

25-26 June 2019

CIWAG MARITIME IRREGULAR WARFARE WORKSHOP



TABLE OF CONTENTS

Program of Events.....	1
About the Center on Irregular Warfare and Armed Groups (CIWAG).....	3
Biographies	
Acting President, U.S. Naval War College.....	4
Center on Irregular Warfare and Armed Groups	5
Participants.....	6
Case Study Proposal 1.....	8
<i>The Sea Tigers as a Model of Irregular Operations at Sea: How New? How Common? How Different?</i>	
Case Study Proposal 2.....	12
<i>The Development of Doctrine to Address Operational Challenges Associated with Unmanned Maritime Systems</i>	
Case Study Proposal 3.....	15
<i>The Russian Maritime Arctic: A Region of Great Change in the 21st Century</i>	
Case Study Proposal 4.....	17
<i>Sea Shepherd – A Non-State Navy Responding to a Global Challenge: The Evolution of Sea Shepherd from Environmental Activist/Outlaw to Legitimized Maritime Security Partner in Capacity Building</i>	
Case Study Proposal 5.....	19
<i>Irregular Warfare in the Arctic Islands: Past and Future</i>	
Case Study Proposal 6.....	23
<i>Countering Coercion in the South China Sea: The Role of Strategic Culture</i>	
Case Study Proposal 7.....	26
<i>Hybrid Maritime Warfare</i>	
Case Study Proposal 8.....	34
<i>Testing the Limits of Seapower: Islands, Insurgents, and Interaction</i>	
Figures and Maps.....	37

PROGRAM OF EVENTS

TUESDAY, 25 JUNE

0815 Transportation departs Hotel for U.S. Naval War College

0830 Workshop Registration and Breakfast – Mahan Rotunda

0900 Introduction – Mahan Reading Room

Working Group Agenda and Goals

Dr. Andrea J. Dew, U.S. Naval War College

Opening remarks and Speaker Introductions

Prof. David Brown, U.S. Naval War College

0930 Case Study Proposal 1

The Sea Tigers as a Model of Maritime Insurgency: How New? How Common? How Different?

Prof. Geoffrey Till, U.S. Naval War College

1045 Break

1100 Case Study Proposal 2

The Development of Doctrine to Address Operational Challenges Associated with Unmanned Maritime Systems

CAPT Andrew J. Norris, USCG (Ret.), Tradewind Maritime Service

1200 Luncheon – Mahan Reading Room

1300 Case Study Proposal 3

The Russian Maritime Arctic: A Region of Great Change in the 21st Century

Dr. Lawson W. Brigham, Wilson Center & University of Alaska, Fairbanks

1400 Break

1415 Case Study Proposal 4

Sea Shepherd – A Non-State Navy Responding to a Global Challenge: The Evolution of Sea Shepherd from Environmental Activist/Outlaw to Legitimized Maritime Security Partner in Capacity Building

Dr. Claude Berube, U.S. Naval Academy

1515 Final Remarks

1530 Transportation to Hotel

1745 Transportation departs Hotel for Officers' Club

1800 Workshop Dinner – Officers' Club, Naval Station Newport

2100 Transportation returns to Hotel

WEDNESDAY, 26 JUNE

0815 Transportation departs Hotel for U.S. Naval War College

0830 Breakfast – Mahan Rotunda

0900 Case Study Proposal 5

Irregular Warfare in the Arctic Islands: Past and Future

Dr. Rebecca Pincus, U.S. Naval War College

1000 Break

1015 Case Study Proposal 6

Countering Coercion in the South China Sea: The Role of Strategic Culture

Kerry Lynn Nankivell, Public Safety Canada & PhD Candidate, King's College London

1115 Lunch – Mahan Rotunda

1215 Case Study Proposal 7

Hybrid Maritime Warfare

Dr. Gary Schaub, Jr., University of Copenhagen

1315 Break

1330 Case Study Proposal 8

Testing the Limits of Seapower: Islands, Insurgents, and Interaction

Dr. Timothy D. Hoyt, U.S. Naval War College

1430 Concluding Remarks

Transportation departs for Hotel and T.F. Green Airport / Kingston Train Station

ABOUT THE CENTER ON IRREGULAR WARFARE AND ARMED GROUPS

The Center on Irregular Warfare and Armed Groups (CIWAG) is dedicated to the interdisciplinary study of the challenges presented by irregular warfare (IW) and non-state actors, also known as armed groups, in the 21st century. Additionally, CIWAG facilitates interaction and collaboration between professional military educational institutions, civilian academics and battlefield practitioners.

The mission of the CIWAG is fourfold:

1. Promote and support research and teaching on irregular warfare and armed groups;
2. Facilitate interaction and collaboration between professional military educational institutions, civilian academics and battlefield practitioners;
3. Disseminate current analysis via symposia and workshops to provide a forum for dialogue at the Naval War College between U.S. and international practitioners and scholars;
4. Expand outreach and networking activities to establish and sustain a community of interest devoted to the study and teaching of irregular warfare and armed groups as well as create case studies.

The operational objectives for the CIWAG are:

1. Promoting collaborative research among scholars and practitioners resulting in panel presentations at major conferences, workshops and seminars as well as published research;
2. Expanding the institutions represented at CIWAG workshops and symposia in order to improve the quality of research and exchange on the issue of irregular warfare and armed groups;
3. Fostering collaboration and increasing institutional ties between civilian and professional military educational institutions, and between U.S. and international academics and practitioners.

ACTING PRESIDENT, U.S. NAVAL WAR COLLEGE



LEWIS M. DUNCAN, PhD

Lewis M. Duncan currently serves as Acting President of the U.S. Naval War College, the preeminent advanced military education school in the world. As Provost, Dr. Duncan serves as the College's chief operating officer, overseeing the continuum of professional military education programs, residential and online, as well as operational administration of the institution.

Dr. Duncan is internationally recognized as an accomplished research scientist in experimental space physics and radiophysics, and as a leading scholar in study of the societal and ethical implications of emerging technologies.

Additionally, he serves on the Board of Directors of the Center for the Advancement of Science in Space, responsible for management of the U.S. National Laboratory of the International Space Station. He also is an Associated Fellow of the United Nations Institute for Training and Research, supporting the United Nations Operational Satellite Applications Technology (UNOSAT) program.

Previously, Dr. Duncan served for ten years as President of Rollins College. He also served as Dean of the Thayer School of Engineering and Professor of Engineering Sciences at Dartmouth College.

Dr. Duncan received his BA (1973) in physics and mathematics, MA (1976) and PhD (1977) in space physics, all from Rice University. Among his past honors, he received the Alan Berman Award from U.S. Naval Research Laboratory and is a member of Phi Beta Kappa, Sigma Xi, Tau Beta Pi, and Phi Kappa Phi.

DEAN OF ACADEMICS, U.S. NAVAL WAR COLLEGE



PHIL HAUN, COL, USAF (RET.), PhD

phil.haun@usnwc.edu

Phil Haun has been the Dean of Academics and a Professor at the U.S. Naval War College since 2016. He previously served in the U.S. Air Force as an officer and A-10 pilot with combat tours in Iraq, Bosnia, Kosovo, and Afghanistan. His last assignment was as Commander of AFROTC at Yale University. Phil's military education includes National Security Fellow at the JFK School of Government, School of Advanced Air and Space Studies, Air Command and Staff College, and USAF Weapons School. His areas of scholarly and professional expertise are coercion, deterrence, air power theory, strategy, international relations, and security studies. Phil holds a Ph.D. in Political Science/International Relations from MIT, a master's degree in Economics from Vanderbilt, and a bachelor's degree in Engineering Studies from Harvard. He taught Economics at the Air Force Academy, Strategy and Policy at the U.S. Naval War College, and Military History and Grand Strategy at Yale University. For the past decade he has been a research affiliate with MIT's Security Studies Program. His books include *Lectures of the Air Corps Tactical School and American Strategic Bombing in World War II* (UP Kentucky, 2019), *Coercion, Survival, and War: Why Weak States Resist the United States* (Stanford UP, 2015) and *A-10s over Kosovo* (Air University Press, 2003). His latest article with the *Journal of Strategic Studies* is "Peacetime military innovation through inter-service cooperation: The unique case of the U.S. Air Force and Battlefield Air Interdiction."

CENTER ON IRREGULAR WARFARE AND ARMED GROUPS



ANDREA J. DEW, PHD

andrea.dew@usnwc.edu

Andrea J. Dew is an associate professor of Strategy and Policy and also holds the Chair of Maritime Irregular Warfare Forces at the U.S. Naval War College. She lived in Japan for eight years where she studied advanced Japanese at the Kyoto Japanese Language School. Professor Dew has served as a research fellow at the Belfer Center for Science in International Affairs at Harvard University, and senior counter-terrorism fellow at the Jebson Center for Counter Terrorism Studies at the Fletcher School. Dr. Dew is the founding Co-Director of the Center on Irregular Warfare and Armed Groups at the U.S. Naval War College.



DAVID BROWN, COL, USA (RET.)

david.brown@usnwc.edu

David Brown is the executive director of the Advanced Strategist Program (ASP) at the Naval War College. A former designated Army Strategist, he holds a BA in Philosophy, a diploma for studies in the Greek language, a diploma from the Army's Command and General Staff College, a MMAS from the Army's School of Advanced Military Studies Program, a MS from Long Island University in Counseling and Leader Development, and a MA in National Security and Strategic Studies from the Naval War College. COL Brown's career spanned over 30 years in combat arms units and a variety of command and staff positions in the United States and overseas. His operational experience includes nuclear weapons programs, combat experience in Desert Storm and Iraqi Freedom, and operational planning experience at Battalion, Brigade, Division and Theater levels to include operations in Bosnia, Kosovo, and Iraq. In 2008 he served as the senior military advisor for the 2nd Iraqi Army Division in Mosul. Professor Brown also taught for seven years in the Naval War College's Strategy & Policy Department, and is the co-director of the Center on Irregular Warfare & Armed Groups.



LOUIS MCCRAY, CAPT, USN

louis.mccray@usnwc.edu

Louis McCray joined the Joint Military Operations Department as a military professor in the fall of 2017, and he is the U.S. Naval War College special operations chair and the deputy director of the Center on Irregular Warfare and Armed Groups. He is a naval special warfare officer and has served in a variety of billets in both the SEAL community and at joint commands. He has made multiple deployments to the U.S. Central Command area of responsibility, as well as throughout Europe and the Pacific.

PARTICIPANTS



CLAUDE BERUBE, PHD

berube@usna.edu

Claude Berube has published five books and more than 40 articles. He is a past Chair of the Editorial Board of Naval Institute Proceedings. As a defense contractor, he worked for Naval Sea Systems Command and the Office of Naval Research. He also worked for two Senators on Capitol Hill and as a civilian at the Office of Naval Intelligence. Since 2005, he taught in the Political Science Department at the U.S. Naval Academy and in the History Department for the past seven years while serving as the Director of the Naval Academy Museum. He was a LEGIS Fellow with the Brookings Institution and a Maritime Security Studies Fellow with The Heritage Foundation.



LAWSON W. BRIGHAM, CAPT, USCG (RET.), PHD

lwb48@aol.com

Lawson W. Brigham is a Global Fellow at the Woodrow Wilson International Center for Scholars (The Wilson Center) in Washington DC and a researcher at the International Arctic Research Center, University of Alaska Fairbanks (UAF). He is also a Fellow at the U.S. Coast Guard Academy's Center for Arctic Study and Policy, and a member of the National Academies Polar Research Board. Captain Brigham was a career Coast Guard officer and commanded four cutters including the icebreaker Polar Sea on Arctic and Antarctic voyages; he also served as the Coast Guard's Chief of Strategic Planning. During 2004-09 he was chair of the Arctic Council's *Arctic Marine Shipping Assessment* and Vice Chair of the Council's Protection of the Arctic Marine Environment Working Group. Dr. Brigham has been a Marine Policy Fellow at Woods Hole Oceanographic Institution; a faculty member of the U.S. Coast Guard Academy, Naval Postgraduate School, and UAF as Professor of Geography & Arctic Policy; and, Alaska Director of the U.S. Arctic Research Commission. He is a graduate of the U.S. Coast Guard Academy, a U.S. Naval War College distinguished graduate, and holds graduate degrees from Rensselaer Polytechnic Institute (MS) and Cambridge University (MPhil & PhD). His research interests have focused on the Russian maritime Arctic, environmental change, polar marine transportation & logistics, Arctic security, and polar geopolitics. Dr. Brigham is a Council of Foreign Relations member, was elected to the Norwegian Scientific Academy for Polar Research (2013), and awarded the American Polar Society's Polar Medal (2015). A central peak in Victoria Land, Antarctica was named Mount Brigham in January 2008 by the U.S. Board of Geographic Names.



TIMOTHY D. HOYT, PHD

hoytt@usnwc.edu

Timothy D. Hoyt is a Professor of Strategy and Policy, the John Nicholas Brown Chair of Counterterrorism, and Acting Director of the Advanced Strategy Program at the U.S. Naval War College, where he has taught for 17 years. His research focuses on irregular warfare and terrorism, the defense policies and strategies of middle powers, warfare in the developing world, and a regional focus on South Asia and the Middle East.



KERRY LYNN NANKIVELL

Kerry Lynn Nankivell has been working in the security and defense community for over 15 years and specializes in maritime security in the Asia Pacific. This includes naval modernization, coast guard dynamics, blue economy, and maritime disputes, in waters ranging from the Arctic Ocean to the Indian Ocean. Her work has been published in *Foreign Policy*, *Asia Policy*, *Cambridge Review of International Affairs*, *Pacific Defense Forum*, *The Diplomat*, and the *National Bureau of Asian Research*. Her edited volume, *Chinese-Japanese Competition in the East Asian Regional Security Complex* was released in 2017.



ANDREW J. NORRIS, CAPT, USCG (RET.) anorris@tradewindmaritimeservices.com

Andrew Norris currently works as a maritime legal and regulatory consultant. Retired from the Coast Guard after 22 years of active service in 2016. He also served as a surface line officer in the U.S. Navy from 1985-1989, during which he deployed aboard USS Kidd (DDG-993) to the Persian Gulf in 1987 during Operation Earnest Will. Career highlights include serving as a visiting professor of maritime policy at the U.S. Coast Guard Academy, as the Robert J. Papp Jr. Professor of Maritime Security at the U.S. Naval War College, as the Staff Judge Advocate for the Fourteenth Coast Guard District, and as a judge on the Coast Guard Court of Criminal Appeals.



REBECCA PINCUS, PHD

rebecca.pincus@usnwc.edu

Rebecca Pincus is an Assistant Professor of Strategic and Operational Research Department (SORD) in the Center for Naval Warfare Studies at the U.S. Naval War College, and a member of the Institute for Future Warfare Studies within SORD. She previously served as primary investigator (PI) at the U.S. Coast Guard's Center for Arctic Study and Policy, located at the U.S. Coast Guard Academy.



GARY SCHAUB, JR., PHD

gs@ifs.ku.dk

Gary Schaub is a Senior Researcher at the Centre for Military Studies, Department of Political Science, University of Copenhagen. He previously has been a consultant to the Institute for Defense Analyses, an Assistant Professor of Strategy at the U.S. Air War College, a Research Fellow at the U.S. Air Force Research Institute, a Visiting Assistant Professor at the U.S. Air Force School of Advanced Air and Space Studies, a Researcher at the Center for International Studies at the University of Pittsburgh, and an Adjunct Instructor of History at Chatham College. He earned his Doctorate in Public and International Affairs from the University of Pittsburgh, his Master of Arts from the University of Illinois at Urbana-Champaign, and his Bachelor of Science from Carnegie Mellon University.



