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NAVAL WAR COLLEGE REVIEW

Spring 2020

Volume 73, Number 2



Cover

Following the 15 April 1969 downing of an EC-121 USN reconnaissance plane by North Korean fighters, a C-130 Hercules cargo plane circled overhead and took photos. The cover photo shows crewmembers on the deck of a Russian antisubmarine ship and a whaleboat off its bow, both looking for debris from the downed plane. In "Improbable Allies," Bill Streifer and Irek Sabitov relate the story of the joint U.S.-Soviet search-and-rescue and recovery operations that followed the downing, an example of international and interservice cooperation at sea during the depths of the Cold War.

Source: Associated Press, from an Air Force Reserve handout

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When France's Toulon Fleet appeared off Cádiz in April 1805, Orde possessed more information about the whereabouts and strength of the Combined Fleet than any other British flag officer, placing immense responsibility on him to share that information widely and quickly. But in this he failed, costing Lord Nelson a good chance of bringing the campaign to a halt six months before Trafalgar, and providing an example of a failure to achieve mission command.

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FROM THE EDITORS

The question of command accountability goes to the heart of what it means to be a military professional. Over the last few years, several major tragic accidents involving USN vessels have trained a bright spotlight on this question. In “From Accountability to Punishment,” Michael Junge offers a careful analysis of incidents of naval officers dismissed from the naval service, going back to World War II. He argues that a major change can be discerned in Navy practice from roughly the mid-1980s, when the widely acknowledged “zero defects” culture of today first became dominant. Over these years, the distinctions between *accountability*, *responsibility*, and *culpability* have become fatally blurred, resulting in a higher rate of officer firings than in the past, with debilitating consequences for the naval profession. Captain Michael Junge, USN, is a professor in the College of Leadership and Ethics at the Naval War College.

Since the nineteenth century, war gaming has played an important role in the professional education of military and naval officers in many countries, and it remains one of the key missions of the Naval War College today. The increasing technological sophistication of commercial war games certainly helps to explain their wide popular appeal, but in the context of military education technology has its limitations. John Curry, in “The Utility of Narrative Matrix Games: A Baltic Example,” makes the case for so-called matrix games designed to test human decision-making in relatively open-ended scenarios, with reference specifically to a recent NATO war game with a Baltic scenario. John Curry is a senior lecturer at Bath Spa University, United Kingdom.

The recent decision by the current American administration to change the name of U.S. Pacific Command to U.S. Indo-Pacific Command appears to be a move of some geostrategic consequence, but so far its implications remain quite unclear. It leaves unchanged the western boundary of the command’s area of responsibility—an artificial line extending from the India-Pakistan border—rather than expanding it to include all of the Indian Ocean. It is, therefore, of considerable interest what the Indians themselves make of this. In “The ‘Indo’ in the ‘Indo-Pacific’: An Indian View,” Yogendra Kumar and Probal K. Ghosh provide what seems intended as an authoritative *tour d’horizon* of India’s view of the current state of maritime security cooperation in the Indian Ocean, as well as various suggestions for how that cooperation can be strengthened. Their

treatment of China is muted, but they indicate that, while China is not presently in a position to undermine the Indian Ocean's current maritime "system," this could change in the future, and they go so far as to suggest that the region's maritime states should consider establishing a regime governing use of the area's ports by "extraregional" powers. Yogendra Kumar, a retired Indian ambassador, and Probal K. Ghosh, a former officer in the Indian Navy, both write extensively on maritime affairs.

As the United States steps up its confrontation with Iran with the targeted killing of Major General Qasem Soleimani in January 2020, it is instructive to revisit our last shooting encounter with Iran, Operation EARNEST WILL, during the last years of the Reagan administration. Little remembered today, these efforts, triggered by the reflagging of Kuwaiti oil tankers by the United States to protect them from Iranian strikes during the final stage of the Iran-Iraq War, constituted the largest American naval engagement since World War II, resulting in the destruction of a large fraction of Iran's navy. In "Operation EARNEST WILL: The U.S. Foreign Policy behind U.S. Naval Operations in the Persian Gulf 1987–89; A Curious Case," Andrew R. Marvin examines the strategic considerations driving the American decision to involve itself in the Iran-Iraq struggle, arguing (contrary to much conventional wisdom) that it had less to do with protecting the flow of Gulf oil than with preventing the Soviet Union from gaining a foothold in the region. Andrew R. Marvin is an analyst in the Department of Homeland Security and a former U.S. Army officer.

In another footnote to the naval history of the Cold War, Bill Streifer and Irek Sabitov, in "'Improbable Allies': The North Korean Downing of a U.S. Navy EC-121 and U.S.-Soviet Cooperation during the Cold War," revisit the April 1969 incident, on the basis of much new material, particularly interviews with Soviet naval personnel directly involved in it. Then as now, the leader of the Democratic People's Republic of Korea was named "Kim." Bill Streifer and Irek Sabitov are journalists.

In "Sir John Orde and the Trafalgar Campaign: A Failure of Information Sharing," J. Ross Dancy and Evan Wilson examine a neglected aspect of the situation preceding the famous victory of Nelson at Trafalgar in May 1805: the relationship between Admirals Nelson and Orde. The latter commanded a British squadron off Cádiz, which was effectively, if not technically, within Nelson's area of operations in the Mediterranean. The authors argue that Orde's later reputation is undeserved, and that both he and the Admiralty made unnecessary mistakes in the way they managed command relationships and communication during this critical period. J. Ross Dancy and Evan Wilson are professors in the John B. Hattendorf Center for Maritime Historical Research at the Naval War College.

IF YOU VISIT US

Our editorial offices are located in Sims Hall, in the Naval War College Coasters Harbor Island complex. For building-security reasons, it would be necessary to meet you at the main entrance and escort you to our suite—give us a call ahead of time (401-841-2236).

UNLEARN

Timothy P. Schultz, PhD, Associate Dean of Academics at the Naval War College, delivered a version of the following as an address at NWC's 13 November 2019 graduation ceremony.

Graduates—thank you. There is no higher privilege than interacting and learning together with people like those in this room. I have been looking forward to this one last engagement with you—the final gathering before the scattering.

Families: Let us enjoy this time together. It is your time, after all, and we owe you. Don't let the formality of this ceremony make you shy.

Faculty: Graduation is our crystallizing moment. You have given these graduates a new life of the mind—one book, one lesson, one seminar, one war game, one tutorial, and one red-ink-covered page at a time.

A poet said, "A professor is one who talks in someone else's sleep." The best professors change your thought life; they speak to you in your dreams. So, you have that to look forward to. It will be like having Milan Vego's 1,500-page book on joint operational warfare as your pillow. And imagine decades of pillow talk with professors like Marc Genest and Tom Nichols . . .

Recently I learned a couple of new words: *lapidary* and *tortuosity*. *Lapidary* relates to the art of etching in stone. *Tortuosity* is a technical term meteorologists use to describe the degree of zigging and zagging by a bolt of lightning. Your education here has been both lapidary and tortuous—but in a good way!—both engraved in stone and full of unpredictable power. I'll come back to these words later.

First, let me voice some dissent within this storied institution of higher learning. We talk a lot about being lifelong learners. That's good—but not good enough. I expect *more* from our graduates; I want you to be lifelong *un*-learners. Dedicate yourselves to the higher, and more elusive, art of *unlearning*. Why? Because unlearning is the mark of true learning.

Think of the things we've had to unlearn in the past (and it was hard!):

- We had to unlearn that Earth is the center of the universe.
- Doctors had to unlearn that leeches are usually a good idea.

- The cavalry had to unlearn the value of the sword and then unlearn the value of the horse, to remain relevant in the twentieth century.
- Navies had to unlearn the battleship mind-set.
- Air forces had to unlearn that the bomber always gets through.
- Garry Kasparov had to unlearn how to play chess after losing to a computer.
- As a U-2 pilot [at 70,000 feet], I had to unlearn my old worldview and perceive how the Earth curves, its borders blur, and its inhabitants compete under a thin veil of atmosphere. It changed my perspective.

Think of the things that *you* may have to unlearn in the future:

- Quantum computing may require us to unlearn our traditional cryptology, and how we keep secrets.
- You may have to unlearn the AI-constructed “deep fake” images that will appear on your screens and enter your minds.
- You may have to unlearn the traditional limits of human capability.
- You must unlearn the pretensions that have set themselves up as truth.

In my office I have a “Table of Disruptive Technologies” that is designed like the periodic table. It includes elements such as “wireless energy transfer,” “biohacking,” and about a hundred others. We constantly discover elements that disrupt our status quo understanding of the world. What new forms of expert knowledge will the future require? Who knows? But the first step will be to unlearn some of the old forms of expert knowledge so you can lead in the modern world. In that sense, unlearning is a process of creative destruction.

On your first day at NWC last year I shared with you this quote from Lincoln: “The dogmas of the quiet past are inadequate to the stormy present.” It is hard to unlearn dogma, but you must. Ralph Waldo Emerson, a contemporary of Lincoln, said, as many of you have heard, that “a foolish consistency is the hobgoblin of little minds.” In the same poem he advised, “Speak what you think now in hard words, and tomorrow speak what tomorrow thinks in hard words again, though it contradict every thing you said today.” These are the practices of life-long unlearners. They seek hard truths and speak—and write—hard words. Rear Admiral Grace Hopper, a pioneering intellect in computers, had a clock on her wall that told the correct time—but it ran counterclockwise. Why? She wanted to demonstrate that the argument “We’ve always done it that way” is a refuge for the complacent. She was an unlearner.

I am not advocating for change for the sake of change; all of us have seen fads come and go. I am advocating for thinking that is simultaneously rigorous yet

unbound by convention. And developing that ability demands time and energy, because it is inherently inefficient. It is easy to visualize your education as something that is efficient—a ladder, say. Expend some energy in a predefined direction and you'll get to the next rung. It is one-size-fits-all, and everyone pretty much does the same thing. In a very basic sense, you've done that here; when you climb these stairs and walk across the stage, you will have stepped up a rung. That's great, and we're here to celebrate that.

But it's not *just* that, because real learning—true education—is much more. So let me make a different comparison. Learning—and unlearning—is less like a ladder than like climbing a cliff, or a rock wall. The rock wall is the unknown. You find your own way up by grasping new things and contemplating new directions. You have done some free-climbing this year, in the form of your electives, your papers, your research, your presentations, and your discussions with each other as you've developed your own intellectual strengths and abilities; you've “gripped” new ideas. Now you're moving onto a steeper face—and there are no safety ropes. Here are some things about climbing a rock wall that are similar to your ongoing education:

- There is no straight line.
- It requires (mental) agility.
- It requires tenacity and focus.
- It requires taking risks.
- It requires a high index of suspicion.
 - Is that handhold as good as it appears to be?
 - You have to do some unlearning on the way up. Some grips and ledges may not be what they appear. Your assumptions literally may not hold; in fact, they may be fatally wrong if they cannot support the weight you thought they could. They may have to be unlearned.
- It requires innovation. That means there may be some trial and error, some false moves that reveal better moves. If you're not making mistakes, you're not moving very far.

And just as there are hazards to navigation at sea, there are some hazards to navigation on the rock wall.

- One of them is thinking you know more than you actually do. Stephen Hawking said the greatest enemy is “not ignorance, it is the illusion of knowledge.” The ancients called this hubris. And everyone in this room today suffers from it.

- Another hazard is a lack of ideas. If you only have one idea, one method, one technique, you'll get stuck—and passed by.
- An inability to think a few moves ahead poses another hazard, and so does comfortably clinging to one spot or one idea. If you cling, you can't move; when you cling to doctrine, it becomes dogma.

So when you leave here today, you'll be making it up as you move up; there is no set path. But the ideas you've learned here will provide future traction; they are the grips and toeholds and ledges that allow you to climb higher.

And here is where this idea of *lapidary* comes in. You have had an immersive, lapidary experience here. It takes time, energy, and focus for things to become etched into stone, and the ideas you've grappled with here are lapidary; they are engraved in—sometimes pounded in. They are anchor points in the rock wall—things that you can grasp and that can give you purchase.

So, your professors won't be speaking to you just in your dreams but during your climb as well. You can recognize their influence by your familiarity with grappling with complex problems; otherwise, you may see nothing but slick, steep rock. And as you learn, you can etch more ideas, more friction points into the stone and use them to move in different directions. So, an effective education is lapidary.

People who climb rocks and face the unknown also know something about the value of threading a pathway from point to point, from strength to strength—often an unpredictable pathway. And here's where *tortuosity* comes in. Remember, a lightning bolt is measured by its degree of tortuosity. Step back and look at the pathway a climber ends up taking; maybe it's like the pathway you've navigated while here. It very likely zigs and zags; it has tortuosity. That is because education is nothing like a straight line; education is inherently inefficient. It's tailored; no two paths toward wisdom are exactly the same. And that, like a lightning bolt, is a mark of power—a symbol of creative destruction. Your climb may seem random and wandering to an observer below, but it has its own internal reasons and external influences. And it is a display of the energy you are gathering and harnessing for a future purpose. Your lifelong learning and unlearning should create heat, light, and fire. And it will etch your mark into the rock.

So, yes, you have climbed a ladder here, and you now have a much better view. But, more importantly, you have spent some time on the face of the rock, testing new ideas and techniques, while you yourselves have been tested as well.

So, think of your education in these terms.

- It involves a commitment to unlearning.
- Its lapidary etchings and carvings create lasting value.

- It lets you see and explore different directions; it has powerful tortuosity.
- Lifelong unlearners don't care much about ladders; they prefer to free-climb mountains—they prefer to discover.

This is a constant struggle. There are effective ways to cultivate your mind, but none of them are efficient; there is no straight path of least resistance. In some sense, your education is like war. You have learned that in war there are no easy solutions or shortcuts, and it's the same with learning. Both are difficult, messy, unpredictable, and reactive. In war, as in education, the results are never final—and you're never home by Christmas.

As you climb your rock wall, your struggle is against more than the pull of gravity. You struggle against what plagued the ancient Greeks and their Olympian gods: the constant pull of hubris—pride in dearly held pretensions; a resistance to a greater truth, and satisfaction with a lesser one; and an unwillingness to unlearn. The modern world and its little gods of metal and silicon only strengthen these forces against which you must climb. They must be fought and overcome in your minds and in the future you will create.

And what if you fall? As the great visionary novelist Ray Bradbury advised, “Build wings on the way down.”

So now: go forth, act justly, love mercy, walk humbly, confront evil, unlearn, and climb on.



Rear Admiral Shoshana Chatfield is the fifty-seventh President of the U.S. Naval War College and a career naval helicopter pilot. A native of Garden Grove, California, she graduated from Boston University in 1987 with a bachelor of arts in international relations and French language and literature. She received her commission through the Naval Reserve Officers Training Corps in 1988 and earned her wings of gold in 1989. Chatfield was awarded the Navy's Political/Military Scholarship and attended the Kennedy School of Government, receiving a master in public administration from Harvard University in 1997. In 2009, the University of San Diego conferred on her a doctorate of education in leadership studies.

PRESIDENT'S FORUM



IT IS MY DIFFICULT DUTY to advise our many readers of the passing of one of our treasured professors, Dr. William F. Bundy, who passed away on December 15. Our College is blessed with a host of remarkable researchers and educators, and Will's body of work and connections will stand as a lasting example to and enduring source of motivation for this talented group.

Professor Bundy's life cannot be summed up easily, because he impacted so many people in wildly varying ways. He was keenly aware of his legacy as one of the Centennial Seven—the first seven African Americans to command a submarine in the first hundred years of our nation's submarine force. With that awareness came his commitment to mentoring and guiding Naval War College students, faculty, and staff of all races and ethnicities. He left an indelible imprint on their experiences at the College and their career experiences going forward. It was heartening to see that all five of the surviving members of the Centennial Seven gathered in Rhode Island to pay their respects to Will at his funeral.

Those who had the opportunity to work with Professor Bundy can attest to his untiring work ethic. He constantly engaged other faculty members and collaborated on new and innovative ideas. He was extremely proud of his advanced research project work with the Gravely Group. Honoring Vice Admiral Samuel L. Gravely Jr., the first African American naval officer to command a U.S. combatant ship, Dr. Bundy transformed the group by looking at current technical challenges of naval operations and created a place where he also could educate, mentor, and inspire officers from across all the services.

As Pericles said, "What you leave behind is not what is engraved in stone monuments but what is woven into the lives of others." Professor Bundy wove his approach to life into the many people with whom he interacted, and because of

that he made the Naval War College, the Navy, and our community so much better. His presence will be carried on in the continued work on his various projects all around the College. Dr. Bundy will be missed by us all.

In other events around the College in recent months, our Center for Naval Warfare Studies (CNWS) had the opportunity to showcase its vast wargaming capabilities to the Department of the Navy's Chief Learning Officer (CLO), Dr. John Kroger, in December. Our War Gaming Department combines a depth of operational experience with a wide breadth of academic expertise in the oldest military operations research method to provide optimal output for the Navy and Department of Defense (DoD). During the CLO's visit, we highlighted the wide variety of events the College supports to the acting SECNAV's principal adviser for education.

Over the past fiscal year, our wargaming team executed more than forty events, including eight large-scale war games for DoD and numerous other efforts, both inside and outside the College. One of these war games was an ongoing bilateral effort with a critical ally, another was the first in a series of trilateral war games with two key allies, and one was a large, strategic-level war game involving the whole of the U.S. government. In addition, War Gaming faculty are leading a NATO research task group on innovation in analytical war gaming, which is the largest systems analysis research effort currently under way in NATO and a key component in NATO's modernization mission. With the most sophisticated facilities and a widely respected team of professionals, we provide a service to our Navy and our nation that no other institution in the world can match.

Continuous advancements in our wargaming capabilities were highlighted when CNWS was selected to design and execute the Globally Integrated War Games 2020 (GIWG 20-1 and GIWG 20-2) for the Chairman of the Joint Chiefs of Staff (CJCS). This largest and most complex game to date tackled pressing joint global-integration and force-design issues. Over four hundred personnel with an average of seventeen years' experience in their individual warfare specialties participated in GIWG 20-2, including thirty-seven flag and general officers and senior executives from over sixty commands across DoD and the Intelligence Community. Additionally, forty-one senior leaders, among whom were eighteen four-star flag and general officers (including the CJCS, the vice chairman, combatant commanders, and service chiefs), participated in the Senior Leader Event on the final day of the game. The CJCS has directed the Joint Staff J7 to use findings from GIWG 20 to inform joint concepts of operation and future joint-force design and development.

Finally, I'd like to report that the College recently dedicated our command conference room in memory of the late Vice Admiral James Bond Stockdale,

USN (Ret.). As President of the Naval War College from 1977 to 1979, he created a military ethics course that has proved timeless and enduring. Universally known as the “Stockdale course,” the Foundations of Moral Obligation class still is being taught more than forty years after Stockdale’s departure and is one of the College’s most popular elective courses.

The Stockdale Conference Room features paintings, books, and photographs depicting Stockdale’s career, including the 1976 ceremony in which he was awarded the Medal of Honor by President Gerald R. Ford for his courage and leadership during his seven years as a prisoner of war in Vietnam. Books lining the shelves of the conference room include Stockdale’s own work *Thoughts of a Philosophical Fighter Pilot* and, with his wife, Sybil Stockdale, *In Love and War*. Also represented are books that Stockdale credited with influencing him—in particular, the work of the Greek thinker Epictetus, whose ideas about Stoicism helped Stockdale endure his torture and captivity.

At the ceremonial dedication on December 4, Stockdale’s eldest son, Dr. James B. Stockdale II, said that nothing would make his father more proud than to see his life’s work continuing: “Dad would be positively honored, and he would be humbled. He was a realist, and when he left the War College, it was his earnest hope that his work might continue in some way. He would be grateful that so many took his words to heart and made them a part of their professional and personal lives.”

It is hard to overstate just how much of an effect Admiral Stockdale had on the United States Navy and our ideas about moral foundations, ethical behavior, philosophy, and the profession of arms.

As we embark on a new decade, we do so with a renewed commitment to the professional education and development of our students, and to the research and analysis that will enable the Navy and all of DoD to defend our nation and its allies against those who might challenge the concepts and values we hold so dear.



SHOSHANA S. CHATFIELD

*Rear Admiral, U.S. Navy
President, U.S. Naval War College*

(If you are interested in reading our full statement on the passing of Professor Bundy, it is available on our website at www.usnwc.edu/News-and-Events/News/NWC-Statement-on-the-Passing-of-Professor-William-Bundy.)

Captain Michael Junge, USN, is a surface warfare officer and a military professor in the College of Leadership and Ethics at the Naval War College.

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FROM ACCOUNTABILITY TO PUNISHMENT

Michael Junge

Why does the Navy fire so many commanding officers? Is it, as one Naval War College professor often asserts in lectures, a feature in the system?¹ Is there a problem in the command selection process? Are people just flawed individuals? All the above? Or something else? After a decade of research that examined almost two thousand individual cases and incidents and hundreds of investigations, the answer is clear: the Navy fires commanders who fall short of the Navy's standards. These officers are held to a high standard and are accountable for their actions. *Removal* is now nearly synonymous with *accountable*.

Supporting an argument from largely self-evident cases makes for preconclusive reading. Yet what is *falling short*? Why does falling short mean removal from command? These embedded questions—as well as how standards are defined, the temporal nature of standards, what happens after removal, and an assessment of the modern removal process and rate compared with historical removals—are the central issues of this article. After a very long look at history and analysis of the language in dozens of official Navy investigations, an answer to each question reveals itself to us. What does the answer to “Why does the Navy remove commanding officers?” mean for today's commanders?

Historically, removal from command followed from a violation directly tied to command itself and was described through a term of art—*crimes of command*—the most obvious examples of which are collisions, allisions, and groundings. *Collisions* occur when two moving objects strike each other. For example, if, while driving home, you strike another moving car on the highway, that is a collision. *Allisions* occur when a moving object strikes a nonmoving object. If, on that same drive home, instead of striking a moving car you strike a telephone pole, guard-rail, or tree, that is an allision. *Groundings* occur when a ship's bottom strikes the

seafloor. Some groundings are intentional and may not inherently constitute a crime of command; the same is true of some collisions and allisions. Sorting out the intent is part of the accountability process for these incidents. Major fires, weapons accidents, and aviation accidents can fit within the broad definition of a crime of command as well.

Why are the examples given above considered crimes of command, whereas poor leadership, infidelity, misappropriation of funds, and drunkenness are not? If a ship collides, allides, or grounds, the commanding officer is responsible for what happened; that responsibility is inherent in command. The commanding officer has the power and obligation to train the crew to avoid collisions, alli-

[F]lashed events—arrest, grounding, collision, death of a sailor—are more likely to result in . . . removing a commander than mediocre performance, an unpublicized affair, or funds mismanagement. However, if those things make it into the press, then removal from command is far more likely.

sions, and groundings; to stow and secure flammable materials and weapons properly; and to adhere to established standards. When he or she becomes aware of violations of rules or regulations, the commanding officer also has the obligation and power to act.

Whether the commander was involved directly in an incident is irrelevant; the nature of command is inherent in the movements of the ship.

In contrast, infidelity, embezzlement, and drunkenness are individual actions. A commander who cheats on a spouse is not involving the command. A commander who uses a government aircraft for personal transportation is acting for personal benefit. A drunken commander is just drunk. Likewise, the actions of individual sailors do not reflect on or impact the command, necessarily. Each of these actions is improper, regardless of whether the individual is in command. But if a ship collides, those directly involved in operating the ship and the commanding officer are responsible for what happened; they alone are accountable for their actions.

History shows that three current trends differ from past patterns. First, today's commanding officers are more likely to be removed for personal failings (moral indiscretions, financial mishandlings) or for accidents (fire, grounding, collision) that once barely made the news. Second, they are removed via an administrative investigation that is far from that outlined in Navy regulations and procedures. Finally, this culture of removal arises because of an improper conflation of the concepts of accountability, responsibility, and culpability. As the Navy reenters an era of great-power competition, it is past the time that we should evaluate our culture of command and relearn precise language before we jettison superb commanding officers for ahistorical reasons.

IDENTIFYING THE PROBLEM

In 2004 and 2010, the Naval Inspector General (IG) sought to answer these same questions: Why are we removing so many commanders, and for what reasons? Two naval officers, Captain Mark Light and Captain Jason Vogt, published papers addressing the subject.² Neither the papers nor the IG reports provided specific answers to any of the questions, and in fact they asserted that even with a hundred removals there were insufficient data to draw any trends or overall linkage.

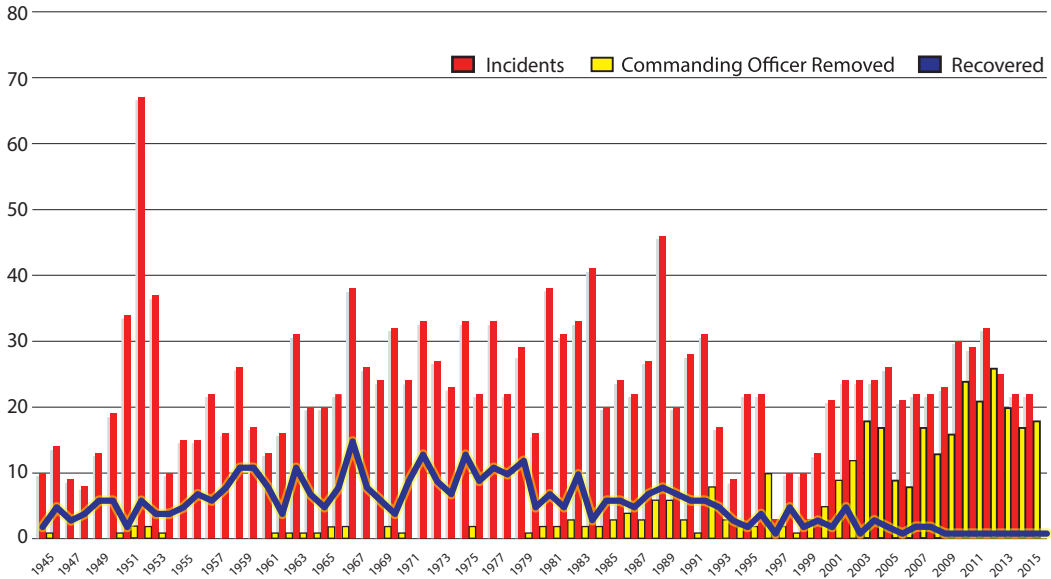
Both the reports and the papers, however, called attention to the fact that removals hovered around 1 percent of commanders, and that this 1 percent was historically normal.³ If 1 percent was normal or acceptable, and the reasons for removal were accepted and normal when the Navy removed twenty-six officers in 2003, from a service with 376,000 sailors and 297 ships, then how many commanders were removed in 1983, when the Navy had 533 ships and 779,000 sailors? Or in 1963, when there were 857 ships and almost a million sailors? From mere napkin math, the answers should be two times and three times as many removals, respectively. But where were the sensational headlines then?

I ultimately identified over 1,500 incidents, including crimes of command and personal failures, in the seventy years between 1945 and 2015. Unlike the IG reports and the papers by Light and Vogt, the incidents in my study displayed a clear trend, a clear change, and evidence that what the Navy does today is not what it did in the past. In the decades after World War II, removals occurred, but they were uncommon. Officers who committed missteps in command routinely were retained in command, often forgiven, and allowed to continue with their careers. If their career paths allowed time for rehabilitation or if their prior performance outweighed the misstep, they were promoted and remained in the service. While custom and tradition implied that commanders would lose command for collisions or groundings, the reality at that time was far different.

To evaluate the impact of these incidents, my study identified the incident commanding officer and determined whether the commander was removed overtly from command, suspiciously departed with a reduced-length tour, was relieved by an officer who held command for a few days or weeks, or was relieved by someone identified as acting or interim commander. Once the individual names were located and combined with evidence—or an educated guess—on each removal, I consulted Navy promotion records. Was the officer removed, and then failed to promote? Did the officer retain command, but fail to promote? Or, as happened in a number of cases, did the officer—whether removed or not—still promote after committing a crime of command?

Graph 1 illustrates trends where, of the 1,500 cases examined, over 330 commanders were removed overtly from command, and a majority of those

GRAPH 1
ANNUAL INCIDENTS, REMOVALS, AND RECOVERIES BETWEEN 1945 AND 2015



removals—305—happened between 1986 and 2015. Another significant difference lies in the number of officers forgiven or allowed rehabilitation. Between 1985 and 2015, only sixty-five officers experienced some sort of misstep but were promoted afterward, while between 1945 and 1985, over 250 officers recovered—or about a quarter of the thousand incidents.

RESULTS? ANSWERS? OR MORE QUESTIONS?

So, why are commanding officers removed from command? In general, news and Navy reports tell us that commanders are removed because of some mixture of alcohol, indiscretion, financial misdeeds, sexual relationships, and other inappropriate relationships between senior leaders and junior sailors. Some analysts have linked increased removals directly to the presence of women in the Navy.⁴ In almost all cases, the official Navy response includes some manner of a “loss of confidence in ability to command” and a reference to the “absolute accountability of command.”

Graphing the incidents, removals, and recoveries over seventy years (as seen in graph 1) reveals the following trends.

1. The Navy is safer today than before—explosions and major fires are rare.
2. Collisions are a constant issue.
3. Groundings are less likely.
4. Individual personal behavior is held to a different standard than in previous decades.

5. Fewer officers recover from missteps.
6. The changes are most apparent before and after the early 1980s, specifically before 1983 and after 1986.

The first finding evident in this data set is that in the modern Navy, a commander is most likely to be removed for personal misconduct or when the crime of command includes one or all of the following elements: death, press coverage, or significant damage to the Navy, whether materially or to its reputation.

An immediate superior in command (ISIC) may remove a commander for one or more of four reasons: misconduct, substandard performance involving gross negligence, substandard performance over an extended period, or a loss of confidence. Each of these is largely subjective and unlikely to be questioned.⁵ Whether an ISIC thinks actions constitute misconduct is more important than the actions themselves, and in all cases each ISIC has another ISIC above him or her, so a commander is subject to the opinions of the captain and each flag officer in the chain of command. This is one reason that flashy events—arrest, grounding, collision, death of a sailor—are more likely to result in conversations about removing a commander than mediocre performance, an unpublicized affair, or funds mismanagement. However, if those things make it into the press, then removal from command is far more likely.

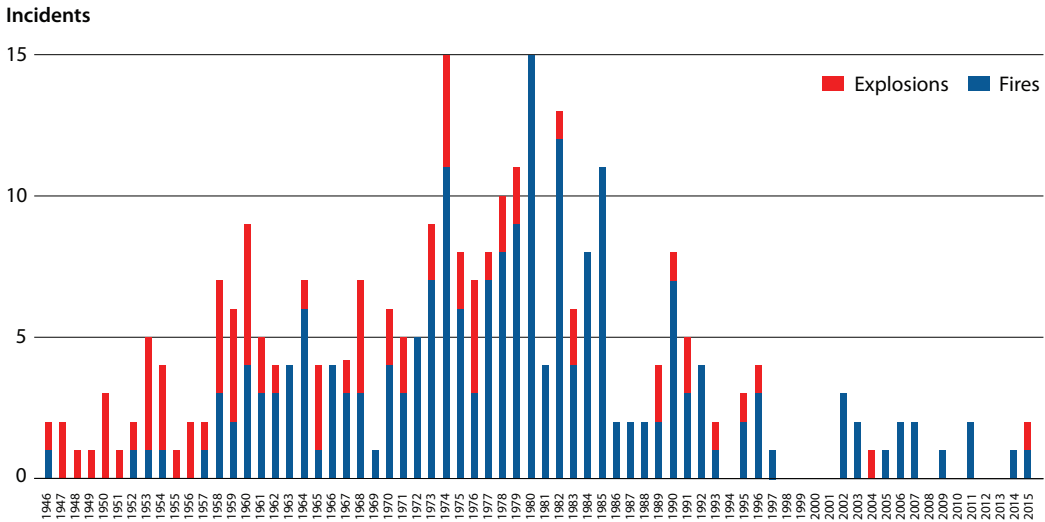
There are no crimes of command that guarantee removal, and there is no comprehensive list of reasons for removal. Reportedly, some officers are removed from command to send a message. Perhaps some are removed because mixed performance resulted in a strained relationship with the ISIC, and when a significant enough event presented itself the ISIC removed a perceived underperforming commander. In the consideration of the specific reason relating to removal, each case should, and must, be treated separately. However, this does not preclude recognizing some trends that may allow the Navy to identify future issues and reduce command removal rates.

Since 1945, the Navy also has done the following:

1. Reduced the number of senior officers at sea and aboard ships
2. Relied on less-formal fact-finding bodies
3. Conflated operational and personal missteps
4. Focused on rules and consequences rather than intent and capability

To some degree, it is obvious that the Navy is safer today and groundings are less likely. We no longer have 1,200-pounds-per-square-inch steam ships, we have fewer sailors, we use safer munitions, and we have global positioning systems to aid in navigation. Mortality rates for today's sailor are four times less than they were in 1980, and active-duty sailor mortality rates are sixteen times

GRAPH 2
ANNUAL FIRES AND EXPLOSIONS BETWEEN 1945 AND 2015

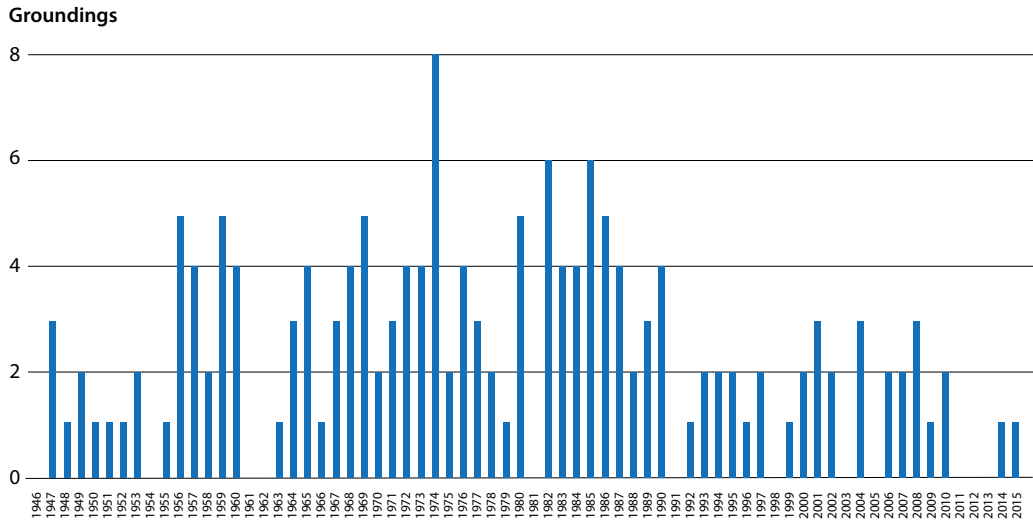


less than the population at large. Graph 2 shows the decline in major fires and explosions, especially since the late 1980s. This century has seen seventeen major fires afloat, while there were fifteen in 1980 alone. Fifteen fires per year remained a rough rolling three-year average into the late 1980s, compared with an average of less than one a year since the turn of the century. The result of a safer Navy is that each active-duty death is more noticeable.

Navigation today is far more precise—often more precise even than is useful to a ship’s crew. While groundings are rare (see graph 3), collisions remain reduced but somewhat constant (see graph 4). The frequency of collisions relates more to ships entering and leaving port, operating in congested waters, and conducting underway replenishment operations than it does to changes in technology. The fact that the Navy is operationally safer supports the decreased removal rate for clear crimes of command, but does not explain why fewer officers recover after incidents or why personal standards are different now from what they once were. The underlying rules and traditions governing command have not changed—only the standard for removal has.

Through the 1970s, and even into the 1980s, flagships were where the flag officer lived and worked. Fleet commanders, and even Chiefs of Naval Operations, embarked in ships for extended periods—and not only aircraft carriers. Today, most sea commands are led by commanders who may never see their captain ISIC, much less the flag officer in command of the strike group or fleet. This separation among commanders, combined with the more-varied commissioning sources in modern accessions, leads to commanders who no longer have personal relationships with most of their subordinate commanders. This removes

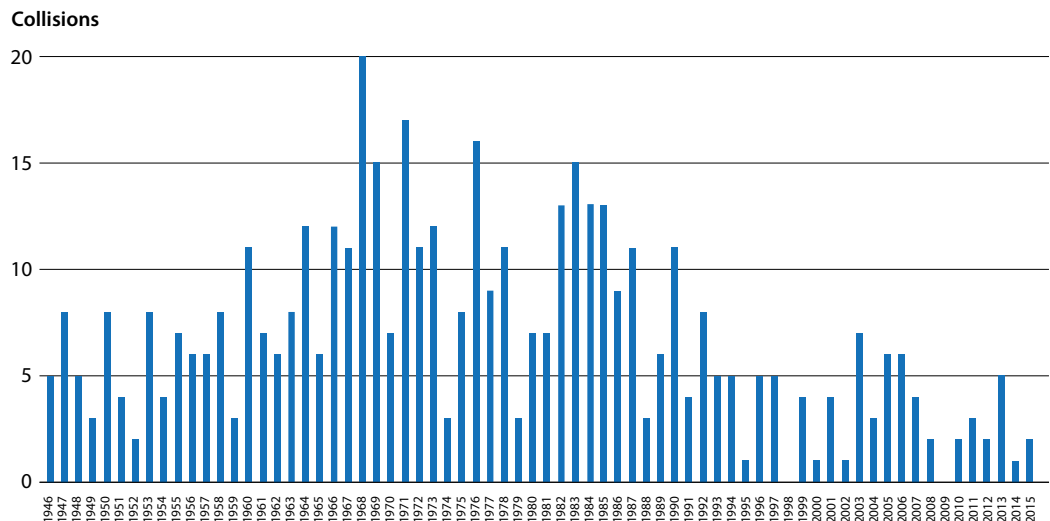
**GRAPH 3
ANNUAL GROUNDINGS BETWEEN 1945 AND 2015**



the possibility of applying a knowing “benefit of the doubt”—the sort that likely kept Admiral William F. “Bull” Halsey in command even after he endured two disastrous typhoons and committed operational missteps at the Battle of Leyte Gulf. This personal-professional relationship among commanders was one of the reasons for more frequent rehabilitation in the decades after World War II.

Another reason for the modern difference lies in how the Navy investigates incidents. Incidents that occurred through the mid-1970s were investigated by boards and courts of inquiry. Three or more officers sat together and interviewed

**GRAPH 4
ANNUAL COLLISIONS BETWEEN 1945 AND 2015**



witnesses and interested parties before issuing their findings and opinions. Everyone went on the record. Some of these courts were contentious; many, if not most, were routine. Even complicated cases such as the 1952 collision between USS *Wasp* (CV 18) and USS *Hobson* (DMS 26) took little over a month from incident to report completion. The internationally sensitive 1969 collision between USS *Frank E. Evans* (DD 754) and HMAS *Melbourne* (R21) took a little

[A] commanding officer who sexually harasses subordinates, a commander whose ship runs aground and is lost to the Navy, or an officer who has a minor collision are all treated the same way by the Navy. This treatment is inconsistent with historical practice.

over five weeks, with interviews and testimony taking three weeks and involving seventy-nine witnesses. The only modern court of inquiry was of USS *Greenville* (SSN 772) regarding its 9 February 2001 collision with

Japanese fishing vessel *Ehime Maru*. The court was appointed eight days after the collision but did not convene until 5 March 2001. After twelve days of testimony, the court closed on 20 March but did not issue its report until 13 April, sixty-three days after the collision. The Navy has not held a court or board of inquiry for a major incident since, in no small part because the participants believed that courts of inquiry, while appropriate to their case, required significant investments of resources and time. In other words, they were hard, and there were easier and more-efficient ways to accomplish the same result.⁶

The veracity of this claim is subject to challenge. USS *Fitzgerald* collided on 17 June 2017, and the command triad was removed two months later. USS *John S. McCain* collided on 21 August 2017, and the commanding officer and executive officer were removed on 10 October of the same year. A narrative report was released to the press on 1 November, but the actual reports remain withheld and the courts-martial for officers in the *Fitzgerald* incident finally were canceled without trial in April 2018.

Other modern cases took similar amounts of time. The investigation into the October 2000 attack on USS *Cole* (DDG 67) was completed forty-eight days after the investigation. The investigation into the 1987 attack on USS *Stark* (FFG 31) took twenty-six days. The investigation into the 2005 collision between USS *Winston S. Churchill* (DDG 81) and USS *McFaul* (DDG 74) took twenty-five days. The investigation into the 2013 helicopter mishap aboard USS *William P. Lawrence* (DDG 110) took sixty-one days. The biggest differences between these investigations and the courts of inquiry are not time and resources but Navy regulations and the rights of the commanders involved.

The older courts of inquiry and the individual officer investigations that have dominated the last four decades are governed by the same instruction: *The Manual*

of the Judge Advocate General (*JAGMAN*). This document delineates the requirements for preliminary inquiries, command or administrative investigations, and courts and boards of inquiry. Command investigations, per the *JAGMAN*, are for ship groundings, shipboard flooding, fires, or collision and aviation mishaps, provided they are not identified as major incidents. The *JAGMAN* defines *major incidents* as follows:

An extraordinary incident occurring during the course of official duties resulting in multiple deaths, substantial property loss, or substantial harm to the environment, where the circumstances suggest a significant departure from the expected level of professionalism, leadership, judgment, communication, state of material readiness, or other relevant standard. Substantial property loss or other harm is that which greatly exceeds what is normally encountered in the course of day-to-day operations. These cases are often accompanied by national public and press interest and significant congressional attention. They may also have the potential of undermining public confidence in the Naval service. That the case is a major incident may be apparent when it is first reported or as additional facts become known.⁷

This definition has not changed since 1990 and is consistent with prewar definitions as found in the 1937 edition of *Courts and Boards*. Why, then, would the Navy use the single-officer investigation over the mandated court of inquiry? Courts of inquiry provide for greater legal representation of the commanders and other interested parties and the information presented becomes part of an open record. In fact, most courts of inquiry were open to spectators and reporters. By contrast, today's investigations are completed, acted on—and subsequently not disseminated to the fleet. They become available only to judge advocates on large staffs or via the Freedom of Information Act process, which in itself reduces the amount of released information, if any is released at all. In many cases, the individuals removed from command are not provided copies of the applicable investigation, even when they ask for one.

