another more recent example is the Houthi Rebel (or Iranian) unmanned remote controlled bomb boat attack on a Saudi ship.¹⁸

b. <u>Most Dangerous.</u> The most dangerous capabilities that VNSAs could use against maritime forces are also those that are most difficult to acquire or would be provided by state actors for VNSA use as a proxy. This includes anti-ship missiles and torpedoes which could be launched from civilian ships or shore-based locations. It also includes the use of electronic warfare capabilities from a civilian ship to degraded or destroy a target ship's susceptible electronics, a capability recently demonstrated in Ukraine by Russian forces.¹⁹ Recent Iranian and North Korean activities demonstrate the increased threat of nuclear weapons in the world and this extends to VNSAs using materials gained from a state or the black market for an attack with an Improvised Nuclear Device (IND) on

¹⁶ "US 'concerned' that drones used in attacks on Russian bases in Syria available in 'open market'." RT International. Accessed February 04, 2018. https://www.rt.com/usa/415314-pentagon-syria-isis-drones-concerns/.

¹⁷ CNN. Accessed February 04, 2018. http://transcripts.cnn.com/TRANSCRIPTS/0010/18/bp.00.html.

¹⁸ "Navy: Saudi Frigate Attacked by Unmanned Bomb Boat, Likely Iranian." USNI News. February 20, 2017. Accessed February 04, 2018. https://news.usni.org/2017/02/20/navy-saudi-frigate-attacked-unmanned-bomb-boat-likely-iranian.

¹⁹ "Russian New Generation Warfare Handbook." *Asymmetric Warfare Group*, December 2016. https://info.publicintelligence.net/AWG-RussianNewWarfareHandbook.pdf.

maritime forces. Houthi Rebel ballistic missile attacks on Riyadh and anti-ship missile attacks on UAE and US Navy ships show the willingness of state actors to attack maritime forces via proxies.²⁰ VNSAs have also demonstrated a willingness to attempt to poison food supplies during land operations, maritime forces remain vulnerable to this type of attack due to their reliance on resupply in foreign ports.

CONCLUSION

7. The environment the RCN will face on current and future operations has the potential to be significantly more complex and dangerous than faced in the past. Conversations with RCN members, observation of their training and exercises indicate that the RCN has taken inadequate steps to operate as safely as possible in this "grey zone" between clear war and peace. To be fair to the RCN, the Canadian Army (CA) haven't mastered the environment either but deployments to Afghanistan, Iraq, Ukraine and Latvia have helped. It would benefit both organizations to work more closely together to share lessons learned. Recommendations are listed below for the RCN to take actions to fill this capability gap.

RECOMMENDATIONS

8. <u>Force Protection</u>. Unfortunately, VNSAs often have the initiative with conventional forces finding themselves on the defensive. It will generally require a named operation and the associated rules of engagement to take the offensive against VNSAs, and due to their nature

²⁰ "Yemen: Missile Again Fired at U.S. Navy." The Maritime Executive. Accessed February 04, 2018. https://www.maritime-executive.com/article/yemen-missile-again-fired-at-us-navy#gs.ozDKsNQ.

offensive action against VNSAs is often a special operations forces (SOF) task. Increased presence of conventional forces to counter a VNSA threat generally leads to the VNSAs waiting for a reduction in conventional forces to resume operations. For these reasons, maritime forces should focus on force protection measures to counter VNSAs.

a. <u>Continuum of Force Training.</u> North American police forces are trained in the Continuum of Force versus the military system of Escalation of Force. Both systems start at the lowest level of force and, dictated by the actions of the aggressor, work towards lethal force as the highest level available to resolve the situation. Within the Continuum of Force versus the Escalation of Force, police officers are trained to escalate and deescalate and have more tools at their disposal. To operate more effectively in an environment with VNSAs, the RCN will have to train their personnel to employ the Continuum of Force instead of the Escalation of Force.