GEOFFREY TILL, PHD

geoffrey.till.UK@usnwc.edu

Geoffrey Till is a Professor of Maritime Historical Research and holds the Dudley W. Knox Chair for Naval History and Strategy at the U.S. Naval War College, Newport, Rhode Island. Once Dean of Academic Studies at the UK Joint Services Command and Staff College, Geoffrey Till is also Emeritus Professor of Maritime Studies at King's College London and Chairman of the Corbett Centre for Maritime Policy Studies. Since 2009 he has also been a Visiting Professor and Senior Research Fellow at the Rajaratnam School of International Studies, Singapore. The author of over 200 articles and book chapters, his *Understanding Victory: Naval Operations from Trafalgar to the Falklands* appeared in 2014 and the fourth revised edition of *Seapower: A Guide for the 21st Century* in 2018.

CASE STUDY PROPOSAL 1

The Sea Tigers as a Model of Irregular Operations at Sea: How New? How Common? How Different? — Two case studies compared

Geoffrey Till, PhD
U.S. Naval War College

Summary

As long as there has been regular or conventional methods of conducting conflicts at sea, weaker actors, and often even powerful ones, have sought to evade the high political and physical costs these conflicts can incur by resorting to irregular or unconventional methods of securing their objectives by actions at sea. The actors in question are often nation states acting unconventionally in order to achieve their aims in the most cost-effective way. Resorting to the widespread use of privateers was a common device, for example. Privateering, or the issue of “letters of marque” to ship captains whose *modus operandi* approximated to piracy that just happened to be targeted against the country’s adversaries, provided the state with a cost-effective means of damaging its adversary’s war economy, while enriching its own economy at minimal outlay in terms of investment in military people and equipment. The ambiguous status of privateers and the known uncertainties of central control over such free spirits also provided a diplomatically useful degree of plausible deniability—as Philip II of Spain was only too aware of in his frustrated dealings with his notionally much weaker adversary, England’s Queen Elizabeth I.

The English approach, especially in the earlier days of Elizabeth’s reign, was shaped by a lively awareness of the apparent strength and reputation of the Spanish army (especially when compared to the meagre military resources that the Queen could command) and the extreme limits of the country’s war budget.¹ Accordingly, the strategic aim was to secure as much advantage as possible while avoiding a full-scale war with Philip II. The apparent “fuzziness” of the operational and tactical means by which Elizabeth sought to secure her aims was ideally suited for this broader higher purpose.

Sometimes, though, Philip was also up against nonstate actors (or at most proto-state actors) such as the Dutch “Sea Beggars.” Not having access to facilities that could build conventional warships, these rebels against Spanish rule resorted to the use of small, nimbler craft, able to take on the apparently much more powerful Spanish galleons, especially when at anchor or becalmed. Much more feared though were the insurgents’ “fireships” —the “Antwerp Hellburners” —which proved so effective against Spanish warships in the narrow waters of the English Channel that the Royal Navy adopted them as a decisive battle-winning tactic against the Spanish armada in 1588. Fireships became an aspect of conventional naval operations for most of the rest of the Age of Sail.

The nature and status of the protagonists, both state and nonstate, and of the methods they employed (especially in actions in the grey zone between peace and war) shrouded these activities in a level of ambiguity that was strategically useful to determined actors when taking on much more powerful adversaries. Their overall aim was to exploit particular vulnerabilities of those adversaries at the strategic, operational, and tactical levels. The English were well aware, for example, that the potential Achilles heel of Spain, the superpower of the day, was its absolute reliance on bullion imported from Central and South America, and they devised a strategy that made the most of their victim’s strategic dependency. Similarly the Sea Beggars aimed to exploit the tactical vulnerability of powerful galleons at anchor or huddled against the sandbanks of the English Channel. This was

¹ In fact modern historiography has shown that there was a good deal of “smoke and mirrors” in Spanish power, especially at sea, but at the time this was not how it seemed to Spain’s adversaries.

“manoeuvrist” in approach, less in terms of tactically outflanking their adversary, although that was certainly part, than in outsmarting it conceptually at the operational and strategic levels.

Given this long tradition of irregular and nonconventional operations at sea, some obvious questions arise. What, if anything, is new and distinctive about contemporary examples of irregular warfare at sea? In fact, examples of this kind of thing are so common as almost to make the “irregular” seem “regular”! To what extent are they distinctive, and to what extent are the qualities required to respond to them different to those needed, if not enjoyed, by the Spanish over 400 years ago? A further question arises: Is there anything distinctive about such “irregular” operations when they are conducted in the maritime domain?

This paper will seek to address these questions, first by teasing out some of the key characteristics of irregular warfare, and second by an exercise in contrast and comparison. It will examine two notable but very different examples of such operations at sea: the struggle conducted by a number of Jewish groups to defeat British restrictions on migration to Palestine in the late 1940s, and the maritime aspects of the long campaign of the Liberation Tigers of Tamil Eelam (LTTE) against the government of Sri Lanka (1983-2009). Hopefully this will reveal the extent to which one can reasonably generalize about the novelty or nature of irregular operations at sea. Finally, the paper will consider whether other useful generalizations can be made about the responses of conventional forces to such challenges.

Five Common Characteristics of Irregular Operations

- 1. Irregular operations are often a feature of “violent peace” or the grey area between peace and war.**
- 2. They usually pit the apparently weak against the apparently strong.**
- 3. The battle of the narrative is particularly important.**
- 4. Success in irregular operations requires a comprehensive approach.**
- 5. The stronger party may adopt (or adapt to) the tactics of the weak.**

Applying These Characteristics to Two Case Studies

[Long paper to provide short but necessary background to the Palestine Patrol² and the campaign by and against the LTTE³]

1. Grey Area Operations. Neither side in the Palestine Patrol wished to resort to outright conventional force, the Jewish authorities because they knew they would lose, the British because they were fearful of the military and especially political costs that would incur. As far as the former were concerned, the objective was seen as contributing to a viable and independent Israel and so essentially of existential importance. The British had many other things to worry about and did not attach the same level of importance to the outcome. In Sri Lanka, the matter was existential for both sides, which explains why both the Sri Lankan Navy (SLN) and the Sea Tigers (ST) were willing to accept the costs of ferocious and lethal conflict.

2. The Weak Versus the Strong. In both cases, this was how the situation was purveyed by the weaker side, accurately in the case of the Palestine Patrol, although it put considerable strain on a war-exhausted Royal Navy that had many other commitments to perform. On paper at least, the British could easily have deterred further illegal immigration by sinking a few ships, but this was

² Sources for this include David Holly, *Exodus*, (Annapolis MD: Naval Institute Press, 1995; Ninian Stewart, *The Royal Navy and the Palestine Patrol* (London: Frank Cass, 2002) and Freddy Liebreich, *Britain's naval and political Reaction to the Illegal Immigration of Jews to Palestine 1945-49*, (London: routledge, 2004).

³ Sources include Jayanath Colombage, *Asymmetric Warfare at Sea* (Saarbrücken, Germany: Lambert Publishing, 2015) and discussions and interviews with the Sri Lankan Navy

obviously not a politically acceptable option. In this case, the advantage in perceived strength at sea was relevant only to the extent that it could be applied.

In the early days of the ST operation, the reality was different than it appeared at first glance. At that time, the insurgents were more numerous and better equipped than their naval adversaries. By adopting insurgent weaponry and methods, however, the SLN with the full resources of the state at its disposal at first equaled and then surpassed the ST, eventually confirming the perception commonly held at the start of the conflict.

3. The Battle of the Narratives. By emphasizing the extent to which the refugees were innocent men, women, and children fleeing from the raw horrors of World War II, Jewish groups were easily able to present themselves as victimized by brutal British naval professionals. This narrative played especially well in the U.S., a country which for other reasons of high strategy the UK was anxious to retain as a guarantor superpower ally.

In the Sri Lankan case, the ST needed to solicit continuing support from the Tamil diaspora, while the Sri Lankan government was concerned about the manifest disapproval of their methods, especially in Europe. But while the battle for narratives was important to both sides in this conflict, it was less central to both their concerns. The main focus in the Sri Lankan case was to seek to undermine the will of the opposing force, rather than to appeal to bystanders. Sinking the adversary's vessels and killing its people was at once a military act and a powerful message of capability and resolve.

For the SLN, however, there was the burdensome requirement to distinguish its adversaries from innocent Indian/Tamil fishermen. The ST made the most of this problem by using these fishermen as cover, pretending to be them and even taking children with them as a form of disguise; for the SLN it was imperative not to make damaging mistakes, especially given the high probability that it would be caught doing so. However, the conditions characteristic of the murky world of irregular operations, at sea as on land, made the full monitoring and observance of many aspects of humanitarian law much more difficult. There remains intense and damaging controversy over the extent of, and responsibility for, numerous gross violations of humanitarian law and the commission of war crimes and crimes against humanity allegedly by both the SL military and the LTTE, especially in the closing stages of the conflict and almost exclusively ashore that as yet remain unresolved.⁴

In the case of the Palestine patrol, the British in the conduct of their boarding operations were able largely to avoid such accusations, but their crucial use of the legal concept of *refoulement* (under which ships and/or their passengers could legitimately be returned to their port of origin) became a much debated issue of legal and political contention.

4. The Comprehensive Approach. For both sides in the Palestinian case, the importance of such legal controversies showed that the conduct of their competing campaigns at sea was just a part of their broader policies towards the creation of Israel. The Jewish groups, however, relied heavily on the support of the diaspora, especially in the United States, in the acquisition, equipment, and operation of the shipping they needed and in the tacit support of the European countries from which those ships departed. Ensuring all this required an integrated grand strategy and attempting to counter at least parts of it was a major preoccupation of the British side.

The LTTE likewise depended heavily on the Tamil diaspora and on various interest groups in Tamil Nadu in southern India for the supply shipping and military equipment that supported their land campaign and their naval forces. Early on in their campaign, the SLN discovered a need for major naval reinvestment, but there were few countries able or willing to provide the equipment needed, with the exception of Israel and Singapore. The Sri Lankan government had also to be acutely mindful of the attitudes of the Indian government, which was initially helpful but later more distant. Their actions at sea has therefore to be seen against a much broader set of policies by both protagonists.

⁴ Steven R. Ratner 'Accountability and the Sri Lankan Civil war' *American Journal of International Law*, Vol 106, Issue 4, Oct 2017, pp 795-808.

5. Substantial Military Adaptation. On the refugee ships en route to Palestine, when British boarding threatened, the passengers resorted to physical resistance. This was often quite risky but generally stopped short of inflicting lethal costs on British boarding parties. Well aware of the political and propaganda costs of apparently disproportionate responses, the British acted with restraint, although there were a few lapses resulting in the inadvertent deaths of four or five people over the period of the campaign. In some cases, the British were concerned that the risks to life and limb would be greater if they did not intervene, as in the case of ships that seemed to be grossly overloaded and fundamentally unseaworthy, especially if allowed to try to run themselves ashore on the Palestinian coast. To cope, the Royal Navy resorted to special training run by the Royal Marines in Malta, specifically modelled on the methods of resistance adopted by the immigrants. This and the restraint shown by both sides kept the costs of this campaign surprisingly low and overall relations between them surprisingly good.

It was otherwise in the Sri Lankan case, where the acquisition of more appropriate small attack craft, accumulated expertise in the identification and prosecution of the ST boats, and the adoption of insurgent methods in the formation and operation of the Rapid Action Boat Squadrons allowed the SLN to seize the initiative, destroy their adversary's attack fleet, and sink their supply shipping. In effect the insurgent "swarms" were "outswarmed."

In terms of the extent to which we can reasonably generalize about the nature of irregular operations at sea, it would seem that they do have characteristics in common, even though the form of those characteristics vary in accordance with the specific circumstances in which they are conducted. The overall principles seem much the same although their application may vary.

Is It Different or the Same at Sea?

Finally, there remains the question of whether there is anything about the maritime domain that marks irregular operations at sea from their counterpart on land. One thing at least seems clear, such activities are closely linked to and often largely determined by events ashore. However, both the cases examined suggest that the consequences of activities afloat can have very considerable consequences for the land campaign. In the Sri Lankan case, the SLN's ability to cut the LTTE supply lines deprived their forces on land of support and contributed significantly to the LTTE's defeat at the hands of the Sri Lankan army and air force.

While this demonstrates how intimately operations afloat may be linked to those ashore, it is much easier to imagine an irregular land campaign that has no bearing on events afloat than the reverse. There may be an element of strategic dependency about such operations that is much less true of their land equivalent.

A second line of distinctiveness that might be pursued is a consequence of the sheer size of the maritime domain, which means that responding to the moves of the other side might well require action almost at a global level. Dealing with ST supply ships, for example, required a navy essentially configured for coastal missions to engage in deep sea operations off Sumatra, 1,500 miles from home. Likewise, what happened off the coast of Palestine was due to major operations of intelligence, organization, and persuasion by the British and their opponents around the world. And today, tracking vessels of interest is truly a global matter.

Action at sea has often been associated with the adage "out of sight, out of mind" because what happens at sea is much less visible to politicians and the public at home. Historically this has provided commanders at sea with much more operational freedom and perhaps less accountability than their counterparts ashore. Since the sea is much less populated than the land, it may be easier there to observe the legal restraints on the use of armed force than it is on shore, but this is more a difference of degree than of kind.

With these possible exceptions, it would seem that in principle more unites irregular operations ashore and afloat than divides them, and conclusions about how best to prepare for and to conduct them are generally common to both domains.

CASE STUDY PROPOSAL 2

The Development of Doctrine to Address Operational Challenges Associated with Unmanned Maritime Systems

Andrew J. Norris, Captain, U.S. Coast Guard (Ret.)
Tradewind Maritime Services

Relevance of Topic to Field of Maritime Irregular Warfare

Unmanned maritime systems (UMS) are “irregular” by nature, as they constitute a revolutionary emerging technology that poses significant physical, operational, and doctrinal challenges. These challenges apply both to the affirmative use of UMS and to defend against their use by adversaries. Those adversaries may be near-peer competitors, or irregular armed groups, terrorists, or criminals who seek to leverage capabilities offered by UMS that, for cost reasons or otherwise, would be out of reach through the use of conventional systems.

Significance of Topic

UMS are already here to stay, and their complexity and range of missions will continue to increase in the coming years. As the executive editor of a leading technical publication has written:

Unmanned vehicles carrying advanced sensor and processing payloads proliferate the modern battlefield, in the air, on the ground, and at sea. The number of unmanned ground, aerial, and undersea vehicles deployed by aerospace and defense organizations has grown exponentially given the many benefits they deliver.¹

Yet despite their current and anticipated proliferation, there are many difficult physical, operational, and doctrinal challenges that need to be solved before UMS can reach their full potential. A DOD-chartered task force concluded that “while currently fielded unmanned systems are making positive contributions across DoD operations, autonomy technology is being underutilized as a result of material obstacles within the Department that are inhibiting the broad acceptance of autonomy and its ability to more fully realize the benefits of unmanned systems.” Key among these obstacles identified by the task force are poor design, lack of effective coordination of research and development (R&D) efforts across the military services, and operational challenges created by the urgent deployment of unmanned systems to theater without adequate resources or time to refine concepts of operations and training.²

The development and refinement of “concepts of operations and training” is critical to the full maturation of UMS as a tool for commanders, and for countering their use by adversaries.

Research Question

As a question: “What are the operational challenges posed by the affirmative use of UMS, or by countering their use by adversaries, and how should they be resolved?”

¹ Courtney Howard, “Unmanned, Sensor-Laden, and Ubiquitous,” *Military and Aerospace Electronics*, July 1, 2012.

² DOD, Defense Science Board, “The Role of Autonomy in DoD Systems,” DOD, 19 July 2012.

As a statement: “This project will examine the operational challenges posed by the affirmative use of UMS and by countering their use by adversaries, and will make recommendations for the development of doctrine to deal with these challenges.”

The purpose of the project is to identify and thoroughly discuss the most salient issues posed by the use of or defense against such systems, with the aim of forcing the adoption and shaping the direction of doctrine to guide commanders who would otherwise face some of the many challenges posed by such systems without any standing guidance.

It is important to note that the focus on “operational challenges” will not be on the design of these systems per se, nor on their tactical employment. Instead, the focus will be on larger legal and ethical issues raised by the paradigm-changing nature of such systems. The intent will be to address and answer “can I?” questions. In doing so, there may be some derivative consequences to such other issues as design and tactical employment.