Because commanders are now judged via an administrative process during which they enjoy fewer rights than they would in a judicial process, removal for personal misconduct is lumped in with operational incidents. Much of the reasoning for this process lies in the Navy's own regulations, wherein any removal is treated the same, whether an officer requests relief for some reason or is removed by the ISIC for a significant event or personal misconduct. The result is that a commanding officer who sexually harasses subordinates, a commander whose ship runs aground and is lost to the Navy, and an officer who has a minor collision are all treated the same way by the Navy.

This treatment is inconsistent with historical practice. John Barry, recognized as the "father of the Navy," ran USS *Raleigh* aground and abandoned it to the British in 1778. William Bainbridge grounded and lost USS *Philadelphia* in 1803

and then was imprisoned in Tripoli for nineteen months. Ensign Chester Nimitz ran his first command, USS *Decatur*, aground. Today all of these officers have ships named for them and are revered as heroes of the Navy. And these officers are not anomalies, but rather well known. Between 1945 and 2015, over three hundred officers recovered from some form of crime of command or personal misstep and were promoted or continued on to other commands. In this century, across over two hundred crimes of command, only twelve officers recovered, with none of those in this decade.

These examples illustrate what was then, and what is now. Other major questions are how and why. How did the Navy change from a service that allowed recovery after an incident to one that never forgives? Where did the idea of a zero-defect culture originate? Why does the Navy remove commanders and discard them regardless of their prior or potential future contributions? Neither Barry, Bainbridge, nor Nimitz—nor even Halsey, Raborn, Mullen, or Natter—would survive in today’s Navy. How and why are we here? The answer comes down to a single individual who, oddly, held command for roughly six months but was a flag officer for almost three decades: Hyman G. Rickover.

WORDS MATTER

For some the groan is audible: “Rickover!?!” Admiral Rickover is both lauded and blamed for every facet of the modern Navy. Every success and every failure might, in some way, link back to him. At the beginning of this research, Rickover’s legacy had no place. Nuclear weapons and nuclear power, yes, but Rickover? No. In hindsight, this was an exceptionally naive view. Any study of command must at least acknowledge someone who had such a significant impact on the Navy. But that is hindsight. It was not until I was reading through the investigations and cases that Rickover’s influence started to show through. There are any number of stories or tales that can link Rickover to command and removal from command, but no instance more directly links to how we got here, and why we got here, than Rickover’s statements on responsibility.

In 1961, Rickover testified before Congress as follows:

Responsibility is a unique concept: it can only reside and inhere in a single individual. You may share it with others, but your portion is not diminished. You may delegate it, but it is still with you. You may disclaim it, but you cannot divest yourself of it. Even if you do not recognize it or admit its presence, you cannot escape it. If responsibility is rightfully yours, no evasion, or ignorance, or passing the blame can shift the burden to someone else. Unless you can point your finger at the man who is responsible when something goes wrong, then you have never had anyone really responsible.⁸

Certainly, many readers recognize this statement, or something similar to it. It appeared in one form or another in a few of the investigations after the mid-1980s

and has been quoted often since. It is *similar to* what lies at the core of the next issue. What Rickover left behind is not what he said, but how others internalized and repeated it.

In 2014, Admiral Dave Oliver, USN (Ret.), wrote in a book about Rickover: “Do you agree with Rickover’s concept of accountability? He phrased it thusly: ‘You may share it with others, but your portion is not diminished. You may delegate it, but it is still with you. . . . If responsibility is rightfully yours, no evasion, or ignorance or passing the blame can shift the burden to someone else.’”⁹

An astute reader will have seen the difference already. Rickover said *responsibility*; Oliver wrote *accountability*. While the modern Navy uses the words interchangeably, they are two different words and two different concepts, and they are misused all too often. These two words also frequently supplant another word: *culpability*. The simple fact is that we no longer differentiate among *accountable*, *responsible*, and *culpable*.

Accountability is the condition of someone who is accountable. Being accountable, or to give account, entails the need to explain one’s actions or to provide a balancing of sums. *Responsibility* is different, even when used synonymously. Responsibility is the condition of being responsible—that of an obligation or power to act or respond. Responsibility carries an additional subtext of claim, credit, blame, and sometimes trust. *Culpability* is the state of being culpable; it often is defined as being responsible for a fault or deserving blame. This definition is different from the other two: culpability is associated solely with blame. Culpability looks back after an action, as does accountability when one gives account for an action. Responsibility is the only word with both a forward-looking (power to act) and a backward-looking component (the power to respond). While these three terms commonly are used together or in place of each other, their conflation illustrates one of the issues the Navy faces today: imprecision in language means not only that we are uncertain about what these words mean today, but we misunderstand them when they are used in historical context.

The Navy also does not seem to differentiate between *mistake* and *sin* or *guilt* and *shame*. We all too often think of these different concepts as identical. A mistake is not a sin: a mistake is unknowingly doing something wrong, while a sin is knowingly doing something wrong. If you know the rule and choose to violate it, that is sin. If you should have known the rule and chose not to learn it and violated it, that is also sin. If you did not know the rule, you did not know about the rule, no one drew your attention to the rule, or you were accustomed to some other standard, that is a mistake.

Likewise, guilt and shame are very different concepts. Guilt relates to actions, while shame relates to self. The guilty person feels bad that something happened, while the ashamed person feels bad about him- or herself. The guilty commander

says, “I can’t believe I *ran the ship aground*.” The ashamed commander says, “I can’t believe *I* ran the ship aground.” This extrapolates up the chain of command (and down) with ISICs who are upset that Commander Smith-Jones ran the ship aground. How the ISIC frames it—action or person—determines whether the action is one that induces guilt or shame; that is, if it is the action being criticized or the individual. Guilt is something one can repent from and atone for, but shame is not. When we internalize shame, either as an individual or as an institution, we say that someone brings shame and discredit on the Navy, and we are saying that their actions are unforgivable and irredeemable. This is something we should say only in rare cases, and never lightly.

If an officer does not know better or if an officer works within a culture that is consistent and constant for the fifteen years prior to command—and is evalu-

How did the Navy change from a service that allowed recovery after an incident to one that never forgives? . . . Why does the Navy remove commanders and discard them regardless of their prior or potential future contributions?

ated by an officer who has not been to sea in four, seven, or ten years, or who never commanded a ship at all—then those officers are working from different frames of reference. Each officer has a differ-

ent idea of “is,” which leads to a different idea of how things “ought to be.” And it is easy to confuse what “is” with what “ought to be” when what “is” generally has worked in your favor.¹⁰ One of the challenges that leaders face is identifying what a subordinate knows, should know, and honestly does not know. Another lies in creating the system that imparts the lessons necessary for success in peace and war.

One path that helps to guide us through this model of language, rules, understanding, and what is or what ought to be is ethics. Professional military ethics came into popular understanding with Samuel P. Huntington’s seminal 1957 work *The Soldier and the State*. Huntington laid out three criteria for a profession: special expertise, responsibility toward society, and a sense of corporateness. This sense of corporateness includes a self-policing function whereby the profession examines and evaluates members against recognized standards. What the Navy has done, however, is to turn from ethics to rules. Ethics are about right or wrong, and sometimes about choosing the least wrong of two wrongs. Rules are different. Rules are about “shall” or “shall not.” Ethics cannot, and should not, be rules. Ethics imply a level of autonomy that requires decision-making, while rules do not.

Rickover’s words and legacy provide insight. In 1978, a submarine officer who was on his way to his first nuclear submarine for his department head tour after initial qualification in diesel submarines wrote that submarine officers were

“given responsibility, but not authority, [and] the natural reaction is to ask to be told exactly what to do, to request rudder orders. An officer working in a nuclear billet can become a commanding officer if he simply makes no major mistakes. Leadership is not nearly so important a criterion of success. A leader who does what he is told and ensures that he is told everything that he must do does not make mistakes.”¹¹

Look at the language: “responsibility, but not authority,” “not make mistakes.” Phrases such as these still ring true today and reflect the view of many junior, and some senior, officers. If I do not make a mistake, I can make it to command. If I take a risk, I might make a mistake. If I follow the rules, I will not be taking a risk. This is where the zero-defect culture, the accountability culture, has brought us. Do what you are told, nothing more and nothing less, and you will advance. Take no risks, make no mistakes, and you will advance. It does not matter that this is not what Rickover lived or believed, or that modern leaders do not believe this. Enough junior officers do believe it, which is what makes a culture—and culture is everything.

For those who wonder and think, “Nineteen seventy-eight—that was forty years ago; I was in grade school (or not even born),” look at how the Navy viewed ethics in a 2014 white paper written at the Naval War College: The Navy’s “predominant approach to ethics is legalistic in content and often negative in tone. . . . At best, we employ a checklist of what *not* to do, and at worst, ethical development of our people is a chore or a burden that takes away from getting the job done.”¹²

This is how we moved from broad to narrow, from latitude to checklist. This is how we lost focus on the profession and instead emphasized protecting the perception and reputation of the Navy. We traded judgment for following orders.

What can we do to right the ship? First of all, we must follow Rickover’s lead. Rather than misunderstand him, we must study and learn from his example. Imagine if we put as much study into the human psyche, into leadership and ethics, as Rickover and the nuclear enterprise put into nuclear power, materials, controls, and testing. We must understand and standardize our language so that we know the difference between clear concepts such as allision and collision, and less clear ones such as accountable, responsible, and culpable. We must know where rules matter and where principles are more important. The simple fact is that the more rules that exist, the more likely sailors and officers are to violate and then ignore them. If rules are no longer applicable, change them. If the eight-decades-old guidance for courts of inquiry is no longer applicable, change it. But do not ignore it out of personal or institutional convenience.

Admiral Arleigh A. Burke had a saying that “a commander who fails to exceed his authority is not of much use to his subordinates.” This is not about commanders overstepping standards beyond their authority or taking personal liberties

with command funds and equipment. Burke was talking about commanders exceeding given authority to the betterment and benefit of subordinates: back-dating awards to advance a well-deserving petty officer who just missed the final multiple, or sending fathers home from deployment for a child's birth.

The Navy also must relearn institutional forgiveness. This is not recommended lightly. The perceived ability to recover from failure is more important than any commander's exhortation that we do not have a zero-defect culture. If commanders make a mistake, then they deserve a better education, they deserve a chance to show what they have learned, and they deserve to move up. However, if they sin—no matter what the results—they must be investigated and evaluated—for the decision, not the outcome. Flouting regulations cannot be absolved because everything turned out fine. Likewise, just because something turned out badly does not make the decision inherently wrong.

Studies show that forgiveness matters. Many studies, going back centuries, have showed us that people lie and people cheat.¹³ It is part of who we are; it is human nature. We also know that those who are absolved of sin, who know that repentance is accepted, or who are reminded of the group standard that eschews lying or cheating are less likely to sin, or less likely to sin again.¹⁴ Some believe that if there is no chance of repentance, then they might as well keep doing bad things. This is a culture we should avoid at all costs—but we might be headed down this road already.

Rickover knew the value of forgiveness. As a junior officer his ship went aground and his commanding officer was court-martialed. The court verdict is unknown, but this officer, Herbert Kays, was not removed from command and went on to be promoted and to command a light cruiser and a destroyer squadron before retiring. In the Navy's nuclear-propulsion program, legend depicts Rickover summarily removing commanders from command for trivial reasons; the legend is apocryphal. At least one officer *was* removed from command of a nuclear-powered submarine, *twice*—but he still was promoted to captain. Ernest Barrett commanded USS *Permit* (SSN 594) until the submarine ran into a freighter during precommissioning trials, whereupon he transferred ashore. But two years later he reentered the command course, this time for nuclear missile submarines. After taking command of USS *Ethan Allen* (SSBN 608), his boat collided with a merchant ship in January 1965, and again he was removed from command. But Barrett was promoted to captain before he retired in 1971.¹⁵

The Navy removes commanders when they do not meet the standards set for them. Despite a constant underpinning of law, regulations, and tradition, Navy custom and action have raised those standards and divorced them from historical context, such that today's commanders are held to a higher standard than those before them. What began as aspirational now has become the minimum. We

should not be surprised if someone does not meet an aspirational standard. This also means that more commanders are removed from command, and removed from the service, than in past decades. This leads to weakened command, risk-averse commanders, and a focus that places results ahead of intent. Results are important, but ill-intentioned success is more corrosive than the poor results of good and well-intentioned commanders. Differentiating the two is the Navy's challenge going forward.

Yet even with this information, some might insist that the responsibility of the commanding officer is absolute, and that when blood and treasure are lost accountability must be demanded. That argument is valid and correct; however, neither accountability nor responsibility mandates removing an officer from command. In fact, had the Navy lived by this idea of absolute removal, the following officers never would have risen to important positions in our forces:

- Captain Robert J. Kelly, USN, who commanded USS *Enterprise* (CVN 65) when it ran aground in 1983. Kelly served as Commander, U.S. Pacific Fleet from 1991 to 1994.
- Commander Mike Boorda, USN, who commanded USS *Farragut* (DDG 37) when it ran aground in 1975. Boorda was Chief of Naval Operations from 1994 to 1996.
- Captain Leon “Bud” Edney, USN, who commanded USS *Constellation* (CV 64) when it collided with a Bangladeshi merchant ship in 1980. Edney also dealt with an explosion aboard USS *Ponchatoula* (AO 148) when he commanded it in 1976. He served as Vice Chief of Naval Operations from 1988 to 1990.
- Lieutenant Michael Mullen, USN, who in 1973 allided with a buoy when he commanded USS *Noxubee* (AOG 56). Mullen was Chief of Naval Operations from 2005 to 2007 and Chairman of the Joint Chiefs of Staff from 2007 to 2011.
- Captain Roy L. Johnson, USN, who collided with USS *Pinnacle* (MSO 462) while in command of USS *Forrestal* (CVA 59) in 1956. He commanded U.S. Pacific Fleet from 1965 to 1967.
- Captain Joseph S. Mobley, USN, who in 1990 lost twenty-one sailors to a liberty boat accident when he commanded USS *Saratoga* (CV 60). Mobley commanded Naval Air Force, U.S. Atlantic Fleet from 1998 to 2001.
- Captain William Raborn, USN, who in 1954 lost 103 sailors when the hydraulic catapult system exploded aboard USS *Bennington* (CV 20). Raborn retired as a vice admiral after overseeing development of the Polaris missile system.

These are only a few of the more than 150 officers who commanded ships during crimes of command yet rose to flag rank before retirement. Those officers benefited from a less draconian view of accountability, and the Navy benefited from their service and experience. What have we lost in the hundreds of officers handled differently over the past three decades?

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THE UTILITY OF NARRATIVE MATRIX GAMES

A Baltic Example

John Curry

The long contribution of war gaming to military training, operational analysis, and military planning has been well documented by numerous authors.¹ War games have been used for many purposes, and there are numerous different methods and types from which to choose, depending on the stakeholders' aims. For example, war colleges have used war games as an integrated part of their curricula as part of the experiential learning cycle.² The Pentagon wargames to develop and test new doctrine and war plans. Think tanks have used war games to generate new insights. The respective interests of these different users of war games determine the focus of their gaming efforts.³

The focus of professional gaming has shifted over time from the kinetic so as to include wider aspects of confrontations beyond war fighting, such as national will, social media, economics, and the laws of war. Traditional wargame models have struggled to represent these factors adequately. Developed from the hobby-war-game space, the matrix game narrative wargame method has been discussed widely in the wargaming community of practice and the method is

now in general use. It is timely and valuable for the wider professional community to apply some scrutiny to both the worth of the method and its challenges. This article traces the origin of the method, briefly explains how it works, then uses a case study of a game based on a confrontation short of war in the Baltic to highlight some challenges with the method. The article concludes with an assessment of the utility of the matrix game method for gaming current political crises.

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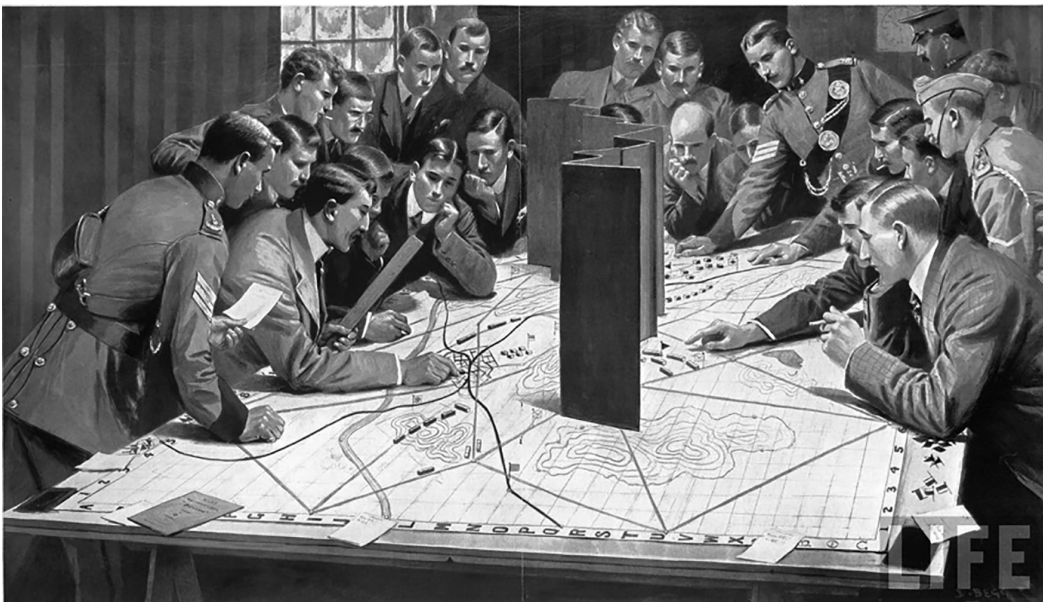
THE LONG ROAD TO NARRATIVE GAMING

War Gaming's Infancy

War gaming first became embedded in military training with the Prussian *kriegsspiel* of the nineteenth century. These training games usually emphasized the operational movement and combat aspects of warfare rather than the political aspects of confrontations. These early war games could be seen as an engaging tool for communicating the combat experience of veterans to the next generation of soldiers. The games supplemented traditional teaching methods of lectures, reading, staff problems, field exercises, and so on. Junior leaders would make decisions within these games and then the umpires, who were veterans, would intervene with reflections based on their actual combat experiences in similar situations. The increasingly detailed *kriegsspiel* rule books attempted to codify the experience of such veterans so that the games could run in a realistic manner even in the absence of veterans as umpires.⁴

The Prussian war games clearly were popular in the late nineteenth century, as shown by their dissemination internationally. For example, members of the British Volunteer movement (part-time reservists) played these games on their own time.⁵ The games were effective at teaching a number of military skills, such

FIGURE 1
EXAMPLE OF KRIEGSSPIEL IN ACTION IN 1915



The 25th London Cyclist Regiment playing a *kriegsspiel* variant, "Bellum," at their London regimental headquarters. Traditional *kriegsspiel* had opposing teams in different rooms looking at their own maps. The umpires would tell the players in each room what they could see. Bellum kept the players in one room and used a simple screen between the two forces to conceal movement until the main battle commenced. The rules were also simplified so a game could be completed in a single training evening.

Source: Reproduced from Curry, *The British Kriegsspiel (1872) Including RUSI's Polemos (1888)*.

as the delivery of orders, combat appreciations, map reading (the games used actual military maps), and tactical decision-making. However, the key weakness of these games was that if too many rules were introduced (so as to include as much of the detail of real combat operations as possible) the pace of the games slowed down, making them less engaging and reducing the chance to practice other military skills.⁶

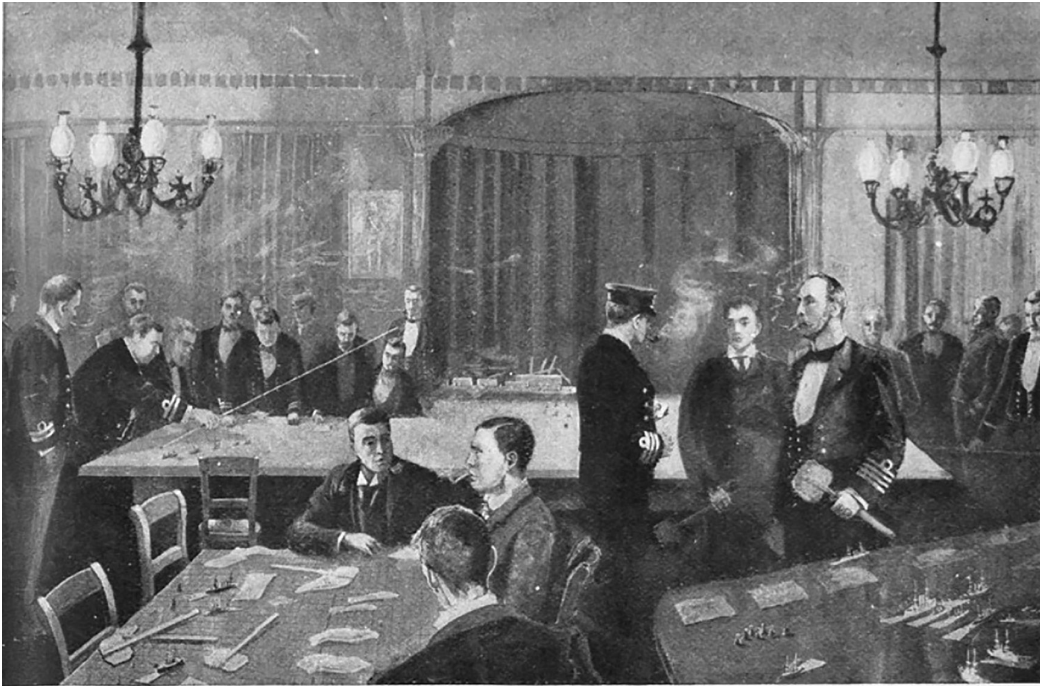
Naval War Gaming

Royal Navy officers pioneered the adaptation of the concept of *kriegsspiel* to naval warfare. John Fredrick Thomas “Fred T.” Jane was the best-known “father” of naval war gaming, but his war game actually rested on foundations built by the professional naval officers of the time. At the Royal United Services Institute (RUSI) in 1873, Lieutenant W. M. F. Castle, Royal Navy (RN), presented *The Game of Naval Tactics* and the chair of the session, Admiral Sir Frederick W. E. Nicolson, 10th Baronet, CB, prophetically said, “I cannot help feeling that, at present, we are only on the threshold of a very difficult and complicated question, which may, in the end, be extremely useful to the Naval Service in general.”⁷ A few years later, in 1879, Captain Philip H. Colomb, RN, presented *The Duel: A Naval Wargame* at RUSI; then in 1888 Lieutenant H. Chamberlain, RN, demonstrated his *Game of Naval Blockade* at a RUSI evening session. Minutes of these meetings show that the audience of professional naval officers and academics examined the merits of these war games vigorously.⁸ In many ways, these early discussions of professional war games were exemplars of good practice; they assessed each game on its merits, applying such questions as “Is this game realistic?,” “Does it teach the correct lessons?,” and “Is it a cost-effective use of officers’ time?”

Fred Jane published his wargame rules in 1898 and the classic Jane’s *Fighting Ships* series of books was the world’s first wargaming supplement.⁹ The books classified ships using the naval wargame armor-classification system. The rules were sufficiently realistic to gain professional credibility and the British and other navies used them widely. They were useful for developing an understanding of naval tactics, in particular what happened when ships of the line closed for a sea battle. The war games taught other lessons; the model ships used helped to develop ship-recognition skills, and playing the game helped teach participants the speeds, ranges, armors, penetration ranges, and the like of those ships.¹⁰ In the interwar years 1919–38, there was a general acceptance of war games as part of a naval officer’s mental equipment.¹¹ The Naval War College’s war games’ impact on World War II combat is documented particularly well.¹²

The vast majority of these early professional war games dealt with low-level tactical warfare, typically focusing on the details of various weapons and their effects. Yet interestingly, some of these tactical games had important strategic

FIGURE 2
A NEWSPAPER REPORT ON FRED T. JANE'S NAVAL WAR GAME BEING PLAYED IN
PORTSMOUTH, U.K., IN 1903



A MEETING OF THE PORTSMOUTH NAVAL WAR GAME SOCIETY IN THE NELSON ROOM AT THE "GEORGE," PORTSMOUTH.

The Naval War Game and How it is Played.

Source: Reproduced from Curry, *The Fred Jane Naval War Game* (1906), including the Royal Navy's Wargaming Rules (1921).

effects. One of the classic examples was the Western Approaches Tactical Game that Captain Gilbert Roberts, RN, ran in 1942–45. The game trained convoy and escort ship commanders in anti-U-boat tactics for the critical convoy battles in the Atlantic during World War II.¹³ Later commentary on these games presents them as a single game, but Roberts actually ran three types of games.¹⁴ The first was for operational analysis—reenacting, on the floor, recent U-boat attacks on convoys. Relying on the after-action accounts of the escorts, Roberts and his team worked out where the attacking U-boats could have been and then statistically worked out the best tactic to maximize the chance of catching the attacking U-boat.¹⁵ The second type of game was training—teaching escort commanders of various nationalities to apply these new tactics. The third type of game was strategic—a map game mimicking the actual Battle of the Atlantic, with the aim of establishing whether rushing escort groups (naval support groups) to support convoys under attack actually would work (it did).

FIGURE 3
WESTERN APPROACHES TACTICAL UNIT ANTISUBMARINE WARFARE WAR GAME (1942–45) IN OPERATION



It was played on the floor, with the players who represented escort captains sequestered behind screens, which limited what they could see to just the playing areas.

Source: Imperial War Museum Collection.

Post-World War II Tactical Gaming

At the start of the Cold War in 1945, a succession of manual, then computer-based, war games focused on training or developing better war-fighting strategies. Many of the American games looked at a potential war between NATO and the Warsaw Pact in central Europe.¹⁶ Dunn Kempf (1977–97) was a game that used 1 : 300-scale miniatures and had been developed from a hobby set of rules. Units were expected to make terrain boards that looked like their training or deployment areas. Units could make a plan, play the war game according to their plan, modify it, and then deploy into the field to exercise over the very terrain over which they had gamed.¹⁷

Tacspiel (1966) is an example of tactical war games that were used for operational analysis during the Vietnam War.¹⁸ It played an important role in improving the effectiveness of U.S. Army counterinsurgency techniques. The Tacspiel

“games” typically took two days to play just thirty minutes of simulated combat. The analysts would examine a situation such as an American infantry company being ambushed, then look at all the evidence to identify the best response. This response then informed subsequent training and doctrine.¹⁹

The Introduction of Game Theory

Along with the various tactical games, there were developments into the new area of political-military (pol-mil) gaming. In the 1940s, John von Neumann and Oskar Morgenstern developed game theory to model mathematically the interactions among rational actors regarding economic matters; it was later adopted in other decision-making environments, such as pol-mil gaming.²⁰

For example, the advent of the atomic bomb in 1945 changed the nature of warfare radically. No longer could war be assumed to be a zero-sum game, in which the person with the highest score wins, such that the loss of a “chess piece” by one side necessarily would represent an equal and opposite gain to the other.²¹ In chess, the aim is to win by achieving checkmate, regardless of how many pieces are lost in the process. Victory in chess is irrespective of the “casualty rate” among the pieces. In contrast, the major goal for each power bloc during the Cold War (1945–91) was to attempt to achieve as many political objectives as possible—but not at *any* cost. Both sides wished to avoid a nuclear exchange that threatened devastation far worse than any possible political advantage that could accrue. Here was a situation in which both sides could lose horrifically but could win only relatively marginally. Understanding such a situation required a new theory.

Game theory in its simplest form can be applied to a situation in which each of the players selects a strategy from a limited number of predefined options. Each option has been quantified as having a positive, negative, or zero score. Game theory teaches that a player must adopt the strategy that best maximizes his assured score, regardless of the other player’s actions. Game theory was the basis for extensive theoretical work and dominated academic thought on conflict throughout the Cold War.²²

Gaming Political Confrontations

Some authorities considered game theory to be unsuitable for gaming pol-mil confrontations, particularly given the short time before a confrontation turned into all-out war. The American government’s answer in the 1950s was mainly to run strategic war games through the Joint War Games Agency of the Joint Chiefs of Staff. The agency was divided into three parts: the General War Division, which conducted annual games about World War III; the Limited War Division, which continually tested contingency plans for smaller conflicts, such as in the Middle East or Korea; and the Cold War Division, which was concerned with modeling high-level crises rather than actual hostilities.²³

Andrew Wilson outlined the standard methods of producing crisis games in America during the 1960s. A team of subject-matter experts (SMEs), including diplomats, created a fact book covering the combat potential of the forces involved and the relevant geography, as well as other resources. On the basis of these sources, the scenario was generated and the game prepared.²⁴

Such games normally involved a committee of five to ten players representing each country. The teams did not represent individuals, so there was no role-playing of individual positions, such as head of state. Each committee collectively made decisions in the best interests of the country it was representing. The American teams were expected to pursue whatever policies best helped the United States pursue its national interest, but other teams were expected to act in a way that reflected the U.S. interpretation of the national interest or ideologies of the countries they were playing.²⁵

Over the course of three days, the committees spent four hours discussing the options, then outlined to the game director their plans for the next two to seven days of game time. The game director, using his own experience and advice from specialists, then arbitrated the outcomes of the different plans.

Such games were criticized for a lack of focus. Was the objective to practice the procedures? To test the effectiveness of different force mixes? To serve as a creativity exercise that looked at outliers? To forecast future outcomes? Or to develop optimal political strategies? Such committee games also tended to produce nonreplicable results, as the actual process by which decisions were made was difficult to record and the group dynamics within each committee were impossible to model.

These games also have been criticized for allowing too much scope for unorthodox behavior—players would become bored and do things merely out of curiosity, just to see what would happen.²⁶ A structure was needed that would produce more-plausible behavior in games, but also would allow political and other factors to be integrated into the games. In addition, a new type of game was needed that could be developed faster, was flexible enough to game whatever subject needed exploring, and could be run within a relatively short span of time.

During the 1970s and '80s, the wargaming hobby industry, in particular through the board game company Simulations Publications Inc. (SPI) and its magazine *Strategy & Tactics*, pioneered innovation in political gaming.²⁷ Early examples included the following:

- The Plot to Assassinate Hitler (1976) attempted to game the preparation for and staging of a coup in Nazi Germany during World War II.²⁸
- Canadian “Civil War” (1977) modeled attitudes toward separatism versus federalism during a time of political conflict in Canada.²⁹

- After the Holocaust (1977) was largely an economic game about reconstruction following a strategic nuclear war.³⁰

Many ideas developed subsequently became widely adopted to represent political issues in gaming.³¹ However, one generic wargame methodology made the leap from the hobby to the professional communities.

MATRIX GAMES

Matrix game methodology was created in the United States by Chris Engle and was first published in 1992.³² Engle aimed to create a system by which it was possible for a player to role-play at any level, representing anything from a single person to an entire country. Subsequently the method was developed extensively and play tested in a variety of professional military educational contexts over the next fifteen years. By now matrix games have been used for professional military education in the United Kingdom, including to study current conflicts, such as those in Syria, Libya, and Iraq, as well as hypothetical conflicts in such hot spots as the South China Sea and the Korean Peninsula.³³ Those working in intelligence also have used them.³⁴

Matrix games exist in the space between rules-based war games and online role-playing games. Many of the existing rules-based games take considerable time and effort to explain to those from a nonwargaming background. Rather than attempting to come up with rules to cover all possible actions, the matrix games are very light on rules. Players state what they want to do and what the impact of this would be, and give reasons supporting why their efforts would succeed. Other players then are allowed to suggest factors that would increase or decrease the chance of success. On this basis, the umpire normally assigns a probability to the chance of success of the players' actions. This method encourages creative thinking but has a structure that uses the experiences of the group to help moderate the suggestions. Having a team represent and role-play each actor in

EXAMPLE OF A MATRIX GAME ARGUMENT

Player A: "I will reassure the Baltic States of support by harassing enemy submarines in the Baltic Sea. I am able to do this because:

- I have three frigates deployed and available.
- The captains and crews are highly experienced in antisubmarine warfare.
- Electronic intelligence reveals the enemy deployment patterns.
- The weather is fine, so they can work uninterrupted."

Player B: "But overt trailing guarantees that the submarines will detect the frigates and will take active counterdetection actions."

Umpire: "I assess the balance of these arguments and I assign the following probability of success that Player A has to achieve to obtain the desired outcome."

The game world then moves on from that point and the next player proposes an action.

the game helps encourage analytical discussion; for each turn, the team is given a short time to agree on a course of action.

One of the strengths of matrix games is the ability to integrate pol-mil actions within a single game. Since players can make arguments about whether another player's proposed actions would succeed, the game had some elements of both competition and cooperation. This method allows a situation to be explored quickly without the constraint of cumbersome game mechanics. Game designers developed many variations of matrix games, customizing them to their purposes.³⁵

MATRIX GAME CASE STUDY: POSTURING IN THE BALTIC SEA

The scenario that follows was developed at the Military Operations Research Society (MORS) Emerging Techniques Special Meeting (METSM) in October 2016.³⁶ The intention of the effort was to examine the utility of matrix games for gaming an event of current interest. This formed part of MORS's wider efforts to investigate the validity of professional war gaming.

The scenario subsequently has been played multiple times with different audiences, including members of the military, academics with relevant specialties, and wargaming hobbyists.³⁷ Those in the last-named audience, if they are experienced in playing modern pol-mil games, can add value, as they sometimes think outside the box and propose original strategies that provide new insights.

Background to Tensions in the Baltic

While the United States often focuses on issues of sea power in the Pacific, the European countries of NATO focus more on the issues of the Baltic States and the threat from Russia. Russia's agenda is to secure its place as a world power, and as such to be entitled to its own sphere of influence and the right to maintain buffer regions as part of its strategic defensive doctrine. Such a buffer would include adjacent states. Recent history demonstrates that Russia has the willingness and the ability to use military force, or the threat of it, to achieve its political objectives, such as in Chechnya (1999–2009), Georgia (2008–14), and Ukraine (2014–present). Hence, the Baltic States of Latvia, Estonia, and Lithuania see themselves as being on the front line.³⁸ To secure the republics, it is NATO policy to rely on the deterrent effect of trip-wire-size NATO forces that could be reinforced rapidly in the event of a crisis.

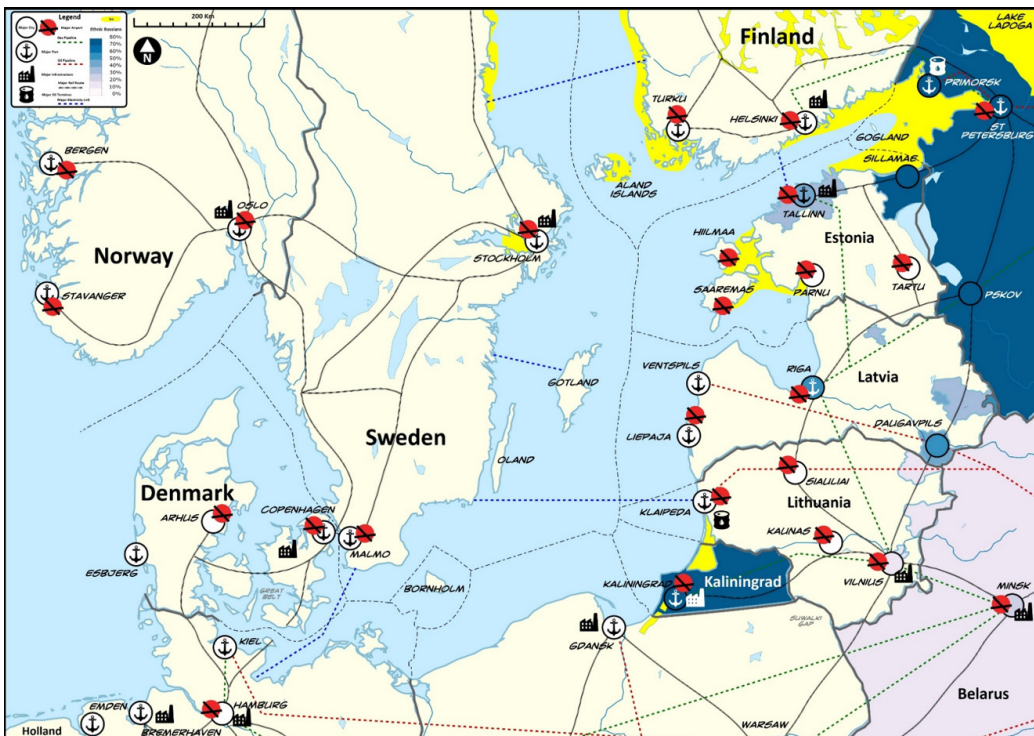
The region has the added complexity of the presence of the Russian exclave of Kaliningrad. Königsberg was an ancient medieval town and was the old capital of Prussia. At the end of World War II, Russia occupied the town and the local German inhabitants fled, were killed, or were expelled forcibly. The town was renamed Kaliningrad and became the year-round ice-free European port for the Russian Baltic Sea Fleet. Approximately four hundred thousand Russians live in

the area, largely providing the workforce to support the Baltic Sea Fleet and the two naval air bases. The area has staggering pollution problems, including by nuclear waste. Geopolitically, Kaliningrad is cut off from the rest of Russia by Lithuania and Poland, which are members of NATO. The strategic importance of the existence of the exclave is that the Baltic States are linked to Poland and the rest of NATO only by a sixty-five-kilometer land corridor to Lithuania.

The Scenario

One of the keys to a successful game is constructing an immersive narrative for the scenario.³⁹ The starting point of the Baltic Challenge scenario is as follows: Russia has deployed nuclear-capable Iskander-M short-range ballistic missiles to its Kaliningrad exclave. The Iskander missile is dual capable—able to carry a conventional warhead or a nuclear one. But development and deployment of such a missile constitute a breach of the Cold War-era Intermediate-Range Nuclear Forces Treaty of 1987.⁴⁰ The missile's range, perhaps six hundred kilometers, makes all the Baltic States and two-thirds of Poland potential targets. The missile

FIGURE 4
THE GAME MAP FOR THE BAL TIC CHALLENGE



The map is populated with counters as narrative devices—visual aide-mémoire rather than accurate representations of military units. The choice of map and counters influences the direction of the game, as they provide a visual focus and a potential psychological boundary on which players can focus. However, the players can ask for additional geographical areas or units to be represented if required.

Source: Reproduced from Curry and Price, *Modern Crises Scenarios for Matrix Wargames*.

is mobile and, despite the huge size of its launcher, hard to detect. Finally, the missile's mobility, combined with the short elapsed time from order to launch and the fast flight time, means that Russia has a first-strike nuclear capability in the region. It is unlikely that a target state would receive any warning of an attack before the first missiles exploded.

For the purposes of the scenario, the Baltic States are alarmed and they ask NATO for assistance. This raises tensions within NATO.

The expectation in the game is that the conflict will remain below the threshold of a general war. However, miscalculation, perhaps by a third party, could bring the situation to the brink of a shooting war.

The Play

Players are told that the game outcomes will be reported only under the Chatham House Rule, under which the contribution of individuals may not be attributed.⁴¹ Removing any concerns about postgame reporting is important; it helps remove organizational constraints that might discourage players from experimenting.

The players read their briefing handouts, which include a strategic overview of the initial situation and personalized aims and objectives. Sometimes after discussion (at least two people represent each faction) the players suggest revising the objectives. Any such revision is done in collaboration with the umpire, to prevent players from inadvertently "breaking the game."⁴² The dynamic of introducing more players into each role is a useful one, but it needs strong moderation to keep up the game's momentum.

The game proceeds with each team making an argument, starting with the faction deemed to have the initiative. The amount of time that each turn represents remains abstract, but players in this game generally understand it to be a few weeks. As the game progresses, the role of chance means that the game does not proceed necessarily in the most likely direction but rather generates a potential future scenario. Conflict incorporates a degree of chance by its very nature, and the game reflects this. In one case a team argued that an operator on the other side fired a surface-to-air missile without authorization, but it missed. The outcome of such arguments usually changes the future direction of the game. The matrix game narrative methodology promotes the creation of plausible actions within the structure of the scenarios.

Postgame Discussion—the Hot Washup

The academic evidence is clear that a major part of the value of serious games is in a well-conducted after-action review. Games can be viewed as a prelude aimed at stimulating high engagement and valuable focused discussion.⁴³

An issue with an unclassified game is that it may produce outputs that could be considered of value to decision makers (on either side). If players, through

the focused lens of the game, identify actual weaknesses or develop successful strategies (for either side), the game outputs should be considered confidential and their dissemination controlled. However, excluding from pol-mil games those who do not hold the appropriate security clearance restricts the intellectual power that can be brought to the exercise. An example might be academics who possess specific foreign policy knowledge.

After game play concludes there is an hour-long discussion among the players and the umpire about the realism of the scenario and the actions taken in the game, including a postmortem of player actions. The umpire provides only minimal moderation; the players take turns posing questions to one another and questioning individual moves.

The purpose of playing the game is to create a realistic representation of a live potential crisis and to react as the stakeholders would in the real world. Players with relevant experience of such confrontations note that the game includes many activities reminiscent of the real world. For example, it might be seen as a rational player strategy to focus on achieving only a few aims, but the NATO team actions always consist of hopping from crisis to crisis.

One recognition—which arose from all iterations of the game and with all types of players—was that the majority of NATO doctrine and foreign policy work was somewhat lacking when dealing with the “gray zone” that falls between a situation constituting normal deterrence and a situation that reaches to article 5 of the Washington (NATO) Treaty (invoking *collective defense*—an attack on one is considered an attack on all).⁴⁴ This has led to a dawning of understanding that the NATO players often are unsure of what they should be doing and how the opposition will interpret their actions. Of course, one must be careful of making generalizations on the basis of anecdotal evidence, even from multiple game iterations; there certainly are policy makers in NATO who can deal with these issues. But the evidence from these games indicates that these experts’ understanding has not filtered down to those at the operational level.