b. <u>Defensive battle.</u> The defensive battle to repeal attacks from VNSAs is very similar to the defensive battle to defend a land forward operating base against attack. This requires centralized control and decentralized execution, with all members mounting the all-round defence connected by communications on an all informed net. This requires a dedicated command post to monitor, synchronize and direct the defensive battle.

c. <u>Optics.</u> As positive identification (PID) of a target is required to engage it, and VNSAs seek to obfuscate our forces for their own protection, our forces must be

equipped with sufficient optics to attain PID before damage can be inflicted by the aggressor. This could include equipping ships with 360 degree colour/thermal cameras, equipping sentry personnel including the Naval Security Teams (NST) and the Enhanced Boarding Parties (EBP) with ELCAN Spectre DR weapon sights which switch between 1/1.5x and 4/6x, equipping ships with 360 degree remote weapons station coverage or 360 degree coverage of manned machine guns with sufficient optics. Sentry personnel, NSTs and EBPs also require personal night observation devices (NODs) and laser aiming devices (LADs) mounted on crew served and personal weapons.

d. <u>Warning Devices</u>. Crew served and personal weapons should all be equipped with powerful mounted flashlights. This includes equipping .50 calibre machine guns with a light like the Surefire Hellfighter 4 spotlight. Weapons should also be equipped with hail and warning laser devices, often called laser dazzlers. The B.E. Meyers Glare LA-9/P is designed for maritime environments and can warn at 4 kilometres (km) by night and 1.5 km by day. It can offensively glare out to 500 metres preventing the person being glared from being able to see in the direction of the laser.

e. <u>Lethal and Less Lethal Weapons</u>. Sentry personnel, NSTs and EBPs require enhanced lethal weapons and less lethal weapons. RCN personnel are equipped with standard C7/C8 5.56mm rifle/carbines and C9 5.56mm light machine guns while they also man the ship mounted .50 calibre machine guns. Due to the environment they are operating in, wind and range dictate that they require 7.62mm weapons. The mounted .50 calibre machine guns should be replaced by the newer GAU-21 .50 calibre machine gun which fires at a much higher rate of fire and is used on the CH-146 Griffon helicopter. When equipped with the above mentioned optics and LAD, this would greatly assist with the rapid destruction of manned or unmanned "bomb boats" such as those used by the Houthi rebels. Sentry personnel, NSTs and EBPs should also be equipped with 40mm Less Lethal grenade launchers to give them an option for engaging potential hostiles before using lethal force.

f. <u>Counter-Unmanned Aerial System (C-UAS).</u> While air defence systems can intercept Unmanned Aerial Systems, it is potentially overkill or not permitted based on the location. Many person portable and mounted C-UAS devices have been produced in the last few years. Both mounted and person portable systems should be procured for use on ships and on land.²¹

9. **Operational Planning.** The current training stream for Naval Warfare Officers (NWO) and Naval Intelligence Officers (Int O) does not have enough of a focus on operational planning. NWO's complete a year long Operations Room Officer (ORO) course which only contains a few days on the operational planning process (OPP). Most of their training is technical and decision making focused to enable them to serve as an ORO or captain of a ship. ORO course exercises focus on a RCN ship within a Naval Task Group context. Enhanced training on OPP before JCSP attendance and routine war games or computer assisted exercises focused on operating at

²¹ "Home Index." DroneShield. Accessed February 04, 2018. https://www.droneshield.com/.

the operational level in a maritime environment would help make the RCN a more innovative organization. Naval Int O's do not have sufficient training in Joint Intelligence Preparation of the Environment (JIPOE). While the RCN has demonstrated great public relations efforts, their understanding of non-kinetic targeting is insufficient and they should work closer with CA Influence Activities units to develop their own capabilities. Select NWO's and Naval Int O's should attend courses like the Canadian Army Operations Course (AOC), United States Marine Corp (USMC) Expeditionary Warfare School and US Navy Maritime Operational Planners Course.