And while UMS pose challenges in both the military and commercial sectors, the focus of this analysis will be only on the military use of such systems.

Proposed Outline

- I. Introduction, including statement of research topic**
- II. Definitions, common terms, and understandings** [UMS, UUV, USV, autonomous, semi-autonomous, etc.]
- III. Necessary background information**
 - A. Maritime zones and their impact on UMS employment
 - B. Law of war issues related to UMS
- IV. Issues associated with their affirmative use**
 - A. What are uses contemplated by DOD doctrine?
 - B. What issues are posed by such anticipated uses?
 - 1. Issue 1
 - 2. Issue 2 (etc.)
- V. Issues associated with defending against the use of UMS by adversaries**
 - A. How may potential adversaries attempt to use such systems?
 - B. What issues are posed by defense against such anticipated uses?
 - 1. Issue 1
 - 2. Issue 2 (etc.)
- VI. Recommendations for the development of doctrine to address these issues**
- VII. Conclusion**

Discussion / Conclusion

According to the Combined Joint Operations from the Sea Centre of Excellence’s “Guidance for Developing Maritime Unmanned Systems (MUS) Capability,” the following affirmative uses of UMS are contemplated by the U.S. and NATO allies:

For unmanned underwater vehicles (UUV):

- (1) Intelligence, surveillance, and reconnaissance (ISR)
- (2) Mine countermeasures (MCM)
- (3) Anti-submarine warfare (ASW)
- (4) Inspection/identification (ID)

- (5) Oceanography/hydrography
- (6) Communication/navigation network node (CN3)
- (7) Payload delivery
- (8) Influence activities (IA)
- (9) Time critical strike (TCS)

For unmanned surface vehicles (USV):

- (1) Mine countermeasures (MCM)
- (2) Anti-submarine warfare (ASW)
- (3) Maritime security (MS)
- (4) Surface warfare (SUW)
- (5) Special Operations Forces (SOF) support
- (6) Electronic warfare (EW)
- (7) Maritime Interdiction Operations (MIO) support

Other potential uses of UMS that aren't strictly military include their use in law enforcement platforms.

The intent of this project is to identify the "can I?" issues related to these and other potential uses of UMS, to discuss the salient points related to each such issue, and to make recommendations on a solution in order to guide the development of doctrine and training that addresses these issues up front, instead of on an ad hoc basis as they are encountered in real time. A non-exclusive list of such issues includes:

- A. Maritime zones** (for example, submarines and other underwater vehicles are required to navigate on the surface and to show their flag when operating in another nation's territorial sea)
- B. Sovereign immunity for government property**
- C. Rights and obligations of warships** (for example, warships are entitled to engage in right of visit; are UMS "warships" for purpose of this entitlement?)
- D. Rules of the road compliance** (for example, how can a proper and adequate lookout be maintained?)
- E. Law of armed conflict issues** (for example, how can an unmanned system comply with requirements of necessity and proportionality without human involvement?)
- F. General maritime law** (for example, where the law of the sea imposes certain duties on the master of a vessel [UNCLOS Article 98], how [if at all] can that be complied with by a UMS?)
- G. Liability, search and rescue (SAR) and human rights at sea.** There are unique issues posed by the use of UMS for law enforcement or other military operations other than war. For example, if the crew of a vessel that is the subject of a law enforcement operation scuttles their vessel, the case converts from law enforcement to SAR. How, if at all, can, or should, UMS be able to "morph" from a law enforcement to a SAR platform?
- H. Adversaries' use of UMS for military purposes.** What unique issues, if any, are posed by efforts to counter adversaries' use of UMS for military purposes?
- I. Adversaries' use of UMS for non-military purposes,** e.g. to commit maritime crimes. Who would be charged with a crime? If the *actus reus* involves a crime committed by a "ship," does a UMS qualify?

CASE STUDY PROPOSAL 3

The Russian Maritime Arctic: A Region of Great Change in the 21st Century

Captain Lawson W. Brigham, U.S. Coast Guard (Ret.), PhD
Wilson Center and University of Alaska, Fairbanks

Abstract

The Russian maritime Arctic is undergoing profound change early in the 21st century. Arctic sea ice retreat (in extent, thickness, and ice character) is providing for greater marine access and potentially longer seasons of marine navigation throughout the Arctic Ocean. These environmental changes are principally observed in the coastal seas of the Russian Arctic and are providing new opportunities for use of Russia's national Arctic waterway, the Northern Sea Route (NSR). The most influential drivers of change in this once remote Arctic region are the development of Russian Arctic natural resources and the emerging marine transport of these commodities to global markets. During the Soviet era, the NSR was a waterway that linked natural resources to domestic needs, mainly the requirements of the Soviet defense ministry. Today the national strategy is to link the vast Siberian resource base to the global economy, an economic security challenge of critical importance to the future of the Russian Federation. This Russian Arctic strategy demands broad attention: key marine infrastructure development (such as ports, hydrography, communications, and more); domestic and foreign investment (from France, China, and others); application of new host of advanced marine technologies; the buildup of Russian Arctic security forces; the renewal of the Russian icebreaker fleet (including new nuclear ships); advancing the Russian ship traffic monitoring and surveillance system; and overall development of the onshore and offshore coastal regions of this long coastline in an era of intense climate change.

This case study will review all of these changes and developments and consider what they mean to the future of the Arctic and the Russian Federation. Plausible futures will be developed to better understand the uncertainties that could impact these major changes and how they might influence Arctic state relations and the future geopolitical stability of the region. Scenarios may include the impacts of a major marine accident and the increasing interests by China and its announcement of a "Polar Silk Road" as a component to its Belt and Road Initiative. The roles of non-Arctic states and the increasing marine use of foreign shippers in the Russian maritime Arctic will be considered throughout.

Relevance and Significance of the Topic to Maritime Irregular Warfare

The Russian maritime Arctic has always been one of the remotest regions on the planet. However, increasing marine access and economic development of Arctic natural resources have fundamentally changed the region. The region is a difficult and extreme polar marine environment, which means access by domestic and foreign military forces and civilian operators remains challenging. Increasing monitoring and surveillance of the Russian Arctic will increase, and the Russian polar fleet, particularly its nuclear icebreakers, will provide a sovereign presence in all seasons and any part of the Russian coastal seas. For the top of the world it likely the Russian Arctic will be the most dynamic through the 21st century. One question will be the long-term political stability of the region and its relationship to Moscow and the central government. The role of China in development of the Russian Arctic and overall Russia-China cooperation in the decades ahead will be crucial to future relations with the U.S. and the West. Maritime irregular warfare in the Arctic is evolving, and the Russian maritime Arctic—half of the coastline of the Arctic Ocean—will be a dynamic region of potential friction and also cooperation.

Preliminary Case Study Outline

I. Introduction

Significance of the region to the Arctic and Russia, and to Arctic maritime security

II. Geography, Environment, and Boundaries

UNCLOS (internal waters, EEZ, Article 234), boundaries and the polar environment; connections/roles of the northward flowing Siberian rivers

III. Changing Marine Access

Impact of climate change on sea ice and permafrost; marine access projections; impacts on the Russian Arctic national waterway (Northern Sea Route)

IV. Regional Economic Development

Russian Arctic resource development: oil, gas (LNG), hard minerals; roles of Yamal LNG and oil development; role of Norilsk (copper, nickel, more); onshore and offshore development; the roles of the Northern Sea Route/NSR (domestic and international marine traffic); Russia Arctic/Northern policies

V. Marine Infrastructure Developments

Emerging Russian polar icebreaker fleet, including new nuclear icebreakers; marine infrastructure developments: ports, hydrography/charting, aids to navigation, monitoring and surveillance; role of new technologies (icebreaking, LNG-powered ships, floating nuclear power plants, floating North Pole Station for the central Arctic Ocean, use of drones, more); Russian stability/control in the vast Siberian region and Russian Far East

VI. National Security Interests

Developments on the Kola Peninsula and Siberian islands; new Russian Navy icebreakers and FSN law enforcement icebreakers; domain awareness and area control; Russian policies and Arctic national security interests

VII. International Aspects

China-Russia cooperation in investment and long-term contracts (oil and LNG); China's "Polar Silk Road" as a component of the Belt and Road initiative; presence of foreign-flag ships along the NSR and in the Barents Sea; cooperation with Norway in Barents Sea oil/gas and fisheries; International Maritime Organization Polar Code implementation and enforcement; continued Russian involvement in the Arctic Council; overall governance of the Russian maritime Arctic and adherence to international norms; future scientific research with the Russian Arctic EEZ

VIII. Plausible Futures of the Russian Maritime Arctic

Futures of the region to 2040 and beyond; identification of continued, major drivers of change; influence of potential wildcard drivers of future change; what to expect from this region as it is increasingly linked to global markets and the Russian domestic economy; what to expect from profound climate change in the region

VIX. Conclusions and Future Research

Overall concluding remarks and relationships of this dynamic and changing region to the globe, and to irregular warfare; potential areas of further research for the USN, USMC, USCG, USNWC

CASE STUDY PROPOSAL 4

Sea Shepherd – A Non-State Navy Responding to a Global Challenge: The Evolution of Sea Shepherd from Environmental Activist/Outlaw to Legitimized Maritime Security Partner in Capacity Building

Claude Berube, PhD
U.S. Naval Academy

Relevance of Topic to Field of Maritime Irregular Warfare

Examining Sea Shepherd's goals, strategies, platforms, and tactics is a worthwhile endeavor because it serves as a model to understand the motives, operations, and threat posed by emerging maritime non-state actors (MNSAs). Understanding the irregular challenges these MNSAs pose can help navies and coast guards respond to similarly structured groups in the future. In addition, Sea Shepherd itself has gained some growing state-sponsored legitimacy and might indicate how a non-state actor could gain acceptance among businesses, NGOs and states.

Significance of Topic

Sea Shepherd Conservation Society (hereafter SSCS) has a 42-year history as an evolving organization with global support.

In April 2015, the Sea Shepherd Conservation Society ship Sam Simon completed a 10,000 nautical mile, 110-day chase of an illegal fishing trawler from the Southern Ocean to West Africa, culminating in the scuttling of the trawler Thunder, the rescue of its crew, and the successful prosecution of its captain. In the course of the chase, the Sam Simon worked with more than two dozen countries as well as Interpol. This event was a game-changer for the organization, which had a four-decade history of touting itself as a "pirate" organization taking action on behalf of marine life. With the chase of the Thunder, Sea Shepherd demonstrated a willingness to work with nation states and those nation states in giving some legitimacy to it in return.

Sea Shepherd is responding to a growing crisis of fish depletion. Fewer fish, particularly in littoral regions of small states, has an immediate economic impact to nation states that have insufficient resources to patrol their own waters in response especially to illegal, unregulated, and unreported (IUU) fishing. This case study is about the organization but also weighs its value as a business model for responding to the growing scarcity of marine food and the economic and national security implications of that challenge between state powers.

Research Question

How has an environmental activist organization viewed by some as pirates or terrorists evolved to become a global enterprise with a fleet of ships working with local and state governments for maritime security?

Proposed Outline

- I. Introduction**
- II. Today's SSCS: The Chase of the Thunder**
- III. History and Goals and Strategy**
- IV. Campaigns, Logistics, and Organization**
- V. Platforms and Tactics**
- VI. Lawfare**
- VII. Successes/Failures**

Discussion/Conclusion

Beyond the local level, depleted fisheries hurt national economies. A 2005 report by the United Kingdom's Department for International Development reviewed the economic impact of IUU fishing on 10 developing countries. The report estimated that \$372 million was lost annually through illegal fishing in the exclusive economic zones of those countries, representing nearly 20 percent of the total catch. Off the coast of Guinea alone, up to 60 percent of vessels sighted in 2001 were illegal. Among five nations (Seychelles, Namibia, Mauritania, Gambia, and Comoros), illegal fishing diminished gross national product by 10 to 20 percent.

In an age of austerity, few nations are able to commit the resources in terms of manpower, platforms, or technologies to enforce international or national laws. The U.S. government set out 15 recommendations in 2014 from the Presidential Task Force to combat IUU fishing, but these were largely procedural considerations with no apparent mechanism for platforms or manpower. Two recommendations had promise. One called for international capacity building, but included no real assets, and the final stage of implementing a strategy would not be complete until mid-2016 (nearly two years after the report). Another called for partnerships. The U.S. Coast Guard has a long history of capacity-building, but its resources are a drop in the ocean.

There is, however, one opening in this latter recommendation. Just as one federal agency alone cannot combat IUU fishing and seafood fraud, these issues cannot be addressed only by federal or state governments. It is important that federal agencies join forces and take strong steps in partnership with nonfederal entities such as harvesters, importers, dealers, retailers, processors, academia, and nongovernmental organizations.

CASE STUDY PROPOSAL 5

Irregular Warfare in the Arctic Islands: Past and Future

Rebecca Pincus, PhD
U.S. Naval War Colleg

Relevance of Topic to Field

Growing awareness of rapid environmental change and increasingly competitive dynamics in the Arctic region are driving securitization, particularly linked with more assertive Russian actions and clear expressions of interest by China. While the threat of open conflict in the Arctic region remains low, as noted in the Navy's recent Strategic Outlook for the Arctic (January 2019), the challenge of gray zone or hybrid challenges has been noted. Characterizing the Arctic as a "strategically competitive space," the Coast Guard's Strategic Outlook for the Arctic noted that Russia and China "have both declared [the Arctic] a national priority and made corresponding investments in capability and capacity to expand their influence." Taken together, these assessments point to growing concern about strategic competition in the Arctic region between the U.S. and its major rivals—competition that will remain below the level of outright conflict, but will be active and intentional within the "gray zone."

More broadly, as U.S. and NATO attention has returned to the High North, it is appropriate to reexamine the lessons of past operations in the region. At one time, the islands of the GIUK gap were considered of the utmost strategic importance. The lesson of WWII-era landings on Greenland, Iceland, and Svalbard for U.S. leaders during the Cold War was that these islands must be secured under the NATO umbrella. Bringing Iceland, Denmark, and Norway into the alliance as founding members was a chief U.S. objective—partly due to the strategic geographic benefits that would result.¹

In addition, a great deal of recent attention has focused on the Russian buildup of military and dual-use infrastructure on the Russian Arctic islands. From Wrangel Island in the east near the Bering Strait, through the New Siberian islands and Severnaya Zemlya in the center, to Franz Josef Land and Novaya Zemlya in the West, the Russian Arctic islands are a central component of the Kremlin's efforts to strengthen its security position in the far north as ice retreats. The Nagurskoye base in the Franz Josef Land archipelago (on the western island of Alexandra Land) features a new 2,500-meter hardened runway that can handle heavy aircraft year-round.² In addition, Nagurskoye includes a year-round trefoil base for Russian border guard troops.³ The Nagurskoye base is approximately 200 miles from Svalbard, and aircraft launched from Nagurskoye could target the Thule base in northern Greenland. While some of the Russian buildup can be understood as rebuilding capabilities that were lost following the Cold War (for example, Nagurskoye dates back to the 1950s), other aspects of Russian plans, like the spread of the S-400 missile system, are of more concern.⁴

In recent months, some observers have speculated that Svalbard is likely to be targeted by Russia with a Crimea-type hybrid warfare attack.⁵ Similar speculation has surrounded Greenland and

¹ For further information, see Lundestad, Geir. *America, Scandinavia, and the Cold War 1945-1949* (New York: Columbia University Press, 1980); Tamnes, Rolf. *The United States and the Cold War in the High North* (Aldershot: Dartmouth Publishing Company, 1991).

² Staalesen, Atle. "Big Upgrade for Russia's Northernmost Airstrip," *The Barents Observer*, 26 September 2018, <https://thebarentsobserver.com/en/security/2018/09/big-upgrade-worlds-northernmost-airstrip>.

³ Nilsen, Thomas. "Russian Border Guard Service Conquers the North Pole," *The Barents Observer*, 13 April 2017, <https://thebarentsobserver.com/en/borders/2017/04/russian-border-guards-conquer-north-pole>.