Recently, some senior Western politicians have made comments along the line of “Treaties should not be straitjackets” and “Are we really considering going to war over a country with a population equivalent to two [U.K.] municipal boroughs?”⁴⁵ Such comments have worried many professionals who had assumed that the Cold War certainties with regard to Russia still held firm. This particular uncertainty, coupled with the larger, manifest uncertainty about the actions the United States might take, has led to a number of iterations of the game by professionals that mirrored the sort of radical alternative futures that recreational players have proposed.

The game has proved to be an extremely good way of ensuring that all concerned develop a deeper understanding of the situation. Prior to the series of

games being played, one senior person (whose professional focus was *not* the Baltic States) looked at the proposed map for the first game and asked why some counters on the map showed the proportion of ethnic Russians in particular areas. This person then pointed to Kaliningrad and asked why so many Russians were living there—obviously completely unaware that Kaliningrad was part of Russia. Following the game, many of the participants remarked on aspects of the situation about which they were uninformed, despite intelligence briefings being disseminated on a regular basis. Games are effective devices for contributing to the learning process.

Another aspect of the situation was the vexed question of *antiaccess/area-denial (A2/AD) measures*—powerful Russian weapon systems that threaten to deny easy access to the restricted waters of the Baltic.⁴⁶ This subject has been written about extensively; but the game, operating in the gray zone, demonstrates that much of the rhetoric on the subject is flawed. As a player in one iteration of the game summarized, “A2/AD is a product of the imagination. We move into theater, and either they shoot us or they don’t. If they shoot, we are in an Article 5 situation and we all know what to do; if they don’t, we just carry on. A2/AD doesn’t exist outside a shooting war.”

EMERGING THEMES FROM A GAME BASED IN NARRATIVE METHODOLOGY

Flexibility

Over many iterations of the Baltic Challenge game, the inherent focus on the narrative rather than the mechanics of war has led to the game play unfolding in a variety of ways.

- Realism was exhibited not only in the overall design of the scenarios but in how the players responded to the various crises. The reasoning exhibited within the matrix game was natural in human terms, with models of negotiation focusing on the same type of variables that real-world decision makers would consider important in the crises and conflicts being simulated.
- Transparency of the game mechanics led to the logic of the game being understandable and humanlike in terms of the decision process and individual judgments.
- The narrative of the game allowed flexibility, with the overall conflict serving as a framework for a diversity of contexts representing alternative solutions to the conflict. It was possible to reflect diversity in larger strategies, value systems, perceptions, and competence.

- There is an evolutionary potential to the narrative structure, using the initial setup as a highly simplified baseline for constructing more-sophisticated interactions.
- The ease of use designed into the game mechanics ensured that it was possible to review and adapt the game play without being proficient in specific modeling, programming, or game-design disciplines.

Umpiring Challenges

Two umpiring challenges need further exploration. They involve the trade-offs involved in deciding whether to (1) keep a game on narrative track or let the narrative emerge organically, and (2) drive the game to a satisfactory narrative conclusion or encourage analytical discussion.

Player Inventiveness. The first challenge involves the need in matrix games to moderate player inventiveness. The essential trade-off is between allowing players to discover unconventional strategies that constitute so-called black swans and letting players explore the most likely options for each role.⁴⁷ An example was the range of alternatives that the members of a Russian team explored for achieving their strategic direction of creating internal dissent within the Baltic States. At one end of the spectrum was the realistic, incremental approach: building up discontent over months with a carefully crafted social media campaign. But at the other end of the spectrum was the unlikely, but still feasible, idea of carrying out a surge, perhaps by disguising intelligence agents as tourists. In matrix game terms, an argument to achieve this would have needed a high score to succeed but would fall within the bounds of military possibility. However, such a success would alter the course of the rest of the game, with Russia having a strong body of controlled activists in the republics at the end of turn 1 instead of a number of turns later. If the game space is visualized as an ever-expanding branching tree network, occasional choices with a low chance of success can move the game state onto an entirely different branch.

When game play begins within a set construct, a series of tasks is assigned to each team and the members embody their roles within the session. To this point, the umpire retains control over the emerging story line, introducing new tracks as needed when situations arise. Conflict begins to occur when the narrative becomes a question of experience and opportunity, as occurred in the example above. When players of the Baltic Challenge game have had experience in war, politics, and government their experience skews the narrative, altering the nature of the game play in subtle and not-so-subtle ways.

Uneven teams provide an example. A team usually consists of two or three people, who may or may not have similar backgrounds. When the team has

representation from people of different expertise levels and dissimilar backgrounds, the actions it takes tend to alter the nature of the narrative in big leaps rather than the small steps through which people with equal expertise would progress. In one instance, one team's members argued that they would assert political control in a city in just one turn, whereas those with more experience in such matters countered with the suggestion that it would take multiple actions to achieve this outcome. Inexperience can underestimate the time and effort required to effect change in the real world. This led to the narrative refocusing the discussion as a means to explain game play rather than to move the scenario forward. In this instance the umpire had to intervene for the game to progress.

Alternatively, the umpire can create a narrative that is too constrained, whereupon the game begins to break owing to a lack of player choice. For example, if the Russian player moves forces into a blockade position, NATO either must force the blockade and go to war or must concede defeat. If the teams in the conflict lack the means to create new actions, they are forced to rely on the umpire to introduce a new scenario that allows the teams to take action.

In sum, a balance needs to be struck between the organic growth of the game narrative and the immediacy of creating a playable game scenario in a realistic conflict.

Conclusion versus Discussion. The second challenge is deciding whether to drive the game to a satisfactory narrative conclusion or encourage analytical discussion. After players receive their initial briefings, the members of each team retire to a separate space to attempt to coalesce their understanding within the team and to speculate on the content of the other teams' briefings. In one instance, a team even started to map out the most likely path the game would follow by verbalizing a sort of miniature matrix game. One game-management question is how long to allow this focused consideration of the situation to continue before bringing the teams back to the main event. By allowing the teams to confer beforehand the umpire creates space for dialogue not available during the actual game play; however, interchanges that include SMEs discussing ongoing real-world confrontations move from one topic to another, which may result in individual teams creating entire scenarios prior to the actual game play.

A review of the scenario is necessary when starting the game, but it can lead merely to more analytical discussion rather than to actually commencing the exercise. The game does not depend on the map being an exact representation of the daily movement of forces, but players who represent experts in the field want to ensure the authenticity of the experience by starting the game from the actual situation at the present time. When the game commences, engaged players

inevitably take the opportunity to question forces, geography, culture, and other salient factors. The umpire then has to judge at what point to intervene by moving the game narrative on and when to let the discussion continue because it is generating new and potentially useful insights. The narrative of a matrix game evolves constantly, and each scenario posed increases the number of actions the teams can take.

That is, unless a situation develops that brings a halt to most decision processes. In one Baltic Challenge game, the conflict situation developed until it became clear that there would be a major pause in the tempo of operations. Political options had been expended and some player teams were running out of ideas. An indication of this in some matrix games is when most teams are arguing for quite modest developments in their favor. An example of this would be the Nordic team having its civilian politicians carry out a political minitour to boost urban support for the government coalition. Such an action might be worth doing, but it is unlikely to move the narrative forward significantly. In such situations the umpire faces a choice: to halt the game and move into the hot washup / after-action review phase or to wait and see whether the pressure of inactivity will spur on a team's creativity, leading to an unexpected strategic innovation that returns the game to a dynamic state.

Game play in matrix games requires a balance between analysis and narrative. The realistic nature of the Baltic Challenge, combined with the expertise players bring to the game, creates an atmosphere that spurs analysis of the situation more than action. This ongoing analysis makes it difficult to move the narrative forward. Teams often spend a large amount of time debating small actions, and the narrative stalls. While this may mirror the current situation in the Baltic, the purpose of the exercise is to game the situation realistically but at a quicker pace. One of the umpire's greatest powers is the ability to end the game and move on to the hot washup. This option has to be wielded carefully, because calling a halt to all actions and declaring the situation complete concludes the narrative abruptly.

THE UTILITY OF NARRATIVE MATRIX GAMES FOR GAMING CURRENT POLITICAL CRISES

Matrix games serve an important role in gaming current and potential crises. By creating a space where key stakeholders can manage specific situations involved in controlling and predicting scenarios, there is room to learn about the thinking and maneuvering behind current world events.

While the matrix game methodology employs narrative to strengthen the game play, it also assumes a certain level of expertise in the subject being gamed. Preparing a primer pack before the game is essential, and the effort involved in creating such a succinct summary can be a useful analytical exercise in itself. Further, it

is clear that issuing players a pregame narrative of background information helps provide the foundations onto which game play can be introduced. Players are not simply set to work on some prescribed aims and objectives; they possess a cultural overview that helps provide the basis for actions within the game.

However, it should be noted that there is some academic evidence to suggest that players from different cultures play in different ways. For example, Chinese players, and by implication Chinese decision makers, typically act in a more cooperative way than their American equivalents.⁴⁸ This implies that simply handing players a brief may be insufficient to replicate accurately the mind-set of those they are playing. Player recruitment may change game outputs, and each game's lessons may be different depending on player backgrounds, even using the same scenario and ground rules.

Earlier players also noted the need for a practice session to allow those unfamiliar with the technique to practice the game methods, so this has been incorporated. Once everyone is familiar with the game methodology, the game clock is reset and the game itself commences.

Scenario design is critical, particularly with regard to the visualization, as represented by the maps and counters available at the start of the game. For example, adding refugee counters gives the game a more humanitarian focus, whereas introducing large numbers of military units tends to encourage the players to focus their play more on the kinetic aspects of the confrontation. In the Baltic Challenge game, Finland is only partially presented, as simply an area on the map, which limits the potential for players to conduct detailed play in the country. However, if the game starts to focus on Finland the inherent flexibility of the matrix game method allows the umpire to generate an inset sketch map of Finland on demand, thereby allowing the direction of the game to continue.

Certain types of scenario are more suited to matrix games than others. Would gaming a natural catastrophe work as well as gaming a counterinsurgency situation? Experience from the recreational use of matrix games seems to indicate that multisided games are more suitable than two-sided situations; the narrative of multisided games allows multiple stories to develop around the actions of the game. However, some apparently two-sided games might include multiple stakeholders who are notionally on the same side but hold slightly different judgments about the value of certain aims and objectives.

The matrix game narrative methodology may prove to be a useful tool for examining complex scenario dynamics, in which strategies are not initially apparent and the interplay of divergent multiple actors cannot be predetermined or reasoned out even with careful examination of the situation. Like all war games, a matrix game cannot predict the future, but it can lay out a narrative for a particular future scenario. Conducting multiple replays can generate more scenarios.

However, it is clear that there are steps that can be taken to improve the potential utility of the method. Having an SME who is not participating in the game but who evaluates the plausibility of the options proposed in the game is important. Separating such SMEs from the efforts of any particular team helps to keep their judgments professional and objective, which can confer greater credibility on game outcomes.

Careful scenario design, with a clear idea of the purpose of a matrix game and the areas that the umpire wishes to explore, is critical. The game can be designed and used in the educational space, as a way of conveying to those less familiar with the topic essential truths about geography, stakeholders, and potential strategies.

However, matrix games also can be used to identify and analyze previously unanticipated potential future paths. The dynamic nature of these games seems to encourage the generation of unexpected insights. If analysts want to identify the most likely developments in a crisis, these can be reasoned out in a structured discussion; but if they want to explore other potential narrative routes, then a well-managed matrix game can be a useful tool.

NOTES

1. The key work in professional war gaming is John Curry, ed., *Peter Perla's The Art of Wargaming: A Guide for Professionals and Hobbyists* (Morrisville, NC: History of Wargaming Project, 2012). Also worth reading for anecdotes is Thomas B. Allen, *War Games: The Secret World of the Creators, Players, and Policy Makers Rehearsing World War III Today* (New York: McGraw-Hill, 1987). For a more academic approach, see Roger Smith, "The Long History of Gaming in Military Training," *Simulation & Gaming* 41, no. 1 (2010), pp. 6–19. For published examples of professional war games, with commentary, go to wargaming.co/.
2. Kolb's experiential learning cycle theory holds that learners are taught something new, they reflect on it, they develop their understanding, and then they experiment with it to test their new understanding. David Kolb, *Experiential Learning: Experience as the Source of Learning and Development* (Upper Saddle River, NJ: Prentice Hall, 1983). The use of war gaming as the vehicle for experimentation allows learners to go around this cycle a number of times to develop a deeper understanding.
3. The U.K. Ministry of Defence *Wargaming Handbook* is a good summary of the rationale and utility of war gaming. Ministry of Defence, *Wargaming Handbook* (Shrivenham, U.K.: Development, Concepts and Doctrine Centre, 2017), available at www.gov.uk/.
4. Smith, "The Long History of Gaming in Military Training."
5. John Curry, *The British Kriegsspiel (1872) Including RUSI's Polemos (1888)*, *Recreational Wargaming—Early Wargames 2* (Morrisville, NC: History of Wargaming Project, 2013).
6. The reaction to the drive to complexity was the so-called free *kriegsspiel* movement. These games used minimal rules (rather than no rules, as often stated), with guidance on movement, timings, and combat odds required for success. See the 1896 British War Office's rules in John Curry, *Verdy's Free*

- Kriegspiel Including the Victorian Army's 1896 War Game*, Recreational Wargaming—Early Wargames (Morrisville, NC: History of Wargaming Project, 2008).
7. For a discussion of the development of early naval war gaming, see John Curry, ed., *Over Open Sights: Early Naval Wargaming Rules 1873–1904*, Recreational Wargaming—Early Wargames 6 (Morrisville, NC: History of Wargaming Project, 2014).
 8. Ibid. Actually, some of the discussion would have been considered rude for the era of the Victorian gentleman, but the admiral, by continuing to chair the sessions, highlighted the potential utility of such games for training.
 9. Fred Jane's rules went through a series of updates as naval technology developed. For the 1906 version of the rules, see John Curry, ed., *The Fred Jane Naval War Game (1906)*, *Including the Royal Navy's Wargaming Rules (1921)*, Recreational Wargaming—Naval Wargaming (Morrisville, NC: History of Wargaming Project, 2008). The rules were at the back of Fred T. Jane, *All the World's Fighting Ships* (Boston: Little, Brown, 1898).
 10. The stylized ship models emphasized silhouette features that were key to recognition.
 11. Richard Brooks, *Fred T. Jane: An Eccentric Visionary* (Portsmouth, U.K.: Jane's Information Group, 1997).
 12. John M. Lillard, *Playing War: Wargaming and U.S. Navy Preparations for World War II* (Lincoln, NE: Potomac Books, 2016); James A. Miller [Lt. Cmdr., USN], *Gaming the Interwar: How Naval War College Wargames Tilted the Playing Field for the U.S. Navy during World War II; Molding Mahan, War Plan Orange, Fleet Problems, Feedback, Solomons, Peleliu, Samar* (Fort Leavenworth, KS: U.S. Army Command and General Staff College, 2017). For an alternative view that states that the wargame rules included major misunderstandings but were still very useful, see John Curry and Chris Carlson, *The United States War College 1936 Naval Wargame Rules: USN Wargaming before WWII*, Recreational Wargaming—Naval Wargaming 1 (Morrisville, NC: History of Wargaming Project, 2019).
 13. See Mark Williams, *Captain Gilbert Roberts, R.N., and the Anti-U-boat School* (London: Cassell, 1979) for a personalized account of these games.
 14. Paul E. Strong, "Wargaming the Atlantic War: Captain Gilbert Roberts and the Wrens of the Western Approaches Tactical Unit" (paper for the Military Operations Research Society [MORS] Emerging Techniques Special Meeting, "Validity and Utility of Wargaming," Working Group 2, Alexandria, VA, October 2017).
 15. That is, within a few days of the actual attacks.
 16. Curry, *Peter Perla's The Art of Wargaming*; Allen, *War Games*.
 17. Carroll Hilton Dunn Jr. [Capt., USA] and Steve Kempf [Capt., USAF], *Battle Guide to Simulation: USA Army Training War Game Rules 1977–1997*, ed. John Curry, Professional Wargaming (Morrisville, NC: History of Wargaming Project, 2011).
 18. *Tacspiel* has been republished as John Curry, ed., *Tacspiel: The Counterinsurgency Wargame of the American Army 1966*, Professional Wargaming (Morrisville, NC: History of Wargaming Project, 2010).
 19. Allen, *War Games*; Curry, *Tacspiel*.
 20. John von Neumann and Oskar Morgenstern, *Theory of Games and Economic Behavior* (Princeton, NJ: Princeton Univ. Press, 1944).
 21. Chess generally is considered to be a zero-sum game, but not all chess games are. For example, players may consider a draw to be as bad an outcome as losing.
 22. Roger B. Myerson, *Game Theory: Analysis of Conflict* (Cambridge, MA: Harvard Univ. Press, 1991).
 23. Andrew Wilson, *The Bomb and the Computer: A Crucial History of War Games* (Harmondsworth, U.K.: Penguin, 1968).
 24. Ibid.
 25. Ibid.
 26. Robert C. Rubel, "The Epistemology of War Gaming," *Naval War College Review* 59, no. 2 (Spring 2006), esp. p. 116.
 27. The successor to SPI is Decision Games, decisiongames.com/. The company produces three regular magazines with games, including one focusing on modern warfare.

28. BoardGameGeek has various photos of the playing area, counter sheets, etc. *BGG*, boardgamegeek.com/.
29. BoardGameGeek has a description of the game mechanics. *BGG*, boardgamegeek.com/.
30. BoardGameGeek has a description and photos. *BGG*, boardgamegeek.com/.
31. For example, “political will tracks” summarize national will on an arbitrary scale, with a higher number representing strong national attitudes of support for the conflict. Actions in the war game such as success or failure increase or decrease the national will.
32. Chris Engle, “Matrix Games Rules,” *Hamster Press*, available at hamster-press.blogspot.com/.
33. John Curry and Tim Price, *Matrix Games for Modern Wargaming: Developments in Professional and Educational Wargames*, Professional Wargaming—Innovations in Wargaming 2 (Morrisville, NC: History of Wargaming Project, 2014); John Curry and Tim Price, *Modern Crises Scenarios for Matrix Wargames*, Professional Wargaming (Morrisville, NC: History of Wargaming Project, 2017).
34. Rex Byrnen, “Review of: John Curry and Tim Price, *Matrix Games for Modern Wargaming*,” *PAXsims* (blog), 20 September 2014, paxsims.wordpress.com/; Ben Taylor, “Toward Serious Matrix Games,” *PAXsims* (blog), 21 September 2014, paxsims.wordpress.com/.
35. John Curry, Chris Engle, and Peter Perla, eds., *The Matrix Games Handbook: Professional Applications from Education to Analysis and Wargaming* (Morrisville, NC: History of Wargaming Project, 2018).
36. “Special Event October 2016,” *MORS: Military Operations Research Society*, www.mors.org/.
37. The game was played multiple times at MORS in 2016, then at the Defence Academy of the United Kingdom in 2017 and on three other occasions in the United Kingdom.
38. Wesley Clark et al., “Closing NATO’s Baltic Gap,” *International Centre for Defence and Security*, May 2016, www.icds.ee/.
39. Peter Perla and ED McGrady, “Why Wargaming Works,” *Naval War College Review* 64, no. 3 (Summer 2011), pp. 111–30.
40. “The Intermediate-Range Nuclear Forces (INF) Treaty at a Glance,” *Arms Control Association*, www.armscontrol.org/.
41. “Chatham House Rule,” *Chatham House: The Royal Institute of International Affairs*, www.chathamhouse.org/.
42. One example: One team’s members decided to explore an alternative future by postulating that they would not pursue their cultural objectives. But while this might have been interesting, it would have led to the game ending prematurely and in confusion, as the other players would not have had a chance to explore their sides’ aims and objectives through game play.
43. David Crookall, “Serious Games, Debriefing, and Simulation/Gaming as a Discipline,” *Simulation & Gaming* 41, no. 6 (December 2010) is still the best summary of the importance of after-action reviews.
44. “Collective Defence—Article 5,” *North Atlantic Treaty Organization*, www.nato.int/.
45. *This World*, “World War Three: Inside the War Room,” directed and written by Gabriel Range, aired 4 February 2016, on BBC Two, www.bbc.co.uk/.
46. Stephen Biddle and Ivan Oelrich, “Future Warfare in the Western Pacific: Chinese Antiaccess/Area Denial, U.S. AirSea Battle, and Command of the Commons in East Asia,” *International Security* 41, no. 1 (Summer 2016), pp. 7–48.
47. A *black swan* is an event or occurrence that deviates significantly from what is normally expected in a situation. Black swan events typically are random, unexpected, and extremely difficult to predict.
48. Michael Hemesath and Xun Pomponio, “Cooperation and Culture: Students from China and the United States in a Prisoner’s Dilemma,” *Cross-Cultural Research* 32, no. 2 (May 1998), pp. 171–84. For a review of the academic literature, see Simon Gächter, Benedikt Herrmann, and Christian Thöni, “Culture and Cooperation,” *Philosophical Transactions of the Royal Society*, ser. b, 365, no. 1553 (September 2010), available at royalsocietypublishing.org/.

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THE “INDO” IN THE “INDO-PACIFIC”

An Indian View

Yogendra Kumar and Probal K. Ghosh

Like all strategic constructs, the expression *Indo-Pacific* evokes divergent, even contradictory, responses, depending on the strategic outlook of the responder. For the proponents of this construct, the challenge lies in allaying the sensitivities of those who consider the term to be an attempt to bolster the U.S.-led security architecture that is fraying under the challenge of China’s growing maritime power and the perceived unsteadiness of the Trump administration’s commitment to that architecture.

On 1 June 2018, Indian prime minister Narendra Modi delivered what is referred to as his “Shangri-La Dialogue speech.” It was aimed at mitigating such sensitivities and articulating his vision of a constructive relationship for India with all countries of the Indo-Pacific region. He stated that India’s Indo-Pacific outlook is not directed against any country but instead stands for “a free, open, inclusive region, which embraces us all [including extraregional stakeholders] in a common pursuit of progress and prosperity.” Emphasizing India’s approach of promoting “a democratic and rules-based international order,” he placed responsibility on “both existing and rising powers” in the region not to return “to the age of great-power rivalries.” He defined the *Indo-Pacific region* as stretching from “the shores of Africa to that of the Americas”—an expansive definition the United States does not share.¹

While the prime minister’s speech reflects India’s growing strategic engagements across an expanding geographical space, commensurate with its current and potential international roles, India’s stated objectives leave open the question of how to realize them, given the realities on the ground (so to speak) in both the Indian and Pacific Oceans. A common strategic framework embracing both the oceans is at an aspirational stage; the respective strategic perspectives,

instrumentalities, and capabilities have yet to crystallize, held hostage as they are to geopolitical currents and eddies and the attention spans of national leaders who mostly remain in a “firefighting mode,” internally and internationally, owing to pervasive uncertainties.

While some security architecture exists in the Pacific Ocean and force equilibriums characterize some regions of the Indian Ocean, there is no overall security architecture in the region. And in both of those situations, geopolitical headwinds are causing the existing arrangements to wobble. Loose groupings of countries are emerging either to strengthen or to weaken those arrangements, and it is inevitable that the group rivalries involved will spill over from one ocean to the other.

Common threats such as climate change, environmental degradation, piracy, and human trafficking could be addressed better through an interlocking of governance mechanisms throughout the Indo-Pacific continuum. However, the challenges to creating and strengthening maritime systems differ between the two oceans.

When India considers the Indo-Pacific strategic construct, it is the “Indo” portion that is existential. However, India feels that its strategic stakes in the Pacific are growing, causing it to attempt to leverage its regional relationships to influence the maritime system in the Pacific to suit its interests. But in comparison with the United States and, to an extent, China, India faces capacity and capability issues that impose prioritization constraints as it attempts to contribute to the fleshing out of a true Indo-Pacific strategic continuum.

Attention now focuses on the entire Indian Ocean as a maritime system. This is in contrast to the Cold War period, when the U.S.-USSR naval rivalry focused attention on the western Indian Ocean choke points, targeted at the force equilibrium prevailing in the hinterlands from Southwest Asia to the Middle East; and to the post-Cold War U.S. approach, which was limited by those hinterland requirements even as America’s attention shifted to a China-containment strategy, causing its existing strategic framework for the Indian Ocean to reflect these “localized” strategic interests.

THE INDIAN OCEAN: A CHANGING STRATEGIC PICTURE

The changes that the broader strategic picture of the Indian Ocean has been undergoing challenge the Indian Ocean littoral countries, as well as others, to conceptualize a commensurate holistic Indian Ocean maritime system. While the challenges of maintaining the equilibriums on the Middle Eastern and Southwest Asian landmasses remain, the post-Cold War situations there have metamorphosed into a much more complex interplay among a bewildering range of

actors, even as the old Cold War rivalries are reemerging, albeit under radically changed circumstances. New actors have entered the fray even as the old actors soldier on. The challenge represented by growing state fragility—even the possibility of state collapse—is perplexing national leaders and strategic analysts alike.

The challenges to the resilience of the existing force equilibrium in the Indian Ocean are complicated not just by the factors mentioned above but also by different countries' growing concerns over issues of freedom of navigation, especially through oceanic choke points; the deepening naval competition among regional as well as extraregional navies; the nature of naval modernization; and the broader geopolitical flux. The existing Indian Ocean maritime system came into existence, or rather “accreted,” in a different era altogether, resulting from the ad hoc nature of the security challenges then faced, and suffers from multifarious limitations for functioning in the current era. The various subregions of the Indian Ocean discussed below present a picture of growing maritime system-related instabilities.

The Western Indian Ocean

In the western Indian Ocean—as in the southern and eastern Indian Ocean—the threats are rooted in inadequate enforcement capabilities. This results in human trafficking, drug smuggling, terror financing, and the movement of terrorists and criminals both on land and at sea. This region is affected by illegal, unreported, and unregulated (IUU) fishing activities that deprive those countries in the region that have legitimate maritime claims of an important resource for their socioeconomic progress.

The region of the northwestern Indian Ocean and the Horn of Africa is witnessing a growing competition for opening naval bases, whose establishment will enable both regional and extraregional powers to exert greater control over both ingress to and egress from the Red Sea.² The militarization of the Red Sea is expected to continue—witness the Houthi attacks on the Saudi, U.S., and United Arab Emirates (UAE) navies, as well as commercial vessels traveling between the Red Sea and the Gulf of Aden; on 1 June 2018, a spokesman for the Houthis stated that Abu Dhabi was now within range of their missiles.³

This trend raises wider concerns about securing navigation routes through the Bab el Mandeb into the Red Sea and through the Suez Canal into the Mediterranean Sea. The problem is compounded by the intensifying conflict in Yemen, which has drawn in not only regional but extraregional powers. These naval port-building activities signify an intensifying contest among the protagonists to dominate this choke point during a diverse array of future precipitous contingencies. These unfolding dynamics exacerbate the trend toward the fraying of the maritime system in this strategic subregion.

Political instability in this region also is leading to the gradual reemergence of piracy, the acceleration of illegal migration along the East African seaboard, and the presence of and “rooting in” of al-Qaeda and the remnants of the Islamic State in Iraq and Syria.

The Persian Gulf

The Persian Gulf region is witnessing deepening tensions as an overflow from the ongoing conflicts in Yemen, Syria, Lebanon, and Iraq and the worsening of existing regional rivalries, primarily between Saudi Arabia and Iran. The new force alignment developing in this area involves growing activity by extraregional powers, including incipient revival of the Cold War tensions between Russia and the United States. The added element is the tension among the Gulf Arab states, contributions to which include deepening fissures between Qatar and the other Gulf states as well as the involvement of countries such as Turkey and Iran in intra-Gulf Arab rivalries. This is leading to exacerbated tensions in the region between the Iranian and U.S. navies, as evidenced by the frequent naval encounters between them. This poses a grave concern for freedom of navigation through the Strait of Hormuz—a critical artery for global trade.

Another dimension of the growing challenge is the rapid modernization of the Pakistan Navy, including its decision to acquire eight Yuan-class Type 041 diesel-electric submarines from China. This development has the potential to upset the regional balance of power, leading to further power disequilibriums. The danger of “loose nukes at sea” also increases with the Pakistan Navy’s decision to deploy nuclear weapons on its naval platforms. Al-Qaeda’s September 2014 attempt to capture PNS *Zulfikar* at the Karachi naval base provides forewarning of the vulnerability of deployed nukes to terrorists.⁴

U.S. Naval War College analysts Peter Dombrowski and Andrew C. Winner have opined that China’s future capabilities and actions in the Indian Ocean represent the most obvious potential source of U.S. policy change. This is especially so given China’s closer naval alliance with Pakistan.⁵

Indian Ocean Island Countries

The ramifications of the growing challenges to the existing equilibrium in the wider Indian Ocean are being felt by Indian Ocean island countries as well. This is partly the result of their lack of capacity to exploit their respective maritime resources and to cope with the threats of piracy and the illegal trafficking of drugs and migrants. Many of the state systems already are vulnerable owing to their economic fragility (they mostly have single-factor economic systems), to which climate change adds a growing threat. Some of this state fragility manifests itself in deepening internal power struggles, which external powers then exploit, resulting in the fragmentation and polarization of the island communities, which enhance their vulnerability to jihadi extremism.

As elsewhere, the expanding Chinese footprint is visible in the growing frequency of Chinese naval patrols, including by submarines, as well as the expanding scope of China's Maritime Silk Route (MSR) projects. The growing Chinese naval presence in the Indian Ocean has balance-of-power ramifications that may destabilize the maritime system, given the inadequacies of the existing governance mechanisms. Moreover, many of the MSR projects are being carried out without regard to their true economic viability, leading the weak island economies into an inextricable debt trap. The resulting economic, then political, instability has the potential to destabilize the existing maritime system in this subregion.

The Eastern Indian Ocean

Problems related to human trafficking and drug trafficking are major concerns in the eastern Indian Ocean, as are instances of piracy. Jihadist militancy is on the rise, as are other forms of ethnic insurgency. The fragility of the littoral states on or in the Bay of Bengal contributes to these growing phenomena, and the region is prone to extreme weather events that can aggravate that state fragility. The eastern Indian Ocean also can expect certain potential disequilibriums, similar to those in other Indian Ocean subregions but for dissimilar reasons.

The force structure in the Bay of Bengal is changing, gradually. The littoral naval capabilities are growing, including in the development of submarine forces. The littoral countries are conscious of their maritime zones and are building the capability to look after them. In late 2016, the Bangladesh Navy acquired two Chinese Ming-class Type 035B diesel-electric submarines. In April 2017, Thailand, declaring its intention to better police its Bay of Bengal coastline, made the decision to acquire three Chinese Yuan-class S26T submarines. (So far a firm contract has been placed for only one of these, for delivery by 2023.)⁶ The Myanmar government also has declared its intention to acquire a submarine capability.⁷

The Indian Navy has the strongest presence here, with system-defense and policing capabilities, and is developing additional infrastructure in the Andaman and Nicobar Islands to support these functions. It also carries out coordinated patrols with Myanmar, Indonesia, and Thailand in pursuit of effective surveillance. Its deployment of a nuclear-missile-equipped submarine changes the strategic picture in this subregion, in that it draws the attention not only of China but of other major powers to the implications for their deterrence postures.

China's naval footprint is limited but its commercial shipping activities are growing, as part of its Belt and Road Initiative projects. Assets include not only ports but gas and oil pipelines and road and railway infrastructure. The opening of the Myanmar economy has meant a greater focus on the development of special economic zones around important ports in that country. Similar plans

are afoot with respect to Thailand and Malaysia, especially the latter, which has very ambitious plans for developing its port capacity and seaboard infrastructure.

The Strait of Malacca is an important choke point that necessitates serious international attention. Other choke points include the Sunda, Lombok, and Ombai Straits. As these choke points straddle the “Indo” and the “Pacific,” their strategic salience has increased in recent times.

MARITIME SYSTEM INSTABILITY CHALLENGES

Looming Disequilibriums

The International Institute for Strategic Studies (IISS) *Strategic Survey 2016* begins by stating that “the underpinnings of geopolitics have splintered so much in the past year that the foundations of global order appear alarmingly weak. . . . Multiple strategic earthquakes have created a situation in which world leaders are in a constant state of crisis control.”⁸

The different challenges to the existing power equilibrium in the Indian Ocean have different sources, and the evolving trends need to be evaluated across the entire region. Similarly, ongoing subregional developments need to be evaluated for their region-wide ramifications.

Political fragility and the resultant economic disarray invite external powers to manipulate domestic political processes for their own agendas; they also intensify multiple regional power struggles. State fragility at key oceanic locations, as well as in the Middle Eastern heartland, compounds in at least three ways the threats to maritime system stability posed by climate change, extreme weather events, and the structural embedding of nonstate actors—be they extremists, pirates, or common criminals—within collapsing political structures. First, the growing phenomenon of state collapse or regional political collapse renders unfruitful—even Sisyphean—any attempt to create a power structure across the region. Second, state or regional collapse would defeat any attempts by the international community to create a normative framework for the peaceful and sustainable use of the Indian Ocean. And third, such collapse also would militate against the overall vision of economic integration of the littoral economies to enable them to play their due role in the economic and technological globalization processes that are taking place in the rest of the Asian region.

Other Traditional and Nontraditional Challenges

Although the existing balance of power is tilted heavily in favor of the United States, the existing Indian Ocean maritime system faces serious challenges; its inadequacies to respond effectively to changing circumstances are numerous. The system was “designed” for different requirements, and several geopolitical factors, including changes in the power relations among the major littoral and

nonlittoral powers, have led to strategic distrust among them. Regional uncertainty regarding whether China's entry into the Indian Ocean would be "disruptive" is compounded further by the emerging geostrategic rivalry in the Middle East and the Persian Gulf region, in addition to the rivalries already existing there.

The absence of any region-wide capability to protect fish stocks from IUU fishing, affecting a large part of the Indian Ocean littoral, means that several littoral countries have no stake in the creation of a more comprehensive, region-wide maritime system. Various terrorist entities have tried to acquire—some successfully—a maritime capability, and they continue to seek to acquire increasingly lethal capabilities, including weapons of mass destruction. The possibilities for destabilization arising from climate change are growing, both at sea and in coastal regions, affecting existing coping mechanisms for natural disasters and climate-mitigation efforts, and ultimately state stability.

MARITIME SYSTEM DEFENSE ISSUES AND INTEROPERABILITY CAPABILITIES

Force-Projection Infrastructure

In terms of existing military infrastructure, the most significant presence in the region is that of an extraregional power, the United States. Its bases in Diego Garcia, Bahrain, Qatar, and Djibouti provide the skeleton for the power structure in the Indian Ocean, fleshed out with its air, space, and other military assets. It has formidable undersea capabilities in the eastern Indian Ocean, ship-basing rights at Singapore, and troop-rotation facilities at Darwin, Australia.

Regarding other powers, both regional and extraregional, Australia has facilities at the Cocos Islands and Christmas Island, covering the Sunda Strait; this array of forces represents a significant posture for maintaining the existing power equilibrium in both the western Pacific and the Indian Ocean. France has naval and military capabilities in Réunion, Djibouti, and Abu Dhabi. The United Kingdom (U.K.), which "leased" the Diego Garcia base to the United States in 1966, also has made a comeback after a gap of four decades by opening a naval base in Bahrain.⁹

Among regional navies, the Indian Navy is the strongest, with considerable infrastructure in the Andaman and Nicobar Islands and a developing one in the Lakshadweep Island chain. The Iranian navy has considerable presence in the Persian Gulf region, where its confrontations with the U.S. Navy reflect the tense relationship between the two countries.

The Chinese navy's "logistics base" in Djibouti, ostensibly established to support antipiracy operations in the vicinity of the Horn of Africa, also serves as a

means of power projection in the region. This certainly was evident in November 2017, when visiting Chinese president Xi Jinping, dressed in full military uniform, addressed the Chinese contingent there, exhorting its members to promote “international and regional peace and stability.”¹⁰

Information-Sharing Infrastructure

The existing infrastructure for information sharing and for maintaining maritime domain awareness (MDA) is patchy and oriented toward supporting the current force-projection missions. It remains quite inadequate for fulfilling the emerging requirements for maritime system defense, as it largely is geared toward coastal security. It currently is not able adequately to support action across the entire Indian Ocean region (IOR) to combat drug trafficking and other forms of transnational crime, such as IUU fishing.

Beyond the usual ways of gaining maritime domain awareness (e.g., regular joint patrolling with naval contingents of different countries, coverage by existing shore-based radar installations, and use of space assets), the Indian Navy, with the agreement of the host governments, has installed additional radar equipment in Maldives, Mauritius, Seychelles, and Madagascar. There also are maritime-information-sharing centers in the western Indian Ocean in Sanaa, Yemen; Mombasa, Kenya; and Dar es Salaam, Tanzania, with communication links to various countries in the region for mounting search-and-rescue (SAR) operations. The Indian Information Management and Analysis Centre, near Delhi, aggregates information to provide maritime domain awareness over almost the entire Indian Ocean. The Singapore-based Information Sharing Centre also provides significant domain awareness in the Indian Ocean. In certain information segments, capabilities are available as well within the Indian Ocean Commission; its members are Comoros, Madagascar, Mauritius, Réunion, and Seychelles.

Ongoing efforts envisage the interlinking of various of these capabilities to provide a comprehensive domain picture for the Indian Ocean. However, the complexity of these efforts should not be underestimated.

Maritime System Defense Mechanisms, Established and Incipient

A broad overview of current maritime system defense mechanism efforts serves to underline their ad hoc character. The maintenance of good order at sea (to use the universally accepted naval expression) includes a role for great powers as well as multilateral collaborative activities, both well organized and incipient. The roles of the Indian Navy and Coast Guard are touched on elsewhere in this article.

The uniqueness of the Indian Ocean in this respect is the considerable experience in interoperability shared among regional and extraregional navies, including in carrying out specific missions. This may build sufficient confidence to diversify interoperability missions in the direction of system-defense functions.

Yet the creation of a holistic, resilient maritime system adequate to the full spectrum of challenges is a far more complex challenge.

Established Structures. The U.S. naval command system for the Indian Ocean presents a bit of a jigsaw puzzle. It consists of different naval commands for different subregions, without much intercommand coordination. The U.S. Indo-Pacific Command (previously the Pacific Command [PACOM]) covers the area east of the imaginary maritime dividing line between India and Pakistan. West of that line the Central Command (CENTCOM) coverage extends over the remaining part of the Indian Ocean, with the exception of the area close to the African seaboard, which the Africa Command covers. Still within the Indian Ocean, the Gulf of Aqaba (including Elat) is covered by the European Command, because Israel lies within its area of responsibility. The U.S. State Department divides the region into geographical bureaus whose boundaries do not correspond with those of the Department of Defense.¹¹ Owing to this segmented combination of responsibilities for various government agencies, including the military's theater commands, the United States does not have a single "mind" of its own as far as the defense of the entire Indian Ocean maritime system is concerned.

With regard to antipiracy missions, especially in the Horn of Africa region, the Shared Awareness and Deconfliction system (known as SHADE) provides a mechanism for sharing information among the various interested countries, including with nongovernmental stakeholders. Discussions cover coordination of escorts for merchant shipping passing through the internationally recommended transit corridor, as well as aerial coverage of high-risk areas. These meetings take place at CENTCOM headquarters in Bahrain.

The European Union (EU) naval complement (EUNAVFOR) plans to conduct Operation ATALANTA through December 2020. Its purpose is to protect vessels of the World Food Programme and other shipping, deter and disrupt piracy and armed robbery at sea, monitor fishing activities off the coast of Somalia, and support other EU missions and international obligations to strengthen maritime security and capacity in the region. It covers the southern Red Sea, the Gulf of Aden, and a large part of the Indian Ocean, including the waters around Seychelles, Mauritius, and Comoros. EUNAVFOR's current deployments involve one Italian and one Spanish frigate and a Spanish P-3C Orion.¹² The Maritime Security Centre–Horn of Africa, headquartered in Northwood, United Kingdom, provides twenty-four-hour manned monitoring of vessels transiting through the Gulf of Aden, including an interactive capability to provide current information to shippers and escorts. Non-EU members such as Ukraine, New Zealand, and South Korea also have joined EUNAVFOR.

The U.S. Navy operates three multinational combined task forces (CTFs) in the region. CTF 150 was set up in 2001 to fight the "global war on terrorism,"

including in the Horn of Africa area; CTF 151 was set up in 2009 to confront piracy off the Somali coast and in the Gulf of Aden; and CTF 152 was set up in 2004 to provide maritime security in the Persian Gulf. These assignments mean that these task forces also operate in the northern and northwestern Indian Ocean. Headquartered at the U.S. base in Bahrain, the relevant command is the U.S. Navy Fifth Fleet; a Royal Navy (U.K.) commodore assists. These different task forces incorporate units from NATO member states, non-NATO U.S. allies, and others.

Incipient Structures. Among the multilateral organizations that are still in the more formative stages are the Indian Ocean Rim Association (IORA) and the Indian Ocean Naval Symposium (IONS).

IORA is beginning to engage its member countries to develop an extensive maritime-safety and -security cooperative enterprise with legal and regulatory underpinnings. Owing to the numerous dimensions involved in developing such a capability for the organization, the process is still in its infancy, and thus the organization's and members' capabilities mostly remain woefully limited.¹³ However, this organization could be the main agency for providing many of the functions needed to sustain a transformed maritime system for the Indian Ocean.

The members of IONS are the heads of navies and coast guards of a large number of the littoral countries. While it is an important organization with considerable potential for developing confidence-building measures (CBMs) and enhancing strategic trust among its members and observers, given those parties' diversity (and, in some cases, their adversarial relationships) IONS has yet to develop the range of interoperability templates required to overcome the various threats and challenges found in the regional maritime arena.¹⁴

PERSPECTIVES ON THE INDIAN OCEAN REGION

India's SAGAR Framework in the Indo-Pacific Context

Indian prime minister Narendra Modi articulated his vision for the IOR in a major speech at Port Louis, Mauritius, on 12 March 2015. In it he coined the acronym SAGAR, standing for the motto "Security and growth for all in the region"; as a word, the expression means "sea" in Hindi.¹⁵

The concept consists of five elements.