BIBLIOGRAPHY

- CNN. Accessed February 04, 2018. http://transcripts.cnn.com/TRANSCRIPTS/0010/18/bp.00.html.
- "China sets up base in Djibouti." China sets up base in Djibouti Xinhua | English.news.cn. Accessed February 04, 2018. http://www.xinhuanet.com/english/2017-07/11/c_136435716.htm.
- Farah, | Douglas. "The Gerasimov Doctrine." The Cipher Brief. November 06, 2017. Accessed February 04, 2018. https://www.thecipherbrief.com/the-gerasimov-doctrine.
- Flynn, Michael T., and Michael Arthur Ledeen. *The field of fight: how we can win the global war against radical Islam and its allies*. New York: St. Martins Press, 2017.
- Ganapathy, Nirmala. "India increases its presence in Indian Ocean, with an eye on China." The Straits Times. November 07, 2017. Accessed February 04, 2018. http://www.straitstimes.com/asia/south-asia/india-increases-its-presence-in-indian-oceanwith-an-eye-on-china.
- Ginsberg, Amb. Marc. "Tehran's Tango: Iran's Terror Beachhead South Of The Border." The Huffington Post. October 11, 2011. Accessed February 04, 2018. https://www.huffingtonpost.com/amb-marc-ginsberg/terror-tango-iransterror_b_1006093.html.
- Hermesauto. "China in talks over military base in remote Afghanistan: Officials." The Straits Times. February 01, 2018. Accessed February 05, 2018. http://www.straitstimes.com/world/middle-east/china-in-talks-over-military-base-inremote-afghanistan-officials.
- Home Index." DroneShield. Accessed February 04, 2018. https://www.droneshield.com/.
- *Navy planning*. Washington, D.C.: Office of the Chief of Naval Operations, Dept. of the Navy, 2013.
- "Navy: Saudi Frigate Attacked by Unmanned Bomb Boat, Likely Iranian." USNI News. February 20, 2017. Accessed February 04, 2018. https://news.usni.org/2017/02/20/navysaudi-frigate-attacked-unmanned-bomb-boat-likely-iranian.
- Pickrell, Ryan. "China has a covert naval fleet disguised as fishing boats." Business Insider. June 08, 2017. Accessed February 04, 2018. http://www.businessinsider.com/china-has-covert-naval-fleet-disguised-fishing-boats-2017-6.
- Administrator. "Piracy & Armed Robbery Prone Areas and Warnings." ICC Commercial Crime Services. July 07, 2017. Accessed February 04, 2018. https://www.iccccs.org/index.php/piracy-reporting-centre/prone-areas-and-warnings.

- Ramani, Samuel. "Understanding the Russia-Taliban Connection." The Diplomat. January 13, 2018. Accessed February 04, 2018. https://thediplomat.com/2017/08/understanding-the-russia-taliban-connection/.
- "Russian New Generation Warfare Handbook." *Asymmetric Warfare Group*, December 2016. https://info.publicintelligence.net/AWG-RussianNewWarfareHandbook.pdf.
- Scott-Clark, Adrian Levy and Cathy. "Al-Qaeda Has Rebuilt Itself-With Iran's Help." The Atlantic. November 11, 2017. Accessed February 04, 2018. https://www.theatlantic.com/international/archive/2017/11/al-qaeda-iran-cia/545576/.
- Toktomushev, Kemel. "China's Military Base in Afghanistan." The Diplomat. January 18, 2018. Accessed February 04, 2018. https://thediplomat.com/2018/01/chinas-military-base-in-afghanistan/.
- "UNDER FIRE: The July 2016 Violence In Juba and UN Response." Center for Civilians in Conflict. Accessed February 05, 2018. https://civiliansinconflict.org/wpcontent/uploads/2017/09/civic-juba-violence-report-october-2016.pdf
- "US 'concerned' that drones used in attacks on Russian bases in Syria available in 'open market'." RT International. Accessed February 04, 2018. https://www.rt.com/usa/415314pentagon-syria-isis-drones-concerns/.
- "Yemen: Missile Again Fired at U.S. Navy." The Maritime Executive. Accessed February 04, 2018. https://www.maritime-executive.com/article/yemen-missile-again-fired-at-us-navy#gs.ozDKsNQ.