⁴ Luhn, Alec. "Russia to Deploy Top Air Defense Missiles to the Arctic," *Telegraph*, 16 April 2019.

⁵ See, for example, Zimmerman, Michael. "High North and High Stakes: The Svalbard Archipelago Could Be the Epicenter of Rising Tension in the Arctic," *PRISM Journal of Complex Operations* 7, No. 4 (November 2018): 107-

Iceland due to their strategic locations and the deepening tension with Russia. While Russian hybrid methods have demonstrably altered facts on the ground in Ukraine, the assumption that Svalbard may be next requires careful parsing. However, in the new era of competition and tension between Russia and NATO, do these islands still hold the keys to the North Atlantic? Will they simply be the site of defensive and offensive installations, and subject to long-range, high-end attacks? Or will they be actively contested through irregular, low-end means, as during World War II?

These questions are important to designing strategy as well as to service and unit-level preparations for refamiliarization with the High North. During Exercise Trident Juncture in late 2018, U.S. Marines, staging from Navy amphibious ships, simulated a landing in Alvund, Norway, using amphibious assault vehicles, light armored vehicles, and humvees.⁶ The challenges associated with high-latitude training operations during Trident Juncture demonstrate the importance of area familiarization to successful outcomes at all levels of strategy and operations. The large-scale effort undertaken in support of Trident Juncture reflects the growing importance of maritime operations in the Arctic region, especially the area between Iceland and Norway. Large-scale exercises and training opportunities should be built on identified needs and provide tailored learning—making the lessons of past operations both relevant and timely components of current-day planning.

The core research approach: What were the strategic objectives and imperatives associated with Greenland and Svalbard during World War II, and how did the series of irregular warfare operations on those islands advance those ends? What has changed since then, in both military technology and geostrategic context? From a methodic inquiry into the ways in which geographic and technological necessity drove small-scale landings on Greenland, Iceland, and Svalbard, this paper will turn to the present: While the geography has remained the same, technology has altered strategy. What strategic objectives and imperatives would drive U.S. and allied operations in Svalbard and Greenland in the event of conflict with Russia?

The paper will identify the strategic objectives, operational context, and tactical challenges that shaped operations in Greenland and Svalbard in the past, and will examine how these considerations have changed. The aim is to provide a nuanced, historically informed perspective on the likelihood and nature of irregular maritime warfare in the Arctic islands.

Proposed Outline/Key Arguments

Greenland and Svalbard have been loci of active irregular warfare operations as well as diplomatic wrangling in previous decades. With the return of global great power competition, the history of irregular warfare in the Arctic islands is worth reviewing. This paper will argue that a thorough understanding of past irregular warfare operations in Greenland and Svalbard provides insight into the current and future purposes of such operations.

How did they drive strategy and operations in the past? How might they drive strategy and operations in the future? Should the U.S. be prepared to send small teams into remote, hazardous, and challenging island terrain as before, or has that need passed? What missions would expeditionary forces seek to accomplish today?

123; Williamson, Lee. "Tensions in the High North: The Case of Svalbard," *NATO Association of Canada* 21 August 2018, <http://natoassociation.ca/tensions-in-the-high-north-the-case-of-svalbard/>; Closson, Stacy. "Good Fences Make Good Neighbors: Russia and Norway's Svalbard," *Wilson Center, Kennan Cable No. 37*, 20 November 2018, <https://www.wilsoncenter.org/publication/kennan-cable-no-37-good-fences-make-good-neighbors-russia-and-norways-svalbard>.

⁶ Eckstein, Megan. "Trident Juncture Wraps Up After Successful Amphibious Landings, Training Ashore in Norway," *USNI News*, 7 November 2018, <https://news.usni.org/2018/11/07/trident-juncture-wraps-up-after-several-amphibious-landings-training-ashore>.

A basic policy/strategy match analysis framework can be applied backwards to the historical irregular operations in Greenland and Svalbard, and forwards to possible scenarios involving Russia in the near term. One scenario will be primarily defensive and explore possible responses to Russian irregular operations against Greenland and Svalbard; and the other will be primarily offensive and assess the use of U.S. and NATO irregular operations in response to a Russian conventional move against Greenland and Svalbard.

Outline:

- 1. Introduction (define IW, identify relevance of topic to Arctic region today, lay out research framework)**
- 2. History of irregular warfare in Greenland and Svalbard (review operations and analyze using identified framework)**
- 3. Describe current security situation and identify possible threats; apply framework to use of maritime irregular operations**
- 4. Discussion**
- 5. Conclusions and recommendations**

Conclusion

This paper proposal outlines an inquiry into the basis for irregular maritime warfare operations in the Arctic islands of Greenland and Svalbard in the past, and their potential uses at present in the context of conflict with Russia.

The resulting case study will amplify and extend a growing body of research into the emerging dynamics of the strategically competitive space of the Arctic. It will build on existing studies, and connect the historical record with current discussions of possible irregular warfare scenarios in the Arctic, with a particular focus on the key strategic points of Svalbard and Greenland.

Select Bibliography

- Center on Irregular Warfare and Armed Groups. "Maritime Gray Zones." *CIWAG Reading Lists 4* (2018), <https://digital-commons.usnwc.edu/ciwag-reading-lists/4/>.
- Center on Irregular Warfare and Armed Groups. "Gray Zones Russia." *CIWAG Reading Lists 7* (2017), <https://digital-commons.usnwc.edu/ciwag-reading-lists/7/>.
- Closson, Stacy. "Good Fences Make Good Neighbors: Russia and Norway's Svalbard," Wilson Center, Kennan Cable No. 37, 20 November 2018, <https://www.wilsoncenter.org/publication/kennan-cable-no-37-good-fences-make-good-neighbors-russia-and-norways-svalbard>.
- Eckstein, Megan. "Trident Juncture Wraps Up After Successful Amphibious Landings, Training Ashore in Norway," *USNI News*, 7 November 2018, <https://news.usni.org/2018/11/07/trident-juncture-wraps-up-after-several-amphibious-landings-training-ashore>.
- Luhn, Alec. "Russia to Deploy Top Air Defense Missiles to the Arctic," *Telegraph*, 16 April 2019.
- Lundestad, Geir. *America, Scandinavia, and the Cold War 1945-1949* (New York: Columbia University Press, 1980).
- Nilsen, Thomas. "Russian Border Guard Service Conquers the North Pole," *The Barents Observer*, 13 April 2017, <https://thebarentsobserver.com/en/borders/2017/04/russian-border-guards-conquer-north-pole>.

- Pincus, Rebecca, and Berbrick, Walter. "Gray Zones in a Blue Arctic: Grappling with China's Growing Influence," *War on the Rocks*, 24 October 2018, <https://warontherocks.com/2018/10/gray-zones-in-a-blue-arctic-grappling-with-chinas-growing-influence/>.
- Pincus, Rebecca. "China's Polar Strategy: An Emerging Gray Zone?" *The Diplomat*, 6 July 2018, <https://thediplomat.com/2018/07/chinas-polar-strategy-an-emerging-gray-zone/>.
- Staalesen, Atle. "Big Upgrade for Russia's Northernmost Airstrip," *The Barents Observer*, 26 September 2018. <https://thebarentsobserver.com/en/security/2018/09/big-upgrade-worlds-northernmost-airstrip>.
- Tamnes, Rolf. *The United States and the Cold War in the High North*. (Aldershot: Dartmouth Publishing Company, 1991).
- United States Coast Guard. "Arctic Strategic Outlook," April 2019.
- United States Navy. "Strategic Outlook for the Arctic." January 2019.
- Williamson, Lee. "Tensions in the High North: The Case of Svalbard." NATO Association of Canada, 21 August 2018, <http://natoassociation.ca/tensions-in-the-high-north-the-case-of-svalbard/>
- Zimmerman, Michael. "High North and High Stakes: The Svalbard Archipelago Could Be the Epicenter of Rising Tension in the Arctic," *PRISM Journal of Complex Operations* 7, 4 (November 2018): 107-123.

CASE STUDY PROPOSAL 6

Countering Coercion in the South China Sea: The Role of Strategic Culture

Kerry Lynn Nankivell

Senior Strategic Analyst, Public Safety Canada

PhD Candidate, King's College London

Summary

U.S. strategy to counter PRC gray zone operations in the South China Sea has met with little success. Premised on twin pillars of Freedom of Navigation Operations (FONOPs) and partner assistance via the Maritime Security Initiative (MSI), the results of U.S. strategy to date have not delivered the anticipated results. The approach was conceptualized as a non-escalatory sea denial campaign that would resist PRC coercion in the South China Sea through paramilitary forces of small partners. Four years on however, neither U.S. presence nor U.S. assistance has enabled Southeast Asian states to defend their interests more vigorously in contested waters. This outcome defies both conventional realist and rationalist theory, and presents a puzzle for scholars of unconventional conflict in the wider field of strategic studies. Finding little new insight in the conventional strategic studies domains, this project will examine the impact of a state's strategic culture on its partnership at sea with the United States. The examination will add new depth to our understanding of the Southeast Asian seascape, and offers U.S. policy makers the opportunity to better calibrate engagement policy to its realities.

Significance of Topic

An examination of strategic culture as a determinant of U.S. engagement in asymmetric environments at sea has immediate significance. In an alarmingly brief period of time, China and her three maritime services have jointly established *de facto* control of much of the South China Sea. Beijing has accomplished this through incremental gains made almost entirely by paramilitary forces, including civilian vessels that have been enlisted into national service on a part-time basis.

The process of consolidating Beijing's dominance in the South China Sea began in earnest when the PRC successfully wrested the disputed Scarborough Shoal from nominal Filipino control in April 2012. That initial move, largely unopposed, was followed in 2013 with large-scale land reclamation projects undertaken at seven Chinese-held features in the Spratly Islands. Land reclamation eventually enabled overt militarization of the PRC's seven occupied features, starting in 2017. At the time of writing, Beijing has built what look to be three logistics and air support facilities in the Spratly Islands (at Mischief, Subi and Fiery Cross Reefs).¹ All seven features host surveillance capabilities and large anti-aircraft guns, lending them utility in peace time, as well as point-defense capacity in the event of any overt hostilities in the surrounding waters.² In May 2018, reports confirm that the PRC deployed anti-air and anti-ship cruise missiles to the three larger features, allowing the PRC to strike

¹ "Build It and They Will Come," *Asia Maritime Transparency Initiative*, August 1, 2016, <https://amti.csis.org/build-it-and-they-will-come/>.

² "China's New Spratly Island Defenses," *Asia Maritime Transparency Initiative*, December 13, 2016, <https://amti.csis.org/chinas-new-spratly-island-defenses/>.

any target within 295 nm of the disputed reefs,³ giving the PLA easy reach to stretches of sea up to the Philippine, Malaysian, and Bruneian coasts.

The Spratly Islands' military accoutrements are complemented by the more hardened capabilities deployed to the PRC-controlled Paracel Island chain to the northwest. This island chain has also undergone substantial enlargement and hardening in the last five years. Additionally, starting in 2016, the PRC deployed HQ-9 surface-to-air missiles (SAMs) to Woody Island in the Paracels, making it the site of credible force projection at some distance from the mainland Chinese coast.⁴ Probably reverse-engineered from Russian S-300 or -400s air defense system, the HQ-9 is China's primary long-range missile, boasting a range of approximately 125 miles.⁵ When considered together, both the more capable HQ-9 in the Paracels and the smaller-range anti-air guns in the Spratlys give Beijing an increasingly credible, multi-layered sea denial capability throughout the semi-enclosed South China Sea.

The fixed armaments in the two groups of features provide the logistic skeleton for the PRC presence in the South China Sea, but its maritime services and their surface fleets are its lifeblood. As has been amply documented by the U.S. Naval War College's Connor Kennedy and Andrew Erickson, Beijing has modernized its Navy and Coast Guard in the last decade while also complementing it with a highly effective maritime militia. The militia is composed of fishing vessels that are fitted with communication and navigational equipment provided by the PRC government, while its seafarers undergo regular military training, and benefit from awards, titles and recognitions, and financial compensation from Beijing.⁶ Through coordinated use of its navy, air force (including strategic missile force), coast guard, and maritime militia, the PRC has harassed and intimidated its neighbors whenever they seek to exercise sovereignty over what they believe are their own jurisdictions.⁷

This research proposal aims to harness theoretical insights related to strategic culture to examine U.S. engagement policy in Southeast Asia since the MSI was launched in 2015, in order to offer some explanation for the counterintuitive results of U.S. policy to date. It will complement existing, primarily materialist, studies of the dynamics of the South China Sea with a thorough consideration of regional strategic culture. The approach will give rise to new questions about the South China Sea disputes and new answers about the best way forward for U.S. strategy.

Research Question

What is the role of strategic culture in explaining the outcomes of the U.S. approach to countering PRC coercion in the South China Sea?

³ Office of the Secretary of Defense. *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China in 2019*. Washington, D.C.: U.S. Department of Defense, May 2, 2019, https://media.defense.gov/2019/May/02/2002127082/-1/-1/1/2019_CHINA_MILITARY_POWER_REPORT.pdf.

⁴ "China Flies Nuclear-Capable Bomber in the South China Sea after Trump Taiwan Call, U.S. Officials Say," *Fox News*, December 9, 2016, <https://www.foxnews.com/world/china-flies-nuclear-capable-bomber-in-south-china-sea-after-trump-taiwan-call-us-officials-say>.

⁵ "China's HQ-9 vs. Russia's S-300 Air Defense System: What's the Difference?," *The National Interest*, November 10, 2018, <https://nationalinterest.org/blog/buzz/chinas-hq-9-vs-russias-s-300-air-defense-system-whats-difference-3577>.

⁶ See, *inter alia*, Kennedy, C. "The Struggle for Blue Territory," *RUSI Journal*, 163: 5, 2018, 8-19; Erickson, Andrew. "China's Third Sea Force: Understanding and Countering China's Maritime Militia," Testimony before the House Armed Services Committee, 21 September, 2016, <https://docs.house.gov/meetings/AS/AS28/20160921/105309/HHRG-114-AS28-Wstate-EricksonPhDA-20160921.pdf>.

⁷ Green, M., et al. *Countering Coercion in Maritime Asia*, Center for Strategic and International Studies (New York, NY: Rowman & Littlefield, 2017).

Outline

- I. Review of existing literature on Southeast Asian responses to Chinese gray zone aggression**, including identification of gaps
- II. Review of existing literature on strategic culture and its impact on military strategy and the formulation of state interest**, with particular emphasis on Asia
- III. What can regional strategic cultures explain about Southeast Asia's responses to Chinese gray zone aggression:**
 - A. Southeast Asia, in regional terms
 - B. Philippines
 - C. Malaysia
 - D. Vietnam
- IV. Implications for U.S. policy:** What does this investigation of Southeast Asian strategic culture suggest for effective U.S. strategy in Southeast Asian seas?

Discussion/Conclusion

This study aims to be the first exploration of the role of strategic culture in explaining the unsatisfactory status quo in the South China Sea. The question has immediate relevance to both the field of strategic studies and the development of U.S. maritime policy and strategy in Asia. Conventional studies have not succeeded in predicting the current state of affairs, in which U.S. capacity building efforts have, counterintuitively, not resulted in Southeast Asian resistance to PRC paramilitary coercion in disputed waters. This study will aim to fill the explanatory gap left by conventional thinking as a means to informing redesigned U.S. approaches to Southeast Asian seas. In the academic context, the study aims to deliver new insights into the effects of strategic culture on maritime policy and operations that should also apply to other regional contexts.

CASE STUDY PROPOSAL 7

Hybrid Maritime Warfare

Jan Asmussen, PhD
Polish Naval Academy

Gary Schaub, Jr., PhD
University of Copenhagen

Relevance of Topic to the Field

Russia's revanchist grand strategy requires the use of deniable means of coercion to target political, military, economic, social, and cultural seams in adversaries to disrupt, confuse, and favorably change the potential battle space for subsequent political operations. The maritime domain provides ample opportunities to implement such strategies. Maritime services in the European littorals, and NATO as an institution, are revising their practices to address these challenges but not necessarily revising their strategies, concepts of operation, training, tactics, and procedures, exercise components, and procurement priorities. They have focused on obvious and traditional maritime challenges and require further analytic guidance.