- India has national responsibility to safeguard its mainland and islands. Associated objectives include contributing to a safe, secure, and stable region and fulfilling a commitment to help others during natural disasters and SAR operations.

- India seeks to deepen economic and security cooperation within the region, including strengthening maritime-security capacities and maritime economies.
- India aims to achieve collective cooperation for peace and security, better preparedness for emergencies through multilateral mechanisms such as IONS, and bilateral maritime-security cooperation.
- India intends to contribute to greater regional integration on the basis of sustainable development, including for combating climate change, and building the “blue economy,” using IORA as an instrument for this purpose.
- The primary responsibility for peace, stability, and prosperity in the Indian Ocean rests with the littoral states themselves. India seeks a climate of trust and transparency, respect for international maritime rules and norms by all countries while remaining sensitive to each other’s interests, peaceful resolution of maritime issues, and increased maritime cooperation.

While Prime Minister Modi’s Shangri-La vision for the Indo-Pacific is philosophically consistent with the general concept of a free, open, and inclusive maritime order, it is the SAGAR vision that represents an actionable agenda to achieve a viable Indian Ocean maritime system.¹⁶

The Indian Navy’s 2015 articulation of India’s maritime-security strategy envisages an expanded role for the service as a “net security provider” in the country’s maritime neighborhood. It identifies primary areas of maritime interest, which include India’s coastal maritime zones, the Arabian Sea, the Bay of Bengal, the Andaman Sea, the Persian Gulf, the Gulf of Oman, the Gulf of Aden, the Red Sea, the southwest Indian Ocean, the east coast of Africa, and the various IOR choke points and sea lines of communication (SLOCs). Secondary areas of interest are the southeastern Indian Ocean, the South and East China Seas, the western Pacific Ocean, the southern Indian Ocean region (including Antarctica), the Mediterranean Sea, and the west coast of Africa. Other areas may become of interest, depending on national considerations.¹⁷

The increasing tactical complexity of the MALABAR series of exercises, which involve India, the United States, and Japan, illustrates a shared perspective among those countries. The U.S. government has underlined this perspective further by renaming its Pacific Command the Indo-Pacific Command, even as the theater command’s area of responsibility remains unchanged; the rechristening denotes a greater salience of the Indian Ocean (and thus of India) in this perspective. Although enhanced interoperability can be useful for any type of joint mission, conduct of the MALABAR series, with exercise locations alternating between the Bay of Bengal and the western Pacific, does signify that all three countries have

stakes in the strategic equilibriums prevailing in the two subregions. This denotes that there is a certain “buy-in” by India of the U.S. perspective on the Indo-Pacific, as represented in the latter’s own geographical definition. Even so, all three countries maintain their own respective networks of relationships in South-east and East Asia, particularly with China.

India also has shed an earlier inhibition in that it has agreed to deploy a naval liaison officer to the U.S. Naval Forces Central Command, in Bahrain. The intention is to facilitate enhanced situational awareness.¹⁸

Even given that Indian and U.S. perspectives share considerable strategic convergence toward maintaining the current strategic equilibrium, developing a composite perspective on the Indian Ocean would be necessary for a closer sharing of these perspectives. Achieving this would require creation of an American “home” for the policy somewhere within the U.S. government: a policy-coordination unit that would be charged with creating and maintaining an official, composite, strategic “picture.” This policy-coordination function would need to be mirrored at the think-tank level on both sides.¹⁹

Within the existing relationship, strong Indo-U.S. cooperation against terrorism is an ongoing process. India would expect and welcome the United States and the larger international community to weigh in—as strongly as possible—to assist in neutralizing that cross-border terrorism that has come to be identified with Pakistan.

Evolving U.S. Thinking

American thinking on the Indian Ocean continues to evolve past the Cold War era. The United States strives to respond, via both hard-power and diplomatic means, to ongoing regional developments. As regional stability increasingly becomes anchored in the Indian Ocean as a whole, the segmented nature of the U.S. approach to force engagement is exposed as inadequate. The overall U.S. force drawdown, as currently envisaged—unconnected as it seems to be to any holistic vision or grand strategy—only can aggravate the challenges to American interests and to those of others in the region. Even in terms of the country’s own national security perspective alone, there is no strong unanimity within the U.S. strategic community that the existing maritime system can be calibrated to meet these challenges effectively.

America’s existing national security perspective consists of bolstering the largely favorable political order in the Middle East and the Persian Gulf and managing the Chinese naval footprint. At the instance of the U.S. Secretary of Defense, an interagency review of the IOR was undertaken in early 2012; several high-profile American delegations visited India, Australia, and other regional players. However, beyond the Obama administration’s announcement of

a “rebalancing” toward Asia in general, no new initiatives for the Indian Ocean were reported. The expectation has been that the U.S. approach would be one of “muddling through.”²⁰

The unclassified summary of the U.S. National Defense Strategy (NDS), which the Secretary of Defense released on 19 January 2018, states as follows: “A free and open Indo-Pacific region provides prosperity and security for all. We will strengthen our alliances and partnerships in the Indo-Pacific to a networked security architecture capable of deterring aggression, maintaining stability, and ensuring free access to common domains. With key countries in the region, we will bring together bilateral and multilateral security relationships to preserve the free and open international system.”²¹ Under the same broad theme of regional defense challenges, the strategy states its objective of fostering a stable and secure Middle East that denies safe havens to terrorists, is not dominated by any power hostile to the United States, and contributes to “stable global energy markets and secure trade routes.” It also aims to consolidate gains in Afghanistan, Iraq, Syria, and elsewhere and “to support the lasting defeat of terrorists as we sever their sources of strength and counterbalance Iran.”²²

The U.S. National Security Strategy (NSS), which President Trump released in December 2017, distinguishes the “Indo-Pacific” from the “Middle East” and “South and Central Asia.” It describes the Indo-Pacific as stretching from the west coast of India to the western shores of the United States—precisely the area of responsibility of PACOM (now Indo-Pacific Command). The NSS is quite China-centric in its threat assessment, dwelling little on the situation in the IOR and its governance mechanisms. While the NSS reaffirms the U.S. military commitment to the security and stability of the Middle East, it states that “[f]or years, the interconnected problems of Iranian expansion, state collapse, jihadist ideology, socio-economic stagnation, and regional rivalries [have] convulsed the Middle East.” In its discussion of South and Central Asia, the NSS refers to the Indian Ocean only once, stating, “We will deepen our strategic partnership with India and support its leadership role in Indian Ocean security and throughout the broader region.”²³

Manifestly, the NSS anticipates the NDS in terms of the operating U.S. perspective on the Indian Ocean maritime system. Specific factors impacting on that system’s resilience—such as balance-of-power considerations, state fragility, terrorism, and the safety of navigation routes—are highlighted, but largely within the context of different regions’ strategic milieus. These documents pay no attention to the larger issue of the governance of the Indian Ocean as a maritime system. This signals a belief that the factors affecting the unified system’s resilience can be addressed effectively by focusing on specific negative phenomena

in different regions and through the normal diplomatic engagements of a superpower. In other words, the U.S. approach to the Indian Ocean, as currently constituted, lacks the attributes of a grand strategy.

Given the segmented nature of the American approach to IOR governance, that approach remains inherently reactive. By its nature it will be unlikely to shape proactively a new maritime system capable of coping with the threats that are emerging, including of the nontraditional variety, in the near-to-medium term. There is an ominous aspect to this approach, given the fast-paced developments in the Middle East and the Persian Gulf, with their grave implications for the maritime system as a whole.

The Chinese Approach

The Chinese government does not have an officially articulated policy on the Indian Ocean. However, its 2015 white paper on military strategy represents a doctrinal shift from “offshore waters defense” to a combination of that objective with “open seas protection,” as well as the abandonment of the “traditional mentality that land outweighs sea,” so that “great importance has to be attached to managing the seas and oceans, and protecting maritime rights and interests.”²⁴ According to Ryan Martinson, in the Chinese text of the white paper, the relevant concept translates more accurately as “*strategic management*.”²⁵

China clearly has come of age, in both its conception and its program (the latter covering 2016–20) to emerge as a maritime power in all dimensions. As its overseas assets multiply, expanding beyond the so-called first island chain, China also is developing its capacity to protect those islands—and indeed to fly its flag in any waters of interest to it.

An important aspect of this endeavor is to invest significantly—in a political sense—in IOR littoral and island countries, especially in the form of maritime infrastructure projects carried out under its MSR program. Some of these projects, when executed in financially weak countries, have resulted in Chinese acquisition of equity participation, yielding greater control over their management. Because of these projects’ strategic locations, there are apprehensions about them being used for military purposes, although China has not stated explicitly any intention to have naval bases in the Indian Ocean. However, given China’s tendency toward “changing the facts on the ground” in the South China Sea, such apprehensions are not groundless.

Djibouti offers an example worth considering. A July 2017 CNA study on Djibouti offers citations from the Chinese ministry of defense website in 2010 to the effect that reports of Chinese overseas bases are groundless, then presents 2015 quotations from a Chinese foreign office spokesperson that “the building of logistical facilities in Djibouti . . . will better guarantee Chinese troops to carry out

international peacekeeping operations, escort missions in the Gulf of Aden and the Somali waters, humanitarian relief, and other tasks.”²⁶ As mentioned earlier, in November 2017 the Chinese president addressed the Chinese troops in Djibouti, asking them to promote “international and regional peace and stability.”²⁷ In February 2018, a People’s Liberation Army Navy task force (consisting of at least one modern destroyer, a frigate, an amphibious assault ship, and a support tanker) then in the eastern Indian Ocean briefly entered the port. At least one observer believed that this port visit influenced the course of a political crisis then ongoing in the Maldives.²⁸

The expanding Chinese activities, diplomatic as well as naval, cannot yet be considered to be shaping the Indian Ocean maritime system, but by their nature they certainly can be interpreted as a reflection of the country’s desire to shape it in the future. They also signify that the Chinese entry into the Indian Ocean can be expected to be disruptive of the existing maritime system—unless serious efforts are made to shape the maritime system to meet the growing challenges.

The Japanese Approach

The Japanese government, led by Prime Minister Shinzo Abe, has espoused a “Free and Open Indo-Pacific Strategy”; the strategy was conceptualized in Abe’s speech in 2007 to India’s Parliament. It envisages improved connectivity between Asia and Africa and the promotion of stability in and prosperity for the region as a whole; the Japanese conception defines the region geographically more broadly than does the United States. The strategy seeks to realize its goals through strengthened strategic collaboration with India as well as with the United States and Australia.

The strategy lays stress on democracy, the rule of law, and market economics in Southeast and East Asia, and on “nation-building support in the area of development as well as politics and governance” in Africa. In the maritime domain, the emphasis is on the “rule of law and freedom of navigation,” especially compliance with the UN Convention on the Law of the Sea (UNCLOS). Another important aspect is ensuring peace and stability, including cooperation in capacity building for maritime law enforcement and MDA.²⁹

The strategy manifested itself in November 2017 in the convening of the Quadrilateral Dialogue among the United States, India, Japan, and Australia. Another manifestation was the scaled-up Exercise MALABAR that took place in July 2017 in the Bay of Bengal with participation by India, the United States, and Japan, which served to enhance naval interoperability within the U.S.-defined Indo-Pacific construct. According to Japanese media reports, enhancement of maritime-security capabilities is being achieved through greater Japanese involvement with countries such as Djibouti (where the Japan Coast Guard has

provided training and has gifted patrol boats) and Sri Lanka (similarly, antipiracy drills and patrol boats).³⁰

Japan's strategy has the support of several countries, including India and the United States. Not yet a comprehensive approach toward shaping the Indian Ocean maritime order, the strategy still is unfolding, and so far lacks the visibility of the Chinese footprint in the Indian Ocean.

Indonesia's Global Maritime Fulcrum

Indonesian president Joko Widodo announced in 2014 his vision of Indonesia's role as the "Global Maritime Fulcrum" (GMF). The GMF concept comprises five core pillars: maritime culture, maritime infrastructure and connectivity, protection of maritime resources, maritime diplomacy, and maritime defense; two auxiliary pillars are maritime governance and the maritime environment.³¹

While this vision informs Indonesian initiatives in various international forums (especially the convening of the first-ever IORA summit in Jakarta in March 2017), its emphasis is more on economic aspects and less on hard-core military capabilities. Even as Indonesia continues to envisage cooperation with China on MSR projects, it concluded an agreement with India to develop port and related infrastructure projects in and around the Indonesian port of Sabang, on the northern tip of Sumatra.³²

Since 2014, Indonesia has been conducting the KOMODO biennial multilateral naval exercise; the latest iteration occurred in May 2018 at Lombok Island and in nearby waters, with a focus on humanitarian and disaster-response operations. These exercises are well attended, including by the navies of India, China, and the United States.

The Iranian Approach

At the 2018 Munich Security Conference, the Iranian foreign minister advanced a proposal for a Persian Gulf version of the Helsinki process that would be based on the UN Charter and on "ticket principles" and "CBM baskets," to which all Gulf countries purportedly should be able to subscribe. The process eventually was to lead to a regional nonaggression pact; it also envisaged a regional dialogue forum involving both intergovernmental and nongovernmental interactions.³³

As chairman for the 2018 IONS, the commander of the Iranian navy used his inaugural speech before the symposium to stress that it should be the countries of a particular region that ensure the security of that region; he warned that a naval presence by outsiders could impose foreign security arrangements on the region. He also urged IONS to set up a combat group, and to formulate a "common tactical language for coordinated naval measures," to contribute to stability.³⁴

The Iranian naval deterrence strategy of area denial is anchored on blocking the Strait of Hormuz by sea, air, and land should hostilities break out. Both the

Iranian navy and the Islamic Revolutionary Guard Corps Navy (IRGCN) have parts to play under this strategy, but whereas the IRGCN concentrates its activities inside the Persian Gulf and the Gulf of Oman to conduct asymmetrical operations, the Iranian navy—the more professional, conventional, blue-water force—covers the Gulf of Oman, the Indian Ocean, the Arabian Sea, the Gulf of Aden, and the Red Sea. Occasionally the navy ventures even beyond that; it has participated actively in antipiracy operations off the Horn of Africa.

Iranian naval capabilities are to be deployed against both certain Gulf states, such as Saudi Arabia and the UAE, and the United States, which has a significant presence in both the Persian Gulf and the Indian Ocean. Incidents of military confrontation between Iranian naval forces and those of the United States are not infrequent in the Persian Gulf region. Donald Trump, during his 2016 presidential election campaign, even threatened that Iranian vessels harassing the U.S. Navy would be “shot out of the water.”³⁵ Amid rising military tension in the region, one ramification of the hardening U.S. position vis-à-vis Iran is that current access to Afghanistan—vital for both Indian and American interests—through the Iranian port of Chabahar, only recently opened to India, appears to be in jeopardy owing to the reluctance, in a volatile environment, of Indian firms and others to work there lest they attract secondary U.S. sanctions.

THE WAY AHEAD

A Broader Approach

Strengthened pan-IOR governance mechanisms and bilateral maritime diplomacy can help develop normative templates and enforcement capabilities. The stakes that littoral countries, especially small island countries, have in a holistic maritime system can be nurtured through combating climate change and other nontraditional, system-destabilizing challenges. A holistic maritime system, of the type that Prime Minister Modi envisaged, would counter, to a considerable extent, the growing—and geographically expanding—gyre of state collapse and regional instability, with its attendant flourishing of jihadist groups.

The jihadist challenge, which has critical ramifications for India because of the movement’s extensive (especially diasporal) links, is a particularly complex phenomenon in the Gulf region, as well as the Horn of Africa. India’s strategic interests do not converge foursquare with those of the United States in this sub-region, which is witnessing the hostility between the United States and Iran and between Saudi Arabia and Iran, with the added complication of a deepening rift between Qatar and the rest of the countries of the Cooperation Council for the Arab States of the Gulf (known as the Gulf Cooperation Council [GCC]). Yet the United States, given its preeminence in the region, nonetheless can help shape a new maritime system, some elements of which are discussed below.

Ground Rules for Freedom of Navigation and Use of Littoral Harbors by Extraregional Navies. There is an urgent need to devise ground rules for freedom of navigation and the use of littoral harbors by extraregional navies. Presently, these matters are left to the devices of the individual country or countries concerned—and it is amply evident that the outcome so far has been to worsen the situation.

Although UNCLOS enjoins countries to respect freedom of navigation, certain countries base their grand strategies on closing choke points. A prime example is Iran with regard to the Strait of Hormuz; however, the same observation applies to the United States with regard to the Malacca Strait.³⁶ Extralittoral navies are engaged in setting up bases in the Horn of Africa and the Persian Gulf, implicitly threatening closure of SLOCs in the Bab el Mandeb and the Suez Canal.

Actions such as these aggravate regional tensions, potentially leading to the unraveling of the entire Indian Ocean maritime system. While naval operations in pursuit of the security interests of individual countries are sovereign activities, ground rules for both freedom of navigation and the use of littoral harbors can be developed without constraining states' security operations.

Raising Strategic Trust Levels among the Major Navies. Yet another important effort should be aimed at raising strategic trust levels among the major navies. The goal should be to stabilize their force levels so that the balance-of-power equilibrium is not disturbed.

Front-loading cooperative activities in various multilateral governance forums in the IOR and recognizing the legitimacy of relevant countries' stakes in the IOR maritime system and its stability could build up such strategic trust. This could lead to a slowing, or even a reversal, of current trends of naval buildup.

Upholding the SAGAR National Security Priorities. In both the efforts mentioned immediately above, the SAGAR conceptual framework provides a strong basis on which to conduct national and multilateral diplomacy. India's leadership believes that placing responsibility for the peace, stability, and prosperity of the Indian Ocean on the littoral states themselves will ensure that the country's maritime security and larger maritime interests are well safeguarded. This approach is consistent with the nation's sovereign right of national defense, which covers not only the mainland and the islands but also its efforts to "ensure a safe, secure, and stable Indian Ocean region that delivers . . . all to the shores of prosperity."³⁷ The framework also lays out a basis for external navies to secure their legitimate national interests.

India's policy toward the Gulf region and the Horn of Africa, at both the bilateral and the multilateral levels, seeks to persuade all the adversarial countries that they have stakes in regional stability, which is the key to economic progress and societal cohesion. All states should bear in mind that mass internal

or transborder migrations are in the interest of nobody—not countries in the region; not Europe; not other stakeholder countries, such as China, Japan, and Russia; and not countries in South Asia, Southeast Asia, or the Far East. A balance-of-power equation operates only when there are nation-states at both ends of the relationship; collapse of either triggers a very different kind of dynamic, as illustrated in the Afghanistan and Iraq experiences. As the recent U.S. moves in the Gulf region have shown, in the wake of the GCC rift over Qatar, America wants to ensure that the security architecture it has set up in that littoral region remains strong. Any instability there would make it impossible for the United States to sustain this security architecture. Instability in the Gulf region would imperil not only India's energy supplies but also the lives and well-being of the millions of expatriate Indians who live there.

Bilateral capacity building through cultivation of relationships with countries in the region and the strengthening of pan-IOR governance mechanisms for developing the ground rules discussed above would mitigate to some extent the destabilizing effects of the hard-power pursuits of national interests revealed in the violent contestations taking place within the region. In this effort, India will find other influential countries willing to act in tandem with it, and it can leverage its own friendly relations with nearly all countries in the region. The United States would need to calibrate its regional approach according to its own sensitivity toward the possibility that increased China-Pakistan naval cooperation would upset the regional balance of power, as well as the danger represented by the "loose nukes at sea" issue.³⁸

Indian Ocean Maritime System Capacity Issues

IORA's Charter Responsibilities. Because of its essentially pan-IOR character, IORA is uniquely suited to help shape a holistic maritime system for the Indian Ocean. Apart from economic and cultural cooperation, the organization aims to tackle maritime-security, disaster-response, and blue-economy challenges. Its action plan for 2017–21 spells out near-, medium-, and long-term initiatives.³⁹ While this has created a skeletal framework of the desired action, a stronger political will to drive the process is necessary, just as the creation of sufficient stakes for outside powers is necessary to further the organization's institutional growth.

The IORA Summit Declaration of 7 March 2017, called the Jakarta Concord, describes the scope of the field of maritime safety and security as covering accidents and incidents at sea; the safety of vessels and the marine environment; transboundary challenges such as piracy and armed robbery at sea; terrorism; trafficking in persons and the smuggling of people, illicit drugs, and wildlife; crimes in the fisheries sector and environmental crimes; and freedom of navigation and overflight, in accordance with international law and UNCLOS. The

action plan includes, as a long-term program, a regional surveillance network that would provide information on maritime transportation systems.⁴⁰

As one of its initiatives, IORA has established the Maritime Safety and Security Working Group to build capacities, enhance cross-border cooperation and knowledge sharing, and promote harmonized implementation across the region of the relevant international regulations. The working group's terms of reference recently have been finalized as a first step toward the completion of its work plan. It needs to aim at geostrategic cooperation, capacity building for maritime awareness, human safety at sea, capacity building for law enforcement at sea, and the like.

Enhanced capacity for IORA as well as this working group is the desideratum for the organization to be able to monitor closely all security-related developments, have adequate analytical backup to draw appropriate lessons from ongoing developments, and disseminate the results to and coordinate discussions among stakeholders. It also would require the support of a mechanism analogous to the Council for Security Cooperation in the Asia-Pacific (CSCAP). Such an agency would be ideal for developing norms on freedom of navigation and overflight, especially at the various choke points, which are vulnerable to interdiction arising out of political instability in littoral countries or regional conflicts between them.

This agency also could contribute to developing wider norms to be applied to IOR waterways and oceanic resources; the SAGAR construct provides examples. At the levels of both the president and the prime minister, Sri Lanka has suggested a legal framework to address drug trafficking and other criminal activity while maintaining freedom of navigation in accordance with international law. The prime minister went so far as to suggest a "Code on the Freedom of Navigation" that must have an effective dispute-resolution mechanism.⁴¹

Indian Ocean Naval Symposium. As an organization representing the chiefs of the littoral navies and other stakeholder, extraregional navies, IONS can provide professional inputs to IORA as the latter engages in the important task of enhancing maritime safety and security in the Indian Ocean by developing the relevant norms. Through IONS's own committees, interoperability procedures and capabilities can be developed and habits of cooperation formalized. Maintaining this synergy between the two organizations is critical, given that the IONS membership includes countries whose bilateral relations might be described as adversarial. A communication channel also needs to be developed between IORA and IONS to function as an agenda interface, since maritime safety and security are matters of concern to both organizations.

Discussions can be encouraged within IONS on the subject of the ground rules for use of harbor facilities by extraregional navies sailing in the Indian Ocean. Alternatively, this theme can be discussed and developed within the relevant

think-tank networks. A CSCAP-like think-tank network, with a looser hierarchy and process for agenda formulation, also could provide a platform for discussion of security-related developments, both traditional and nontraditional, regarding their implications for the overall IORA security milieu.

The outcome of all this effort should be a strategic framework for the Indian Ocean. The development of habits of cooperation would lead to an element of strategic trust. Eventually, such strategic trust would result in the kind of force equilibrium envisaged in the SAGAR construct, one that recognizes the legitimate interests of all stakeholder countries but posits that the primary responsibility for peace, stability, and prosperity rests with the littoral states themselves.

IORA's Institutional Linkages. IORA is ideally suited to create capacities, considered within the littoral collectively, to put together a strategic framework for the Indian Ocean, as envisaged in the SAGAR speech. In that role, it could reach out to other subregional groups in the Indian Ocean that share a maritime element. A well-known expert on maritime geopolitics, invoking the concept of a *regime complex* for the IOR, has argued that IORA should play the role of a “systems integrator, facilitator, interlocutor, and even translator” for the Indian Ocean maritime system, in partnership with other subregional littoral organizations.⁴² Even as IORA is still developing its own ideas and capacities in the area of maritime safety and security, institutional linkages with the other subregional organizations discussed below would be beneficial.

- There is a maritime dimension to the activities of the GCC.⁴³ However, for the foreseeable future any well-coordinated and cohesive institutional naval cooperation is unlikely because of serious divisions among the key members of the council.
- The two African organizations covering the continent's Indian Ocean seaboard are the Southern African Development Community and the East African Community. These entities have ambitions to create a political/security capability, with a maritime dimension; India and IORA could help them in this.⁴⁴
- The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (known as BIMSTEC) is an organization that can provide a framework for a degree of maritime governance in the Bay of Bengal region, as most of the littoral countries are members.⁴⁵

Some gaps in the existing maritime picture can be filled in by IORA through dialogue between, coordination among, and partnership with other organizations having something to do with the Indian Ocean in the wider Indo-Pacific construct. These include the Association of Southeast Asian Nations (ASEAN),

the ASEAN Regional Forum, the ASEAN Defence Ministers' Meeting Plus, and the relevant UN bodies. To share best practices, IORA also can conduct periodic consultations with other regional groupings of littoral countries elsewhere, such as the Arctic Council.

India's Naval Diplomacy and Thought Leadership

The Indian Navy is the second-most-powerful navy in the region and enjoys considerable convergence of strategic interests with the U.S. Navy. The U.S. Navy undergirds the current maritime order and is uniquely placed to seed and nurture the maritime system envisaged in the SAGAR construct.

Building such a system will require both bilateral and multilateral naval diplomatic engagements. The Indian Navy and its affiliated think-tank participants can play a thought-leadership role. The diplomatic engagements involved need to be nuanced and light of touch; otherwise certain other elements—not all well-disposed—may try to undermine the very diplomatic efforts attempting to create the envisaged maritime order. Certain recent developments, such as in Maldives, Seychelles, and elsewhere, suggest the need for a more nuanced Indian approach.

Naval Capacity Building

Multiple types of capability gaps in the existing maritime system—legislative, organizational, and operational—need to be closed. Judicious naval capacity building remains an important task. Accomplishing this is necessary to achieve a measure of stability by ensuring that the littoral navies themselves have the capacity to uphold the maritime system. These capacity-building efforts would need to involve and engage littoral navies, coast guards, coastal police forces, and any other maritime agencies active in the maintenance of good order at sea. Not only India but several other countries need to carry out this capacity building.

This effort would include building better capabilities to conduct maritime surveillance, so as to help meet several of the challenges the maritime system faces. Implementation is ongoing pursuant to the Indian vice president's announcement on 7 March 2017 at the IORA summit in Jakarta regarding the setting up of an Information Fusion Centre. Such a center could help to coordinate on MDA and to institutionalize existing cooperative mechanisms and efforts, such as white shipping agreements and agreements related to hydrography.⁴⁶ An important aspect of this capacity building would be to prepare state forces to neutralize the empowerment of nonstate actors by the so-called revolution in military affairs.

Closing the Capability Gaps, Including in Skills

Maritime Domain Awareness. MDA is the most relevant area of concern for the IOR. Better MDA can be achieved by combining the various facilities already existing in the region. This may entail capacity expansion for various entities to

enable them to fulfill multimission roles. This closing of domain-awareness gaps would involve not only building physical infrastructure but also developing the requisite protocols for information exchanges and finding a suitable platform on which to carry that out.

Think-Tank Capabilities. Musing over the current global geopolitical flux and the methodological conundrums that handicap analysis and scenario building, the authors of the U.S. National Intelligence Council report *Global Trends 2030: Alternative Worlds* spotlight numerous difficulties. Among others, they list the need for better identification of looming disequilibriums; better exploration of the relationship among trends, discontinuities, and crises; and correction of a tendency to underestimate the rate of change along trajectories of rise and decline for different states.⁴⁷

Better think-tank capabilities would help to address the entire spectrum of issues listed above and to flesh out the concept of a pan-Indian Ocean maritime system. The think-tank infrastructure should include both transnational and internal (within India) networking. Capabilities should include scenario building in the current fluid Indian Ocean geopolitical context. This think-tank activity, both at the national and transnational network levels, would need to flesh out SAGAR's normative framework. This activity should be coordinated so as to be consistent with SAGAR's geopolitical construct, rather than proceeding in a segmented fashion.

The Indian Ocean maritime system is becoming increasingly fragile, and the U.S. Navy's capacity to undergird it is diminishing perceptibly. Nonetheless, America retains significant national capabilities that can help shape a new maritime system for the Indian Ocean, whereas China is not at present in a position to alter the balance of power in the Indian Ocean.

In contrast to those relating to other bodies of water in Southeast and East Asia within the Indo-Pacific construct, the Indian Ocean maritime system is fraying at the edges more than it is crumbling under intensifying great-power contestation. The Indian Ocean no longer serves as an instrument for naval force projection to achieve power equilibrium in the Middle Eastern hinterland, as was the case during the Cold War. A pan-Indian Ocean maritime system has to be devised to meet today's context, in which the region faces multitudinous challenges to its political and economic stability.

The challenges in question are not only those that directly affect the littoral areas, with their huge populations and large proportions of global economic and resource wealth, but also those with effects felt much farther afield, in the hinterland. The stability of the Indian Ocean maritime system is critical to global

stability itself. The challenges inhere in the growing fragility of littoral states as well as the island nations. In addition, the rapidly accelerating naval rivalry in the Horn of Africa and the Persian Gulf negatively impacts any effort to create a stable Indian Ocean maritime system. Establishing a sturdy governance mechanism would encourage the development of stakes on the part of regional as well as extraregional countries.

Given the rapid pace of events, the window of opportunity to build a holistic Indian Ocean maritime system may not remain open for long. The ramping up of maritime safety and security through capacity building, interoperability, and enhanced comfort levels, and thereby the successful addressing of nontraditional threats, remains the overriding priority. This effort is critical to maintaining regional stability, and therefore should receive support from all countries even as they retain their hard-power capabilities and options. Prime Minister Modi's SAGAR perspective covers the entire spectrum of relevant challenges and offers Indian capabilities—in the form of both hard and soft power—to make a signal contribution to shaping such a maritime order.

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OPERATION EARNEST WILL

The U.S. Foreign Policy behind U.S. Naval Operations in the Persian Gulf 1987–89; A Curious Case

Andrew R. Marvin

On 3 October 2015, the U.S. Navy met an odd milestone when it decommissioned USS *Simpson*—the last modern ship in its fleet to have sunk an enemy warship. *Simpson* had sunk the Iranian ship *Joshan* twenty-seven years earlier during an obscure deployment to the Persian Gulf from 1987 to 1989 to protect eleven Kuwaiti oil tankers and preserve freedom of navigation through the Strait of Hormuz.

In 1987, when the episode began, the Cold War was hot. Despite ongoing negotiations over conventional and intermediate nuclear forces, U.S. and Soviet proxies faced off in Nicaragua and Afghanistan. The Iran-Contra hearings were about to begin, and the Iran-Iraq War was starting its seventh year. Iraqi and Iranian forces were sinking neutral oil tankers and other merchant ships moving cargo through the Strait of Hormuz at an alarming rate.

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It was in this environment that President Ronald W. Reagan authorized the Kuwaiti tankers to be reflagged as American ships and given a sizable naval escort, including *Simpson*. The deployment, code-named Operation EARNEST WILL, stood out as the U.S. Navy's largest and most complicated surface-warfare operation since World War II, and it was a rare example of the United States using force to protect access to crude oil. EARNEST WILL was a contentious deployment, and Congress demanded assurances that U.S. forces, if deployed, would be protected, to avoid friendly casualties.

Participants and historians judge the operation to have been a success, although there has been little counterfactual analysis to ascertain what would have happened had the United States done nothing.¹ We should seek to understand why we deploy forces abroad and evaluate each deployment on whether it succeeded in achieving its mission. Strategists use many criteria to determine whether deployments should occur, but minimally these missions should be moral efforts of last resort when diplomacy has failed (or used in conjunction with diplomacy) and tied to a nation's grand strategy.

This grand strategy can take many forms, but generally constitutes "a nation-state's theory on how to produce security for itself," or, as Cold War historian John Lewis Gaddis wrote, "how one uses whatever one has to get to wherever it is one wants to go."² A well-formed strategy must be feasible and have a decent probability of success. It must be suitable; that is, the strategy, if successful, actually will produce the desired policy goal. Finally, the strategy must be acceptable, meaning that the nation is willing to bear the cost of the strategy, as measured in lives, treasure, prestige, and leadership focus.

Given the stakes, one would think that grand strategies and the deployments that support them are well thought out. This does not seem to be so. Some research suggests that much American strategy has been improvised on the fly.³ Scholars such as Richard Neustadt, Ernest May, and Yuen Khong argue that individual policy decisions, such as particular deployments, are driven by a series of messy analytic models that include poor analogical thinking instead of structured analytic techniques.⁴

The EARNEST WILL deployment is an example of an ad hoc improvisation in the context of two developed U.S. strategies: the policy of containment and the Carter Doctrine. As a deployment, it was anomalous because of its size, the ferocity with which it was executed (the American joint task force [JTF] ultimately sank a large portion of the Iranian navy), and its adoption in the face of congressional opposition. An outlier such as this invites examination. We therefore should try to understand what strategic forces drove EARNEST WILL. Analysis of this case study can help us examine what practical realities drive states' foreign policies. When faced with multiple principles (such as containment and the Carter Doctrine), which are the more powerful influencers?

This article assesses two possible drivers. The first is that EARNEST WILL was executed as an extension of President Reagan's Cold War strategy. The Soviet Union had offered to solve the security issues in the Gulf. Keeping the Soviet Union out meant keeping U.S. forces in, and it also meant pulling Kuwait into an American-provided security convoy regime. In this explanation, EARNEST WILL was a shrewd, neorealist example of offshore balancing. A second option is that oil economics was the main driver behind the deployment. The U.S.

State Department's official policy rationale for EARNEST WILL stated that "the unimpeded flow of oil through the Strait of Hormuz is a vital interest and critical to the economic health of the Western world."⁵ The oil had to be protected, as it all went into the global spot and futures markets, which affected the price Americans paid at the gas pump. The Carter Doctrine was explicit that this was a national interest, and in the past, when oil supplies were disrupted, it sent the U.S. economy reeling. In this situation, the Persian Gulf was a critical piece of the economic global commons, and the United States was the protector of the global town green.

THE ROAD TO WAR: THE SHAH, THE HOSTAGES, AND THE IRAQI INVASION

On 22 September 1980, Iraq commenced a mechanized invasion of Iran with twenty-two divisions equipped with modern Soviet weapons. Iraqi president Saddam Hussein thought his force could seize oil fields and the Shatt al Arab waterway quickly from an Iranian army still in disorder from the 1979 Islamic Revolution. Hussein also feared that Iran might export its revolutionary brand of Islam to Iraq's predominantly Shia population. The Iraqi invasion initially made good progress; Iran quickly rallied, however, drawing from a deep well of revolutionary fervor and a population three times the size of Iraq's. For years the ground war, while not exactly a stalemate, produced no decisive results.

America from the start tilted toward Iraq. Iran's status in America had shifted from key strategic partner to terrorist menace. In the 1970s, relations between the United States and Iran's monarch, Mohammad Reza Shah Pahlavi (the shah), were warm. The United Kingdom had been the Persian Gulf's traditional protector and offshore balancer for much of the twentieth century, but in 1971 the United Kingdom withdrew from "east of the Suez," closing its naval base in Bahrain. With the United States overextended at the time and trying to disengage from Vietnam, Britain presented the move as a *fait accompli*.⁶ Henry Kissinger recalled the dilemma: "[T]here was no possibility of assigning any American military forces to the Indian Ocean in the midst of the Vietnam war and its attendant trauma."⁷ America filled the void with the Nixon Doctrine, a stratagem that called for the two pillars of Iran and Saudi Arabia to provide security in the Gulf. Iran, well funded with petrodollars and well equipped with advanced American weapons, approached the task with zeal—until the shah's overthrow in 1979.

America tried to work with the subsequent Ayatollah Khomeini regime, with the Pentagon announcing shipments of spare parts to the Iranian military as late as October 1979.⁸ But in November 1979, Iranian students seized fifty-four hostages in the U.S. embassy in Tehran in retaliation for the U.S. government allowing the shah into the United States for medical treatment. In April 1980,

President Jimmy Carter, perceived by many as overseeing a dovish foreign policy, launched U.S. special operations forces on an audacious rescue mission to recover the Americans. Aircraft malfunctions doomed the raid, and eight U.S. servicemembers died in a collision. The Iranians displayed their bodies and the destroyed aircraft for the world to see—a spectacle that added to the dual humiliations of deposed ally and captive diplomats. Tehran finally released the hostages on 20 January 1981, as part of a deal that netted the regime \$2.8 billion in assets previously frozen by the United States.⁹ In a final affront to President Carter, the airplane bearing the hostages did not depart Iran until a few minutes after Ronald Reagan was sworn into office. They had been held captive for 444 days.

Although Saddam Hussein's decision to invade was unilateral, Iran saw the attack, which occurred during the American hostage crisis, as part of a wider effort to bring harm to the country and end the Khomeini revolution. Bruce Riedel, a former intelligence analyst specializing in the Iran-Iraq War, explains the thinking:

Iranians call the war the “Imposed War” because they believe the United States subjected them to the conflict and orchestrated the global “tilt” toward Iraq. They note that the United Nations [UN] did not condemn Iraq for starting the war. In fact, the UN did not even discuss the war for weeks after it started, and it ultimately considered Iraq to be the aggressor only years later, as part of a deal orchestrated by President George H. W. Bush to free the remaining U.S. hostages held by pro-Iranian terrorists in Lebanon.¹⁰

WAR FOOTING

The “Imposed War” soon required full mobilization of both combatants' citizenries and economies. One analyst has estimated the total cost of the war to both economies at \$1.097 trillion, and noted that the sum “exceeds by \$678.5 billion the entire oil revenue received by both countries, ever since they started to sell their oil on the world market.”¹¹

Much of this money went to weapons purchases. In 1980, Iraq imported \$2.24 billion worth of weapons, a figure that increased to \$3.285 billion by 1982.¹² Iran's imports were anemic by comparison: \$278 million in 1980, when it was in a state of revolution but still on a peacetime footing, increasing to \$541 million by 1982. In 1983, the United States initiated Operation STAUNCH, an effort to stop the flow of arms, not to the aggressor but to Iran, on the grounds that the Iranian government would not negotiate a cease-fire. During a hearing to justify EARNEST WILL, the State Department's Under Secretary for Political Affairs described STAUNCH, then in its fourth year of existence, as “vigorous diplomatic efforts—through intelligence-sharing and strong demarches—to block or complicate Iranian arms resupply efforts on a worldwide basis.”¹³

Oil exports were critical to fuel the war machines of both sides. The war cut off Iraq's access to the Persian Gulf, leaving more than seventy merchant ships stuck in the ports of Umm Qasr, Shatt, and Khorramshahr. Shells and bullets impacted them and their egress to the Gulf slowly silted up. Insurers eventually wrote off the trapped ships as constructive total losses and paid out more than \$450 million to various policy holders.¹⁴

Baghdad adapted by exporting oil via pipeline and importing weapons and dry goods overland after off-loading at ports in the United Arab Emirates (UAE) and Kuwait. Since its navy was small, Iraq used its air force to strike military and economic targets in the Iranian littorals. Kharg Island, Iran's major loading point for crude oil, was a frequent target, and Iran soon fortified the location with missiles, decoys, and anti-aircraft guns in a mode reminiscent of European cities during World War II. In October 1981, Iraq began using French helicopters equipped with French Exocet anti-ship missiles to attack neutral ships heading for Iran. Tankers loading crude at Kharg were a favorite target, and Iranian oil revenue suffered.

Iran declared its territorial waters a war zone shortly after the invasion and stated it would blockade Iraq (both legal moves under the laws of armed conflict), but initially the government did not try to interdict shipping heading to Iraq. By September 1982, after months of Iraqi attacks on Iranian shipping, Tehran's tone changed. That month, speaker of the Iranian parliament Ali Akbar Hashemi Rafsanjani told the Japanese ambassador, "We care a lot about the security of the Persian Gulf . . . but if others do not leave it safe and want to secure only their own interest and thereby use it against us, perhaps then we will not let it be safe for anyone."¹⁵ Iranian rhetoric intensified, but it was not until 13 May 1984, after dozens of ships servicing Iran were hit, that the Iranian air force retaliated by putting an American-made Maverick missile into the side of *Umm Casbah*, a Kuwaiti oil tanker.¹⁶

Denied Iraqi targets, Iran felt justified in targeting third-party shipping, for two reasons. First, it deduced that Iraq was receiving commercial goods and war matériel via "neutral" ports, such as those in Kuwait and the UAE. Second, the Arab Gulf states had tilted openly against Persian (and Shiite-ruled) Iran. During the war, Gulf Cooperation Council (GCC) member states gave Iraq between twenty-five and fifty billion dollars in financial assistance.¹⁷ Eight days after the *Umm Casbah* attack, the GCC asked the UN Security Council (UNSC) to address Iranian aggression. The UNSC condemned Iranian actions on 1 June 1984, in UNSC Resolution 552, a document that demanded that there "should be no interference with ships en route to and from States that are not parties to the hostilities." UNSC Resolution 552 made no mention of Iraqi maritime attacks, which were allowed under the laws of armed conflict, nor did it address Iranian

grievances about the thin neutrality that GCC members such as Kuwait displayed during the conflict.

Stymied on the battlefield and geographically isolated in the Gulf, with only a short list of arms suppliers, Iran must have felt increasingly isolated politically at this point as well. Additionally, the world's two superpowers had weighed in against Iran. The Soviet Union was, of course, Iraq's number one arms supplier. By 1984, the United States tilted against Iran in at least two ways. The first was Operation STAUNCH, its arms-restriction effort. The second was a small deployment of U.S. Air Force jets called ELF-1.