Research Question

How have European maritime services and NATO responded to the challenges of hybrid maritime threats posed by Russia, and how should they respond?

Policy, Strategy, and/or Operational Significance

The 2018 National Defense Strategy has reoriented the United States, and by implication its allies, toward great power competition with Russia and China. Each of the Services are utilizing its guidance to prepare for high intensity operations so as to effectively deter or, if necessary, defend against and defeat overt aggression by these states. Yet, while these great powers are intent upon revising facts on the ground in their regions, they have been careful to not trigger overt conflict with the United States and its allies. They have turned to hybrid tactics to achieve their objectives.¹

Hybrid maritime threats pose challenges to traditional maritime strategies by using multiple mechanisms to reduce the ability of navies and coast guards to attain and maintain domain awareness, the precondition for effective action. They utilize the maritime domain's inherent ability to conceal the activities of a full spectrum of personnel, vessels, and capabilities—private civilian, commercial, government civilian, conventional military, and special operations forces—engaged in shaping operations on, over, or under the water. As the actions of these forces are not intended to be decisive in and of themselves, they present novel situations outside of the norm that are less likely to

¹ Although our focus will be on Russia in the European littorals, hybrid maritime warfare perhaps constitutes the core of Chinese efforts in the South China Sea. See James R. Holmes and Toshi Yoshihara, "Deterring China in the 'Gray Zone': Lessons of the South China Sea for U.S. Alliances," *Orbis* 61, 3 (2017); Michael Peck, "Little Blue Sailors: Maritime Hybrid Warfare Is Coming (in the South China Sea and Beyond)," *The National Interest* (18 December 2016), <http://nationalinterest.org/blog/the-buzz/little-blue-sailors-maritime-hybrid-warfare-coming-the-south-18769>; Andrew S. Erickson, "The South China Sea's Third Force: Understanding and Countering China's Maritime Militia," Testimony Before the House Armed Service Committee Seapower and Projection Forces Subcommittee (21 September 2016); Hal Brands, "Paradoxes of the Gray Zone," *FPRI E-Notes* (February 2016), https://www.fpri.org/docs/brands_-_grey_zone.pdf; and Hongzhou Zhang and Sam Bateman, "Fishing Militia, the Securitization of Fishery and the South China Sea Dispute," *Contemporary Southeast Asia* 39, 2 (August 2017).

be noticed, assessed, and countered. Even if they are noticed and assessed as adversarial, their nondecisive and incremental nature introduces the temptation to defer action and adjust expectations to the revised status quo, as no particular step or action warrants action in and of itself. As such, hybrid maritime threats create low-risk opportunities for making substantive gains over the long term.

The risk is that these steady-state shaping operations will be acknowledged but marginalized in the maritime strategies, concepts, operations, and practices of Western navies.

Proposed Outline/Key Arguments

- 1. Revising Maritime Strategies in the Gray Zone of Great Power Competition**
- 2. Hybrid Maritime Warfare**
 - A. Grey Hybrid Maritime Warfare
 - B. Unconventional Hybrid Naval Warfare
- 3. Russian Use of Hybrid Maritime Strategies**
- 4. Countering Hybrid Maritime Threats**
- 5. Conclusions and Recommendations**

1. Revising Maritime Strategies in the Gray Zone of Great Power Competition

NATO's *Maritime Strategy* of 2011 "identifies the four roles of NATO's maritime forces: deterrence and collective defence; crisis management; cooperative security – outreach through partnerships, dialogue and cooperation; and maritime security."² The 2016 NATO Warsaw Summit Declaration emphasized that NATO's "Standing Naval Forces ... are being enhanced and will be aligned with NATO's enhanced NATO Response Force to provide NATO's highest readiness maritime forces."³ In 2018, NATO, in conjunction with the U.S. Navy's reactivation of the Second Fleet, decided to re-establish Atlantic Command "to ensure dedicated reinforcement of the continent and demonstrate a capable and credible deterrence effect" given "return to great power competition and a resurgent Russia."⁴ While vitally important for deterrence of, and reinforcement after, overt conventional aggression by Russia on the Eurasian continent, NATO's approach to maritime challenges, and those of its constituent navies, risks marginalizing the more likely and more effective actions that Russia has already undertaken.

The 2014 Russian campaign in Crimea included a considerable range of maritime elements.⁵ Hybrid warfare at sea is not confined to the Crimea or the Black Sea region. "In light of the substantial conventional superiority of NATO and partner nations in the Baltic Sea along with the overall strategic situation ... hybrid scenarios like the ones witnessed in the Black Sea become increasingly possible" in the Baltic Sea region.⁶ They are also increasingly used in the High North and Arctic Sea.⁷ Maritime

² NATO *Maritime Strategy*, paragraph 19.

³ *Warsaw Summit Communiqué Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Warsaw 8-9 July 2016*, paragraph 49.

⁴ Pentagon spokesperson Johnny Michael, quoted by Associated Press, "'Great Power Competition': NATO Announces Atlantic Command to Counter Russia," *The Guardian* (5 May 2018), <https://www.theguardian.com/world/2018/may/05/great-power-competition-nato-announces-atlantic-command-to-counter-russia>.

⁵ Martin Murphy, Frank G. Hoffman, and Gary Schaub, Jr., *Hybrid Maritime Warfare and the Baltic Sea Region*, (Copenhagen: Centre for Military Studies, University of Copenhagen, November 2016).

⁶ Adrian J. Neumann and Sebastian Bruns, editors, *Focus on the Baltic Sea: Proceedings from the Kiel Conference 2015* (Kiel: Institute for Security Policy, Kiel University, 2015), page 15.

⁷ Pavel K. Baev, "Threat Assessments and Strategic Objectives in Russia's Arctic Policy," *The Journal of Slavic Military Studies* 32, 1 (January 2019); Tony Balasevicius, "Russia's 'New Generation War' and Its Implications

environments offer excellent conditions for covert, clandestine, and other actions that are difficult to attribute, and Russia has demonstrated its ability to utilize them to achieve significant political, military, economic, and territorial objectives.⁸

2. Hybrid Maritime Warfare

The deliberate ambiguity inherent in hybrid strategies has driven conceptual and analytic debates that have yielded some light and more heat.⁹ We synthesize this literature and define hybrid warfare as the use of deniable means of coercion to target political, military, economic, social, and cultural seams in adversaries to disrupt, confuse, and favorably change the potential battle space for subsequent political operations.

Hybrid maritime warfare applies this conception to the maritime environment, particularly in coastal waters and in the littorals. We can distinguish between three categories of hybrid threats: grey, unconventional, and cross-domain.

Grey hybrid maritime warfare is conducted by irregular, nonstate forces, including private civilian personnel, commercial personnel such as fishermen, and criminals such as pirates, terrorists, and smugglers. They utilize civilian vessels armed with light, temporary mounted guns, shoulder-mounted missiles, mines, and nonlethal weapons such as tear gas, water cannons, and sound. They use commercial off-the-shelf (COTS) communications gear for command and control purposes, as well as commercially available capabilities, such as remotely controlled unmanned aerial vehicles or even marine life,¹⁰ for intelligence, surveillance, and reconnaissance (ISR) functions. Given their affiliations and equipment, their activities are difficult to attribute to any particular state actor or navy, although at times white-hulled coast guard vessels may provide assistance and command and control capacities to these nonstate actors.¹¹

Unconventional hybrid naval warfare is conducted by (in some cases marked) naval personnel from amphibious special operation forces, amphibious light infantry, and units of combat swimmers. They utilize grey-hulled patrol boats, mini submarines, and so-called auxiliary submarines (SSA/SSAN) that are remote-controlled or autonomous to conduct their operations. Their armaments include unconventional naval weapons, however, including mines,¹² seabed acoustic sensors (SAS), container missile systems, and armatures to manipulate objects on the seabed. Their command and control capabilities, as well as those used for intelligence, surveillance, and reconnaissance are high-end military capabilities, including auxiliary submarines (SSA) and nuclear-powered auxiliary submarines (SSNA). Although unconventional naval warfare is not novel, as covert operations by

for the Arctic," *The Mackenzie Institute* (10 November 2015), <https://mackenzieinstitute.com/2015/11/russias-new-generation-war-and-its-implications-for-the-arctic/>.

⁸ Stephen J Cimbala, "Sun Tzu and Salami Tactics? Vladimir Putin and Military Persuasion in Ukraine, 21 February–18 March 2014," *Journal of Slavic Military Studies* 27, 3 (Autumn 2014); Colby Howard and Ruslan Puhkov, editors, *Brothers Armed: Military Aspects of the Crisis in Ukraine* (Minneapolis, MN: East View Press, 2014).

⁹ Frank G. Hoffman, *Conflict in the 21st Century: The Rise of Hybrid War* (Arlington: Potomac Institute for Policy Studies, December 2007); Roger N. McDermott, "Does Russia Have a Gerasimov Doctrine?" *Parameters* 46, 1 (2016); Charles K. Bartles, "Getting Gerasimov Right," *Military Review* 96, 1 (2016); Andrew J. Duncan, "New 'Hybrid War' or Old 'Dirty Tricks'? The Gerasimov Debate and Russia's Response to the Contemporary Operating Environment," *Canadian Military Journal* 17, 3 (Summer 2017); Mark Galeotti, "I'm Sorry for Creating the 'Gerasimov Doctrine,'" *Foreign Policy* 5 (2018).

¹⁰ Rick Noack, "Alleged Russian Spy Whale Is Refusing to Leave and is Seeking Norwegians' Attention, Authorities Say," *The Washington Post* (3 May 2019), <https://www.washingtonpost.com/world/2019/05/02/authorities-alleged-russian-spy-whale-is-refusing-leave-seeking-norwegians-devotion/>.

¹¹ John Grady, "Experts: China Continues Using Fishing Fleets for Naval Presence Operations," *USNI News* (17 August 2016), <https://news.usni.org/2016/08/17/experts-china-using-fishing-fleets-naval-presence-operations>.

¹² Nick Childs, "Naval Mines: Curse or Blessing in Hybrid Warfare?" in Neumann and Bruns, editors, *Focus on the Baltic Sea*, pages 44-49.

Special Forces have always been carried out apart from major battlefield operations, they become hybrid when their tasks are fulfilled without being recognized by the attacked party. Plausible deniability is of course far more difficult in the case of grey hybrid naval warfare, as the high-end equipment needed for its implementation will in most cases point to the perpetrators.

Cross-domain hybrid warfare can be conducted by state or nonstate agents utilizing means that are difficult to attribute against maritime targets. Cyber means, in particular, are exemplars of cross-domain threats. Attacks on the communication structures and other computer-based elements of modern navies, commercial shipping vessels, port facilities, or structures such as locks and dams can significantly disrupt maritime traffic and associated activities and yield military, economic, political, and social effects at sea and ashore.¹³ The global connectivity of cyberspace enables attacks from every location on this planet, making attribution difficult and retaliation problematic.¹⁴

3. Russian Use of Hybrid Maritime Strategies

The Russian campaign in Crimea had many maritime elements. Many of the 15,000 naval personnel that were stationed there, particularly the 2,000 members of the 810th Marines Infantry Brigade, were deployed with their armored vehicles throughout Crimea to “to ensure the protection of places of deployment of the Black Sea Fleet.”¹⁵

They were reinforced by thousands of troops from Russia proper, including a second naval infantry brigade based at Novorossiisk, “two special forces brigades and a designated airborne division.”¹⁶ These personnel surrounded Ukrainian military posts and governmental buildings, provided advice and command to irregular forces throughout Crimea, and discriminately projected power to “politely” intimidate Ukrainian forces, officials, and citizens ashore.¹⁷

Since the seizure and annexation of Crimea, Russian consolidation and expansion of its control have had significant maritime dimensions. These include control over oil and gas reserves in what had been Ukrainian territorial waters,¹⁸ the seizure and operation of Ukrainian oil rigs off the Black

¹³ Peter Dombrowski and Chris C. Demchak, “Cyber War, Cybered Conflict, and the Maritime Domain,” *Naval War College Review* 67, 2 (2014), <https://digital-commons.usnwc.edu/nwc-review/vol67/iss2/7>; Martin Murphy and Gary Schaub Jr., “Sea of Peace or Sea of War? How Maritime Hybrid Warfare Could Alter the Balance on NATO’s Northern Flank,” *Naval War College Review* 71, 2 (Spring 2018).

¹⁴ Eric F. Mejia, “Act and Actor Attribution in Cyberspace: A Proposed Analytic Framework,” in Gary Schaub Jr., editor, *Understanding Cybersecurity: Emerging Governance and Strategy* (London: Rowman and Littlefield International, 2018).

¹⁵ Ministry of Foreign Affairs of the Russian Federation, “СООБЩЕНИЕ ДЛЯ СМИ: О встрече в МИД России с советником-посланником Посольства Украины в Российской Федерации,” [“PRESS RELEASE: About the meeting of the Russian Foreign Ministry with Minister Counselor of the Embassy of Ukraine in the Russian Federation”] (28 February 2014), available at http://archive.mid.ru/brp_4.nsf/newslines/F2C86A40B49E817544257C8D00485C4F, accessed 26 July 2016; Ron Synovitz, “Russian Forces in Crimea: Who Are They and Where Did They Come From?” *Radio Free Europe/Radio Liberty* (4 March 2014).

¹⁶ Synovitz, “Russian Forces in Crimea.”

¹⁷ Lukas Milevski, “Little Green Men in the Baltic States Are an Article 5 Event,” *FPRI Baltic Bulletin* (January 2016). In these ways, Russian hybrid behavior was similar to that described as “maritime irregular warfare” by Molly Dunigan, Dick Hoffmann, Peter Chalk, Brian Nichiporuk, and Paul Deluca, *Characterizing and Exploring the Implications of Maritime Irregular Warfare* (Santa Monica: The RAND Corporation, 2012).

¹⁸ William J. Broad, “In Taking Crimea, Putin Gains a Sea of Fuel Reserves,” *The New York Times* (17 May 2014), <https://www.nytimes.com/2014/05/18/world/europe/in-taking-crimea-putin-gains-a-sea-of-fuel-reserves.html>.

Sea coast,¹⁹ and access to the Sea of Azov through the Kerch Strait²⁰ and the ability to affect significant portions of Ukrainian imports and exports.²¹ Conflicts have arisen as Ukrainian forces have challenged Russian control, including buzzing Russian oil rigs with military aircraft²² and the scuffle between Ukrainian naval vessels and Russian Coast Guard vessels and military aircraft over access to the Sea of Azov in November 2018.²³

4. Countering Hybrid Maritime Threats

How can and should the United States and allied nations address such challenges when directed at them or non-allied partners such as Ukraine?

NATO reacted to Russia's hybrid actions in Ukraine with its Readiness Action Plan and Adaptation Measures to reassure the Baltic States and deter Russian adventurism.²⁴ This conventional response focused almost entirely on land forces and aimed to narrow Russian options for a *fait accompli* land grab in the Baltic states. These measures were less effective against the hybrid warfare techniques Russia demonstrated in Crimea and even offered new opportunities to develop and exploit seams between NATO allies and Baltic societies.²⁵

In the maritime domain, analysts have responded with recommendations to "deliver a prescriptive roadmap for establishing a ready posture for top-end warfighting capabilities" to "contribute to collective defense both in terms of conventional and nuclear deterrence. Specifically, reinforcement of allies on the European continent will require the establishment and maintenance of control over sea lines of communication; doing so in A2/AD environments requires increased capabilities for access and entry."²⁶ NATO's reestablishment of Atlantic Command to address transatlantic reinforcement is of a piece with NATO's overall focus on deterring overt aggression.

¹⁹ "Ukraine Says Russia Looted Two Crimean Oil Rigs," *Reuters* (16 December 2015), <https://www.reuters.com/article/us-ukraine-crisis-crimea-energy-iduskbn0tz22g20151216>; FSUOGM - Former Soviet Union Oil & Gas, "Russian Drilling Rigs Spotted Offshore Ukraine," *Newsbase* (3 August 2016), <https://newsbase.com/topstories/russian-drilling-rigs-spotted-offshore-ukraine>.

²⁰ "Bortnikov: Kerch Strait Controlled by Russian Special Services," *EurAsia Daily* (10 April 2018), <https://eadaily.com/en/news/2018/04/10/bortnikov-kerch-strait-controlled-by-russian-special-services>.

²¹ Andrew Higgins, "Russia Slowly Throttles a Ukrainian Port," *The New York Times* (14 December 2018), <https://www.nytimes.com/2018/12/14/world/europe/moscow-ukraine-azov-mariupol.html>; "Russia's Crimean Annexation Cost Ukrainian Ports \$400M - FT," *The Moscow Times* (17 May 2019), <https://www.themoscowtimes.com/2019/05/17/russias-crimea-annexation-cost-ukrainian-ports-400m-ft-a65625>.

²² Damir Kaletovic, "Black Sea Incident Risks Russia-Ukraine Conflict Tension," *OilPrice.com* (2 February 2017), <https://oilprice.com/Latest-Energy-News/World-News/Black-Sea-Incident-Risks-Russia-Ukraine-Conflict-Tension.html>.

²³ Anton Troianovski, "How the World's Shallowest Sea Became the Latest Flash Point Between Russia and Ukraine," *The Washington Post* (27 November 2018), <https://www.washingtonpost.com/world/2018/11/27/how-worlds-shallowest-sea-became-latest-flashpoint-between-russia-ukraine/>; Steven Pifer, "The Battle for Azov: Round 1 Goes to Russia," *Brookings Institution* (3 December 2018), <https://www.brookings.edu/blog/order-from-chaos/2018/12/03/the-battle-for-azov-round-1-goes-to-russia/>.

²⁴ Supreme Headquarters Allied Powers Europe, 'Enhanced NATO Air Policing Patrols Baltic Airspace', 30 January 2015; NATO, 'Warsaw Summit Communiqué', 9 July 2016.

²⁵ Marta Kepe, "NATO: Prepared for Countering Disinformation Operations in the Baltic States?" *The RAND Blog* (7 June 2017), <https://www.rand.org/blog/2017/06/nato-prepared-for-countering-disinformation-operations.html>; Teri Schultz, "Russia Is Hacking and Harassing NATO Soldiers, Report Says," *Deutsche Welle* (6 October 2017), <https://www.dw.com/en/russia-is-hacking-and-harassing-nato-soldiers-report-says/a-40827197>; Benas Gerdziunas, "Baltics Battle Russia in Online Disinformation War," *Deutsche Welle* (8 October 2017), <https://www.dw.com/en/baltics-battle-russia-in-online-disinformation-war/a-40828834>.

²⁶ Steven Horrell, Magnus Nordenman, and Walter B. Slocombe, *Updating NATO's Maritime Strategy* (Washington: Atlantic Council, 2016), page 4.

These responses make it obvious why Russia and China have adopted hybrid tactics to advance their interests. The concept of “maritime domain awareness” was promulgated by the U.S. Navy in 2007 in recognition that “non-traditional challenges such as ... irregular opponents who employ asymmetric methods and capabilities” “thriv[e] in the ‘gray zone’ between criminal activity and armed conflict.”²⁷ “Maritime situational awareness” is mentioned only in passing in NATO’s Maritime Strategy²⁸ and receives similar levels of attention in most discussions of revising it.²⁹

Yet puncturing the subterfuges utilized in hybrid tactics—utilizing agents and capabilities that are difficult to attribute to a state actor—is perhaps the primary task in countering them. It is vital that any claim by a potential aggressor that it had nothing to do with the attack is “dead on arrival.” NATO made crystal clear at its 2016 Warsaw Summit that any appearance of little green men in the Baltic states would be met with a strong response by the Alliance.³⁰ There are now centers of excellence dealing with hybrid warfare (in Helsinki) and cyber security (in Tallinn), but there remains the requirement to develop specific strategies, concepts of operation, tactics, and practices to counter hybrid threats in and from the maritime domain.

What would these consist of? Admiral (Ret.) James Stavridis has proposed a number of measures that could enhance defense capabilities against hybrid maritime threats:

1. Work with NATO members and partners by encouraging cross talk, exchanging best practices, and sharing intelligence.
2. Train and exercise against maritime hybrid warfare, in particular training and education in rules of engagement, the operation of conventional systems against unconventional forces at sea, learning to act more like a network at sea in the littoral, and including hybrid scenarios in international exercises.
3. Include coast guards and other maritime security forces into hybrid maritime defense planning. Many coast guard systems and platforms already contain the technologies to counter maritime hybrid warfare techniques. Therefore, coast guards and coastal forces should train together.³¹

²⁷ Chief of Naval Operations, Navy Maritime Domain Awareness Concept (Washington: Department of the Navy, 29 May 2007), page 2.

²⁸ *NATO Maritime Strategy*, paragraph 17.

²⁹ Jeffrey A. Larsen, *Time to Face Reality: Priorities for NATO’s 2016 Warsaw Summit*. NATO Defence College Research Paper No. 126 (Rome: NATO Defence College, January 2016); Spyridon N. Litsas, “Russia in the Eastern Mediterranean: Intervention, Deterrence, Containment,” *Digest of Middle East Studies* 26, 1 (2016); Magnus Nordenman, “Back to the Gap,” *The RUSI Journal* 162, 1 (January 2017); all contributions to John Andreas Olsen, editor, *NATO and the North Atlantic: Revitalising Collective Defence* (London: Routledge, 2017), except for James Stavridis, “The United States, The North Atlantic and Maritime Hybrid Warfare”; and all contributors to Gabriel-Florin Moissescu, Daniel Dumitru, Sorin Pinzariu, and Iulian Martin, editors, *Proceedings of the 11th International Conference “Strategies XXI”: Technologies—Military applications, Simulations and Resources*, Volume 2 (Bucharest: “Carol I” National Defence University, 5-6 November 2015), including Dragoş-Alexandru Necula, “Conceptual Delimitations Regarding of Capability Needed to Support Military Effort to Counter Hybrid War Action.”

³⁰ NATO, *Warsaw Summit Communiqué*, issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Warsaw 8-9 July 2016, https://www.nato.int/cps/en/natohq/official_texts_133169.htm.

³¹ James Stavridis, “Maritime Hybrid Warfare Is Coming,” *Proceedings Magazine* 142, 12 (December 2016), <https://www.usni.org/magazines/proceedings/2016-12-0/maritime-hybrid-warfare-coming>.

4. In addition, enhanced Mine Counter Measures (MCM) like the International MCM Exercise (IMCMEX) of more than 30 nations developed in the Persian Gulf in 2016 could have an enhanced deterrent effect.³²

Our own work has explored an expanded list of potential actions to address this deficit.³³ Our presentation will develop these thoughts further, with concrete proposals for the operational level.

5. Conclusion and Recommendations

Hybrid maritime threats pose a considerable problem for naval military planning. They are less foreseeable and attributable than traditional threats posed by adversary naval forces. Hybrid warfare at sea can be extremely successful in terms of spoiling the ability of an opponent's navy to maneuver. Obliteration of sea lines of communication—especially by mine laying—is a two-edged sword, as it does not only hinder operations of the attacked party but also has the potential of foiling the attacker's ability to maneuver. Hybrid maritime warfare is therefore mainly a destructive tool that will not help to establish sea control. It is likely to be used by actors with inferior powers compared to that of the attacked adversary. While most of its techniques are rather conventional (mines, destruction of cables, etc.), its main novelty is the attempt to hide the origin of the attacker. This can only be successful in cases short of war. And its success depends on the acceptance of the target audience of the innocence of the alleged attacker. In the case of Crimea, Russia could not convince the world that it had nothing to do with the affair. However, in Russia, among its allies, and among a growing number of populist movements throughout the world, the story of “plausible deniability” gained considerable credibility. This was good enough to prevent an even stronger international response to Russia's blatant aggression. The use of naval forces in Russia's hybrid war against Ukraine demonstrated how easily regular naval assets can be used in a hybrid maritime scenario.

Future naval warfare will inevitably include hybrid elements. The challenge for modern navies is to include hybrid maritime threats into exercises, naval academies curricula, and strategic planning.

Select Bibliography

- Asmussen, Jan. “Nothing New in the East? Responses to Hybrid Warfare,” *International Humanitarian Law* 7 (2016).
- Berzins, Janis. “Russian New Generation Warfare: Implications for Europe,” 14 October 2014, http://www.europeanleadershipnetwork.org/russian-new-generation-warfare-implications-for-europe_2006.html.
- Childs, Nick. “Naval Mines: Curse or Blessing in Hybrid Warfare?” in Adrian J. Neumann and Sebastian Bruns, editors, *Focus on the Baltic Sea, Proceedings from the Kiel Conference 2015* (Kiel: Institute for Security Policy, Kiel University, 2015).
- Christopher, Paul. “Confessions of a Hybrid Warfare Skeptic,” *Small Wars Journal*, 3 March 2016, <http://smallwarsjournal.com/jrnl/art/confessions-of-a-hybrid-warfare-skeptic>.

³² U.S. Naval Forces Central Command Public Affairs, “World's Largest Maritime Exercise Underway in Middle East” (4 April 2016), <https://www.cusnc.navy.mil/Media/News/Display/Article/713261/worlds-largest-maritime-exercise-underway-in-middle-east/>.

³³ Murphy, Hoffman, and Schaub, *Hybrid Maritime Warfare and the Baltic Sea Region*; Gary Schaub Jr., Martin Murphy, and Frank G. Hoffman, “Hybrid Maritime Warfare: Building Baltic Resilience,” *The RUSI Journal* 162, 1 (February/March 2017); Gary Schaub Jr., “Russia, Hybrid Threats and the Baltic Sea Region,” in Klas Backholm, editor, *Baltic Sea Strategy Forum 2017 Conference Documentation* (Vaasa, Finland: Åbo Akademi University, 30 November 2017); Martin Murphy and Gary Schaub Jr., “Sea of Peace or Sea of War? How Maritime Hybrid Warfare Could Alter the Balance on NATO's Northern Flank,” *Naval War College Review* 71, 2 (Spring 2018); Asmussen, “Nothing New in the East?”

- Deep, Alex. "Hybrid War: Old Concepts, New Techniques," *Small Wars Journal*, 2 March 2015, <http://smallwarsjournal.com/jrnl/art/hybrid-war-old-concept-new-techniques>.
- Dombrowski, Peter and Chris C. Demchak. "Cyber War, Cybered Conflict, and the Maritime Domain," *Naval War College Review* 67, 2 (2014), <https://digital-commons.usnwc.edu/nwc-review/vol67/iss2/7>.
- Ehrhart, Hans-Georg. "Hybride Kriege: Sie mögen nicht neu sein, sind aber eskalationsträchtig und brandgefährlich," *IPG Internationale Politik und Gesellschaft*, 2 March 2015, <http://www.ipg-journal.de/schwerpunkt-des-monats/neue-high-tech-kriege/artikel/detail/hybride-kriege-818/>.
- Ehrhart, Hans-Georg. "Russlands unkonventioneller Krieg in der Ukraine: Zum Wandel kollektiver Gewalt," *Aus Politik und Zeitgeschichte* 64, 47-48 (2014).
- Evron, Gadi. "Battling Botnets and Online Mobs: Estonia's Defense Efforts During the Internet War," *Georgetown Journal of International Affairs* 9, 1 (Winter/Spring 2008).
- Glenn, Russel. "Thoughts on Hybrid Conflict," *Small Wars Journal*, 2 March 2009, <http://smallwarsjournal.com/blog/journal/docs-temp/188-glenn.pdf?q=mag/docs-temp/188-glenn.pdf>.
- Hoffmann, Frank G. *Conflict in the 21st Century: The Rise of Hybrid Wars* (Arlington: Potomac Institute for Policy Studies, December 2007), http://www.potomac institute.org/images/stories/publications/potomac_hybridwar_0108.pdf.
- Liang, Li Qiao and Wang Xiangsui. *Unrestricted Warfare* (Beijing: PLA Literature and Arts Publishing House, February 1999), <http://www.cryptome.org/cuw.htm>.
- McCuen, John J. "Hybrid Wars," *Military Review*, March-April (2008), <http://www.au.af.mil/au/awc/awcgate/milreview/mccuen08marapr.pdf>.
- Van Messel, John A. *Unrestricted Warfare: A Chinese Doctrine for Future Warfare?* (Quantico: School of Advanced Warfighting, Marine Corps University, May 2004), <http://www.dtic.mil/dtic/tr/fulltext/u2/a509132.pdf>.
- Murphy, Martin, Frank G. Hoffman, and Gary Schaub, Jr. *Hybrid Maritime Warfare and the Baltic Sea Region* (Copenhagen: Centre for Military Studies, University of Copenhagen, November 2016).
- Nemeth, W.J. *Future War and Chechnya: A Case for Hybrid Warfare* (Monterey: Naval Postgraduate School, June 2002), http://calhoun.npp.edu/bitstream/handle/10945/5865/02Jun_Nemeth.pdf/sequence=1.
- NATO *Alliance Maritime Strategy* (Brussels: North Atlantic Treaty Organization, 18 March 2011), http://www.nato.int/cps/en/natohq/official_texts_75615.htm.
- NATO. *Warsaw Summit Communiqué*, issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Warsaw 8-9 July 2016, https://www.nato.int/cps/en/natohq/official_texts_133169.htm.
- Peck, Michael. "Little Blue Sailors: Maritime Hybrid Warfare Is Coming (in the South China Sea and Beyond)," *The National Interest* (18 December 2016), <http://nationalinterest.org/blog/the-buzz/little-blue-sailors-maritime-hybrid-warfare-coming-the-south-18769>.
- Popescu, Nico. *Hybrid Tactics: Neither Nor Only Russian. Issue Alert Nr. 4* (Paris: European Union Institute for Security Studies, 2015).
- Racz, Andras. "Russia's Hybrid War in Ukraine: Breaking the Enemy's Ability to Resist," (Helsinki: The Finnish Institute of International Affairs, 2015), http://www.fiia.fi/en/publication/514/russia_s_hybrid_war_in_ukraine.
- Stavridis, James. "Maritime Hybrid Warfare Is Coming," *Proceedings Magazine* 142, 12 (December 2016), <https://www.usni.org/magazines/proceedings/2016-12-0/maritime-hybrid-warfare-coming>.
- Tamminga, T. Oliver. *Hybride Kriegsführung. Zur Einordnung einer aktuellen Erscheinungsform des Krieges* (SWP-Aktuell Nr. 27/2015), Berlin.
- Truver, Scot C. "Taking Mines Seriously: Mine Warfare in China's Near Seas," *Naval War College Review* 65, 2 (2012).

CASE STUDY PROPOSAL 8

Testing the Limits of Seapower: Islands, Insurgents, and Interaction

Timothy D. Hoyt, PhD
U.S. Naval War College

Introduction

Seapower provides a unique and ubiquitous advantage, in both peace and war, for those actors who are able to create and sustain it. In the modern (Westphalian) international system, states able to exercise sea power effectively gain economic and military benefits, which in turn create and sustain diplomatic leverage. This synergistic relationship between core elements of state power and their effective presence on the sea helps explain the outcome of both global and regional wars, the distribution of power in the international system, and the gradual transition from a mercantilist to a globalized economy.

The strategic utility of seapower remains a potent force in lesser conflicts, but its ability to affect those lesser conflicts decisively appears to erode—a phenomenon that deserves further study. If states exerting seapower effectively tend to win the greatest conflicts, why is it that they have so much trouble winning smaller ones? Seapower's relative lack of leverage in irregular warfare presents a particularly difficult question, both for historical case studies and for current policy debates.