The Iran-Iraq War alarmed Saudi Arabia, which moved most of its oil through the Persian Gulf. Shiite Iran was a traditional foe of Sunni Saudi Arabia, which backed Iraq. Saudi Aramco's massive oil-processing facility and anchorage at Ras Tanura is 145 kilometers from an Iranian air force base at Bushehr—a mere fifteen-minute flight time for an Iranian F-4 Phantom. The Saudis requested and received deployment of American E-3 Sentry Airborne Warning and Control System (AWACS) aircraft and refueling tankers. E-3s flown by the ELF-1 mission stood sentinel over Ras Tanura and the western Gulf from October 1980 until the end of the Iran-Iraq War. The E-3s' mission was early warning, and the deployment was defensive, but it gave U.S. and Saudi air forces eyes over the battlefield over a four-hundred-kilometer radius from the aircraft's orbit.

ESCALATION AND CONTINUED AMERICAN TILTING TOWARD IRAQ

Iran eventually retaliated by declaring large parts of the Gulf “free fire zones” and striking an increasing number of tankers and merchantmen with naval and air forces. In the 1980s, oil was cheap, and a glut of shipping meant crews volunteered to sail the Strait of Hormuz even as the tally of damaged and destroyed ships grew. Still, economic pressure built with the tempo of the attacks. Fifty ships were hit in 1985, ninety-seven in 1986.¹⁸ During the summer of 1985, Iran started boarding ships transiting the Gulf as well. The Strait of Hormuz made an excellent choke point for these operations, as it narrowed to only twenty-three nautical miles, and most traffic used a much narrower set of shipping lanes. Iran also controlled the islands of Tunb and Abu Musa, located to the west of the strait, and observed or launched warships from bases there.

Boarding and inspection were legal under the laws of armed conflict for the purposes of seizing contraband, which third parties were funneling to Iraq. On 12 January 1986, a crew from an Iranian frigate boarded SS *President Taylor*, a U.S. ship in the Gulf of Oman, east of the Strait of Hormuz and outside the Persian Gulf proper. *Taylor* was heading to the UAE port of Fujairah to pick up packaged food aid bound for India. U.S. policy makers initially considered the

incident “a matter of serious concern,” but later conceded that the search was legal. Warships escorted subsequent U.S. merchantmen. In May 1986, an Iranian frigate tried to stop SS *President McKinley* during a Gulf passage but backed off when *McKinley*’s destroyer escort, USS *David R. Ray*, requested that it do so.¹⁹ The United States, long a proponent of freedom of navigation, clearly felt its ships’ rights to avoid inspection trumped that of Iran to interdict contraband cargo. Fujairah was known as a transshipment point for cargo heading to Iraq, so Iran’s inspection efforts in the Gulf of Oman were logical. However, the United States in 1986, with hostages held by Iranian-backed Shiite militants in Lebanon and its memory still seared by the detention and torment of the fifty-four diplomats seized in 1979, naturally was reluctant to allow any detention, however brief, of its mariners by Iran.

During this time, hull insurance rates climbed fivefold for ships heading to Kuwait. It appeared that Iranian antishipping efforts, while threatening shipping heading to all GCC countries, were paying particular attention to Kuwait-bound traffic, including its supertankers. The U.S. defense intelligence establishment had concluded as much by the fall of 1986.²⁰ The GCC met to discuss the problem and develop protective schemes on 1 November 1986, but it did not reach a consensus.

Kuwait proved more interested than the others in pursuing alternative solutions to the Iranian antishipping attacks. Admiral William J. Crowe, USN, Chairman of the Joint Chiefs of Staff 1985–89, suggested that Saudi Arabia’s hesitance to seek an armed solution came from a national culture that preferred quiet diplomacy to resolve disputes, as well as the sheer size of the Saudi oil trade, which could absorb the loss of the occasional oil tanker.²¹ In contrast, Crowe suggested that Kuwait’s oil industry, while rich, was more sensitive to the threat posed to the Kuwait Oil Tanker Company (KOTC), which was owned by the Kuwaiti royal family.

David Crist, a historian who wrote an academic history of Operation EARNEST WILL, argues that Kuwait’s precarious geostrategic position drove it to seek a military solution to the Iranian threat. Kuwait’s existence as an independent nation-state was, in the words of a former U.S. ambassador to the country, “an accident of history.”²² Iraq resented Kuwait’s existence. The country had no national bureaucratic or technical class. Kuwait accepted thousands of Palestinian refugees after 1948. The Palestinians and their children ran much of the nation, while native-born Kuwaiti Bedouins reaped the benefits of the country’s oil wealth. As a result, Kuwait felt constantly insecure—“a defenseless state surrounded by wolves.”²³ This encouraged diplomatic hedging. Kuwait was the only Gulf country with full diplomatic relations with the Soviet Union. It bought both Western and Soviet weapons. It refused to close its embassy in Tehran even after Iran bombed

the country and marked its merchant shipping for destruction. Of course, Kuwait—even while this was happening—also was assisting Iraq’s war by transferring weapons from its war stocks to Baghdad, accepting foreign military cargoes (contraband under the laws of armed conflict) and shipping them overland to Iraq, and extending loans and grants to the financially strapped regime. It is not surprising, therefore, that in the fall of 1986, the Kuwaiti government approached both the Soviet Union and the United States to see whether those nations were interested in providing security for Kuwaiti tankers.

AMERICA’S ASSESSMENT AND POLICY FORMULATION

Soviet diplomats responded by saying that Kuwaiti tankers could be reflagged and would receive Soviet naval protection by doing little more than hoisting the hammer and sickle. The American request wended its way through the U.S. State Department slowly. After SS *President McKinley* avoided being boarded and searched, as *Taylor* had been in January 1986, the Department of Defense (DoD) must have felt that it had solved the Gulf’s freedom-of-navigation problem, at least for itself. The hull insurance market was reeling, but, with most premiums backed by Lloyd’s of London, this was primarily a British business problem. Operation STAUNCH continued, fitfully. AWACS radar planes of the ELF-1 mission continued their monotonous surveillance flights, and U.S. warships occasionally plied the Gulf and visited their tiny base in Bahrain. Certainly, the Iran-Iraq War was a tragedy, and the United States clearly had tilted (although not by official policy) toward Iraq, but there did not seem to be reason to intervene militarily over Gulf maritime traffic beyond escorting U.S.-flagged vessels.

In fact, the oil markets scarcely registered the uptick of shipping attacks in the Gulf. In one way, Iran helped depress the flight of oil. Most of its crude was exported through oil terminals on Kharg Island, a perennial favorite for Iraqi air strikes. Iran offered steep discounts for companies willing to fuel up at Kharg, and even self-insured tankers for the period that they were loading. Oil prices had plunged since the heady days of the 1970s, when the Gulf states posted record profits and the West, particularly America, feared the Arab “oil weapon” in the shape of an embargo. Market forces fueled investments in oil exploration and efficiency in the 1970s, and by the early 1980s prices dropped. By November 1986, the world was less than a year away from the introduction of the Brent spot market, a benchmark created on the basis of crude oil extracted from the North Sea that was to compete with the industry standard of West Texas Intermediate (WTI). Brent’s arrival indicated new abundance and a shift in the world oil market’s center of gravity. The futures market for WTI, a benchmark for crude oil, started 1986 at twenty-six dollars per barrel; by Monday, 3 November—the first

trading day after the GCC meeting and Kuwait's failed attempt to hammer out a deal on tanker security—WTI had fallen to \$14.71.²⁴

After 3 November, the U.S. government had even fewer reasons to focus on the tanker war in the Gulf. On that day, *As Shiraa (The Sail)*, a Lebanese newspaper, published a story stating that the United States was shipping weapons to Iran despite having sanctions against that country.²⁵ Further revelations showed that the proceeds from these sales were used to fund freedom fighters battling Nicaragua's communist government, in circumvention of Congress's Boland Amendment. The Iran-Contra scandal had broken, and its revelation harmed America's standing worldwide, especially among Arab nations, who bridled at the superpower's duplicity.²⁶ Rear Admiral Harold J. Bernsen, USN, commander of Middle East naval forces, learned of the scandal during a meeting with a Lebanese defense official: "When I walked in the door, I realized I was in trouble," the admiral recalled. In the course of a severe dressing-down, the official told Bernsen, "[Y]ou can tell all of your buddies that they might as well not come around here anymore."²⁷ Handling international and domestic blowback absorbed the attention of Reagan's national security staff, ensuring that Kuwait's request remained second-page news for a while.

In contrast to the Soviets' quick and unequivocal response, the U.S. State Department, after consulting with the U.S. Coast Guard, relayed a litany of requirements to the Kuwaitis. These included that (1) reflagged vessels must be owned by a U.S. person, via a company incorporated in the United States; (2) vessels must be inspected by the U.S. Coast Guard for safety, to ensure, for instance, that they had the proper number of fire extinguishers on board; (3) vessels must have an American master during operation; and (4) vessels must have American names. While initially cool to the prospect of reflagging, U.S. administration officials, particularly Secretary of Defense Caspar W. Weinberger, came to like the idea, as it would counter Soviet and Iranian objectives simultaneously while protecting U.S. oil supplies.

Weinberger, an avowed anticommunist, took Kuwaiti overtures to the Soviets seriously. Given the free world's dependence on the Gulf's oil, he considered an increased Soviet presence there threatening, later stating, "I was, and still am, convinced that it was not in our interest for Soviet forces to move into an area so vital to us. . . . We in the West need the Gulf's oil resources; the Soviets are more than self-sufficient in oil. Their position in the Gulf, should they achieve a vital presence there, could only be one of denial toward us. They would gain a tremendous strategic advantage I did not want them to have."²⁸ American defense planners did not want to open the Strait of Hormuz to the Soviet navy one inch. Weinberger dismissed claims that his enthusiasm for the reflagging constituted

the United States being “played” by the Soviets. Oil fueled the free world’s economy, and U.S. strategists loathed the thought of the Soviets being in a position to interdict its movement.

Admiral Crowe also concurred with the reflagging plan. While he agreed that Weinberger’s dual objectives were sound, the chairman thought that relationship building justified the action; “it seemed to me that reflagging would go a long way toward mending our fences in the region.”²⁹ Crowe had experience working in the Middle East and had participated in negotiating basing rights for the U.S. Navy in Bahrain in the 1970s. Additionally, Crowe hinted in his memoirs that ideational factors—a visceral antipathy for Iran—may have affected his support. The USN ships already in the Gulf witnessed many of Iran’s attacks on neutral shipping. These captains did not see a blockaded Iran striking back at Arabs smuggling war matériel into Iraq; they only heard calls for help on the radio as Iranian ships attacked merchantmen and observed the aftermath of damaged ships bearing the flags and crews of U.S. allies. Historian Harold Wise captured the sentiment of USN sailors prior to EARNEST WILL.

One Iranian ship . . . named *Sabalan*, gained a notorious reputation for these activities. The captain of *Sabalan*, known as Captain Nasty to Americans, would board tankers bound for Kuwait, Iraq, or Saudi Arabia, and pretend to carry out a friendly inspection . . . then, once the charade was over, Captain Nasty would order an attack on his defenseless prey. Often, Captain Nasty would send a parting message by radio to his victim and say “Have a nice day.” . . . Many times, American ships watched helplessly as both sides [Iran and Iraq] left merchants and tankers in flames.³⁰

Stories such as that of Captain Nasty would have been related to the Navy ships’ local commander, Admiral Bernsen, and likely upward in the chain of command to the Chairman of the Joint Chiefs, Admiral Crowe. Crowe may have had *Sabalan* in mind when he recalled his feelings toward Iranian conduct in the Gulf: “During my recent Gulf visit I had heard firsthand from the Middle East Force’s commanders and men about the unprovoked and murderous attacks they were witnessing. They were a frustrated group of sailors; they hated to have to restrain themselves while atrocities were carried out in front of their eyes.”³¹ Neither Crowe’s nor Weinberger’s memoirs comment on Iraq’s also-murderous and equally illegal use of chemical weapons against civilians. While offshore balancing, oil supply, and loyalty to local allies were important, subconsciously he may have viewed the Iranians’ real crimes as threefold. First, they had held Americans hostage—American diplomats in Tehran and other American citizens held by Hezbollah in Lebanon. Second, they gloated over America’s military failure during the hostage rescue mission. Third, by attacking neutral shipping with impunity, they made the Persian Gulf an area of lawlessness, and by extension made the American naval forces on hand look powerless.

As Chairman of the Joint Chiefs of Staff, Admiral Crowe was the highest-ranking military officer in the nation. He also was, by statute, the president's military adviser. However, he was outside the chain of command for military operations; those plans ran through Secretary Weinberger. So while Admiral Crowe's recommendation carried considerable weight, Secretary Weinberger spoke with the official DoD voice on reflagging.

The reflagging proposal was debated within the U.S. National Security Council (NSC) interagency process. DoD and the NSC were for reflagging, while the State Department was against it. President Reagan concurred with the DoD/NSC position. On 17 March 1987, Admiral Crowe delivered America's formal offer to Kuwait's emir, Sheikh Jabir al-Ahmad al-Sabah, to escort KOTC's oil tankers, either under their Kuwaiti flags or as properly reflagged American ships.³²

Around the same time, the administration alerted Congress to its intentions. The reflagging would not require extra appropriations. Although the actual exchange of flags would be done "by the book," according to U.S. Coast Guard regulations, DoD tried to expedite certain steps. Administration lawyers felt they did not need legislation to authorize the escort. The 1973 War Powers Resolution had set tough notification and approval requirements on a president regarding the use of military forces, but Weinberger thought these approval procedures did not apply to the reflagging; and Reagan, like all presidents since its passing, considered the War Powers Resolution unconstitutional. Admiral Crowe recalled congressional opposition during hearings on the reflagging as intense. Weinberger, a career politician and former legislator, considered it desultory posturing by opposition Democrats. The Iran-Contra scandal was a much bigger deal for Congress. Senator John G. Tower had released a report on the scandal on 25 February 1987, identifying administration errors. The Tower Commission had settled nothing, however. Another congressional entity with a wider scope and subpoena power was authorized in January 1987, and it was preparing for hearings during the reflagging debate.³³

On 15 May 1987, KOTC lawyers finished the paperwork that created Chesapeake Shipping Inc., a corporation based in Dover, Delaware, that had "no employees, with 'offices' consisting of a mail drop at another company that specialized in dummy corporations, and controlling assets (the tankers) valued at approximately \$350 million."³⁴ At this point, Operation EARNEST WILL was ready to start.

However, two days later an Iraqi Mirage jet hit USS *Stark*, a frigate, with two missiles. *Stark* had been conducting routine patrolling activities in the central Persian Gulf when it was hit. Heroic crew efforts extinguished fires and saved the ship from sinking, but the impact and conflagration killed thirty-seven sailors. Congress was livid. On 22 May 1987, the Senate demanded more information on

EARNEST WILL, and by the next day a congressional delegation of investigators had arrived at the U.S. naval base in Bahrain to interview survivors. Iraq immediately apologized. The Navy investigation assessed the incident to have been an accident—the *Mirage* had been looking for shipping bound for Iran.

Stark had missile countermeasures, but had not defended itself, because it did not see the Iraqi aircraft as a threat. The problem was as much cognitive as technological. Naval tacticians long had feared combat in the congested Persian Gulf; American ships were designed for combat in open oceans. Admiral Crowe, among others, noted that encounters in the Gulf's confines left little time for humans to interpret data, identify a threat, and take countermeasures. Because of this, America's aircraft carriers remained in the open waters of the Indian Ocean for the duration of EARNEST WILL.

While the crew of USS *Stark* made mistakes, the Iraqi *Mirage* pilot was grossly negligent. He carried sophisticated radar and other sensors, yet did not identify that his target was a 4,100-ton *Perry*-class frigate instead of his desired prey: a two-hundred-thousand-ton very large crude carrier (i.e., a supertanker).

Despite this fact, America quickly blamed Iran for the tragedy. The day after the attack Reagan stated during a press conference that “the villain in this piece really is Iran.”³⁵ On 20 May 1987, Secretary of State George P. Shultz wrote to Congress, “Quite apart from the Iraqi attack on the USS *Stark*, Iran continues publicly and privately to threaten shipping in the Gulf. It is this basic Iranian threat to the free flow of oil and to the principle of freedom of navigation which is unacceptable.”³⁶ The anti-Iranian narrative continued.

Nothing had changed to tilt U.S. policy in the region away from supporting Iraq in strategy or narrative. On 16 June 1987, Michael Armacost, the Under Secretary of State for Political Affairs, addressed the Senate Foreign Relations Committee to justify EARNEST WILL. Regarding the Iran-Iraq War, he testified that “[w]e do not wish to see an Iranian victory in that terrible conflict.” Yet in the very next sentence he stressed, “Nevertheless, the United States remains formally neutral in the war.”³⁷

Because of the *Stark* incident, America's “neutral intervention” now grew in scope. Congress insisted that the Navy establish robust rules of engagement. The rules would, for instance, have allowed *Stark* to order the *Mirage* to change course as it approached or to open fire on it if it refused. The Navy now planned to send more ships to the Gulf as well. Weinberger told General George B. Crist, USMC, commander of the EARNEST WILL JTF, to ask for any asset he felt he needed to conduct the operation.³⁸ In June, Weinberger convinced the Saudis to let the EARNEST WILL JTF connect the radar feeds from the ELF-1 surveillance aircraft to its naval ships, giving the United States better situational awareness.

The Reagan administration initiated a strategic communications campaign to address congressional opposition and political posturing. Under Secretary Armacost and Secretary Weinberger both delivered lengthy statements to congressional committees on U.S. policy. In justifying EARNEST WILL and *Stark's* sacrifice, the statements described strategic concerns of encroaching Soviet influence in the Gulf as well as economic ones regarding free flow of commerce.

Oil, of course, was the key element of this commerce. Armacost testified that “[t]he unimpeded flow of oil through the Strait of Hormuz is a vital interest.”³⁹ Vital interests generally are understood to be those over which America is prepared to fight. A subsequent national security document defined them as “those directly connected to the survival, safety, and vitality of our nation.”⁴⁰ Armacost reiterated the Carter Doctrine’s affirmation that “[a]n attempt by any outside force to gain control of the Persian Gulf region will be regarded as an assault on the vital interests of the United States of America, and such an assault will be repelled by any means necessary, including military force.”⁴¹ EARNEST WILL was the Carter Doctrine’s first explicit test.

In addition to the Soviets’ geopolitical threat, America had a collective psychological fear of oil shortages. President Reagan addressed this concern during a 29 May 1987 radio address. In justifying EARNEST WILL, Reagan recalled the 1970s oil shocks and their deleterious effects on the U.S. economy. He argued that “[t]his could happen again if Iran and the Soviet Union were able to impose their will upon the friendly Arab States of the Persian Gulf, and Iran was allowed to block the free passage of neutral shipping.”⁴²

AN UNDECLARED WAR WITH IRAN

Iran did not acquiesce to the convoys’ presence when the larger and more aggressive JTF started EARNEST WILL. The Iranians continued to strike neutral shipping with aircraft and ships. They directly challenged the United States by laying mines along convoy routes (while denying constantly that they were doing so). The Iranian navy acted aggressively toward U.S. forces supporting the convoy missions. Three distinct Iranian actions—the mining of SS *Bridgeton*, the attack on SS *Sea Isle City*, and the mining of USS *Samuel B. Roberts*—prompted the U.S. military to retaliate against Iran with military force.

The first EARNEST WILL convoy did not take place until 22 July 1987, when USS *Kidd* and USS *Fox* escorted SS *Bridgeton*, an ultralarge crude carrier that displaced four hundred thousand tons. *Bridgeton*, nominally homeported in Philadelphia, had until shortly before this convoy been the Kuwaiti ship *Al-Rekkah*. In a bit of irony, *Kidd*, a state-of-the-art destroyer designed for work in the tropics, originally had been ordered and bought by prerevolutionary Iran. After the shah’s ousting and the cessation of weapons transfers, the U.S. Navy took the ship.

The convoy started inauspiciously: *Bridgeton* hit a mine on 24 July 1987, while transiting the Gulf to pick up crude oil in Kuwait. The explosion punctured the tanker but did not stop it. As if it were not enough that its escorts could not protect it, *Kidd* and *Fox* escaped the minefield by having *Bridgeton* lead while the warships followed in its wake; sailors reckoned that a four-hundred-thousand-ton supertanker in ballast is nearly impossible to sink with mines, while a 7,900-ton destroyer loaded with fuel and ammunition was at considerable risk.

The Navy reacted to the *Bridgeton* mining by launching an offensive to find and destroy the Iranian minelayer. Washington reinforced the EARNEST WILL JTF with special operations forces (SOFs) and intelligence, surveillance, and reconnaissance assets that could find and track the civilian Iranian ships suspected of laying mines surreptitiously. On 21 September 1987, they succeeded. SOF helicopters, working at night, caught the fishing ship *Iran Ajr* in the act. U.S. SOFs captured *Iran Ajr* in a daring raid and the Navy videotaped its deadly cargo for the world to see.

On 16 October 1987, an Iranian Silkworm missile hit SS *Sea Isle City*. The United States responded by destroying an oil platform.

When *Samuel B. Roberts* hit a mine on 14 April 1988, the United States ratcheted up its response. Unlike *Bridgeton*, which survived with a small hole, “*Sammy B*” burned, flooded, and almost sank. In retaliation, Admiral Crowe ordered the JTF to destroy two oil platforms and a frigate: “sink the *Sabalan*,” Crowe cabled the commander; “put it on the bottom.”⁴³ In a one-day offensive code-named Operation PRAYING MANTIS, the EARNEST WILL JTF destroyed the platforms, several speedboats, and damaged *Sabalan*. Unsatisfied with a partial victory, a surface task force located the frigate *Joshan*. USS *Wainwright* signaled the *Joshan* crew, “Stop and abandon ship, I intend to sink you.”⁴⁴ *Joshan* responded with a missile that missed its target; USS *Simpson* responded with four that did not. *Simpson*’s salvo, along with a flurry of gunfire from other ships in the task force, destroyed *Joshan* and earned *Simpson* its rare distinction as a ship killer.

Amazingly, Iranian provocations continued until the Iran Air Flight 655 tragedy. On 3 July 1988, USS *Vincennes*, while under attack by Iranian speedboats, mistook a civilian Airbus airliner for an attacking fighter aircraft and shot it down. The United States paid sixty-one million dollars in compensation while denying guilt for the incident. Vice President George H. W. Bush summed up America’s position regarding the downing of the Airbus during a speech at the UNSC. “The critical issue confronting this body is not the how and why of Iran Air 655. It is the continuing refusal of the Government of the Islamic Republic of Iran to comply with Resolution 598, to negotiate an end to the war with Iraq, and to cease its acts of aggression against neutral shipping in the Persian Gulf.”⁴⁵

Iran garnered little sympathy at the United Nations. America's unofficial war in the Persian Gulf was preceded by the United States blaming Iran for a mistaken attack launched by the Iraqis. The war then concluded, in a sense, with the United States blaming Iran for the mistaken attack against Iran Air 655. There were no more major engagements after *Vincennes's* incident with the speedboats and the downing of Iran Air Flight 655. By July 1988, Iran was defeated thoroughly on the battlefield. The *Vincennes* episode and PRAYING MANTIS both coincided with Iraqi victories. An exhausted Iran sued for peace later in July—which Supreme Leader Ali Khamenei likened to “drinking hemlock for me.”⁴⁶ EARNEST WILL continued escorting tankers quietly until December 1989.⁴⁷

TWO FACTORS OF EXPLANATION

The Scourge of Communism and Reagan's Response: Ideological Drivers Spark a Great-Power Competition

The threat of the Soviet Union involving itself in the Persian Gulf proved to be the most powerful driver of American foreign policy preceding EARNEST WILL. The fear that the Soviet Union would escort Kuwaiti oil tankers and thereby gain a foothold in the Persian Gulf—the fuel tank of the free world's oil-based economy—motivated the United States to counter the Soviets' offer. The Soviet threat mobilized Washington in a way that years of carnage, attacks on neutral shipping, including oil supplies, and deep-seated hatred of the Iranian government could not. Public statements from DoD and the State Department as well as President Reagan's own comments cited the centrality of the Soviet communist threat in justifying EARNEST WILL. There is little chance that this was posturing simply for public consumption; the fear of communism in the United States (and particularly in the Republican Party) was strong and long-standing, and anticommunism was a central tenet of the Reagan administration.

From the start, Marxist-Leninist Moscow and laissez-faire Washington had diametrically opposed worldviews. Lenin summed up the Manichaeic struggle as follows: “As long as capitalism and socialism exist, we cannot live in peace: in the end, one or the other will triumph—a funeral dirge will be sung either over the Soviet Republic or over world capitalism.”⁴⁸ Reagan was very much aware of and in agreement with Lenin's view on the dichotomy; in 1983, during a speech to the National Association of Evangelicals, he likened the communist leadership to a demon depicted in the C. S. Lewis novel *The Screwtape Letters*, and called the USSR an “evil empire.”

After an alliance of convenience during World War II, this conflict morphed into great-power competition and solidified into the Cold War. The struggle's early phases were marked by the Truman Doctrine and the policy of containment,

both of which sought to box in the Soviet Union and respond to provocations in countries such as Greece, Turkey, and South Korea. A rebuilt Europe and, especially, a unified Germany were great sources of potential power. Superpowers contended over them, as they did countries on the periphery such as Greece, Turkey, Israel, and Kuwait.

The Persian Gulf was an active Cold War theater. America's first brush with oil shortage, the 1973 embargo, was driven by great-power politics. America's support for Israel during the 1973 Yom Kippur War that so inflamed Arab sentiments was part of a balancing act against the Soviet client states of Egypt and Syria. During EARNEST WILL, America was in Bahrain, as a tenant at a small naval base, because it had subsumed Britain's regional security responsibilities after British forces withdrew in 1971. Laissez-faire America could have relied on the free market to keep oil flowing, but it decided that it was important to prevent a hegemon from taking charge in the region. So it put in place its small naval presence and promoted the twin-pillar policies of supporting rivals Iran and Saudi Arabia to police the area.

Even the nation's core strategy for the Middle East, the Carter Doctrine, is at its heart about great-power politics. The shah fled Iran in January 1979; the Carter Doctrine was not promulgated until the January 1980 State of the Union address. Iranian destabilization was a critical foreign policy problem, but the precipitating event for the speech was the Soviet invasion of Afghanistan in December 1979. The Soviets are mentioned thirty-two times in Carter's 1980 speech, Iran only six. America's pledge to prevent Soviet hegemony in the Persian Gulf was consonant with its grand strategy of containment and its regional strategy of keeping the Soviets away from critical resources. John Mearsheimer offers Reagan's execution of the Carter Doctrine / containment as a successful example of offshore balancing, as it relied primarily on proxies and, when needed, used expeditionary forces rather than those stationed at permanent forward bases.⁴⁹

In this context, it should not be surprising that a threat of Soviet involvement in the Gulf, however slight, prompted an American response. Kuwait previously had been a British protectorate; although not a liberal nation, it previously had been in the American orbit. The Islamic Revolution shifted Iran to the neutral column, and this concerned the United States greatly. Also, while the United States faced (conventional) parity or (nuclear) mutually assured destruction on potential battlefields such as those in Korea or central Europe, it had the potential to exert hegemony in the Persian Gulf theater. Reagan greatly expanded the Navy, to nearly six hundred ships. It could support EARNEST WILL and more, without removing aircraft carrier battle groups from critical sea-lanes in the Atlantic and Pacific. In contrast, the Soviet navy's strength was its submarines. Its surface craft were few and could not operate for long in the Gulf, since they lacked forward

operating bases. While the Soviets lacked staying power, America could use its bases in Bahrain and Diego Garcia (the latter in the Indian Ocean) to support its military escort strategy and political objectives of boxing out the Soviets.

Secretary of Defense Weinberger unequivocally identified Soviet involvement as a threat the United States must avoid, even if it played into Kuwait's hands. The position of Secretary of State Shultz was less hard-line; he supported EARNEST WILL, but accepted the possibility of some minimal Soviet naval presence in the Gulf, to avoid giving the Kuwaitis what they wanted. Still, his position was clear. "The idea of the Soviets playing a key maritime role in the Gulf had no appeal to us."⁵⁰ He describes the reflagging as one of the few times he and Weinberger saw eye to eye on a military matter.

The Reagan administration's official rationale on reflagging, delivered to Congress by Under Secretary Armacost, listed protecting Kuwait from Iran first and prevention of Soviet influence second. Yet this ignores the fact that neither the United States nor the world oil markets cared one bit about Kuwait's predicament until the country approached the Soviets—and let the United States know about it—in the fall of 1987.

EARNEST WILL was classic offensive realist offshore balancing. The United States kept the Soviet Union and Iran out, and Kuwait and Saudi Arabia in, while avoiding a permanent large garrison in the Gulf (its base in Bahrain was tiny). Reagan's desire to confront perceived Soviet expansion more aggressively does much to explain the foreign policy decision to engage in EARNEST WILL. Its explanatory power stands in contrast to the proximate reason for Kuwait's predicament. Protection of oil flows, as shown in the next section, played little strategic role in EARNEST WILL, despite the strategic proclamations of the Carter Doctrine and the administration's communication efforts to remind Congress of its importance to the U.S. economy.

The Global Commons and Protecting Oil Flow— a Mediocre Explanation of Events

In his memoir, Secretary of Defense Weinberger justified EARNEST WILL as an effort to keep Soviet influence out of the Gulf. However, while he mentioned the Soviet threat during his June 1987 testimony to Congress, in this public forum oil and economic arguments took center stage—he mentioned them at least six times. The Persian Gulf was a vital interest, he testified. "Our ability to continue to develop economically and to maintain the way of life we are accustomed to depends on our unimpeded access to this oil."⁵¹

President Reagan's messaging during a 29 May 1987 press briefing matched that of his Defense Secretary. Reagan's remarks occurred shortly after the Iraqi missile hit USS *Stark* and one week after the Senate formally requested more

information on Operation EARNEST WILL. Reagan hits the domestic implications of the Gulf crisis hard and early.

It may be easy for some, after a near record 54-month economic recovery, to forget just how critical the Persian Gulf is to our national security. But I think everyone in this room and everyone hearing my voice now can remember the woeful impact of the Middle East oil crisis of a few years ago: the endless, demoralizing gas lines; the shortages; the rationing; the escalating energy prices; the double-digit inflation; and the enormous dislocation that shook our economy to its foundations.⁵²

Yet while the public messaging around EARNEST WILL focused on the resource narrative, neither politicians' memoirs nor military planning accounts show an immediate or quantifiable concern over oil access. Despite quotations of barrels exported, forecasts of America's future reliance on Gulf oil, and evocations (implicit and explicit) of the 1973 Arab oil embargo, oil was cheap in 1987, and concern—on the part of both policy makers and the public and congressmen they sought to influence—was ideational.

Domestic fears of oil shortages dated back to the 1973 Arab oil embargo, which Arab oil producers had imposed in retaliation for America's steadfast support of Israel during the Yom Kippur War. Although the actual supply disruption was neither complete nor lengthy, it shocked the country. The 1979 Iranian Revolution brought a new series of oil shocks and spectacular price hikes—from fourteen to thirty-five dollars per barrel by 1981.⁵³ But the shocks also encouraged exploration and technology. By the time of Operation EARNEST WILL, oil was cheap despite the blockade of Umm Qasr and the occasional sinking of tankers bearing Kuwaiti, Saudi, or Iranian crude destined for the world market. Yet American consumers remained psychologically vulnerable to the threat of oil price spikes.

The Iran-Iraq War had little long-term effect on global oil prices. Iraq's initial invasion did cause a price spike; a barrel of crude rose from fifty-three dollars in September 1980 to sixty-three dollars by February 1981, a 19 percent increase, as Iran and Iraq assiduously bombed and shelled each other's oil infrastructure.⁵⁴ But the Organization of the Petroleum Exporting Countries (i.e., OPEC) replaced all crude oil taken off the market by the war within a few months of the war's onset, and prices dropped to prewar levels by mid-1982. During this period, America's concerns were geopolitical more than economic. Iran was an Islamic republic seeking to export revolution, and the United States tilted against Iran as a result. Iraq escaped censure in the UNSC even though it was the aggressor, and the United States launched Operation STAUNCH against Iran.

The expansion of the conflict into the tanker war likewise did not move the markets. Iranian and Iraqi oil exports actually expanded slightly when the tanker war began.⁵⁵ The market situation was unchanged by 1986 the year Kuwait grew concerned about its fleet. Prices fluctuated quite a bit in 1986 (price fluctuations

on the futures market averaged forty cents per day, compared with a historical average of twenty cents per day from 1983 to 2015), but when Kuwait made its overtures to the superpowers in November, a futures contract for a barrel stood at \$14.71—far below the price at the beginning of the year (2 January) of \$25.56.⁵⁶ To be sure, insurance rates rose fivefold during this time. At one point, underwriters judged the Gulf to be more dangerous than sea-lanes during World War II.⁵⁷ At times it was impossible to insure a supertanker filling up at Iran's Kharg Island; Iran had to self-insure. Yet this was a problem for the sailors. And for the insurance market; Lloyd's of London controlled most of the premiums, but 10 Downing Street made no offer to Kuwait to protect its tankers, nor did it call for an international escorting scheme. Once EARNEST WILL started, Secretary Weinberger asked the British whether they would like to participate, but America's greatest ally demurred.⁵⁸

Geography made Kuwait's risks political and unique. The country sought a political solution to the risk, and America's response, while tied to Kuwait's oil wealth, was underpinned by geopolitical competition first and market fundamentals second. EARNEST WILL would not have happened without the oil, but the oil market did not drive American policy makers. An analysis of oil market fundamentals during the tanker war, reinforced by the silence on the oil situation in key memoirs, makes it clear that arguments about oil in front of Congress addressed theoretical concerns and amounted to debating points aimed at getting congressional approval.

Oil was a factor in EARNEST WILL, but it was a nested factor. If Kuwait chose the Soviet Union to escort all eleven of its tankers, it might spark a permanent Soviet presence in the Gulf. This might embolden the Soviets to seize control of the Gulf one day, even though doing so would require incorporating several large countries (in terms of both population and geography) in an opposed campaign. If this were successful, the Soviets—a net oil exporter already—might decide to keep the extra oil off the market (although it had exported oil throughout its history, even during the 1920s—when it was a pariah state). This would have a serious effect on the U.S. economy, as had previous regional disruptions in 1973, 1978, and 1979. Still, it is critical to understand that this is a nested factor, as in a *matryoshka* doll. The Central Intelligence Agency and the Department of Energy may have been paying close attention to the oil flow during the tanker war, but they did not raise an alarm. Oil security may have helped sell the deployment, but the rationale behind the deployment was power geopolitics.

Basil Liddell Hart wrote that the objective of war is to secure a better peace.⁵⁹ In that sense, EARNEST WILL succeeded in this episode of offshore balancing during

the long Cold War. America kept the Soviets out; the Kuwaitis in; and the Iranians down, to the extent that they sued for peace within a year of the operation's onset.

First, the JTF protected the KOTC's reflagged (and therefore American) super-tankers. While the Soviets did make a show of sending a few warships to the Gulf, they did not attempt to challenge U.S. regional hegemony.

Second, EARNEST WILL began to bring the mercurial Kuwaiti royal family into America's orbit. This process would be complete three years later when, following DESERT STORM, the world's most powerful democracy liberated the tiny country and reinstalled its royal family as rulers without a whisper about potential political reforms, such as moving toward a representative government. Additionally, the reflagging effort improved U.S. standing with GCC members, particularly Saudi Arabia. GCC members previously had been disappointed with America's inability to approve arms-transfer deals for sophisticated weapons its members demanded. Also, America's strategic approach in Vietnam, Cambodia, Laos, and Lebanon had given some nations the impression that the United States was a fickle ally, likely to cut and run. The fact that the United States stayed in the Gulf after the casualties of the USS *Stark* incident, and that its sailors obviously had no compunctions against closing with and destroying the Iranian navy, renewed the value of American military friendship in the region.

Third, EARNEST WILL contributed to defeating Iran. The second half of EARNEST WILL coincided with a spectacular series of Iraqi victories. Iran's navy, with its missile-armed frigates and covert minelayers, was one of the country's comparative advantages over Iraq. But EARNEST WILL neutralized it, along with any hope Tehran had that a maritime-interdiction campaign would isolate Iraq or convince GCC members to deny Baghdad vital financial support. The JTF's largest operation against the Iranian navy, Operation PRAYING MANTIS, was by coincidence launched simultaneously with Iraq's massive ground attack to retake the strategic al-Faw peninsula. This reinforced the existing attitude in Tehran that Washington and Baghdad were coordinating in their war against the Islamic republic. After *Vincennes's* tragic downing of an Iranian civilian Airbus, Iran quickly sued for peace. In his letter to UN secretary general Javier Pérez de Cuéllar, Supreme Leader Khamenei identified the aircraft's downing as an example of widening the war and a direct cause of his desire to offer peace terms.⁶⁰

The EARNEST WILL episode suggests that the principles of strategy (such as containment) matter, but that specific foreign policy formulations will require improvisation within strategic confines. When the Kuwaitis approached the United States with the reflagging proposal, American policy makers did not respond from the Carter Doctrine playbook, and they did not approach the problem as rational actors strictly seeking the optimal response to the royal family's overture. They did, however, act within the framework of the decades-old

strategy of containment. America's desire to stymie the Soviet Union and keep it from obtaining hegemony in the Persian Gulf proved a powerful catalyst to get the United States involved. Still, while the specific strategy framework was preexisting, the details of the American response were ad hoc. Policy makers improvised actions that were specific to the tanker threat's time and place. Kuwait seized the initiative in the reflagging episode by making simultaneous overtures for assistance to both Washington and Moscow. When American leaders formed a policy to address this development, that policy was shaped by their notions of containment, their fear of Soviet influence, and their antipathy toward Iran. The United States responded forcefully to the threat of a few Soviet escorts in the Gulf even though it had done little regarding all the Iranian navy had done up to that point, including boarding a U.S. ship.

During any future inevitable policy improvisations, policy makers would do well to drill down into their key assumptions. For instance, oil is indeed critical to the world economy, but for all the success of EARNEST WILL there is no evidence the operation was necessary to secure the flow of crude oil through the Strait of Hormuz or a decent price for it on the world spot and futures markets; macro-economic factors far outweighed the JTF's efforts in this regard. EARNEST WILL was, in one sense, a subsidy for Kuwaiti crude—another point that policy makers should ponder when they determine future interventions in the Persian Gulf or other places rich in commodities.

However, in the greater context of containment, EARNEST WILL succeeded, and it did so without creating an open-ended military commitment. In an era of strained resources and multiple theaters vying for attention, policy makers should ensure that, given the uncertainty of any military action, capabilities are well matched to objective ends. As Richard Betts has observed, "strategy fails when means prove insufficient to the ends."⁶¹ EARNEST WILL paid off because of military overmatch and America's strong commitment to containing an existential threat—factors that are not always present.

NOTES

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 4. Richard E. Neustadt and Ernest R. May, *Thinking in Time: The Uses of History for Decision-Makers* (New York: Free Press, 1986); Yuen Foong Khong, *Analogies at War: Korea, Munich, Dien Bien Phu, and the Vietnam Decisions of 1965* (Princeton, NJ: Princeton Univ. Press, 1992). *Thinking in Time* is the seminal work on the potential value of structured thinking in national security; *Analogies at War* contains powerful case studies on the consequences of poorly structured thinking—specifically, bad analogical reasoning.
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 12. "SIPRI Arms Transfers Database," *Stockholm International Peace Research Institute*, www.sipri.org/.
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 14. Martin Navias and E. R. Hooton, *Tanker Wars: The Assault on Merchant Shipping during the Iran-Iraq Crisis, 1980–1988* (New York: Tauris, 1996), p. 36.
 15. *Ibid.*, p. 62.
 16. *Ibid.*, p. 77.
 17. Crist, "Operation Earnest Will," p. 43.
 18. Navias and Hooton, who had access to insurance records from Lloyd's of London, have multiple tables in *Tanker Wars* comprising the definitive list of commercial ships damaged during the tanker war.
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 21. William J. Crowe [Adm., USN], with David Chanoff, *The Line of Fire: From Washington to the Gulf, the Politics and Battles of the New Military* (New York: Simon & Schuster, 1993), p. 176.
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54. Eugene Gholz and Daryl G. Press, "Protecting 'the Prize': Oil and the U.S. National Interest," *Security Studies* 19, no. 3 (July 2010), pp. 453-85.
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“IMPROBABLE ALLIES”

The North Korean Downing of a U.S. Navy EC-121 and U.S.-Soviet Cooperation during the Cold War

Bill Streifer and Irek Sabitov

A U.S. Navy reconnaissance plane with 31 men aboard is reported missing in the Sea of Japan. The North Koreans are boasting that they have “shot down an American spy plane.” The information triggers a unique, massive, multinational sea and air search for possible survivors of the EC-121. The cast includes improbable rescuers—Russian warships which happen to be in the area and volunteer their services.

CAPTAIN RON MARLAR, USN, “THE THINGS THEY’LL DO . . .,”
AIR RESERVIST, JUNE 1969

On 15 April 1969, North Koreans were engaged in celebrating the birthday of Kim Il-sung, the founder and leader of the so-called Hermit Kingdom. However, the cheers quickly were replaced by the familiar shouts of “Down with U.S. imperialism!” and “Liberate the South!” when it was announced that a pair of MiG fighters had shot down a U.S. Navy (USN) EC-121 reconnaissance plane, which North Korea claimed had intruded into its airspace.¹ The celebration of Kim Il-sung’s birthday (in this case, his fifty-seventh) was the nation’s most important national holiday: a day filled with festivals, artistic performances, sports competitions, and academic seminars and debates. Freed from their daily routines, workers and students were in a cheerful mood as they carried banners and placards bearing the image and slogans of their leader in the numerous parades held during the day. But the festive mood changed radically when the crowds became aware of early-evening bulletins announcing a “brilliant battle success.”²

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The doomed EC-121 was an electronic intelligence (ELINT) version of the Lockheed Super Constellation, a four-engine, propeller-driven, three-hundred-miles-per-hour, unarmed aircraft.³ A bulbous radar dome (radome) on the top of the fuselage housed a special antenna capable of determining the

frequency of an adversary's air-defense radar.⁴ EC-121 Big Look aircraft were tasked with conducting ELINT to intercept, locate, and record radar and communications emissions.⁵ Operating under the umbrella of the National Security Agency (NSA), the specific aircraft in question had been assigned to take off from Atsugi, Japan, transit across the Sea of Japan to a point off the northern coast of North Korea, fly two and a half orbits, and land at Osan Air Force Base in South Korea.⁶

Following the attack, the United States put ships and planes en route to the site. But before they arrived, the Nixon administration requested foreign assistance. Robert J. McCloskey, the chief State Department spokesman, stated that the United States had asked the Soviet Union, Japan, and South Korea for any assistance they might render in helping to locate the plane's missing crewmen. The requests were made in the capitals of the three countries.⁷

Owing to the EC-121 crash site's proximity (about 150 miles south) to Vladivostok—the main Far East naval base of the Soviet Union's Pacific Fleet—the first vessels on the scene were Soviet, not American. The first hard evidence that the EC-121 had gone down came the next morning when a USN P-3 rescue plane spotted debris two nautical miles northeast of the reported downing location; it consisted of such items as uninflated life rafts, paper, and dye markers.

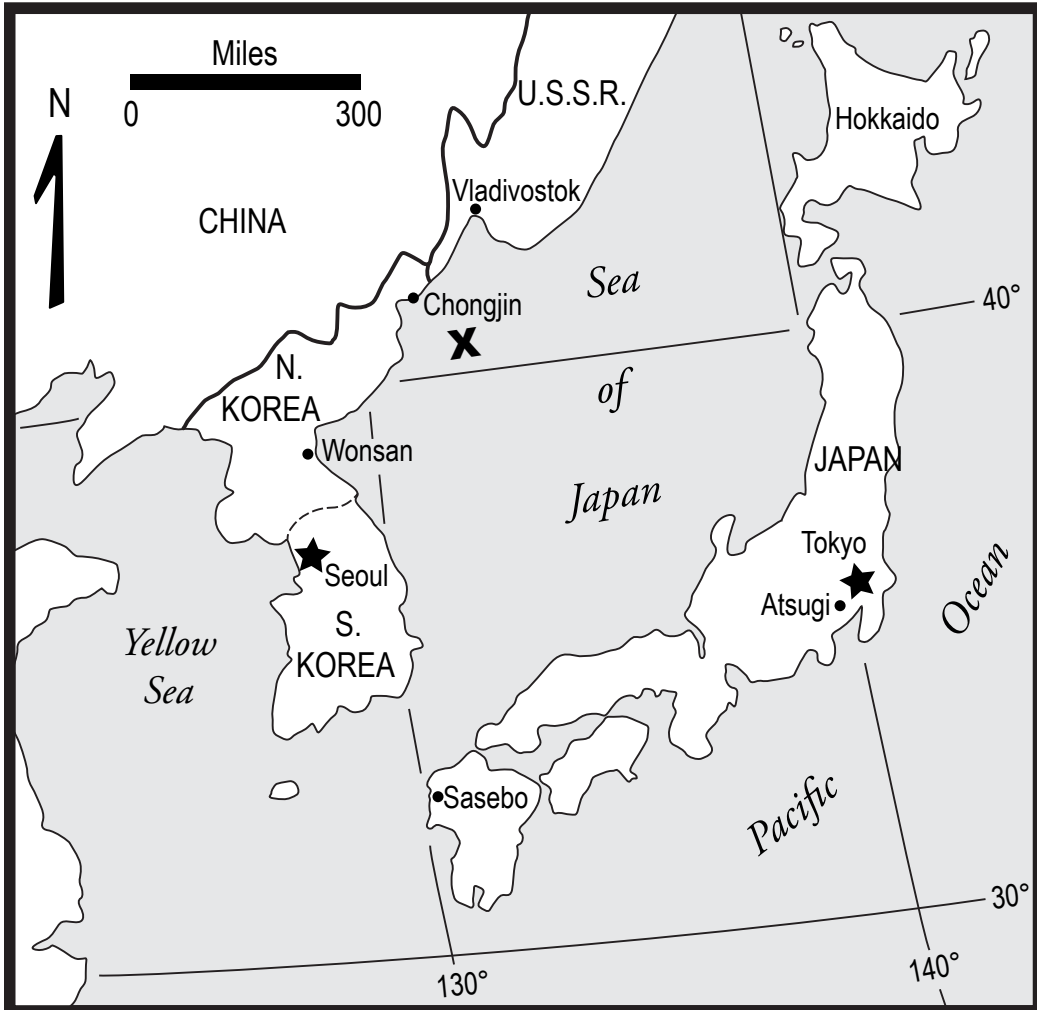
A joint U.S.-Soviet search-and-rescue (SAR) operation began later that day when the rescue plane made contact with two Soviet ships in the vicinity of the downed plane. That afternoon, aided by American rescue-aircraft personnel who dropped identifying smoke bombs, the Soviet destroyers began to pick up debris from the downed aircraft.⁸

Although the ships at sea picked up pieces of the spy plane and assorted debris and the downed plane reportedly had carried enough life rafts to hold the entire crew, no survivors were spotted from the air.⁹ Despite the lack of confirmed reports of survivors, the size of the rescue operation was being "substantially expanded" at that time, the Pentagon said.¹⁰

Sometime after the shootdown, Captain Wayne Whitten, U.S. Marine Corps (USMC), who had flown several missions with EC-121 aircraft in the Gulf of Tonkin during the Vietnam War, took a phone call from Secretary of Defense Melvin R. Laird. At the time, Whitten was in Hawaii on a watch team at the Joint Reconnaissance Center (JRC) at the headquarters of the commander in chief, Pacific Fleet, at the time Admiral John S. McCain Jr.¹¹ "It was really confusing[,] with reports first of Soviet ships going to the crash site and no one sure if they were going to help or hinder," Whitten later recalled. Secretary Laird had heard, erroneously, that there were survivors. Whitten was the one who had to give the Secretary of Defense the sad news: all on board the EC-121 had perished.¹²

The joint U.S.-Soviet SAR operation that unfolded over four days became a rare example of cooperation between traditional Cold War adversaries. The June

FIGURE 1
CHART SHOWING EC-121 CRASH SITE SOUTH OF VLADIVOSTOK



Source: *Washington Post*, 1969.

1969 issue of *Air Reservist* magazine, the official publication of the Air National Guard and Air Force Reserve, described them as “improbable allies.”¹³

With the passage of over fifty years since the North Korean downing of this EC-121 in the Sea of Japan, much has been written on the topic, both in books and in academic journals. But no works previous to this article have relied so heavily on declassified congressional reports, documents obtained through the Freedom of Information Act (FOIA), contemporaneous press reports, and the testimony of former Soviet participants, nor have others delved so deeply into the surprising role the Soviet navy played during this joint SAR operation.

This article tells the story of the EC-121 incident, with an emphasis on the participation of the Soviet navy. Those whom the authors interviewed for this article

FIGURE 2
FELIX GROMOV, SOVIET NAVY, AS PACIFIC FLEET CRUISER COMMANDER, CIRCA 1970s (INSET), AND IN 1992



Sources: Yuri Panachev and Sputnik Image Archive, respectively.

include three former members of the crew of *Vdokhnovennyi*, one of the three Soviet vessels that took part in the operation. Felix Gromov, the ship's executive officer, also provided a handwritten response to the authors' questions. Gromov, a lieutenant commander in 1969, later would be promoted to admiral and go on to become the commander in chief of the Russian navy (1992–97). Others interviewed include Chief Petty Officer (CPO) Georgy Kondratiyev, the foreman of the mine command of Combat Unit–3 (mines/torpedoes), and Yuri Panachev, a senior seaman. Also interviewed was Colonel Wayne Whitten, USMC (Ret.), who as a captain passed on to the Secretary of Defense the sad news of the EC-121 deaths.

THE GEOPOLITICAL SITUATION: THE COLD WAR

According to a declassified top secret UMBRA NSA report titled *The National Security Agency and the EC-121 Shootdown*, the North Korean MiGs that shot

down the EC-121 “represented the military forces of a small, hostile Communist nation . . . that itself was a Cold War creation.”¹⁴

The forces that collided on 15 April 1969—the United States Navy reconnaissance plane and the MIG-21s of the North Korean Air Force—were symbols of the Cold War that had developed following World War II. The EC-121 was a part of the Peacetime Aerial Reconnaissance Program (PARPRO) conducted [jointly] by the United States Navy and Air Force [USAF]. These programs were developed in the early 1950s as a way of providing intelligence on the Soviet Union and its Communist neighbors.¹⁵

The Soviet Union

Richard M. Nixon was a renowned Cold Warrior and the Soviet Union was his particular focus. According to an NSA report titled *American Cryptology during the Cold War*, within the NSA’s production organization fully 50 percent of the staff worked “the Soviet problem.”¹⁶ Whenever anything happened between the West and a Communist entity, the ever-present question was what role, if any, were the Soviets playing in the matter.

The Soviet Pacific Fleet. The United States conducted aerial reconnaissance to learn what it could about the Soviet navy’s submarine and surface forces. One focus of such attention was Vladivostok. Known historically as the “pearl of Russia on the shores of the Pacific,” Vladivostok hosted the headquarters of the Soviet Pacific Fleet, one of the four Soviet navy *flot* (fleets).¹⁷ According to a Central Intelligence Agency (CIA) National Intelligence Estimate (NIE) published a decade after the EC-121 incident, the Soviet Pacific Fleet was a large force made up primarily of submarines, surface ships, and aircraft. The submarine force consisted of more than a hundred submarines, of which thirty-two were ballistic-missile and seventy-eight were cruise-missile or torpedo-attack units.¹⁸ The surface fleet, the report said, consisted of thirty-five cruisers, destroyers, and Krivak-class missile frigates, in addition to numerous smaller naval craft. Nearly all units in the fleet were based in either Vladivostok or Petropavlovsk, the latter home to the nuclear submarine fleet at the secret Rybachiy base.¹⁹ An example of the Soviet Pacific Fleet’s activities: in 1972, it would send several cruise-missile-firing submarines and between five and ten surface combatants and auxiliary ships to respond to the U.S. mining of North Vietnamese ports during the Vietnam War.²⁰

With more relevance to the 1969 EC-121 downing, *Vdokhnovennyi*, a Project 56 Soviet navy destroyer, was part of a detachment of ships known as a “sea force.” Together with a missile cruiser, an antisubmarine ship, a submarine tender, one or two tankers, and a support vessel, *Vdokhnovennyi* sailed to the Indian Ocean for “operational service” (training) on 22 October 1968. Until then the ship had

remained at Vladivostok, its home port. When the sea force was directed to the Indian Ocean it became the second such detachment of Soviet ships to visit the area. According to Vladimir Dukel'sky, the former head of intelligence of the 10th Operative Squadron of the Pacific Fleet (OPESK), this group of ships was formed and sent into the Indian Ocean to prevent the Americans from "privatizing" the area.²¹

Seaman Panachev reported that while aboard *Vdokhnovennyi* he often "met" Americans in the Indian Ocean—"We had neither grudge nor rage against them." The Soviet navy, he said, was "quite powerful and diverse in those days." Off Seychelles, an island nation in the Indian Ocean, *Vdokhnovennyi* also met Soviet ships from both the Black Sea and Northern Fleets, Panachev said. "Our cruisers, destroyers, large anti-submarine ships, and submarines were everywhere and continuously watched [U.S.] aircraft carriers," Panachev said.²²

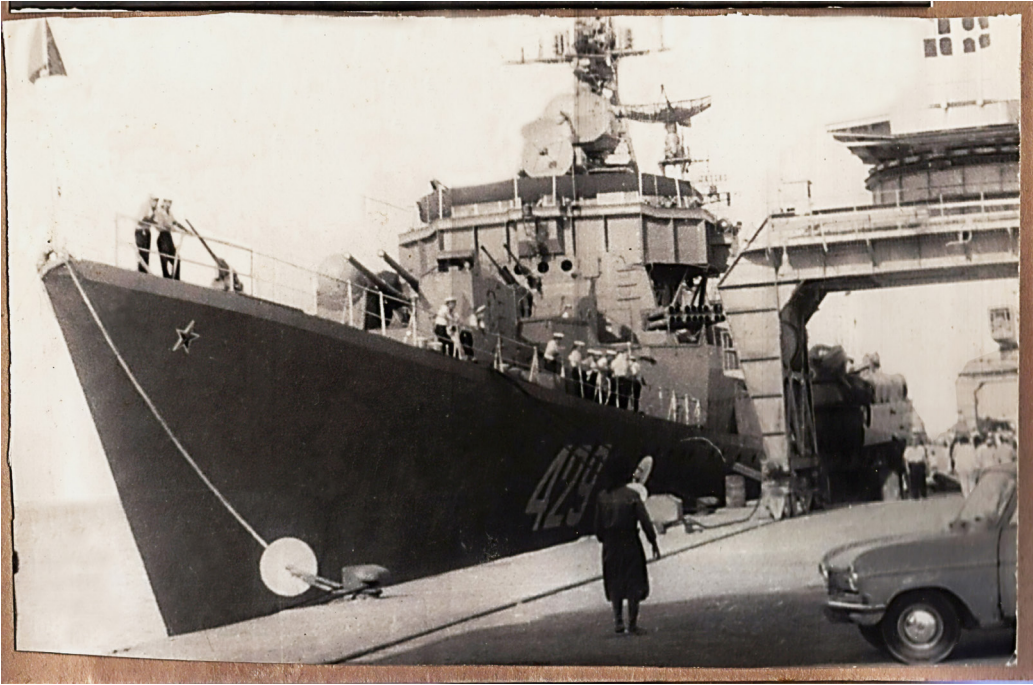
"We served this way, where they were, there we were. It's not like before now." By that Panachev meant that the situation today is not as it was during the Cold War. Back then, the Soviet navy opposed—and cursed—the American imperialists everywhere at sea, whereas today the sole superpower, America, does whatever it wants throughout the world. "I liked serving in the Navy," Panachev said. "I was on a combat ship, constantly in motion; we seldom stood near the moorage wall."²³

Following a period of training, but before *Vdokhnovennyi* arrived back at Vladivostok, its боевая служба (combat service) included several foreign port calls, including to Mombasa, Kenya; Aden, South Yemen; Al Hudaydah, North Yemen; Bandar 'Abbas, Iran; and Umm Qasr, Iraq (and by land to Basra). For example, *Vdokhnovennyi* was docked in North Yemen in early January 1969; the EC-121 was shot down about three months later. Had *Vdokhnovennyi* sailed directly from there to the Sea of Japan at the ship's top speed of thirty-eight knots, it would have taken a week or more.²⁴

According to Alexandr Rozin, a Russian expert and writer on topics that include the Soviet fleet, *Vdokhnovennyi*, and the EC-121 incident, this detachment of ships was due to return to Vladivostok in mid-March 1969. Later, however, the order was changed to apply only to *Vdokhnovennyi*, with the other vessels ordered to remain in the region; no reason was given for this decision.²⁵ So, on 15 March 1969, *Vdokhnovennyi* began moving toward Vladivostok, while the other ships of the detachment continued to visit various foreign ports. After sailing a total of 25,600 nautical miles, *Vdokhnovennyi* arrived back at Vladivostok on 4 April 1969—about ten days before the EC-121 incident.²⁶

The Soviet Union versus Aerial Reconnaissance. Over the decades that the United States conducted its aerial reconnaissance to learn about Soviet naval forces and their activities, it was commonplace for Soviet fighters to react to these peripheral reconnaissance missions, particularly in the vicinity of Vladivostok. The Russians

FIGURE 3
VDOKHNOVENNYI IN NORTH YEMEN



Source: Yuri Panachev.

often would send out fighters, in relays, that would pace the aircraft, staying between them and the Soviet coastline—usually without incident.²⁷ But in thirteen cases between 8 April 1950 and 10 March 1964, Soviet retaliation turned deadly when the Soviet fighters shot down U.S. reconnaissance planes. On 6 November 1951, for example, the U.S. Navy became the victim of Soviet aggression when a Lockheed P2V Neptune, with a crew of ten, was shot down over the Sea of Japan “somewhere off Vladivostok.”²⁸

Given the Soviets’ long history of using deadly force in retaliation against what they saw as intrusion into their airspace, might others—the North Koreans—have taken their cue, but not necessarily instructions, from the Soviets in the downing of an EC-121 reconnaissance plane?

Within this context of Cold War hostility and uncertainty, the joint Soviet-American SAR operation conducted after the downing of the EC-121 constitutes a stark contrast. When the Commander in Chief, Pacific (CINCPAC) ordered the destroyer USS *Henry W. Tucker* (DD 875) to rendezvous with *Vdokhnovennyi*, this was the first cooperative meeting of Soviet and American warships since the Cold War began at the close of World War II. Later, during a press conference ashore in which the captain and executive officer of *Tucker* answered questions from representatives of the world’s media—including ABC, CBS, NBC, and U.S.

wire services, as well as *Life* magazine and *Pacific Stars & Stripes*—the following “facts” came to light: *Tucker* was the first American ship under way to search for the EC-121, the first American ship to arrive on scene, the first to collect debris, the only ship to recover bodies, the only ship chosen to deliver bodies and consolidated aircraft debris to Sasebo, Japan—and the only ship to rendezvous peacefully with a Soviet destroyer in over twenty-five years.²⁹

North Korea

The Context: The Pueblo Incident. The EC-121 incident, which began in April 1969, came on the heels of the release of the crew of USS *Pueblo*. The *Pueblo* crisis, centered on the North Korean seizure of a USN reconnaissance vessel, had begun on 23 January 1968. Not since the British boarded USS *Chesapeake* off the coast of Virginia in 1807 had an American naval commander surrendered his ship in peacetime, but with *Pueblo* it happened again. USS *Pueblo* (AGER 2) was a lightly armed, 177-foot, *Banner*-class technical research ship with a crew of eighty-three officers and men. The North Koreans seized it in international waters.

About a week after the seizure of *Pueblo*, Semyon Kozyrev, the deputy minister of foreign affairs of the Soviet Union, met Robert Ford, the Canadian ambassador to the Soviet Union, at Kozyrev’s office in Moscow; two of Kozyrev’s subordinates also were present.³⁰ As recorded in a memorandum intended for distribution to Politburo members and candidates, Ford began by referring to their recent conversation concerning the North Korean seizure of *Pueblo*. According to Ford, the Soviet position vis-à-vis the *Pueblo* incident (if he understood it correctly) boiled down to four points: (1) the United States should not yield to emotion but instead should examine the issues associated with this incident in a calm, businesslike atmosphere; (2) the United States should abandon the threat to use force to settle the incident; (3) there should be direct talks about this issue between the Americans and North Koreans; and (4) it was necessary to eliminate the fever of propaganda and the campaign and uproar around discussion of the matter at the UN Security Council.³¹ Thus, representatives of the Soviet Union undertook to instruct the United States with regard to its interactions with North Korea.

After nearly a year of brutal internment, North Korea released the crew of *Pueblo* and the body of Petty Officer Duane Hodges, who as a twenty-one-year-old fireman had died when North Korean gunboats opened fire on the ship. The release followed a U.S. apology—an apology the U.S. government quickly disavowed. In Washington, Secretary of State D. Dean Rusk issued the following statement regarding *Pueblo*: “The men were released after long and difficult negotiations. The North Korean negotiator insisted from the beginning that the men would not be released unless the United States falsely confessed to espionage and to violations of North Korean territory and apologized for such alleged actions.”³²

During his 1968 presidential campaign, candidate Nixon described North Korea as a “fourth-rate power” and swore there never would be another “*Pueblo* incident.” Five months after his election, however, President Nixon faced his own North Korean crisis when the MiG-21s downed the EC-121 in the Sea of Japan. The shutdown of this Navy plane by one air-to-air missile (or perhaps two) took the lives of thirty-one Americans—thirty sailors and one Marine.³³

North Korea versus Aerial Reconnaissance. Well before the April 1969 EC-121 incident began, the Joint Chiefs of Staff (JCS) JRC in the Pentagon had decided that Asian Communist nations fell into a different category from those elsewhere—including the Soviet Union, despite its history of shooting down U.S. aircraft. As Dr. Thomas R. Johnson, an NSA historian, put it, “When one of them launched a fighter in reaction, which was rare, they meant business.”³⁴

By the middle of 1963, the JCS had implemented an elaborate White Wolf Advisory Warning Program to protect American aircraft flying reconnaissance missions, essentially worldwide. Then, in the mid-1960s, in response to what the JRC perceived as an elevated security threat, new conditions were inserted into the plan. Of these, Condition 3, which required a heightened state of alert aboard the aircraft and diversion to a fallback orbit farther off the coast, would be initiated any time a hostile fighter was seen headed over water within one hundred nautical miles of the mission. Should a fighter come within fifty nautical miles, Condition 5 was initiated, which required an automatic abort.³⁵

Following the institution of these new conditions the United States lost no missions to the People’s Republic of China, North Korea, or North Vietnam—until the April 1969 downing. At the time of the incident, USN and USAF signal intelligence (SIGINT) reconnaissance missions were frequent occurrences off the North Korean coast; for example, from January 1969 through the April incident, nearly two hundred similar missions—averaging about two a day—were flown. EC-121 missions were so commonplace, in fact, that they were categorized as “low risk.”³⁶

However, not long before this particular EC-121 mission began, General Charles H. Bonesteel III, the commander of U.S. Forces in Korea, had warned of unusually vehement language and surly protests by the North Koreans at Panmunjom.³⁷ The warning was passed on to the relevant squadron, which was advised to be extracautious. But the North Koreans appeared to suffer perpetually through profound mood swings at Armistice Commission meetings, so neither the Seventh Fleet nor CINCPAC changed the risk category from “hostile action unlikely.”³⁸ Besides, it was thought that Conditions 3 and 5 would cover any potential problems that might arise. Plus, there had been relatively few incidents since the White Wolf warning program was instituted in the early 1960s. However, according to a senior NSA official who was involved with White Wolf, the Navy had been an “unenthusiastic” player in the program.³⁹

The EC-121 was one of the most frequently used reconnaissance platforms in this area. While the aircraft's original configuration was designed to haul passengers, the EC-121 variant incorporated nearly six tons of sophisticated ELINT equipment in addition to its radome.⁴⁰ The EC-121 was larger than its sister collector, the USN EA-3B Skywarrior jet aircraft, and normally carried two crews that worked in relays, enabling it to remain on station for approximately eight hours. So while the large, slow, lumbering aircraft had become the easiest target in the Navy's aviation inventory, it remained the aircraft of choice for fleet support.⁴¹

Previous to the incident, both J. Strom Thurmond (R-SC), the ranking member of the Senate Armed Services Committee, and Robert Hotz, former editor of *Aviation Week*, had referred to the EC-121 as a "flying *Pueblo*"—vulnerable to hostile action. In the aftermath of the April 1969 loss, Hotz criticized that, once again, the only excuse the U.S. Navy could offer was that "it had never happened before," and he described that response as "a tragic repeat of their pitiful wheeze after the *Pueblo* capture."⁴²

In any case, everything changed that day in April, when, for the second time in fifteen months, a small, isolated North Korea attacked the U.S. military, this time by shooting down an EC-121 aircraft.⁴³

The Soviet Union and North Korea

At the authors' request, a top secret portion of an NSA report on cryptology during the Cold War was declassified recently, revealing new details on the EC-121's flight path and the failure to issue an advisory warning. This new information shows, for example, that the EC-121 was illuminated by both Soviet and North Korean radars, but the North Korean detections were sporadic and, when compared with Soviet tracking, inaccurate. Since Soviet radar was reflecting (tracking) the EC-121 prior to the disaster, the Russians must have seen the plane disappear from their radar screens.⁴⁴

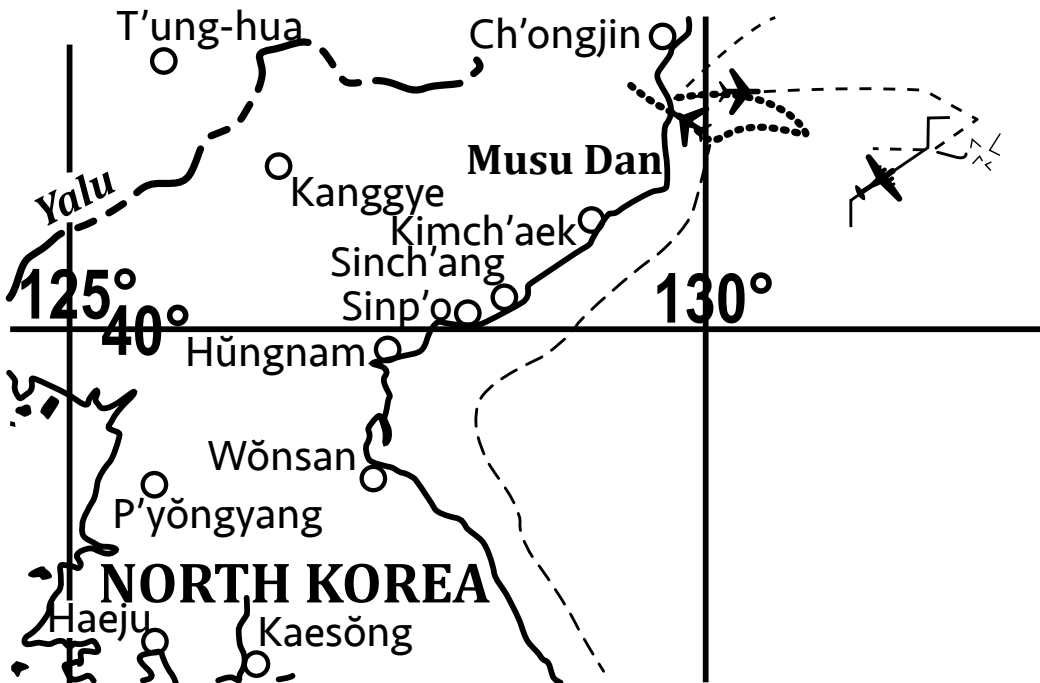
At the time of the incident, the USAF base at Osan, South Korea, was "flight-following" the EC-121.⁴⁵ The tracking of this USN spy plane, which the NSA report says began at 10:00 AM Korean local time, was "initially based on Soviet reflections."⁴⁶ Also according to this newly declassified information, the closest the EC-121 came to either North Korea or the Soviet Union was at 12:04 PM, when the So'ndok tracking facility showed it to be thirty-eight nautical miles off the North Korean coast. However, since the Soviet facilities showed it to be between eighty-five and one hundred nautical miles off the coast, Osan, the station that had primary advisory warning responsibility, declined to issue a Condition 4, which would have been required had the EC-121 come within eighty nautical miles of the Soviet coast. Also newly released is the NSA version of the track of the EC-121, which clearly shows the plane over international waters when it was shot down.⁴⁷

Why did the NSA believe that North Korean radar was inferior to what the Soviets were using? According to William Hickey, a USN cryptologic veteran, although the North Koreans probably obtained most of their radar systems from the Chinese or the Russians, they would have represented an older technology than the Soviets were using at that time. “You don’t want to sell your best stuff to anyone, even your allies,” Hickey said. The North Korean radar was inferior to that of the Soviets in a number of factors, including its age and power stability, which would impact frequency stability, timing errors, and more. As a result, the North Korean signal might have been “jittery,” whereas the Soviet systems were known to be more reliable and accurate.⁴⁸ Thus, while the North Koreans may have been operating on poor information, the Soviets knew better.

THE FLIGHT AND THE DOWNING

The EC-121M was from the fleet air reconnaissance squadron designated VQ-1. It was commanded by Lieutenant Commander James H. Overstreet, USN, and carried thirty-one men, comprising the two full working crews and some excess members in training status.⁴⁹ According to *Air Reservist*, the flight (call sign Deep Sea 129) took off from Naval Air Station Atsugi, Japan, about thirty miles from

**FIGURE 4
 FLIGHT PATH OF EC-121**



Source: NSA.

Tokyo, on 15 April 1969 at 6:50 AM (local time), on what should have been a routine BEGGAR SHADOW reconnaissance mission over the Sea of Japan.⁵⁰

New details of the EC-121 incident came to light only after the declassification in 2013 of an undated Naval Scientific and Tech Group, Far East (NSTFE) intelligence report; meanwhile, other details, including the official track of the ill-fated spy plane, remained classified until more recently.⁵¹ However, it is established that at roughly 1:47 PM (local time) the plane was shot down by a pair of North Korean MiG-21 fighters off the North Korean coast. After the later recovery of the wreckage from the Sea of Japan, a joint USN-USAF investigative team would conclude that the EC-121 had sustained major structural damage from the detonation of a fragmenting warhead from one air-to-air missile, or possibly two.⁵²

The pilot credited with the kill was Kim Gin-ok, recognized in North Korea as the nation's top fighter ace; during the Korean War, Kim is said to have personally downed eleven American aircraft, including three B-29 Superfortress bombers.⁵³ North Korean defense minister General Choi Hyun hailed the downing of the EC-121 as a "heroic feat."⁵⁴

The first information concerning the possible plight of the EC-121 was obtained by the duty officer of VQ-1 when that command intercepted and copied a friendly warning—its origin unidentified in the record—that hostile aircraft were approaching the EC-121. The commanding officer of VQ-1 contacted Fuchu Air Station, Japan, for any communications from the mission aircraft and requested that personnel at the base check all sources for any message that may have caused the EC-121 to abort its mission. VQ-1 made numerous calls for more than half an hour, with negative results.⁵⁵

When VQ-1 lost all effective operational control over the EC-121, it appeared that Army, Air Force, and Navy units monitoring the flight must have assumed operational control of the aircraft—and if they did not, no one did. Thus, when these classified military units subsequently directed warning messages to the EC-121 aircraft, VQ-1 was never included as an addressee on any of those messages.⁵⁶ So just before 1:00 AM (eastern standard time)—about an hour after the apparent downing of the EC-121—the commanding officer of VQ-1 sent a Flash message to all appropriate units in the area requesting information on the mission aircraft. Shortly thereafter, VQ-1 received a copy of a Critic message sent by the USAF Security Service that indicated the possible shutdown of the EC-121 over the Sea of Japan.⁵⁷ The USN plane was listed as missing at 2:00 PM that afternoon.⁵⁸

At NSA headquarters at Fort Meade, Maryland, the EC-121 downing caused a crisis situation. On the day of the shutdown, the NSA declared a SIGINT alert code-named BRAVO HANGAR, which it maintained for the remainder of the month.⁵⁹

Within seventeen minutes after receiving an alert, the 314th Air Division at Osan Air Base, South Korea, scrambled fighters. Yet no air unit initiated a SAR operation for over an hour after the shootdown.⁶⁰ And when the first U.S. aircraft finally reached the scene, Soviet ships already were in the area. But instead of acting aggressively toward the arriving U.S. aircraft, these Soviet ships invited cooperation with their long-standing Cold War adversaries.

THE U.S.-SOVIET SAR OPERATION

Surface units of the U.S. Navy responded immediately to the downing of the American aircraft; the commander in chief of the Seventh Fleet ordered USS *Tucker* and USS *Dale* (DLG 19) to get under way as soon as possible and proceed to the Sea of Japan to search for the downed plane. However, both ships—which happened to be nested together in berth 6 at Sasebo, Japan—were delayed in getting under way. *Tucker*, which needed three hours to light off boilers and make sufficient steam to get under way, executed an emergency recall of its crew. *Dale*, with major equipment out for repair at the ship-repair facility at Sasebo, estimated it would need ten to twelve hours to get underway; however, it beat its projection, managing to get under way only an hour behind *Tucker*.⁶¹

In contrast, at the time of the incident a Soviet Ugra-class Project 1886 submarine tender (hull number 945) and two Foxtrot-class submarines already were at sea and in the immediate area of the crash. Next, three large Soviet vessels moved in: *Vdokhnovennyi* (Inspiration), a Kotlin-class destroyer, hull number 429; *Steregushchiy* (Vigilant), a large antisubmarine ship, No. 580; and later *Dalnevostochnyi Komsomolets* (Far East Komsomol), No. 427.⁶² Seas in the area were described as moderate, running about four feet. The air temperature was estimated at 42 to 48 degrees Fahrenheit (5–9 degrees Celsius), with the sea slightly warmer.⁶³

Once the three large Soviet surface vessels were in the vicinity, Washington appealed to the Soviet government for them to help locate any survivors. When U.S. ambassador Jacob D. Beam in Moscow asked Georgy M. Korniyenko, head of the U.S. section of the Soviet Foreign Ministry, for assistance, Korniyenko said he had no knowledge of the incident or the missing aircraft but would inform his government of the American request.⁶⁴

In Washington, Secretary of State William P. Rogers called Soviet ambassador Anatoly F. Dobrynin into his office shortly after noon (local time) to discuss the shootdown. Rogers stated that the American plane had not violated North Korean airspace and that the United States was unsure, at that point, whether there were any survivors. Rogers then repeated the U.S. request, expressed earlier in Moscow, that the Soviet ships in the shootdown area assist in the search and rescue.⁶⁵ At the time he was unaware that Soviet ships already had begun retrieving EC-121 debris from the sea.

In line with the U.S. desire for Soviet aid, the JCS directed U.S. forces operating in the Sea of Japan not to interfere with rescue attempts by other ships, regardless of nationality. In addition, the Fifth Air Force was ordered not to interfere with any Soviet aircraft in the vicinity of the shootdown.⁶⁶

Meanwhile, back at the crash scene, American aircraft established radio contact with *Steregushchiy*. The ship revealed that it already had picked up pieces of the plane, but there was no sign of survivors. *Steregushchiy* personnel granted permission for an American plane to fly low over their ship to photograph the debris. U.S. aircraft located some additional debris and dropped a smoke signal to mark the spot, then guided one of the Soviet destroyers to the marker, where it put small boats in the water to recover some of the debris. Sadly, while these boats took aboard the only two bodies ever to be recovered, they found no survivors.⁶⁷

To establish communications, a USAF survival radio—a URC-10—was dropped to the Soviet ships. In addition to the radio, a U.S. Army sergeant who was a Russian linguist was put aboard one of the aircraft dispatched to the search area.⁶⁸

According to a later Pentagon statement, the air and sea search for survivors began in an area centered about seventy-five miles off North Korea in the Sea of Japan. A Navy search plane sighted debris that it said “could be associated with the missing aircraft” about 120 miles southeast of Chŏngjin, North Korea; however, the crew of the search plane did not report any evidence of survivors. The Department of Defense report stated that a Navy “patrol plane” had guided two Soviet destroyers that already were on scene in the area where the debris was spotted. At the time, there was no report of the ships’ findings.⁶⁹

In addition to the U.S. Air Force and Navy, the USAF Reserve figured prominently in these SAR activities. The members of the 305th Aerospace Rescue and Recovery Service (ARRS) were reservists from Selfridge Air Force Base, Michigan; the unit had been mobilized during the 1968 *Pueblo* incident. In June 1969, in a well-deserved expression of self-praise on behalf of the reserves, *Air Reservist* magazine would mention how the 305th had played a “key role” in the EC-121 matter, which it said had added “at least one instance of heroism to their record.” Flying Boeing HC-97 rescue aircraft, two aircrews of the 305th took off from Naha, Okinawa, in the early morning hours of 16 April. They flew to the area of the air-sea search, approximately eighty-three miles southeast of Chŏngjin and seventy-two miles due east of the North Korean coast, where they relieved a C-130 Hercules (a medium-range transport plane) of the 36th ARRS, based in Tachikawa, Japan, about twenty miles west of Tokyo.⁷⁰

On the morning of 17 April, two days after the shootdown, the waters of the Sea of Japan yielded the bodies of only two crewmen, that of Lieutenant (junior grade) Joseph R. Ribar and Aviation Electronics Technician First Class Richard E.

Sweeney. Their bodies were recovered seventeen nautical miles north of the general incident area. Throughout the day, winds and currents continued to cause the debris to drift toward the North Korean and Soviet coasts. The Soviets again were requested to pick up any bodies or debris within twenty nautical miles of the coastlines—areas that were off-limits to American craft. Search operations by the two U.S. destroyers, a C-130, a P-3, and four F-106s from the Fifth Air Force continued throughout the day.⁷¹

At 10:02 PM (local) on 19 April, at the end of a fourth day of searching, the JCS terminated SAR operations, with twenty-nine of the thirty-one crewmen unaccounted for.⁷² Combat air patrols continued over the USN surface units until the following day, when the ships passed south of the thirty-eighth parallel.⁷³

FIRSTHAND ACCOUNTS

American Accounts

For the men of the 36th ARRS, a period of frantic activity began with the ringing of the scramble alarm. According to an Associated Press (AP) report out of Tachikawa, the plane was reported missing at 2:00 PM. “At 3:25 the horn blew and at 3:41 we were airborne,” said the thirty-four-year-old pilot, Air Force major George W. Hillyer. First Lieutenant Roy B. Petit, who majored in Russian studies, the copilot of the first C-130 to take off, said he grabbed his oxygen mask and raced to his aircraft with other crewmembers. Moments later, Major Hillyer arrived from a briefing in the control center.⁷⁴

The crew of the C-130 knew only that an EC-121 was missing in the Sea of Japan. They were told that it had gone down approximately ninety nautical miles southeast of the North Korean port of Chŏngjin; however, Major Hillyer later reported that when he spotted the wreckage it was perhaps another forty-five nautical miles east of that position. When Hillyer’s plane reached the EC-121’s last known position, the sun was about to set. There was no sign of survivors or aircraft debris.

At one point, however, Major Hillyer and Lieutenant Petit both thought they saw two or three dim, steady lights floating on the waves. At 12:30 the next morning, with their plane running low on fuel, they were about to head to Osan for rest and refueling when they again saw lights on the water and realized they were the searchlights of a ship. Hillyer had the feeling it was a Soviet ship but had no idea what it was doing or whether it considered his presence unfriendly. However, “They were very friendly,” Captain Thomas van Winkle, the pilot of a second C-130, said in an interview. “I was preoccupied with finding survivors. It never occurred to me that these people would be anything but friendly. They were obviously trying to help us in this catastrophe.” Major Hillyer and Lieutenant Petit, also present in the interview, nodded in agreement with van Winkle’s words.

The next day, Captain van Winkle positively identified and got in touch with the two Soviet destroyers in the search area. From the air, van Winkle saw orange and white debris scattered over a wide area, so he dropped smoke flares to guide the searching Soviet destroyers. He also dropped a survival radio to one of the Soviet ships, but they could not communicate satisfactorily with it. After dropping the radio, van Winkle recalled that Lieutenant Petit, then still resting at Osan, spoke Russian, so he urged that a C-130 return with Petit aboard.

When the press later interviewed Petit, he said he had been concentrating so heavily over the previous several months on learning to speak Japanese that at first only Japanese words came to mind when he was again on scene. From his C-130, Petit called down to the Soviet destroyer, in Russian: “Ship No. 580 [the large antisubmarine ship *Steregushchiy*]. This is No. 963. Do you understand?” He repeated that same message five or six times. Eventually an answer came in flat, expressionless Russian: “Greetings, I understand you.”

Then, in a voice expressing urgency, Petit asked, “Have you seen any survivors? Have you seen any people?” This was followed by a disappointing response: “No, we have not seen any. Have you?” When Petit responded in the negative, the conversation turned to aircraft debris, which was seen floating all about the ship. When the Americans asked the Soviet destroyer whether it had taken any aircraft parts aboard, a Russian voice answered yes. When Petit asked the Russians whether they would mind if his plane dropped down to have a better look at the debris on deck, the Russian voice said it would be okay. “We will come down low over the ship. Please don’t fear,” Petit said. The reply came back: “That’s fine.” What the American pilot described as a “cordial” conversation followed. When Major Hillyer brought the plane down to three hundred feet and made two or three passes near the ship, the Americans sighted a wheel, a ladder, and other aircraft parts on the deck of the Soviet ship. He then flew on to the other Soviet ship, the destroyer *Vdokhnovenniy*, and after a similar conversation dropped a radio to that ship as well.

When an American pilot asked *Vdokhnovenniy* what parts of the EC-121 it had aboard, the ship answered with the following list: a rubber life raft (no size given), cigarette packs, imperial pencils, an aircraft seat, parts of wood, a man’s coat (no name), and parts of the aircraft. All answers from *Vdokhnovenniy* were given in Russian. “Looking up names of these articles in Russian dictionary (our aircraft doing this)—will pass [on] this information later,” the American pilot said. Mysteriously, when the American asked whether the ships in the crash area the night before had been theirs, the Russians broke off communications. “Up until that point, communications were clear; it was a definite break off.” (This note came from the “scratch” desk log of VQ-1, which recorded events as they unfolded.)⁷⁵ When the Soviet destroyer provided the list of items that had been picked out of

the water, the Americans were unaware that *Vdokhnovennyyi* either soon would transfer a load of EC-121 debris to Vladivostok or had just done so.

When the 305th arrived, the HC-97 crew, commanded by Major Michael J. McLeod, took over as on-scene controllers, while another aircraft, flown by Captain Robert J. McClear, with Major Howard D. Coffman as backup pilot, began to fly a search pattern. At sundown, the searchers were joined by the U.S. destroyer *Tucker*. Both aircrews reported spotting pieces of debris. They remained in the vicinity throughout the night, controlling the efforts of other search aircraft and vessels while dropping flares to illuminate the area. After being out on the mission for more than fifteen hours, both aircrews were relieved by other rescue crews.⁷⁶ The Fifth Air Force Joint Rescue Coordination Center stated that a total of twenty-six aircraft would be operating in the search area by daylight.⁷⁷

On 19 April, at Tachikawa, Japan, Second Lieutenant Ronald Adinolfi of the 36th ARRS told reporters he had flown a mission in which his C-130 photographed the transfer of EC-121 debris from Soviet to American warships. As Adinolfi explained, after *Vdokhnovennyyi* gave Lieutenant Petit a list of the items it had picked up, Captain van Winkle and his crew received words of condolence from the Russians.⁷⁸ Takashi Oka, the *New York Times* Tokyo bureau chief, and the AP added further details.