This paper will examine the strengths and limitations of seapower in irregular warfare, recognizing that there are many other variables that help determine outcomes in those types of conflicts. It will, in particular, focus at the conceptual level, and the interaction between the strengths and weaknesses of seapower and insurgents, their preferred strategies, and their points of maximum strategic effect. In order to focus on the strengths and limits of seapower in irregular warfare, it will then examine four case studies of irregular warfare on islands—states where seapower would have a unique ability to shape the battlefield and maximize its relative advantages. These cases will be the struggle between the government of the United Kingdom and nationalists in Ireland from 1912-1921, the continuation of that struggle between the government of the United Kingdom and nationalists in the province of Northern Ireland from 1969-1997, the insurgency on Cuba from 1954-1959, and the civil war in Sri Lanka from 1980-2009 (this will receive relatively less attention in the symposium presentation, due to Geoffrey Till's work).

Relevance of the Topic to the Field of Irregular Maritime Warfare

This case study has a large conceptual component, which should be applicable to the study of any case involving a sea or naval power and an irregular opponent. Evidence seems to suggest that seapower has relatively declining effectiveness when wielded in support of internal or irregular conflicts. The sources of that declining effectiveness may lie in the unique attributes and relative strategic effects of seapower. It is possible that these are more effective against an asymmetric but still state-structured continental power than against an asymmetric but weaker state or nonstate actor. The interaction of relative strengths and weaknesses, and of preferred strategies, may be more favorable (albeit at *much* higher cost) in the former case than the latter. This is a problem that is certainly worthy of investigation.

Significance of the Topic

Irregular warfare has become endemic to the evolving international system. Formal inter-state conflict is increasingly rare in the modern world, even though recent U.S. national security documents urge an increasing focus on the possibility of great power competition and conflict. Most wars in the international system today are internal wars, waged by a state against elements that opposed the state for reasons that might include ethnic, sectarian, or religious differences; uneven distribution of economic resources or political power; strong regional bonds that might lead towards demands for greater autonomy or outright secession; ideological or revolutionary opposition to existing regimes; state support from a neighboring power seeking to undermine the existing regime; or other disputes and factors.

In the 75 years since the end of World War II, great and regional powers with significant naval capabilities have engaged in irregular warfare and consistently failed to achieve desired political end-states. There are many reasons for this – but the distinction between the explanatory nature of seapower in major wars and its relative ineffectiveness in smaller conflicts is both important and significant if, as can be anticipated, states will continue to face internal conflicts alone or with coalition partners. Understanding the limits of seapower, and the additional burdens that may be placed on states or coalitions struggling with irregular opponents, will be important if not critical in creating proper net assessments, strategies, and political endgames in these conflicts.

Research Question

How and why does the unique character of irregular warfare reduce the strategic effectiveness of seapower?

The approach taken to this question will first examine the principle attributes of seapower (as outlined by multiple theorists), and its demonstrated effectiveness in struggles against major continental powers. It will then examine the principle attributes of irregular warfare, as outlined by various theorists of revolutionary war and insurgency, and outline how interaction between the principle strengths of each approach may interact in practice. Four case studies will be examined to look at practice. These case studies will be “island insurgencies,” chosen both because (in theory) seapower should have maximum impact in a small theater contained by water and also to examine different types of actors combating the insurgency. The four cases will be Ireland 1912-1921 (civil war/insurgency within the territory of the leading maritime power), Northern Ireland 1969-1997 (irregular warfare on an island divided by an international border), Cuba 1954-1959 (irregular warfare on an island subject to great power sea control), and Sri Lanka (civil war on an island with episodic great power intervention).

Proposed Outline

1. Typology of Wars

- a. Great Power/Coalition conflict/competition
- b. Regional Wars
- c. Internal Wars

2. Attributes and Relative Strengths of Sea Power in Great Power Competitions

- a. Theory
- b. Practice

3. Reduced Strategic Effectiveness of Sea Power in Regional and Internal Wars

- a. Possible explanations
- b. Isolating for internal/irregular wars

4. Attributes and Relative Strengths of Irregular Warfare

- a. Theory
- b. Practice (selected)

5. Hypotheses

- a. Most potent strengths of sea power do not manifest effectively in irregular warfare
- b. The character of irregular warfare has changed over time, and that change has reduced the strategic leverage of sea power
- c. The leverage of sea power is NOT significantly different in different types of war

6. Case Studies

- a. Ireland 1912-1921 (civil war/insurgency in the territory of a leading sea power)
- b. Northern Ireland 1969-1997 (irregular warfare on a divided island)
- c. Cuba 1954-1959 (irregular warfare on an island subject to sea control)
- d. Sri Lanka 1980-2009 (civil war/irregular warfare with episodic sea control)

7. Analysis and Conclusions

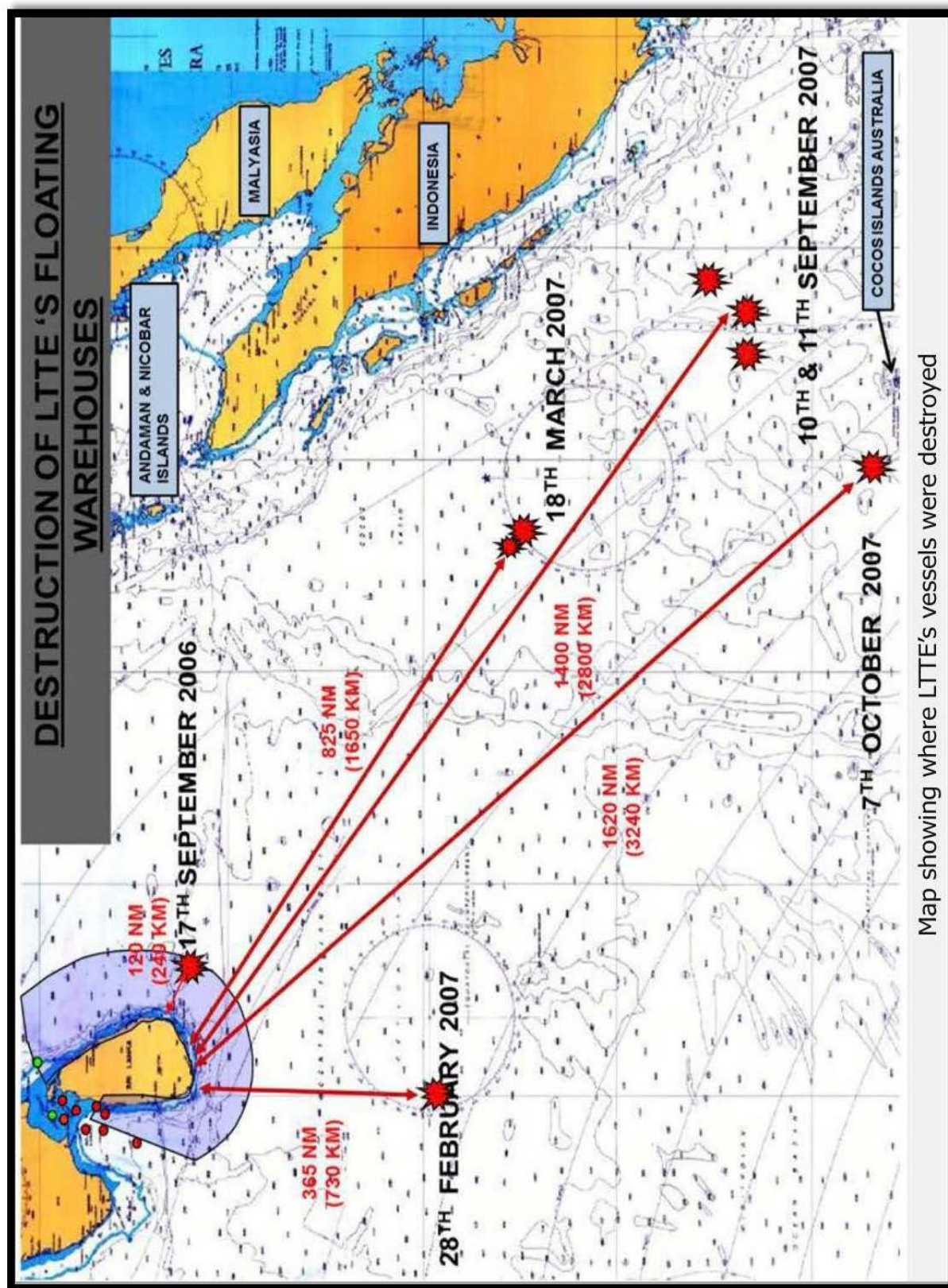


Figure 1. Destruction of LTTE's Floating Warehouses.

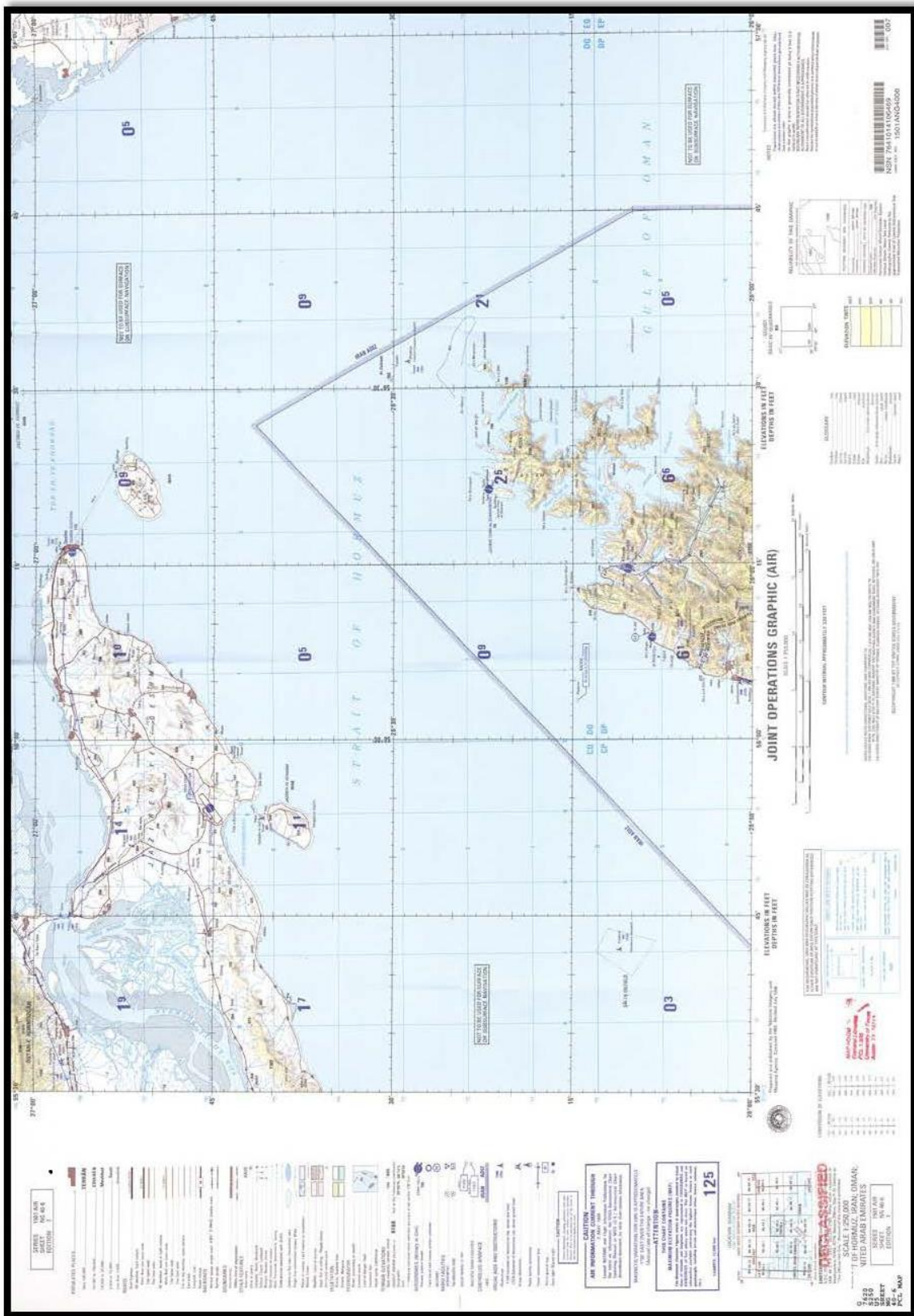


Figure 2. Strait of Hormuz Joint Operations Graphic (Declassified), U.S. Government.

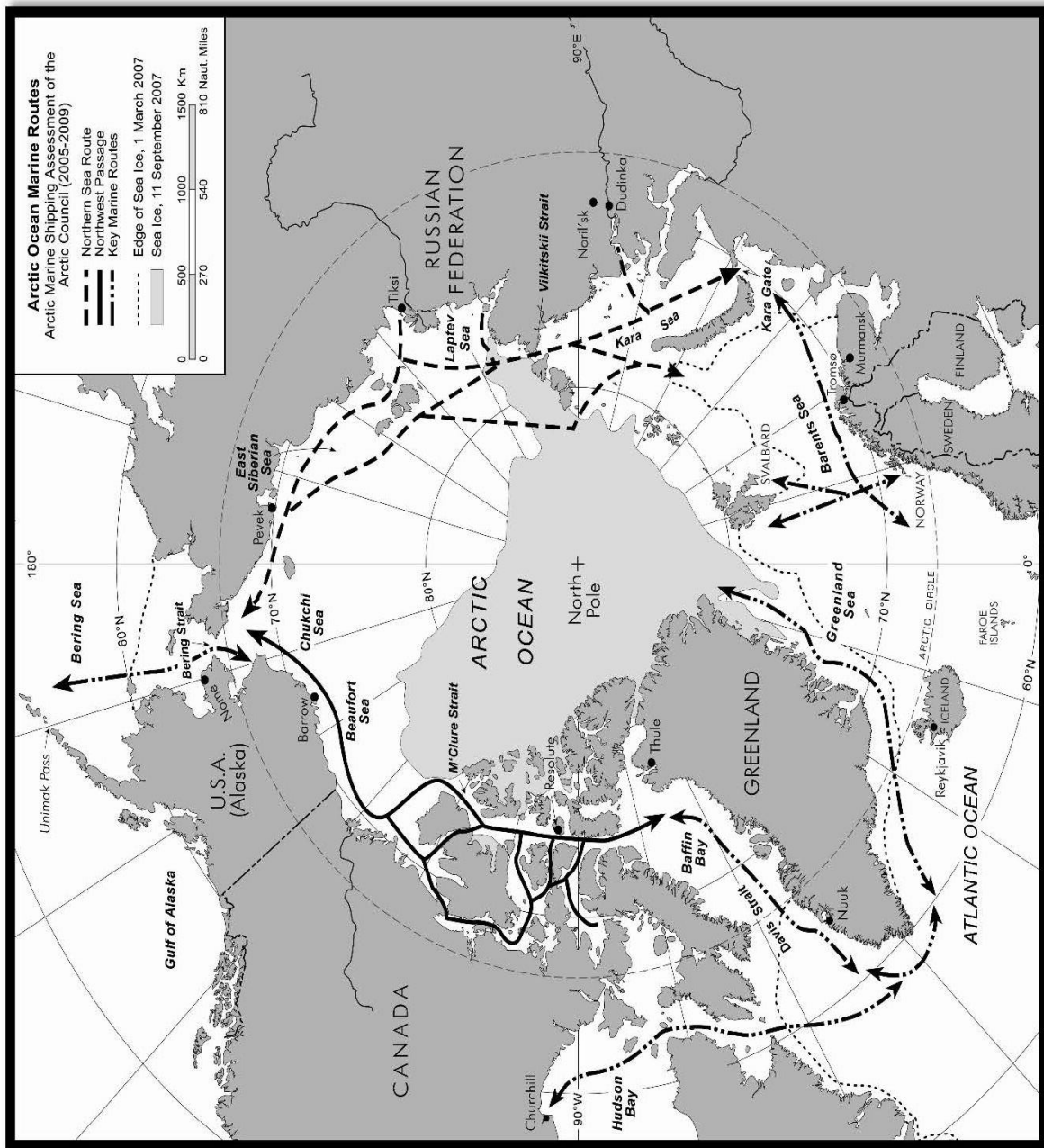


Figure 3. Arctic Ocean Marine Routes, Arctic Council.

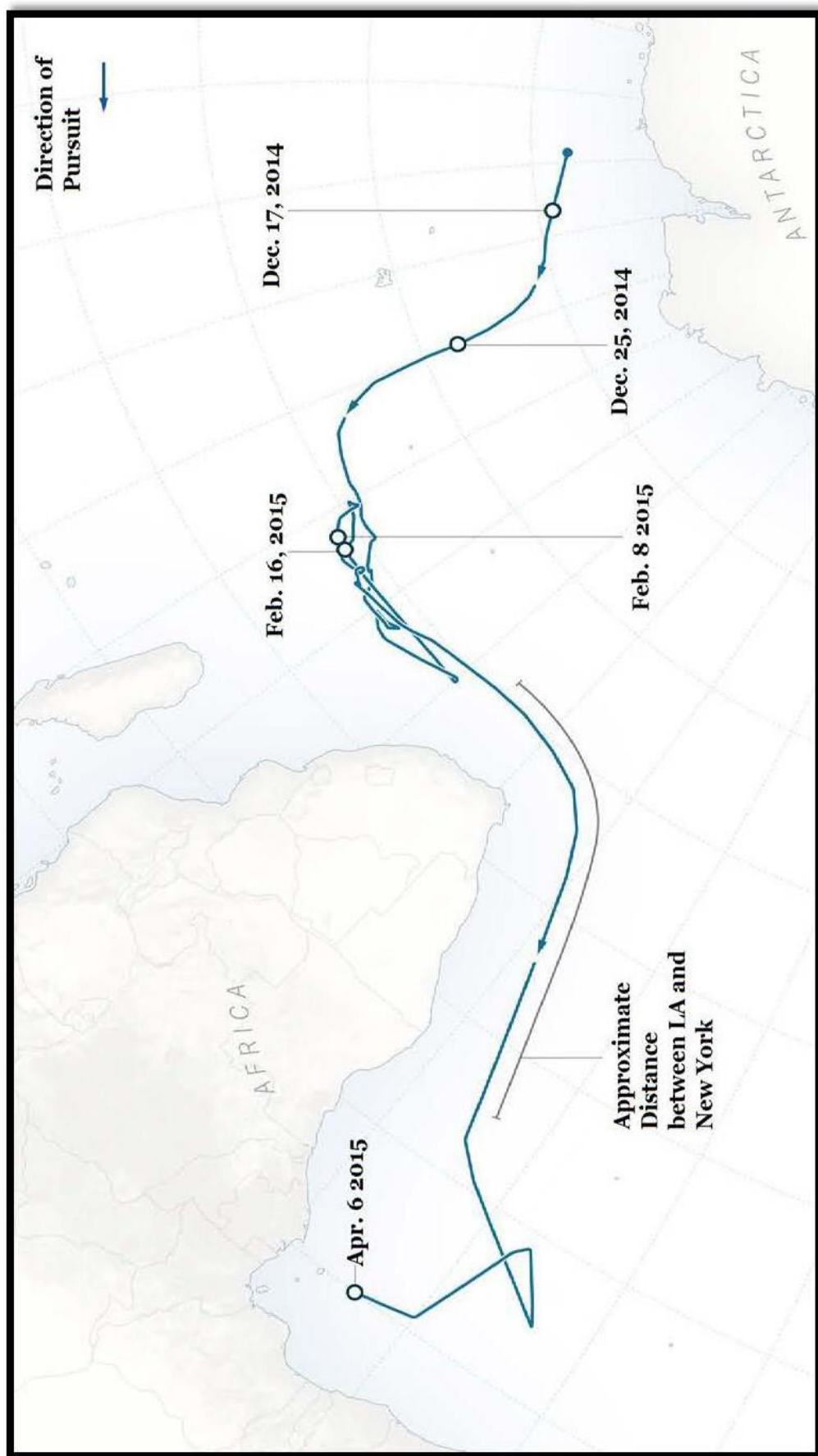


Figure 4. Sea Shepherd's Chase Illegal Fishing Vessel for 110 days, *New York Times*.



Figure 5. Political Map of the Arctic, U.S. Department of State.

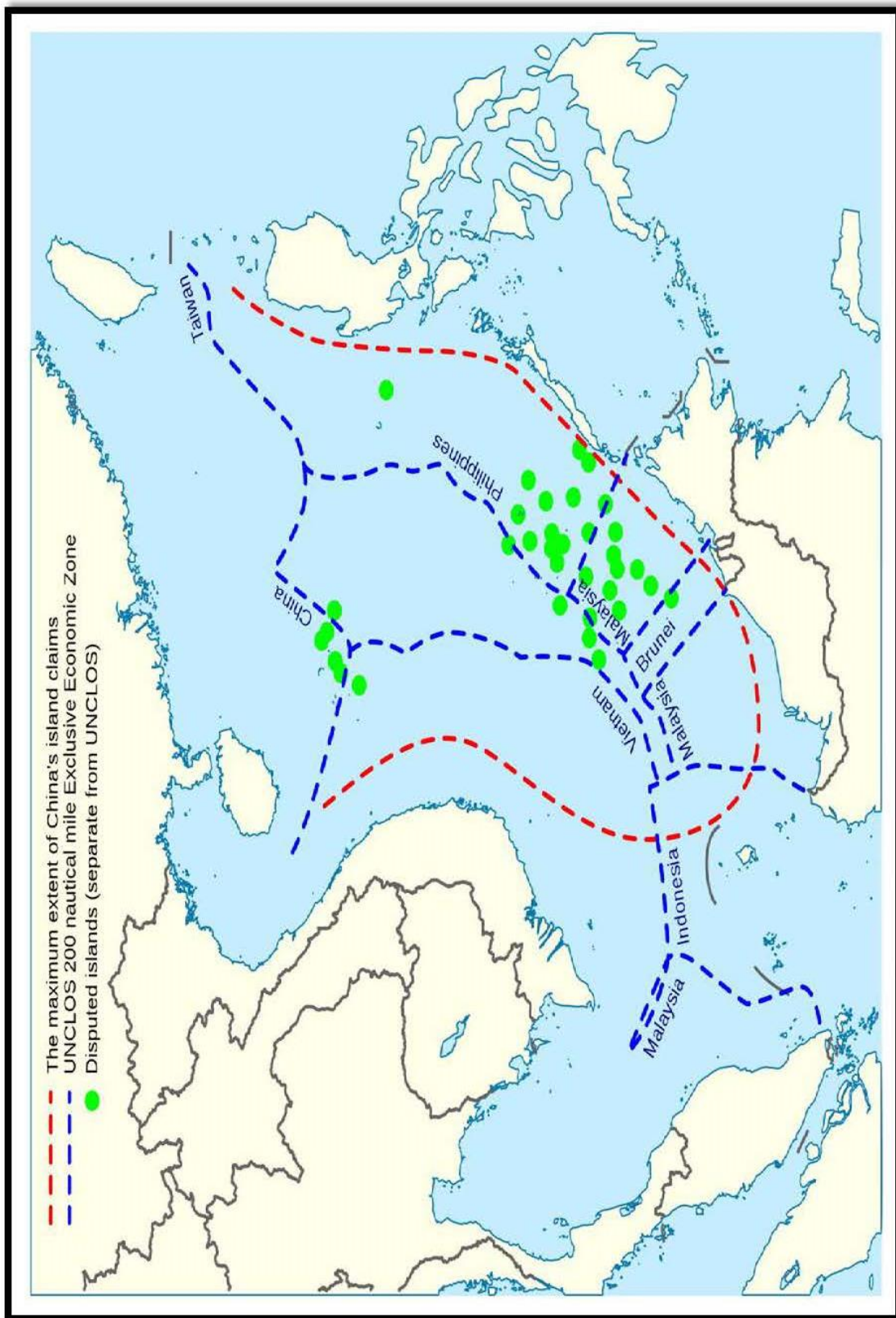


Figure 6. South China Sea Maritime Claims, *Australian Strategic Policy Institute*.

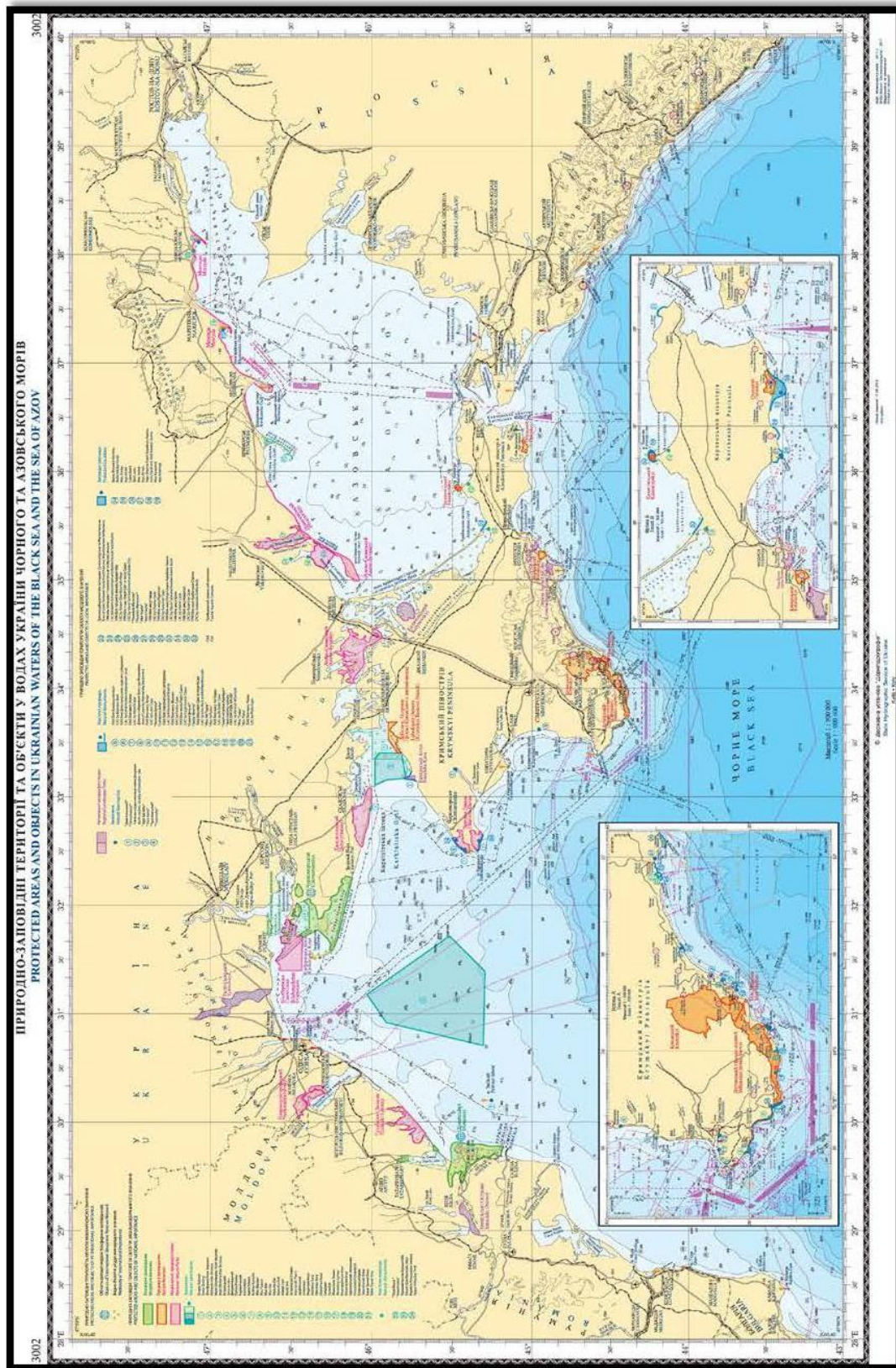


Figure 7. Ukrainian Waters: Black Sea and Sea of Azov, State Hydrographic Service of Ukraine.

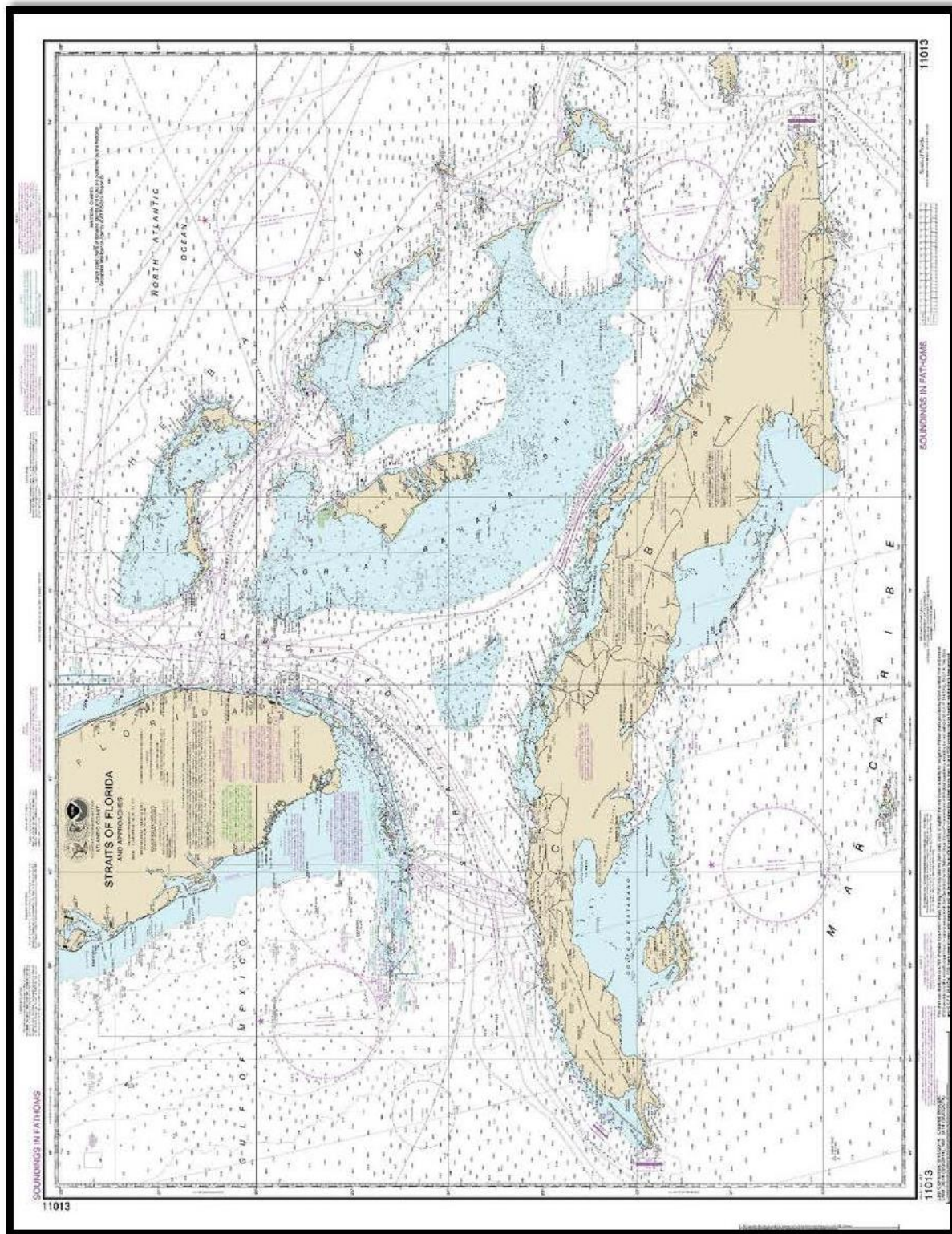


Figure 8. Straits of Florida and Cuba, *National Oceanic and Atmospheric Administration*.



Figure 9. United Kingdom Operational Navigation Chart, Director General of Military Survey U.K. Ministry of Defence.



U.S. NAVAL WAR COLLEGE

— Est. 1884 —

NEWPORT, RHODE ISLAND

686 Cushing Road

Newport, Rhode Island 02841

www.usnwc.edu

Also search for us on Facebook and Twitter