As the Americans' C-130 circled overhead its pilot received a message in heavily accented but distinct English that said: "Soviet Destroyer 429 [*Vdokhnovennyyi*], Red Banner Pacific Fleet, sends condolences in connection with the loss of your aircraft." No explanation was given for the phrase "Red Banner."⁷⁹ The message was repeated several times as the Soviet destroyer steamed in the Sea of Japan, 150 miles from its home port of Vladivostok, toward its rendezvous with *Tucker*.⁸⁰

According to Adinolfi, at the time of the SAR operation, there initially were some nervous reactions, apparently because the Russians thought the USN men planned on coming aboard their ship. Eventually, however, the Americans got the Russians to understand that the transfer of EC-121 debris, from *Vdokhnovennyyi* to *Tucker*, could be accomplished using only the ships' small boats.

At 4:00 PM on 18 April, at the end of three days of search, *Vdokhnovennyyi* transferred the debris its crew had accumulated to *Tucker*, which already had taken aboard the bodies of the two EC-121 crewmen. Included in the transfer was a twenty-man lifeboat, three leather jackets, a parachute, two exposure suits, and various aircraft parts. Adinolfi noted that the Russians even returned the small radios dropped to them that had enabled communications between Soviet ships and U.S. aircraft. The transfer via whaleboats required only eight minutes or so. Then the Soviet ship turned northward and disappeared over the horizon. When *Vdokhnovennyyi* reappeared, it again rendezvoused with its American counterpart, *Tucker*.

When the SAR operation ended, *Tucker* proceeded to Sasebo, Japan, with the bodies of the two EC-121 crewmen, plus over five hundred pounds of debris. A gunner's mate on *Tucker* still remembers the details of his ship's participation in the operation. On the afternoon of the shootdown his ship had just pulled into Sasebo for liberty, but after crewmen had been on the beach for less than an hour the shore patrol ordered them back to the ship. "We got steam up and went all ahead flank for the crash site. Surface searches all the next day, the coldest watch I've ever stood. Recovered a lot of pieces of the plane, full of bullet holes. I helped bring the bodies aboard and carry them below, and I was in the dress honor guard as we brought the caskets ashore back in Sasebo." Then he said that they "went back to swapping rounds with the shore batteries in Haiphong Harbor. It was just more of the war to us."⁸¹

Soviet Accounts

Interesting and largely overlooked in the EC-121 incident are the details of this joint U.S.-Soviet SAR operation from the point of view of the Soviet sailors and officers who took part. The following is a rare look into this four-day-long cooperative effort between traditional Cold War adversaries, including firsthand accounts by three former crewmen of the Soviet destroyer *Vdokhnovenniy*.

In August 1992, Admiral Felix Gromov would be made commander in chief of the Russian navy.⁸² But in 1969, as a lieutenant commander, Gromov was serving as executive officer of *Vdokhnovenniy*, and years later he provided handwritten answers (in Russian) to the authors' questions on the events in question. Yuri Panachev, who served in the underwater weapons branch of the ship during Gromov's tenure, recalls him fondly. "[I'll] always remember the [ship's] Executive Officer with great warmth . . . good man."⁸³

As Admiral Gromov explained (in his letter to one of the authors), the Soviet Pacific fleet command held *Vdokhnovenniy's* operational service in high regard. The ship's main task was surveillance over the "potential enemy," a "show of flag," and "friendship visits" to the ports of friendly countries. "Of course, we [also] closely monitored the world atmosphere in connection with the *Pueblo* situation," Gromov wrote. After *Vdokhnovenniy* completed its mission pursuant to the downing of the EC-121, the crew received a short rest before returning to home port.⁸⁴

Panachev, a senior seaman, and Gromov, the ship's executive officer, recall certain details of the incident differently. For example, was *Vdokhnovenniy* at sea when the EC-121 was shot down? Panachev and Kondratiyev said yes. Did *Vdokhnovenniy's* crew recover classified materials from the wreckage of the EC-121 but fail to return them to the Americans? Panachev was unsure; Gromov said yes. The following are Admiral Gromov's closing remarks.

We were put on combat alert and, as the most combat-capable ship, ordered to be the first sent to the place of downing. The search task and approximate coordinates

were only assigned at sea. Arriving in the region, we started the search and found documents, body remains, and details of the plane's internal parts. We brought aboard everything we could during daylight hours. Various documents were there. As night approached, we rapidly got to Vladivostok, turned the documents over at staff headquarters, and just as rapidly returned to the search zone. Yes, during [our prior] service, our ships confronted the Americans all the time—even collisions took place—but we, believing that relations had to be equal, couldn't afford to have the Americans dominate. And the Soviet Navy succeeded in doing so. [Owing to the mission's classified nature,] [l]ikely, it is all that I can say on your questions.⁸⁵

In 2008, two sailors from the Soviet destroyer *Vdokhnovennyyi*, CPO Georgy Kondratiyev and Yuri Panachev, described their roles in the U.S.-Soviet cooperative salvage effort.⁸⁶ Their comments came in response to a request from a naval club in Saint Petersburg, Russia's second-largest city, which had received a letter from American navy veterans who were attempting to locate Russian sailors who had taken part in the search for EC-121 debris.

At the time of the EC-121 incident, Kondratiyev said, his ship was conducting combat training missions in the Sea of Japan. Then suddenly it was announced that *Vdokhnovennyyi* was going to begin searching for a crashed American plane. As he recalled, the ship arrived in the search area during the morning hours. Since American ships were "absent nearby," an agreement was reached between the Soviet and U.S. commands for the Soviet ships to assist in the search for plane debris while American planes—a Neptune (a Lockheed P-2) and an Orion (a Lockheed P-3)—flew over the area believed to be the crash site. According to a USN spokesman, it was a USN P-3 patrol plane that guided the Soviet destroyers to the area of the debris.⁸⁷

Kondratiyev said that before the search began the Americans had dropped portable transmitters into the water for coordinating the search from the air. Meanwhile, *Vdokhnovennyyi* put a motorboat and a rowboat in the water. Kondratiyev, a rower on the ship's rowboat crew, said he "participated personally in the search and gathering [of] plane remains." Nearby, *Steregushchiy* also searched; Kondratiyev said he could not recall the name of the other ship since it was a missile antisubmarine ship and their naval units were stationed at different piers in the Vladivostok region.⁸⁸

Kondratiyev then described the range of debris retrieved from the sea. "We picked up all floating debris [and placed it into our motorboat]: logbooks, clothes, an inflatable raft, lifejackets, spare radio parts wrapped in polyethylene, plastic bags with some [unknown] powder, [and] pieces of hull." As Kondratiyev recalls, "Americans showed [us] the area where most of the debris gathered. Our command informed the Americans on search results. The search continued all day long."⁸⁹

As Kondratiyev recalls, *Tucker* was to rendezvous with his ship to receive the debris. That evening, however, when *Tucker* arrived, an order was issued to return to Vladivostok, urgently. “The Americans followed us up to our territorial waters,” Kondratiyev said, “not understanding our ‘getaway’ as we, ourselves, did not.” Only in Vladivostok, he said, was the crew told that North Korea had downed a reconnaissance aircraft with thirty-one men aboard. All the debris was taken out for examination at night; what they decided to hand over to the Americans (to determine the cause of the “accident”) was delivered the next morning. Kondratiyev’s words, however, contradict what Panachev and Gromov have said; namely, that the crew was told about the incident before heading to the search area. Some fifty years after the event, Kondratiyev may have been confused about some details.⁹⁰

Later that same day, Kondratiyev’s ship, the destroyer *Vdokhnovennyyi*, returned to the search area, where the items of debris were to be passed to the Americans. “At the rendezvous point,” Kondratiyev said, “our ships stood board-and-board by right sides, [and the Soviet crewmen were] piped over the side, as motorboats were set into the water.” Kondratiyev said there were four or five sailors, plus an officer interpreter, in each whaleboat. The recovered items then were transferred to the American motorboat.⁹¹

Senior seaman Yuri Panachev, from Yuzhnoukrainsk, Ukraine, who also served in the crew of *Vdokhnovennyyi*, later provided his firsthand recollections. After he left the service, Panachev said he studied medicine and became a physician. His medical training allowed him to identify later the body parts pulled from the water; at the time of the incident, however, Panachev said he only knew that they were human remains.⁹²

Panachev said his battle station was located at the stern of the ship. Among his duties as a senior electrician, Panachev maintained the rocket-assisted bomb launcher’s electrical system. Regarding the North Korean downing of the EC-121, Panachev also recalled “picking up debris of an American plane.” He said that each iteration always began the same way: “With the shrill ring of the alarm bells, ‘Stand by, General Quarters!!!’”⁹³

At the time of the incident, Panachev said his ship had been at sea for a few weeks—“All was as usual: a watch, rest, maintenance work, cleaning. . . . It was boring, but necessary. The sea was growing stormy a bit, but no one worried too much about this fact; a long ocean voyage was behind us, stretching . . . from Vladivostok to Africa!”⁹⁴

After supper, Panachev began standing watch at his battle station in the fourteenth compartment, near the aft rocket launcher. After examining the equipment, Panachev sat in his chair, put the earphone helmet on, and had just begun reporting readiness to the main control room when “the so-loved alarm gongs

rang.” Surely, it was a call to military service, he thought. “I assumed that a military training exercise was starting, [so] I prepared to receive commands, but the earphone helmet kept silent. The ship stopped and then dashed forward.”⁹⁵

After four hours the watch changed and Panachev went to bed. The next morning, he woke up to silence, not knowing where the destroyer had rushed to. Panachev recalled American planes dropping something red into the water by parachute, which turned out to be a portable transmitter. “It was brought to the [main control room] immediately,” he said.⁹⁶

Panachev said his BCh-3 (Combat Unit-3) was responsible for the lowering of the working boat (located on the port side amidships) into the water.⁹⁷ The crewmen then climbed down into the boat by storm ladder. “There were five of us and an officer,” he said. But the men were not given instructions until after the whaleboat had left the destroyer; at that point, the officer explained the tasks the men were to perform, which were to pick up everything floating on the sea surface and check attentively whether men were in the water.⁹⁸

No debris was spotted at first. The men then heard an odd sound that surprised them—a sound that appeared to come from tiny hammers striking the side of the boat. At first glance, it appeared the “hammers” were in fact a large mass of shattered glass bottles. But once the men began picking up the glass from the surface of the water with a skimmer, closer examination revealed that it actually consisted of the shattered remnants of radio vacuum tubes off the U.S. spy plane. The men placed the glass fragments into buckets.⁹⁹

Nothing else was seen on the water until they spotted a piece of EC-121 fuselage, which Panachev estimated to be approximately 2 by 1.5 meters in size; but he found it not to be too heavy, owing to its honeycomb construction. Later, a lot more debris began to pop up, including numerous thick books whose pages were filled with figures—presumably classified material. After the men loaded up their motorboat with debris they returned to their ship.¹⁰⁰

When their boat got under way again, the men were ordered to pick up “journals”—entire publications—that had floated to the surface. Other items retrieved included aircraft covering (notably inner covering), greenish in color, that was said to resemble a passenger car seat cover. There was so much of it, Panachev said, that it filled half the motorboat. The boatswain, Warrant Officer Kolosov, whom Panachev described as a “practical person,” said everything picked up would be useful—and he was right; the covering, about 5 mm thick, later was used to line stools and cover lockers inside their ship.¹⁰¹

The men also pulled human remains out of the water, undoubtedly those of the crew of the EC-121—the inner organs of the abdomen (small bowel, a part of the large intestine, and a part of the liver with stomach)—which they placed in a small sack. Around lunchtime, a command was issued to hoist the motorboat

and rowboat into the ship, alarm bells rang, and *Vdokhnovennyi* rushed off (to Vladivostok, as the men found out later).¹⁰²

When the ship arrived in port that evening, Panachev said his ship was moored stern to at a pier to which they never had been before. At daybreak, Combat Unit-3 began off-loading the debris. Before arriving at Vladivostok, with the debris already wrapped in polyethylene, the executive officer of *Vdokhnovennyi* (Gromov) explained the next part of their mission to the crew over the intercom—with words to the effect that “we are going to a rendezvous with an American destroyer to pass the found plane fragments, so be vigilant.” Then the *zampolit*, the Communist Party official aboard the ship, added that “the enemy was crafty and very capable of provocation, but he didn’t clarify which one [i.e., specify the Americans]. Well, yes; we did not know this!” Panachev said sarcastically.¹⁰³

FIGURE 5
USN SMALL BOATS APPROACH THE SOVIET RESCUE AND SALVAGE TEAM, WITH TUCKER IN THE BACKGROUND



Source: Yuri Panachev, via *The Tin Can Sailor*.

When *Vdokhnovennyi* reached the rendezvous point, the American destroyer already was waiting around for them. “We stared at her severely,” Panachev said. “Here he is, the visible enemy!” The Soviets then set a motorboat back into the water and began loading the collected debris into it. When they got under way, they imagined passing the load to the Americans: “So rugged and toothless enemies will sail now.”¹⁰⁴

Just then, Panachev said, “a motorboat popped out from behind the American destroyer’s aft and headed towards us. We moved slowly.” But instead of “the enemy,” he said that a light, swift motorboat with flag flying approached, with some “joyful Americans” aboard. “The Americans—young, smiling guys—were telling us something and waving. Our brains went numb, really. They were the same as us—tense anxiety disappeared immediately. I began taking photos, forgetting about the debris. Someone from their side gave the order. Stretching out their arms to take the load, we handed them all [over].”¹⁰⁵

As CPO Kondratiyev recalls, salvage operations ended with a courteous parting of the ways, when a USN officer thanked the Soviet command for assistance. After exchanging a few words, he handed a butane cigarette lighter in its case to the Russian interpreter, plus two more lighters to be passed along to the Soviet ship’s commanding and executive officers. Kondratiyev said he was presented with a bunch of *Playboy* magazines—which the *zampolit* confiscated immediately after Kondratiyev’s return to the ship. Kondratiyev also emphasized that no untoward incidents took place between the U.S. and Soviet motorboats.¹⁰⁶

RESPONSES

During the immediate aftermath of the April 1969 downing of the EC-121 and what followed, the incident was viewed through the prism of the Cold War. The passage of time, however, brought additional information forward. In the years since, greater access to additional records and documents, as well as accounts by those who experienced the incident firsthand, has clarified some of the events; however, some questions remain—as do differing interpretations of those events.

North Korea

Suffice it to say, North Korea made no contribution to the SAR effort its actions had made necessary; on the other hand, neither did it interfere. Although no North Korean ships were sighted during the joint SAR operation, Soviet sailor Yuri Panachev recalls that two North Korean MiGs flew over at low altitude. “They dipped their wings [mockingly] and disappeared.” Someone shouted that they were Korean aircraft, Panachev said.¹⁰⁷ What a shock it must have been for those North Korean pilots to witness their supposed friends (the Russians) working cooperatively with their sworn enemies (the Americans).

Four days after the search came to a halt, word reached Washington of a statement from Pyongyang that suggested North Korea might shoot down additional

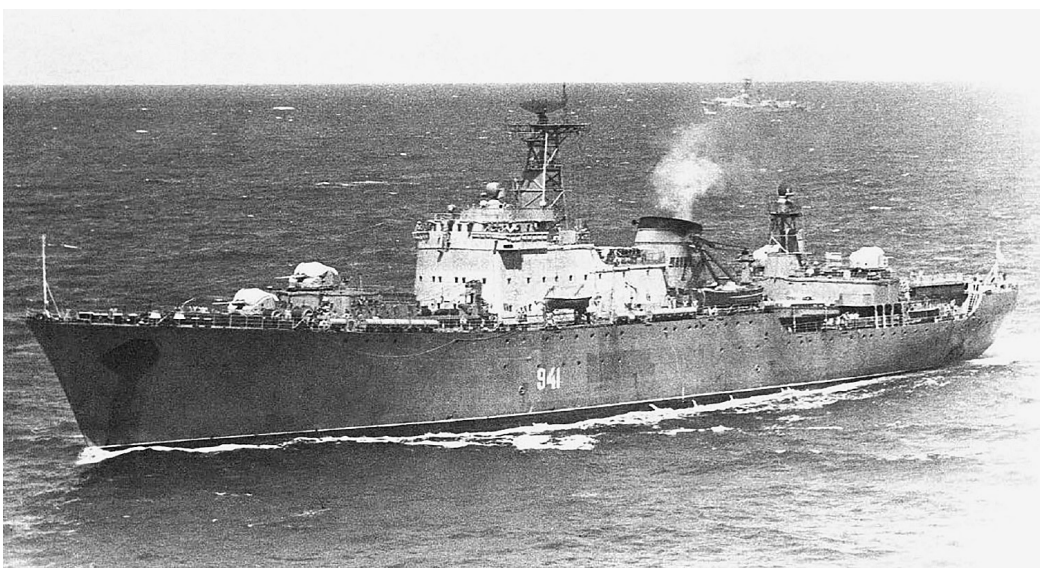
U.S. reconnaissance planes in the future.¹⁰⁸ Would there continue to be such reconnaissance flights? A 1969 article in *Newsweek* titled “An Exercise in Restraint” claimed that the downing of the EC-121 and crew in the frigid waters of the Sea of Japan had “immediately plunged the U.S. into a soul-searching examination of the parameters of its global power.”¹⁰⁹

According to a Nixon administration source, “a lot of problems [had] to be sorted out” before EC-121 flights could be resumed on a regular basis—but flights continued nonetheless.¹¹⁰ According to United Press International, about a week after the downing, the Japanese press and television outlets reported from Tokyo that an EC-121 had taken off from an air base in Japan, and Japanese television filmed the plane as it took off from the base at Atsugi. A U.S. military spokesman declined to comment.¹¹¹

North Korea’s official press agency responded by issuing a 2,300-word declaration from Pyongyang. The message, monitored in Tokyo, castigated President Nixon for his decision to continue reconnaissance flights—now with fighter cover—and for forming a powerful USN task force (TF 71) in the Sea of Japan, which clearly was designed to intimidate Kim Il-sung’s regime.¹¹² A segment of the message specifically concerning the EC-121 incident read as follows:

Even though the U.S. imperialists insist, in word, that their planes will fly over high seas, there is no ground to guarantee that they will not intrude into the territorial air of our country again.

FIGURE 6
UGRA-CLASS SUB TENDER



Source: Smart Maritime Group website.

... If the reconnaissance planes of the U.S. imperialists intrude into the territorial air of our country, we will not sit with folded arms, but will take resolute measures for safeguarding our sovereignty as ever.

Then the U.S. imperialists will use this as a pretext to commit a full-scale armed attack against us, which may only lead to another total war in Korea in the end.¹¹³

The Press

It was press coverage of the unfolding events that first brought to the world's attention the role the Soviet Union was playing in the aftermath of the downing. The fact that the Soviets indeed were participating in the EC-121 SAR operation became public once the Fifth Air Force, headquartered in Japan, released photographs of Soviet destroyers in the general search area. The photos were taken from a 36th ARRS C-130.¹¹⁴

When planes of the USAF Reserve first flew low over the crash scene, they photographed *Steregushchiy*, a large Soviet antisubmarine ship. One of those photos then was released to the AP wire service, in what is known as a handout. A few days after the attack, a high-resolution photo of *Steregushchiy* with one of its whaleboats nearby, searching for debris and possible survivors, accompanied a front-page-headline story in the *New York Times*. The caption under the photo read, "IN THE SEA OF JAPAN: A motor launch moves away from a Soviet destroyer [*sic*] to pick up debris believed to be from the missing U.S. intelligence plane. Soviet ships are taking part in the search at the request of the United States."¹¹⁵

Another photo shows whaleboats of USS *Tucker* and the Soviet destroyer *Vdokhnovennyi* approaching each other, with a C-130 circling overhead.¹¹⁶ A third photo, said to be of poor quality, bore the handwritten caption: "Destroyer picking up piece of yellow metal from area."¹¹⁷ This photo, taken when debris had not yet been identified positively, shows a motor launch, apparently from a Soviet destroyer, with men leaning over the gunwales and possibly holding the yellow metal.¹¹⁸ As the operation was drawing to a close, the *New York Times* concluded its detailed account of the incident with a front-page story entitled "U.S. Fliers Describe Soviet Aid on Plane" that ended with the words "Thus closed an extraordinary three days [*sic*; actually four] of Soviet-American cooperation."¹¹⁹

However, not all press coverage took the opportunity to highlight the Soviet contribution. An article in *Pacific Stars & Stripes* (under the title "N. Koreans Down Navy Recon Plane") mentioned how *Tucker* and the frigate USS *Dale* were expected to reach the search area, but it made hardly any mention of the Soviet ships that were first to arrive at the crash site, nor did an AP press release that appeared within that *Pacific Stars & Stripes* article make any mention of Soviet ships. The only other immediate mention, in fact, appeared in accounts of a press

conference held by Senator Everett M. Dirksen (R-IL). At a White House meeting, Dirksen said the EC-121 had possible survivors and that legislative leaders were informed that two ships, “believed to be Russian, were moving toward the spot where the plane was downed.”¹²⁰

Some of the later press coverage focused on questions, not answers. A June 1969 article in *Air Reservist* magazine wondered why Soviet ships “happen[ed] to be in the area” and why they arrived at the crash site before American ships.¹²¹ Part of the answer was simply the proximity of the last known position of the missing EC-121 to Vladivostok. In addition, we now know that the two U.S. ships involved in the SAR operation were delayed in getting under way, as noted previously. Whether there were any other reasons for the quick Soviet response remains a matter of speculation.

In 2004, Professor Narushige Michishita, now at the National Graduate Institute for Policy Studies in Tokyo, referenced the North Korean downing of the USN EC-121 reconnaissance plane in an article in the *Korean Journal of Defense Analysis*. The article makes no mention, however, of the joint U.S.-Soviet SAR effort. Instead, Michishita explains how 1966–72 represented the “genesis” of North Korean military-diplomatic campaigns. At the time of the incident, North Korea employed MiG-21 fighters, which he writes were “newly introduced from the Soviet Union.” The April 1969 incident marked the first successful interception, after failed attempts had been made in January 1954, February 1955, June 1959, and April 1965—a clear sign that the “military balance had been gradually shifting in favor of North Korea,” Michishita wrote.¹²²

In 2017, Van Jackson, an associate professor at the Asia-Pacific Center for Security Studies, wrote an essay on the EC-121 downing for the Woodrow Wilson International Center for Scholars. In accordance with what he describes as North Korea’s “coercive theory of victory,” Jackson states that the incident had “special meaning in the history of U.S.–North Korea relations.” Although the Soviets had exercised “little to no control” over North Korean foreign policy, Jackson avers that they had attempted to restrain North Korea on several occasions.¹²³ Again, there was no mention of this rare joint SAR effort between the United States and the Soviet Union during the Cold War.

The Nixon Administration

The separate but related questions of what role, if any, the Soviet Union might have played in North Korea’s downing of the American plane and the role it might play, and in fact already had played, in the resultant SAR case were intertwined from the start. On the day of the downing, Secretary of State William P. Rogers had a fifteen-minute conversation with Soviet ambassador Anatoly F. Dobrynin that was not in any way a protest but rather an appeal for assistance.¹²⁴ Behind the scenes, Rogers and Henry A. Kissinger, President Richard M. Nixon’s national

security advisor, had spoken on the telephone. According to a transcript of their conversation, Rogers said he was going to have Dobrynin in at noon. Kissinger said the president did not want any protests to anyone. In response, Rogers said he was not going to protest, he just wanted to talk to Dobrynin about helping to save the men. In a later telephone conversation, Nixon and Kissinger discussed the idea of a formal protest but “decided [it] should not be done with Soviets.”¹²⁵

A few days after the attack, it was only in accompaniment to a headline story, entitled “U.S. to Emphasize Diplomatic Steps on Loss of Plane,” quoting U.S. government officials that “[d]iplomatic action rather than military retaliation will be the Nixon Administration’s essential response to North Korea’s shooting down of a United States reconnaissance plane” that the *New York Times* printed the front-page photo of *Steregushchiy* and its whaleboat. As noted previously, the caption accompanying that photo noted that the Soviet ships were taking part in the search at the request of the United States.¹²⁶

During a press conference on 18 April, President Nixon addressed the downing of the EC-121. “As was pointed out in the protest that was filed at Panmunjom yesterday, and also in the Defense Department statement,” the president said, “the plane involved was an unarmed Constellation, propeller driven.” Nixon said that the plane was conducting reconnaissance, but at no time had it come closer than forty miles to the coast of North Korea. “[A]ll of the evidence that we have,” the president said, “indicates that it was shot down approximately 90 miles from the shores of North Korea while it was moving outward, aborting the mission on orders that had been received.” He said they knew this because of U.S. radar; more important was the fact that “the North Koreans knew it based on their radar.” Therefore, the attack was unprovoked, Nixon stated. “It was deliberate. It was without warning. The protest has been filed: The North Koreans have not responded.”¹²⁷

Nixon also said that such missions were not uncommon. “This year [and it was only mid-April] we have had already 190 of these flights without incident, without threat, without warning, at all.” The president observed that, throughout the period of the Nixon administration, in response to an increasing number of North Korean incidents and threats of military action against South Korea and against the U.S. forces stationed in South Korea, “[w]e have had a policy of reconnaissance flights in the Sea of Japan, similar to this flight.”¹²⁸

When asked about North Korea’s motives and whether he saw any parallels or patterns between the attacks against the EC-121 and USS *Pueblo*, the president said the *Pueblo* incident was “quite different,” in two respects. As for *Pueblo*, there was some uncertainty for a time regarding the location of *Pueblo* at the moment of the attack. “Present indications are that the *Pueblo* was in international waters,” the president said; in contrast, regarding the EC-121 there was no uncertainty: the United States *knew* what North Korean radar showed. “We incidentally [also] know

what the Russian radar showed,” the president said. “And all three radars [including America’s] showed exactly the same thing.” Under the circumstances, Nixon called it “completely [a] surprise attack.”¹²⁹ Subsequently, when North Korea asserted that the EC-121 had intruded into “the territorial air of our country,” the White House contradicted that contention, averring that the USN plane was over international waters and well off the coast of North Korea when the two MiG jets attacked it.¹³⁰

When asked what role, if any, the Soviet Union may have played in the EC-121 incident, Nixon replied as follows:

The Soviet role in the plane incident first is one of being of assistance to the United States in recovering the debris and looking for survivors. And we are most grateful to the Soviet Union for helping us in this respect. Our intelligence—and of course no one can be sure here—indicates that the Soviet Union was not aware that this attack was to be made. North Korea is not a nation that is predictable in terms of its actions. It is perhaps more than any other nation in the Communist bloc completely out of [the] control of either the Soviet Union or, for that matter, Communist China.¹³¹

While the U.S. government was appreciative of Soviet efforts to search for possible survivors of the EC-121 and remained uncertain about the degree of Soviet influence over North Korean actions, Ambassador Beam left the following cautionary note with Soviet premier Aleksey Kosygin during a face-to-face meeting in Moscow on 22 April 1969. “The shutdown of our aircraft is only the most recent example of developments in the area which lead to increased tension and which must be a source of concern to the Soviet Government as well as to us. We hope the Soviet Union will do what it can to restrain the North Koreans from such irresponsible acts since we believe it to be in our mutual interest to avoid further exacerbation of tension in the area.”¹³²

Pentagon analysts stated they believed that the Soviets “probably” had warned North Korea against a repetition of either the seizure of a ship such as *Pueblo* or the shooting down of an American plane. The Pentagon also believed the Soviets had warned the North Koreans that they would not support them with either war supplies or forces should a future attack lead to hostilities with the United States.¹³³ Fortunately, neither type of tragedy involving North Korea has occurred since.

In the short term, the U.S. Navy seems to have been less ambivalent regarding Soviet cooperation in the SAR operation than the rest of the government. Three months after the EC-121 incident, Fred S. Hoffman, a military writer for the AP in Washington, DC, noted a distinct thawing of the Cold War. He stated that American admirals, who had thundered for years about the growing Soviet naval challenge, were being “unusually restrained about a Russian squadron making a ‘show the flag’ voyage to Cuba.”¹³⁴ This was the first mention of any warming since the U.S. and Soviet navies had conducted their joint SAR operation in the Sea of Japan.

Critics

A few days after the joint SAR effort terminated on 19 April, the families of the crewmen who had perished, joined by fellow Navy pilots, gathered for simple, quiet memorial and prayer services. They were held under a “mild sun on the green, dandelion-speckled baseball field” of Naval Air Station Atsugi, Japan.¹³⁵

Even before the services began, however, some Navy men began to voice anger over what they said was Washington’s failure to protect the crew of the reconnaissance plane. Others expressed frustration over the Nixon administration’s decision to forgo a retaliatory strike against North Korea. President Nixon had castigated his predecessor for failing to retaliate after the North Korean seizure of USS *Pueblo*, yet Nixon did nothing more in retaliation following the EC-121 downing than President Lyndon B. Johnson had done fifteen months earlier. According to a young naval officer interviewed by a reporter off base, “After it happened, every man in the [Air] Station wanted to go and zap the North Koreans with everything we had. . . . I suppose Nixon had his reasons, but we cannot help feeling badly that nothing was done.”¹³⁶

As noted, when Nixon was asked whether the U.S. government believed the Soviets knew in advance of the North Korean plan to shoot down a U.S. reconnaissance plane, he replied that U.S. intelligence indicated otherwise—but some Americans remained unconvinced. Soon after the EC-121 crisis began, the Reverend Paul D. Lindstrom of Prospect Heights, Illinois, the national chairman of the Remember the *Pueblo* Committee, began making a number of extraordinary, unfounded claims. According to Lindstrom, “possibly seven” members of the EC-121 crew had survived and were picked up by North Korean gunboats, and a supposed four-hour delay in advising President Nixon of the shootdown had “brought about the failure to rescue the known survivors of the EC-121 who parachuted into the Sea of Japan.” Citing an unnamed U.S. government source, Reverend Lindstrom also claimed that the MiGs that shot down the EC-121 were based in the Soviet Union, not in North Korea—an accusation that Admiral Gromov and others later denied.¹³⁷

Any delay in responding to the incident, such as the one to which Lindstrom referred, might have been caused by Nixon being in a drunken state at the time. According to Pulitzer Prize-winning journalist Seymour M. Hersh, “Nixon had become violently drunk early in the crisis.”¹³⁸

Other questions posed by those addressing the incident with a critical eye are more general in nature. Yes, after the *Pueblo* incident the Soviets allegedly warned the North Koreans to cease further acts of aggression against the United States; yes, when the EC-121 was brought down nonetheless, the Soviets assisted in the SAR operation. But when it came to their eagerness to help recover debris, was this entirely unselfish? When top secret documents, cryptologic equipment,

and secret codes off USS *Pueblo* fell into Russian hands, the NSA had said it was “everyone’s worst nightmare, surpassing in damage anything that had ever happened to the cryptologic community.”¹³⁹ Fifteen months later, if similar material that Soviet sailors collected after the EC-121 crash was photographed before its return or never returned at all, the damage to American cryptology would have been no less catastrophic.

Tucker and *Dale* recovered a few pieces of classified material, among which were a radar antenna, a classified photograph, pages from a computer printout, and several pages of handwritten operator’s notes found in the personal effects of Richard E. Sweeney. Also recovered was “a piece of the bulkhead containing the crew’s positions”; presumably this was a chart (attached to a piece of EC-121 bulkhead) that showed where each crewman aboard the spy plane worked.¹⁴⁰

In contrast, according to a top secret NSA report on the incident, no classified material was in the debris exchanged between *Vdokhnovennyi* and *Tucker*. When Soviet seaman Yuri Panachev was asked whether all technical books from the EC-121 were returned to the U.S. Navy, he replied, “We threw thick books into plastic sacks as well; if they were returned, I am not aware.”¹⁴¹ Meanwhile, a complete list of the classified material aboard the EC-121 continues to be withheld from the public.¹⁴²

Congress

In addition to coverage in the press and statements and press releases issuing from the executive branch, the U.S.-Soviet cooperative effort also was discussed in Congress. A special subcommittee of the House Committee on Armed Services already had been established and was conducting a full and thorough inquiry arising from the capture and internment of USS *Pueblo* and its crew by the North Korean government; its scope was expanded to include the loss of the EC-121.¹⁴³ Thus, the parallels between the January 1968 *Pueblo* incident and the April 1969 downing of the EC-121 led to an expansion of the subcommittee’s authority.

During an appearance before the subcommittee in connection with the loss of the EC-121, General Earle G. Wheeler, Chairman of the JCS, provided a detailed account of the incident, including a fairly comprehensive discussion of the Soviet role in the SAR effort. General Wheeler noted to the subcommittee that “[t]he composition of the search and rescue force at various times subsequent to the loss of the EC-121 has been described in briefings and news releases.” He then went on to explain how two Soviet ships had joined the search, and that later a third ship, a destroyer, also was observed in the area. These three were the only Soviet ships known to have participated in the search. “Our search aircraft established contact with the Soviet ships,” Wheeler said.¹⁴⁴

But whatever goodwill developed between the U.S. and Soviet navies during the joint operation was short-lived, and mutual suspicions between these Cold

War adversaries did not abate. Spurred by the Soviet Union's expanding activities at sea, the U.S. Navy planned on stepping up and modernizing its intelligence operations around the world. Monies for an accelerated intelligence program were included in a large funding bill that was pending in the House and Senate in October 1969. Navy spokesmen stated that during their testimony behind closed doors they had urged that the sums be approved. Included in the Navy request was regular funding for "cloak-and-dagger intelligence and counter-intelligence activities of nearly 1,000 agents operating around the world." These activities ranged from sensitive espionage investigations to an increasing number of inquiries into Navy narcotics use. The proposed expansion was requested for surveillance on, over, and beneath the high seas; also involved were reports from visual sightings, as well as from radar, sound-sensitive sonobuoys, and other sophisticated sensors.¹⁴⁵

Rear Admiral Frederick J. "Fritz" Harlfinger II, commander of Naval Intelligence Command, told congressional committees that Russia's new interest in sea power was largely responsible for the step-up in requests for congressional funding. Referring specifically to the penetration by the modern and expanding Soviet fleet into the Mediterranean Sea and Indian Ocean over the preceding two years, Harlfinger said, "The urgent effort to improve Naval intelligence capabilities has been provoked primarily by the steady and continuing expansion of Soviet sea power." The Soviets were showing "increasing competence" in using their modern ships and equipment, he said. "More Soviet ships and aircraft are going out to sea—going farther and staying out longer."¹⁴⁶

Over a decade later, an aspect of the incident again raised its head in congressional debate. In 1983, Congress was debating a bill on national security; specifically, the House was debating further consideration of a bill (H.R. 3231) to revise the Export Administration Act of 1979.¹⁴⁷ Although the MiG fighters that shot down the EC-121 were Soviet made, Representative Gerald B. H. Solomon (R-NY) claimed that the Atoll missiles that MiGs used were Soviet copies of American technology. An NSA report completed after the EC-121 incident had determined that the missiles that brought down the plane probably were of the infrared, heat-seeking, Atoll type—a Soviet reverse-engineered replica of the U.S. Sidewinder missile.¹⁴⁸ Solomon, in his debate remarks, stated that he believed the Soviet practice of stealing Western technology that had led to the Atoll missile would continue unless the House passed the amendment to the bill currently under debate. He was outraged that the House was being asked to vote on a bill that would make it easier for the Soviets to obtain U.S. missile technology. Solomon claimed there was a strong relationship between the national security sections of the bill and the recent "Korean airline massacre"—the September 1983 downing of Korean Air Lines (KAL) Flight 007 over the Sea of Japan. "At the same time,

we continue to search for the black box from the KAL destroyed by an Atoll missile. A Soviet missile which is an exact duplicate of the U.S. Sidewinder missile. The Soviet Atoll is a mirror image of U.S. technology and was built with Western methods, and Western know-how,” the congressman said.¹⁴⁹

At the time of the attack, President Nixon was extremely grateful to the Soviet Union for helping in this SAR effort. However, we now know, on the basis of the recent testimony of Soviet participants, that the Soviets did not participate entirely unselfishly. Following the *Pueblo* seizure, the North Koreans had passed on to the Russians the state-of-the-art ELINT equipment on board that USN spy ship. Similarly, in the case of the EC-121 incident, the Russians transferred to Vladivostok a load of classified material—perhaps even before the first U.S. warship had arrived on scene.

NOTES

- The authors thank the following individuals, without whom this story could not have been told: Admiral Felix Gromov, Yuri Panachev, Georgy Kondratiyev, Alexandr Rozin, Wayne Whitten, and William Hickey (U.S. Naval Cryptologic Veterans Association).
1. National Security Agency (NSA) / Central Security Service (CSS), *The National Security Agency and the EC-121 Shootdown*, U.S. Cryptologic History, Special Series Crisis Collection 3 ([Fort Meade, MD]: Office of Archives and History, 1989), p. 1. The NSA, CIA, Defense Intelligence Agency, Joint Staff, National Security Council, and Office of the Secretary of Defense declassified and approved this material for release in 2013.
 2. Tai Sung An, *North Korea in Transition: From Dictatorship to Dynasty* (Westport, CT: Greenwood, 1983), p. 1, cited in NSA/CSS, *The National Security Agency and the EC-121 Shootdown*, p. 1.
 3. “N. Koreans Down Navy Recon Plane,” *Pacific Stars & Stripes*, 17 April 1969, pp. 1, 24.
 4. Ibid.; William Beecher, “U.S. Scout Plane with 31 Is Lost, Reported Downed by 2 North Korean MiGs,” *New York Times*, 16 April 1969, pp. 1, 14.
 5. “Index of Possible Actions” in response to the seizure of USS *Pueblo*, undated, page labeled “Airborne Reconnaissance Action No. 2d,” Records of Gen. Earle Wheeler, Chairman, JCS, box 29, tab 449, National Archives and Records Administration, College Park, MD, available at [nsarchive2.gwu.edu/](https://www.nsa.gov/NSA/NSA%20Archives/NSA%20Archives%20-%20Public%20Access%20-%20NSA%20Cryptologic%20Veterans%20Association/).
 6. Thomas R. Johnson, *American Cryptology during the Cold War, 1945–1989*, book 2, *Centralization Wins, 1960–1972*, U.S. Cryptologic History, Series 6: The NSA Period, 1952–Present 5 ([Fort Meade, MD]: National Security Agency Center for Cryptologic History, 1995), chap. 10, p. 464.
 7. “Now It’s Nixon’s Turn; How Will He React?,” *Democrat and Chronicle* (Rochester, NY), 16 April 1969, pp. 1, 3A.
 8. “N. Koreans Down Navy Recon Plane,” pp. 1, 24.
 9. Ron Marlal [Capt., USN], “The Things They’ll Do . . .,” *Air Reservist*, June 1969, pp. 6–7.
 10. Beecher, “U.S. Scout Plane with 31 Is Lost,” pp. 1, 14.
 11. Navy admiral John S. McCain Jr., the father of Senator John S. McCain III, was the commander of U.S. Pacific Command in Hawaii from 1968 to 1972.
 12. Wayne Whitten [Col., USMC (Ret.)], e-mail to author (Streifer), 12 June 2019.
 13. Marlal, “The Things They’ll Do . . .,” pp. 6–7.

14. NSA/CSS, *The National Security Agency and the EC-121 Shootdown*, p. 4.
15. Ibid.
16. Johnson, *Centralization Wins*, p. 294.
17. Stepan Vostroin, "Russia's Crisis in the Far East: A Siberian View," *Slavonic and East European Review* 14, no. 40 (July 1935), p. 112.
18. Director of Central Intelligence, *Warsaw Pact Forces Opposite NATO*, NIE 11-14-79, vol. 2, *The Estimate* (31 January 1979), p. A-2, available at www.cia.gov/.
19. Ibid.; "Petropavlovsk-Kamchatskiy," GlobalSecurity.org.
20. "Soviet Navy: Intelligence and Analysis during the Cold War," *Central Intelligence Agency*, 6 September 2017, www.cia.gov/.
21. The reference is to Становление Индийской эскадры—ОПЭСК (Operative Squadron—OPESK). It is common knowledge in Russia that the main surface force of the Soviet Pacific Fleet stayed in Vladivostok. Regarding the travel of *Vdokhnovennyi* to the Indian Ocean, it is mentioned briefly in I. N. Khmel'nov [Adm., Soviet navy] et al., "The 10th OPESK: Navy's Vanguard during the 'Cold' War [in Russian]," chap. 5 in *The Pacific Squadron* [in Russian] (Moscow: Oruzhiye i tekhnologii, 2017). Details of *Vdokhnovennyi*'s voyages came from Yuri Panachev and in articles by Vladimir Dukel'sky and Alexandr Rozin, and from Russian Wikipedia; however, the Wikipedia article stated incorrectly that *Vdokhnovennyi* visited Bombay, India. On the formation of the 10th OPESK and concerns over America's Indian Ocean activity, see Vladimir Dukel'sky, "We Used to Do Tours Overseas [in Russian]," *Moskovskiy zhurnal* [Moscow journal], 1 February 2004. Dukel'sky was an officer aboard the cruiser *Admiral Fokin* and later the head of intelligence of the 10th OPESK. See also Alexandr Rozin, "The Second Detachment of the Pacific Fleet in Indian Ocean and Submarines of the Expedition 'Inflow-2' [in Russian]," chap. 6 of the edited and updated version of his work, "8th OPESK: Evolvement of the Indian Ocean Squadron [in Russian]," 8 August 2016, available at alerozin.narod.ru/.
22. Yuri Panachev, interviews by Irek Sabitov, various dates over March–October 2018. Sabitov communicated with Yuri Panachev over the Russian social networking site Odnoklassniki (Classmates) and by e-mail. Panachev sent photos from his archive and Kondratiyev's memoirs, as well as his own. Sabitov and Georgy Kondratiyev then spoke briefly on the telephone.
23. Panachev to Sabitov over Odnoklassniki (Classmates), a Russian social networking site, ok.ru/.
24. *Wikipedia*, s.v. "Kotlin-Class Destroyer," en.wikipedia.org/; Sea-Distances.org.
25. Alexandr Rozin, "8 OPESK—the Formation of the Indian Squadron," *Chronicle of Military Service*, alerozin.narod.ru/.
26. *Wikipedia* [in Russian], s.v. "*Vdokhnovennyi*," ru.wikipedia.org/.
27. Ibid.; "Petropavlovsk-Kamchatskiy."
28. Michael L. Peterson, "Maybe You Had to Be There: The SIGINT on Thirteen Soviet Shootdowns of U.S. Reconnaissance Aircraft," *Cryptologic Quarterly* 12, no. 2 (Summer 1993), pp. 4, 9.
29. This information was obtained from USS *Tucker*'s captain, Cdr. S. D. Kully, and his executive officer, Lt. Cdr. James L. May, during a press conference ashore with representatives of the world's media. Although it was Soviet sailors who actually pulled the bodies from the water, they later were transferred to *Tucker*, which wrongly took credit for their recovery. This was a Cold War incident, after all, and these U.S. naval officers may have found it difficult to give credit to the Soviet sailors who pulled bodies from the water—even where that credit was due. "History of the USS Henry W. Tucker DD 875, sect. 5, 1965–1969," p. 130, *USS Henry W. Tucker DD 875 / DD(R) 875*, www.hwtucker2000.com/.
30. Evgeny N. Makeyev (Deputy Chief of the Second European Department) and Vyacheslav I. Dolgov (Third Secretary of the Second European Department).
31. "Record of a Conversation with Canadian Ambassador to the USSR R. Ford," 2 February 1968, trans. Gary Goldberg for the North Korea International Documentation Project, *Wilson Center Digital Archive*, digitalarchive.wilsoncenter.org/. The Russian original came from the Archive of Foreign Policy of the Russian Federation, f. 102, op. 28, pap. 55, d. 2.

32. "Statement by Secretary Rusk, December 22 [1968]," *Department of State Bulletin* 60, nos. 1541–1566 (6 January–30 June 1969), p. 3.
33. NSA/CSS, *The National Security Agency and the EC-121 Shootdown*, pp. 25–26.
34. *Ibid.*
35. *Ibid.*
36. Thomas Van Hare, "Flight Stories: Beggar Shadow Down," *Historic Wings*, 15 April 2013, fly.historicwings.com/.
37. Panmunjom, a village on the border between North and South Korea, is where the 1953 Korean War Armistice Agreement was signed and where the 1968 negotiations for the release of the *Pueblo* crew were held.
38. The 1950–53 Korean War ended in an armistice. A negotiated agreement provided for a suspension of open hostilities, a fixed demarcation line with a 2.4-mile buffer zone (the so-called Demilitarized Zone), and a mechanism for the transfer of prisoners of war. The agreement also called for the establishment of the Military Armistice Commission and other agencies to ensure that the truce held.
39. Johnson, *Centralization Wins*, p. 464.
40. NSA/CSS, *The National Security Agency and the EC-121 Shootdown*, p. 15; Henry Kissinger, *The White House Years* (Boston: Little, Brown, 1979), p. 313.
41. Beecher, "U.S. Scout Plane with 31 Is Lost," pp. 1, 14; Johnson, *Centralization Wins*, pp. 462–65.
42. Robert Hotz, "The Flying *Pueblo*," *Aviation Week and Space Technology* 90, no. 17 (28 April 1969), p. 11.
43. NSA/CSS, *The National Security Agency and the EC-121 Shootdown*, p. 1.
44. Bill Streifer filed a Freedom of Information Act request on or about 14 May 2018. The NSA approved the material for release on 2 October 2018, pursuant to Executive Order 13526—MDR 104508.
45. *Flight-following* means that the command at Osan was responsible for maintaining situational awareness concerning the EC-121's mission area. Therefore it was responsible for notifying the EC-121 if any other aircraft were in the area or the spy plane inadvertently had strayed into territorial waters.
46. When a radar pulse is sent out, it hits a target—in this case, the EC-121. The pulse then bounces back to the station that sent the pulse. However, the return pulse is not 100 percent of the signal. In other words, the pulse scatters and goes beyond the target it hits. Therefore, Osan likely would have seen the original pulse sent out by North Korean and Soviet radar systems, and it also would have seen the "reflected" pulse from the EC-121. In this way, the enemy's radar system can be used to track your target without having to send out your own radar signals, which would give away your position.
47. William P. Rogers, dispatch to [deleted], 171619Z April 1969; National Military Command Center, memorandum, "EC-121 SAR Operations," 191742Z April 1969. Both obtained from the NSA through FOIA, requested May–June 2018, received 8 October 2018.
48. William Hickey, e-mail to author (Streifer), 4 November 2018.
49. Beecher, "U.S. Scout Plane with 31 Is Lost," pp. 1, 14; Johnson, *Centralization Wins*, pp. 462–65.
50. Marlar, "The Things They'll Do . . ." pp. 6–7.
51. This NSTFE report is cited in NSA/CSS, *The National Security Agency and the EC-121 Shootdown*.
52. "Remembering Shootdown of EC-121M (PR 21), 15 April 1969—31 Crew Members KIA," *Station HYPO*, stationhypo.com/. When NSA personnel reported to work during the early hours of that April morning, they faced a confusing situation. NSA's role in the mission of the aircraft seemed unclear. Although the U.S. Navy dubbed the flight a BEGGAR SHADOW mission, implying that it was primarily a COMINT (i.e., communications intelligence) flight, and thus under NSA authority, the mission of the aircraft was primarily ELINT, in direct support of the U.S. Navy's Seventh Fleet requirements. NSA/CSS, *The National Security Agency and the EC-121 Shootdown*.
53. When the Korean War began, Kim Gin-ok was the commander of a squadron, flying

- Yak-9s as part of the 56th Regiment of the North Korean air force. He later flew MiG-15s as a squadron leader, then regimental commander, and eventually divisional commander. He died in November 2001 at the age of seventy-six. Anonymous comment on "The First Victories of Soviet Aviation in Korea," *Top War*, 7 August 2013, topwar.ru/.
54. "Correction, Please!," *Review of the News* 5 (1969), p. 2. The periodical *Review of the News* was published by Robert Welch, a cofounder of the John Birch Society. While similar to *American Opinion*, a monthly magazine that Welch also published, *Review of the News* was a weekly publication that covered similar themes but on a more frequent basis, following the breaking news of the week more closely.
 55. Special Subcomm. on the U.S.S. *Pueblo* of the H. Comm. on Armed Services, 91st Cong., Inquiry into the U.S.S. *Pueblo* and EC-121 Plane Incidents, H.A.S.C. 91-12, p. 1625 (1969).
 56. *Ibid.*
 57. Flash is a category of precedence reserved for initial enemy contact messages, or operational combat messages of extreme urgency in which brevity is mandatory. Critic indicates a message of such importance that it requires notifying the highest authorities of the government within ten minutes. Martin H. Weik, *Communications Standard Dictionary* (New York: Springer, 1989), p. 411; H.A.S.C. 91-12, p. 1625.
 58. Marlar, "The Things They'll Do . . .," p. 7 editor's note.
 59. During this crisis period, NSA officials and analysts would play major roles in providing answers to questions raised by the Nixon White House, the Pentagon, other intelligence agencies, Congress, and the press regarding the loss of this Navy intelligence aircraft. On the morning after the shootdown, the front-page headline of the *Washington Post* read, "N. Korea Claims It Downed U.S. Plane." "N. Korea Claims It Downed U.S. Plane," *Washington Post*, 16 April 1969, p. 1; NSA/CSS, *The National Security Agency and the EC-121 Shootdown*, p. 1.
 60. NSA/CSS, *The National Security Agency and the EC-121 Shootdown*, p. 24.
 61. "History of the USS *Henry W. Tucker*," p. 128.
 62. According to Kondratiyev's memoir, the commander of *Vdokhnovennyi* was Capt. 2nd Rank V. M. Marin, not Marsh, as certain Russian-language newspapers had reported.
 63. "N. Koreans Down Navy Recon Plane," pp. 1, 24.
 64. NSA/CSS, *The National Security Agency and the EC-121 Shootdown*, pp. 25–26. During the 1962 Cuban missile crisis, Korniyenko had been an attaché at the Soviet embassy in Washington, DC. "Cuban Missile Crisis," *Harvard Kennedy School Belfer Center for Science and International Affairs*, www.cubanmissilecrisis.org/.
 65. NSA/CSS, *The National Security Agency and the EC-121 Shootdown*, pp. 25–26.
 66. *Ibid.*
 67. *Ibid.*
 68. *Ibid.*
 69. Beecher, "U.S. Scout Plane with 31 Is Lost," pp. 1, 14.
 70. Marlar, "The Things They'll Do . . .," pp. 6–7; "N. Koreans Down Navy Recon Plane," pp. 1, 24.
 71. NSA/CSS, *The National Security Agency and the EC-121 Shootdown*, pp. 25–26.
 72. Associated Press, "Search for Bodies Ends," *New York Times*, 20 April 1969, p. 3.
 73. William C. Barnes, *The EC-121 Incident: 15 April 1969*, Project CHECO Report (Honolulu, HI: HQ Pacific Air Forces, 15 March 1970), p. 13.
 74. Takashi Oka, "U.S. Fliers Describe Soviet Aid on Plane," *New York Times*, 20 April 1969, pp. 1, 3; "Soviet Ships Aided Search," *Atlanta Journal and Constitution*, 20 April 1969, p. 22-A; Takashi Oka, "Drama at Sea: U.S.-Soviet Co-operation," *Ottawa Journal* (Canada) via New York Times Service, 22 April 1969, p. 7. The succeeding five paragraphs are drawn from the same sources.
 75. "N. Koreans Down Navy Recon Plane," pp. 1, 24; VQassociation.org.
 76. Marlar, "The Things They'll Do . . .," pp. 6–7.
 77. "N. Koreans Down Navy Recon Plane," pp. 1, 24.

78. Associated Press, "Cold War Thaws in Debris Search," *Times Herald* (Port Huron, MI), 19 April 1969, p. 2.
79. A few years earlier, on 7 May 1965, the Northern Fleet of the Soviet navy had been awarded the Order of the Red Banner. "Day of the Northern Fleet. Dossier," TASS [the Russian news agency], 31 May 2018, tass.ru/.
80. Oka, "U.S. Fliers Describe Soviet Aid on Plane," pp. 1, 3; Associated Press, "Cold War Thaws in Debris Search." Both of these press reports were out of Tachikawa, Japan. The following two paragraphs are drawn from the same sources.
81. Oka, "U.S. Fliers Describe Soviet Aid on Plane," pp. 1, 3; Associated Press, "Cold War Thaws in Debris Search"; "15 April 1969: Deep Sea 129 Shootdown," *Naval History* (blog), 15 April 2010, www.navalhistory.org/.
82. RussianShips.info, created on 11 December 2009, concerns the postwar design of the ships of the navy of the USSR and the Russian Federation. As the website notes, all information was derived from public sources and none of it is secret.
83. Adm. Felix N. Gromov's military history, available at persona.rin.ru/. This is a Russian-language biography site of Russian celebrities and certain other persons.
84. Felix Gromov, e-mail to author (Irek Sabitov), 30 March 2018. Admiral Gromov sent his handwritten answers to Sabitov's questions. Gromov and Sabitov also spoke briefly on the telephone.
85. Ibid.
86. Born on 12 April 1948, Yuri Panachev was called up for military service in 1967 and served until 1970. He is now seventy years old. Georgy Kondratiyev likely is about the same age, since military recruits in the Soviet Union were called up for military service at eighteen or nineteen years old.
87. Takashi Oka, "Japan Advises U.S. against Reprisal," *New York Times*, 17 April 1969, p. 15.
88. Georgy Kondratiyev's memoir, in "The Shooting Down of an American Surveillance Plane," *Tin Can Sailors* 32, no. 3 (July–September 2008), www.destroyers.org/. Maintained by the National Association of Destroyer Veterans. Used with permission.
89. Ibid.
90. Ibid.
91. Ibid.
92. Panachev e-mail exchange.
93. Ibid.
94. Ibid.
95. Ibid.
96. Ibid.
97. БЧ-3 (BCh-3) (Combat Unit-3) referred to both the Mine-Torpedo Department and the compartment of the ship.
98. Panachev e-mail exchange.
99. Ibid.
100. Ibid.
101. Ibid.
102. Ibid.
103. Ibid.
104. Ibid.
105. Ibid.
106. Kondratiyev memoir.
107. Ibid.; Panachev e-mail exchange; NSA/CSS, *The National Security Agency and the EC-121 Shootdown*, pp. 25–26.
108. William Beecher, "Posting of U.S. Intelligence Ship off Korea Believed under Study," *New York Times*, 24 April 1969, p. 7.
109. "An Exercise in Restraint," *Newsweek* 73, no. 17 (28 April 1969), pp. 27–31; "Correction, Please!," p. 2.
110. Beecher, "Posting of U.S. Intelligence Ship off Korea Believed under Study," p. 7.
111. United Press International, "Take-Off of EC-121 Reported," *New York Times*, 23 April 1969, p. 14.
112. Takashi Oka, "Korea Reds Warn U.S. over Planes," *New York Times*, 24 April 1969, p. 1.
113. Ibid.
114. Oka, "Japan Advises U.S. against Reprisal," p. 15.
115. Max Frankel, "U.S. to Emphasize Diplomatic Steps on Loss of Plane," *New York Times*, 17 April 1969, p. 1. This photo appears on the cover of this issue.
116. "History of the USS *Henry W. Tucker*," p. 129.

117. This “yellow metal” was likely coated with zinc chromate primer, which is yellow in tone with a hint of green. It was used on the interior surfaces of EC-121 and other aircraft. When used as a pigment, zinc chromate also is known as zinc yellow, buttercup yellow, or yellow 36.
118. Oka, “Japan Advises U.S. against Reprisal,” p. 15.
119. Oka, “U.S. Fliers Describe Soviet Aid on Plane,” pp. 1, 3.
120. “N. Koreans Down Navy Recon Plane,” pp. 1, 24.
121. Marlar, “The Things They’ll Do . . .,” pp. 6–7.
122. Narushige Michishita, “Calculated Adventurism: North Korea’s Military-Diplomatic Campaigns,” *Korean Journal of Defense Analysis* 16, no. 2 (August 2004), pp. 181–226.
123. Van Jackson, “The EC-121 Shoot Down and North Korea’s Coercive Theory of Victory,” *Wilson Center*, 13 April 2017, www.wilsoncenter.org/.
124. Beecher, “U.S. Scout Plane with 31 Is Lost,” pp. 1, 14.
125. “Telephone Records 1969–1976,” Manuscript Division, Kissinger Papers, box 359, Library of Congress, Washington, DC.
126. Frankel, “U.S. to Emphasize Diplomatic Steps on Loss of Plane,” p. 1.
127. “Transcript of the President’s News Conference on Foreign and Domestic Affairs,” *New York Times*, 19 April 1969, p. 14.
128. Ibid.
129. Ibid.
130. Beecher, “U.S. Scout Plane with 31 Is Lost,” pp. 1, 14.
131. “Transcript of the President’s News Conference on Foreign and Domestic Affairs,” p. 14.
132. Oral Statements Made by Ambassador Jacob D. Beam to Soviet Premier Alexei Kosygin, 22 April 1969, doc. 39 in *Soviet Union, January 1969–October 1970*, ed. Erin R. Mahan, Foreign Relations of the United States, 1969–76, vol. 12 (Washington, DC: U.S. Government Printing Office, 2006).
133. Beecher, “Posting of U.S. Intelligence Ship off Korea Believed under Study,” p. 7.
134. Hoffman’s article appeared under various headlines in Utah’s *Ogden Standard-Examiner* and other regional newspapers on various dates in July 1969.
135. Philip Shabecoff, “Families of 31 U.S. Crewmen Mourn,” *New York Times*, 24 April 1969, p. 6.
136. Ibid.
137. “7 Plane Survivors Are Reported Held by North Koreans,” *New York Times*, 16 April 1969, p. 14; “MIG’s Soviet-Based, *Pueblo* Group Says,” *New York Times*, 17 April 1969, p. 1; Gromov e-mail to Sabitov.
138. Seymour M. Hersh, *The Price of Power: Kissinger in the Nixon White House* (New York: Summit Books, 1983), p. 88.
139. Johnson, *Centralization Wins*, p. 439.
140. NSA/CSS, *The National Security Agency and the EC-121 Shootdown*, pp. 25–26.
141. Panachev e-mail exchange.
142. NSA/CSS, *The National Security Agency and the EC-121 Shootdown*, pp. 25–26.
143. H.A.S.C. 91-12, p. iii. In a letter to L. Mendel Rivers, chairman of the House Committee on Armed Services, Representative Otis G. Pike (D-NY) referenced a letter, dated 18 February 1969, establishing a special subcommittee to conduct a full and thorough inquiry arising from the capture and internment of USS *Pueblo* and its crew by the North Korean government. Also referenced was a letter dated 22 April 1969 in which the inquiry was expanded to include the loss of a USN EC-121 aircraft. Of course, the details of the incident found in the resulting congressional report did not rely on interviews of Soviet naval participants.
144. Ibid., p. 1676.
145. Robert S. Allen and John A. Goldsmith’s 27 October 1969 Inside Washington column, in Texas’s *El Paso Times*.
146. Ibid.
147. 129 Cong. Rec., p. 26,744 (1983) (remarks of Representative Solomon).
148. NSA/CSS, *The National Security Agency and the EC-121 Shootdown*, p. 26.
149. 129 Cong. Rec., p. 26,744 (1983) (remarks of Representative Solomon).

SIR JOHN ORDE AND THE TRAFALGAR CAMPAIGN

A Failure of Information Sharing

J. Ross Dancy and Evan Wilson

What we now call the Trafalgar campaign took place over the spring and summer of 1805. French, Spanish, and British fleets raced back and forth across the Mediterranean and the Atlantic. Orders flew from London and Madrid, and especially from Boulogne, where Napoléon was camped with 165,000 men preparing to invade Britain. Confusion was the order of the day. French admirals often executed one set of orders, only to learn later that other ad-

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mirals were executing an entirely different set. The Spanish, recently coerced into the war, struggled to catch up with their French allies and prepare their fleets for sea. The British, stretched thin owing to mismanagement during the recent peace and the challenge of fighting two peer competitors at once, desperately searched for the French and Spanish fleets they had failed to blockade in port. Yet by the time Vice Admiral Lord Nelson stepped ashore in England for the last time in August 1805, having crossed the Atlantic twice, the chaos had resolved itself into a large British fleet blockading an even larger Franco-Spanish Combined Fleet in Cádiz. It was, in effect, the end of the Trafalgar campaign. The actual battle, which took place two months later, was something of an anticlimax, strategically speaking.

This article focuses on one little-noticed aspect of the Trafalgar campaign: the role of British vice

admiral Sir John Orde. It is not an obvious point of inquiry, as there is a well-established historical consensus about Orde's actions, which can be summarized as follows. Orde commanded a detached squadron of five ships of the line tasked with blockading a similarly sized force of Spanish ships in Cádiz. On 9 April 1805, Orde was surprised to see a fleet of eleven French ships of the line sail through the Strait of Gibraltar. The Toulon Fleet, commanded by Admiral Pierre-Charles de Villeneuve, had managed to escape Nelson's watching frigates. As the French approached Cádiz, Orde was faced with odds of three to one and caught between the two enemy forces. He sensibly withdrew. Assessing the strategic situation, Orde knew that for Napoléon to launch an invasion flotilla, the French needed to gain control of the English Channel. To do that required the defeat of Britain's largest fleet, which was positioned to guard against that very possibility, in the western approaches to the Channel. Whatever Napoléon's plans were for the French and Spanish ships in Cádiz, the appropriate course of action was for Orde to concentrate British forces on the strategic point. He did so, arriving in the Channel a month later.

By withdrawing to the Channel, Orde had correctly ascertained Napoléon's plans, which indeed did call for a concentration of naval forces in the western approaches. No less a luminary than Sir Julian Corbett claimed that Orde was the first Englishman to understand the pattern of what was to follow. Corbett credited Orde with "penetrating appreciation," arguing that with the ships under his command he "did everything that the means available permitted."¹ Modern historians have followed Corbett's lead. While the incident off Cádiz usually merits just a few lines in the standard narrative, the most recent authoritative works have not seen fit to question Corbett's account. They roundly praise Orde for his sound judgment and strategic insight.²

Interestingly, Orde's contemporaries were less impressed with his actions. Corbett's assessment (from 1910) cut against the previously established opinion of Orde and reversed more than a century of criticism and vitriol. The opening salvos were fired as soon as news of Orde's actions reached London. Fellow naval officers were eager to second-guess his decisions. One officer bemoaned that Orde had been timid in the face of the enemy, implying that Orde should have stayed and fought Villeneuve.³ Others thought he should have sought to join the squadron under Sir Robert Calder off Ferrol, and still more argued that he should have shadowed Villeneuve to the West Indies.⁴ Orde was a notoriously unpopular officer, as this article will explore, but his personal qualities do not explain the ferocity of the attacks launched against him in the aftermath of the campaign. One letter to the First Lord of the Admiralty said that Orde should be fired, "and I hope broke, if not *shot*, for his disgraceful and cowardly conduct."⁵ The echoes

of Admiral John Byng's execution for cowardice in 1757 are unmistakable. Orde and his contemporaries were operating in an environment in which British officers were expected to lead their forces into heroic battle no matter the odds and no matter the strategic situation.⁶

The nineteenth-century criticism of Orde goes too far, and there is no need to revive it. We should not judge Orde as Byng was judged. However, Corbett's influential argument is overdue for a critical reading. Corbett's main thrust—that Orde was correct to bring his ships back to the Channel—holds up well. Given the balance of numbers and the state of Orde's fleet, attempting to fight likely would have been catastrophic. Orde also demonstrated laudable insight into Napoléon's ultimate purpose. Yet he did not do "everything that the means available permitted." At the moment the French fleet appeared off Cádiz, Orde possessed more information than any other British flag officer. His knowledge of the whereabouts and strength of the Combined Fleet placed immense responsibility on him to share that information as widely and quickly as possible. He failed in this mission, which cost Nelson a good chance of bringing the campaign to a halt six months before Trafalgar.

The preceding is a summary of the initial goal of this article: to speak to naval historians and, by delving deeply into the archival record, revise the standard account of the Trafalgar campaign. But there is more to say. Ironically, the closer we examine a historical event, the more uncertainty we uncover. At some point, we reach the end of the available empirical evidence and enter a realm where individual thought processes are impossible to reconstruct. A fundamental challenge of empirical historical research is to put ourselves in someone else's head: to empathize, while remaining detached; to use judiciously our knowledge of how the story ends; and to describe the known unknowns and retreat in the face of the unknown unknowns.

It is easy to become uncomfortable with these processes, and historians often are quick to step back from considering individual motivations and impose structures that seek to make sense of the human experience. This article attempts to do both: it asks what role human nature plays in the conduct of naval operations, and how we can connect the answer to that question to broader questions of strategy. Taking a microscope to one man's role in a historical event uncovers the tension between organizations and their personnel—their fallible, jealous, self-interested, human personnel. Strategists behind the scenes must plan; commanders on the spot must act. A detailed, intensive examination of one commander's actions raises broader questions of strategy and command structure. Under scrutiny, we find the uncertainties of human emotions and motivations. Stepping back, we see how the organization in which the man operated set him up for failure. Naval

officers are intimately familiar with the human element in naval operations, as they grapple with it daily. What follows provides a case study of strategic and operational failure in one of the most well-known campaigns in naval history.

Readers will be unsurprised to learn that Orde's failure was not solely his own. The Admiralty set him up for failure by breaking with precedent, ignoring obvious sources of political and personal conflict, and creating problematic command boundaries. In today's parlance, the Admiralty created a problem along the seams of areas of responsibility, leading to a failure of information sharing. Revisiting the messy details of the confusing Trafalgar campaign provides an opportunity to reassess the role that Orde played in it, and to call more attention to the role of Admiralty mismanagement in prolonging it. Orde's failure to inform Nelson of the French fleet's disposition is an example of a failure to achieve mission command. Demarcating command responsibilities requires senior commanders to communicate their intent; junior commanders to understand that intent; and everyone, throughout the system, to trust in commanders on the spot. The challenge is to choose the appropriate personnel and provide them with structures and instructions that help them succeed in rapidly changing tactical situations.⁷

SETTING THE STAGE

John Orde was born in 1751 to a family of landed gentry in Northumberland. His older brother Thomas was a politician who married the natural daughter of the Duke of Bolton. As a result, throughout his career John could rely on extensive connections with the great and the good. He joined the navy in 1766, was commissioned a lieutenant in 1773, and first experienced combat in the American Revolutionary War. His big break came when Lord Howe appointed him first lieutenant of his flagship in 1777. He then gave him command of a sloop, and in May 1778 made him post captain into the frigate *Virginia*.⁸

The date of his promotion to post captain is significant. Post captain was the highest rank to which an officer could be promoted on merit regardless of previous rank, seniority, or experience. From there, promotion proceeded by seniority alone (although employment depended on a mixture of talent and connections). The date of seniority for post captains influenced their seniority for the remainder of their careers. The sooner you were promoted to post captain, the sooner you would be promoted to rear admiral, although most officers had to wait about twenty years.⁹ Nelson, despite being seven years younger than Orde, was made post in June 1779.¹⁰ That thirteen-month difference in seniority would prove pivotal in later years.

When peace arrived in 1783, Orde was appointed governor of Dominica, an island newly acquired by the British in the peace settlement. Here he first came into contact with Nelson, who was stationed in Antigua during the peace. At

Dominica, Orde worked to improve the harbor and solidify British rule, and was successful enough to be rewarded with a baronetcy at the end of his tenure in 1790. Yet there were hints of trouble: Orde had clashed with the colonial assembly in Dominica over funding for harbor improvements. Cuthbert Collingwood, who had served with both Nelson and Orde in the West Indies, thought Orde's actions were justified. He wrote to Orde, "Men of honour and strict integrity in a high publick station will ever be obnoxious to a certain description of people. . . . I hope you will never return to them, and that the day will come when they lament your absence."¹¹

Collingwood's high opinion of Orde was not widely shared.¹² Although Orde's career up to 1790 had been successful, the clash with the Dominican colonial assembly foreshadowed the problems that would plague him for the rest of his life. An Audit Office investigation of Orde later found that Collingwood's praise was unwarranted: in fact, Orde had mismanaged public funds while governor, costing him £2,420 in penalty fees.¹³ Not only did Orde demonstrate repeatedly an unsavory enthusiasm for profiting off his public service, but he also lacked tact and judgment in dealing with fellow officers. The general consensus was that he was arrogant and officious, and few captains who served under him enjoyed the experience.¹⁴ One captain said that he was "a strange high and haughty man to all his Captains, who are all but myself at paper war with him; he has given out some curious regulations and signals; he works them from morning till night with signals."¹⁵

Orde was promoted to rear admiral in June 1795. Because of the thirteen-month difference in seniority, Nelson was not high enough on the post captains list to join him, and remained a post captain until February 1797. In 1798, their paths crossed fatefully. Orde was serving as third in command of the Mediterranean Fleet under the Earl of St. Vincent. A large French expedition was known to be preparing at Toulon for an unknown destination, and St. Vincent, stationed at the time off Cádiz, detached a small force to monitor it. Orde was in prime position to receive command of this detachment, which promised the possibility of a glorious battle. Instead, Nelson, fresh off shore leave to recover from the loss of his arm, swooped in and received the plum assignment. The appointment of the junior Nelson over Orde rankled: he wrote to St. Vincent, "I cannot conceal from your Lordship how much I feel hurt."¹⁶

Orde's pain was compounded by interpersonal clashes with Sir Roger Curtis, who was both marginally senior to Orde and an officer who reasonably might claim to have been at least as disliked in the service.¹⁷ Orde made no friends in his squadron, either. When one of his captains missed or disobeyed his signals, he brought all the captains aboard his flagship and publicly reprimanded them on the quarterdeck. The episode made news in Britain. One captain

requested a court-martial to clear his name—hardly an indication of effective man management by his admiral.¹⁸ Not only was Orde struggling to get along with fellow officers, but the result of Nelson's detachment was in fact a great fleet victory. The Battle of the Nile in August 1798 saw Nelson become the most famous naval officer of his generation, solidified his reputation as a daring tactician, and elevated him to the peerage as Baron Nelson of the Nile. Orde's jealousy was palpable.

St. Vincent eventually became so fed up with Orde that he sent him home, calling him "a vain ignorant supercilious creature."¹⁹ Orde appealed to the Admiralty, requesting that St. Vincent be court-martialed. The Admiralty gently tapped St. Vincent on the wrist instead, so Orde waited until St. Vincent, who was in poor health after two years at sea, returned to England in June 1799. After granting him four months to recover, Orde challenged him to a duel. While dueling had long been essential to the maintenance of a gentleman's honor, it was generally in decline in this period, especially in wartime. Orde—stalking an ailing, sixty-four-year-old man around Essex—looked ridiculous. Lord Spencer, the First Lord of the Admiralty, was flabbergasted at Orde's behavior and asked the king to intervene. St. Vincent was forbidden from fighting, which came as a relief to all, and Orde had to give a surety of £2,000 to keep the peace.²⁰

Orde's disgraceful performance should have ended his career. For the next five years, it appeared to have done so. In 1801, St. Vincent became First Lord of the Admiralty under the Addington administration. That same year, Nelson—who nearly had ruined his career in Naples after the Nile—once again justified all the support he had received from St. Vincent and other senior officers by performing admirably at the Battle of Copenhagen. Orde languished ashore unemployed on half pay, secure in the knowledge that St. Vincent would never consider appointing him to an active command.

Two events rescued Orde from discreditable obscurity. First, the brief peace brought about with the 1802 Treaty of Amiens collapsed with the British declaration of war in May 1803. War naturally increased employment chances for officers, although with St. Vincent still at the Admiralty Orde had no prospects. In the spring of 1804, rumors began to circulate that the Addington ministry was in trouble. Orde saw his chance, writing to the secretary of the Admiralty in March to request employment.²¹ The rumors were correct, and in May William Pitt returned as prime minister and St. Vincent resigned from the Admiralty. Orde's brother Thomas, now Baron Bolton, had served as the chief secretary for Ireland in the 1780s and worked closely with Pitt on Irish affairs. The new First Lord, Viscount Melville, was a veteran politician and close associate of Pitt's. Bolton had retired, but he still could advocate for his brother's career with his former colleagues. Despite Orde's general unpopularity, he did retain some friends among

naval officers who thought St. Vincent had treated him poorly. Admiral Sir William Cornwallis campaigned heavily on his behalf, keeping Orde informed of his progress throughout the summer of 1804. As commander in chief of the Channel Fleet—the navy’s most important active-duty command—Cornwallis was a powerful ally.²² In August of that year, Sir John Colpoys, one of the members of the Board of Admiralty, hinted that Melville might be able to find Orde a position.²³ When the good news of his appointment officially arrived in October, Orde received letters of congratulations from a number of prominent officers, including Sir James Saumarez and Sir Andrew Snape Hamond, former comptroller of the Royal Navy.²⁴ Orde now had a chance to rescue not only his career but also his reputation among his peers.

ORDE IN COMMAND

Melville gave Orde command of a small squadron off Cádiz. In September 1804, British squadrons were responsible for blockading French squadrons in Toulon, Ferrol, Rochefort, and Brest, not to mention maintaining superiority in the Channel and the North Sea to monitor Napoléon’s invasion preparations. Spain was not a belligerent, but the British admiral blockading the French squadron holed up in Ferrol was convinced that the Spanish would declare war once they received a shipment of treasure from South America. The cabinet acted on this intelligence by ordering four British frigates to seize that treasure in October. In an attack delivered without warning and without a declaration of war, three Spanish ships were captured and the fourth exploded, killing innocent passengers and inflaming international opinion against the British.

War with Spain may well have been inevitable, but the capture of the treasure ships certainly accelerated the timeline and made an already dangerous strategic situation significantly worse. Spain’s declaration of war doubled the number of ships of the line facing the British and necessitated additional blockades of Spanish ports. Nelson, commanding the Mediterranean Fleet, could spare no additional ships to watch Cartagena or Cádiz, so Orde’s squadron was sent from Portsmouth to blockade Cádiz.²⁵

A glance at a map will tell readers that Cádiz is on the Atlantic rather than the Mediterranean coast of Spain, and it is reasonable to wonder why the commander in chief of the Mediterranean might be held responsible for enemy forces there. According to the Admiralty, the Mediterranean Sea and the Mediterranean command were two different things. The sea, it was generally agreed, was bounded in the west by the Strait of Gibraltar; British Mediterranean fleets, however, frequently needed to be stationed west of the strait. Some reasons were geostrategic: Cádiz was a major Spanish naval base, and the area between the strait and Cape



Saint Vincent was trafficked heavily by ships transiting between northwestern Europe and the Mediterranean. Other reasons were practical, as British forces could not always depend on well-stocked naval bases in the Mediterranean.

Still, stationing the Mediterranean Fleet outside the Mediterranean was less than ideal. From at least the middle of the seventeenth century, the British had made concerted efforts to obtain secure naval bases in the sea itself, or at least in locations more convenient to the sea than Lisbon. Tangier showed initial promise, even though it is on the Atlantic side of the strait; unfortunately, it lacked a safe harbor and was difficult to protect from land-based attacks. A bold assault was launched against Cádiz in 1702, not only because capturing it would sever the connection between Spain and its Atlantic empire, but also because it would make a suitable base for Mediterranean operations. The attack failed, but it demonstrates that Cádiz long had been thought of as being connected to the Mediterranean. Success finally came with the capture of Gibraltar in 1704, but little changed immediately; like Tangier, Gibraltar had no anchorage and only

limited dockyard facilities. The best port in the western Mediterranean—which, unlike Gibraltar and the Atlantic ports, could be used as a base for blockading Toulon—was Mahón, on Minorca, six hundred miles inside the strait. Captured by the British in 1708, it was robust enough to sustain a fleet in the Mediterranean. It did not remain in British hands for the whole century, though, making it difficult to rely on as a permanent base.

Even when the British did control Minorca, Mediterranean commanders both took responsibility for and relied on Atlantic ports. When the fleet was tasked with monitoring Cádiz, it relied on the combination of major allied facilities at Lisbon, the developing naval base at Gibraltar, and the provisions available for purchase in Tangier. The 1798 dispute between Orde and St. Vincent had arisen in precisely these circumstances. Cádiz was, in Admiralty terms, under the authority of the commander in chief of the Mediterranean—in 1804, Nelson.²⁶ But, as we have seen, Nelson was junior to Orde; Orde's command, no matter how small, could not be considered subordinate to Nelson's.

This complication was entirely unnecessary. Both Nelson and Orde were high up on the seniority lists as vice admirals, and there were numerous qualified candidates for the Cádiz command who were junior to Nelson. The Admiralty had more admirals than it could employ; finding an eager rear admiral would not have been difficult. Orde's appointment was not the first time Cádiz had been separated from the Mediterranean command, but it was the first time that the admiral off Cádiz had been senior to the commander in chief of the Mediterranean.²⁷ The political decision to appoint Orde—not only senior to Nelson but with a history of jealous conflict with him—created unnecessary and avoidable seams in the command structure and complicated information sharing across the Strait of Gibraltar.

Melville's decision to give Orde an independent command off Cádiz therefore broke with long-standing precedent. The particular circumstances of the strategic situation in 1804 make the decision even less explicable. Minorca had been returned to the Spanish under the terms of the Treaty of Amiens, meaning there was no base from which to watch Toulon. A promising new base at Malta—captured from the French in 1800—might have counterbalanced Minorca's loss, but it was too far from Toulon to be of use to Nelson. For his blockade, he resorted to a hodgepodge of Sardinian harbors and out-of-the-way anchorages, but none were capable of supporting his fleet logistically. He had to rely, as many British admirals had before him, on long communication and supply lines to North Africa and through Gibraltar to the Atlantic coast.²⁸

Orde took responsibility for Cádiz beginning 27 October 1804. The Spanish had six ships of the line preparing for sea, and there was a French ship of the line in port as well. Orde's squadron of five ships of the line was not particularly

powerful. His flagship, *Glory*, was an imposing ninety-eight-gun three-decker, but *Defence* was an elderly seventy-four and the three others—*Ruby*, *Agamemnon*, and *Polyphemus*—were mere sixty-fours, barely worthy of a position in the line of battle. Technically, the Spanish were not yet belligerents, but Orde's orders were clear: he was to prevent French and Spanish ships from leaving port.²⁹ The uncertainty in the diplomatic situation may have contributed to Melville's failure to communicate his intent to Orde. In a personal note, separate from the official orders, Melville explained that the Admiralty wanted "to have a small cruising squadron outside of the Straits of Gibraltar for the protection of our trade and watching the enemy."³⁰ It was not immediately apparent at the time that the difference between the official orders (blockade Cádiz) and the personal note (protect trade and watch the enemy) would matter. Yet this seemingly innocuous discrepancy would feature prominently later in the competing stories about what happened when the French appeared in the strait. Melville's letter and orders confused the intended responsibilities of the command.

For his part, Orde did not seek clarification. He finally had returned from the wilderness of half pay, and he knew that his new command was ripe with opportunities for glory and enrichment. Whether he was supposed to be protecting British trade or just blockading Cádiz, he was back at sea in an area he knew well.

Melville had succumbed to pressure from Orde's relatives and friends—especially Cornwallis—in agreeing to appoint him, but he also must have thought that Orde's knowledge of the Mediterranean station and Cádiz made him a strong candidate. He was wrong. Orde needed to be managed as Orde himself managed—that is, by the book, and with an unnecessary number of instructions. What was needed off Cádiz was a junior admiral instructed to communicate with Nelson—precisely the arrangement that had been in place in the recent past. In 1801, Admiral Lord Keith had taken the bulk of the Mediterranean Fleet to Egypt, and the Admiralty had sent Vice Admiral Charles Pole to Cádiz. Pole was not only junior to Keith but explicitly instructed to place himself under Keith's command if he had to enter the Mediterranean.³¹ In 1804, Orde was senior to Nelson, and he was operating under muddled orders. The Admiralty had set Orde up for failure.

Some of Orde's official orders were clear: he was instructed on arrival to send a frigate to Cartagena to check on Spanish preparations there, but from that point on he was "not thereafter to employ any of the ships or vessels under [his] command within the Mediterranean, except to procure supplies of stores or provisions." The orders were explicit in limiting his ships to travel "occasionally to Tetuan or Tangier to procure fresh beef." Orde reinforced these orders in lengthy regulations issued to his squadron, telling his captains that even Gibraltar was off-limits. This particular regulation had more to do with the presence of

plague in the garrison there in late 1804 than it did with questions about his area of responsibility, but also it indicated that he was cognizant of the demarcation between his area and Nelson's.³²

Seams of Command

It is easy in retrospect to see how the seam between Orde's and Nelson's commands would create communication problems, but it was readily apparent at the time as well. Orde attempted to placate Nelson immediately on arrival, writing to him in November 1804 and offering to "[seize] every occasion of giving Your Lordship any material information" in the hopes that Nelson would do the same in return. Orde even went so far as to say that Nelson should "command [him] without ceremony," though such an offer probably was never intended seriously.³³ At the same time, Orde ordered all Nelson's ships to withdraw into the strait, away from the vicinity of Cádiz.³⁴

Nelson was taken aback by the decision to slice Cádiz from his command, but he does not seem to have held Orde responsible. The personal conflict between Orde and Nelson should not be exaggerated. Nelson had not sought to offend Orde when Nelson was appointed to command the squadron off Toulon in 1798, and he does not seem to have held any animosity toward him. Orde was unquestionably jealous of Nelson, but his anger was directed at St. Vincent and the Admiralty. Orde eventually served as a last-minute replacement pallbearer at Nelson's funeral.³⁵

However, the structure of the two commands made friction between them unavoidable. Nelson spent much of his time as commander in chief in the Mediterranean frustrated by slow and inconsistent instructions from London. He complained to the Admiralty that he had not been informed of Orde's appointment until Orde had announced it himself.³⁶ Placing a senior admiral with a detached squadron squarely on his lines of communication promised to complicate, rather than simplify, matters. In February 1805, fully three months after Orde's arrival, Orde attempted to clarify the boundary between the two commands. He suggested to the Admiralty that a north-south line could be drawn through Cape Spartel, the southwestern edge of the strait. Orde hoped that drawing the boundary on the Atlantic side of the strait would obviate him from being responsible for convoys in the strait. He wrote to Nelson, passive-aggressively: "It will therefore I presume, be incumbent on your Lordship to provide for this important duty."³⁷

Meanwhile, Nelson struggled to work around Orde. In March, Nelson told the Admiralty that "a report"—no details were given, but one suspects Orde—had reached him accusing him of frequently sending his ships out of the Mediterranean. Nelson flatly denied having done so, "except the [frigate] *Amazon* which was sent to Lisbon with my dispatches."³⁸ Nelson was being disingenuous here.

To receive any communication from London, he had to send ships to Lisbon occasionally. He had given secret orders to *Amazon* to sail well out to the west to avoid Orde's squadron.³⁹ Orde missed *Amazon* but intercepted another one of Nelson's ships, the sloop *Halcyon*. Orde added his own dispatches to Nelson's and required *Halcyon* to call at his squadron on its return. It was nearly impossible for Nelson to bypass Orde without violating the command structure arrangement or practicing deception.⁴⁰

Conflict over Prize Money

What really frustrated Nelson about Orde's appointment was that Orde's squadron was in perfect position to profit from the declaration of war against Spain. Prize money was the lifeblood of naval warfare, and most officers thought that there was no better time to make a fortune than at the beginning of a war, when the enemy's merchant ships were likely to be at sea. Admirals claimed an eighth of the value of every prize captured by ships under their command, but since Orde did not report to Nelson, Nelson had no claim on prizes captured by Orde's ships. Nelson's friends commiserated with him: "I have never felt more indignant than as Your Lordship's account of the Admiralty's treatment of you," wrote Alexander Ball.⁴¹ Another correspondent expressed similar sentiments, damning Melville ("the Scotch Lord") and writing, "I am very sorry to hear . . . that Sir John Orde is come to skim the cream of the first of the Spanish War off Cadiz."⁴²

The cream was very rich, in the end. By mid-December, Orde was already requesting Admiralty instructions about what to do with all the money he had on board the ships in his squadron. The frigate *Lively* captured a single ship worth £180,000, only to be topped by *Polyphemus* capturing a Spanish frigate carrying 1,215,000 Spanish dollars plus bark and cocoa. Collectively, the squadron captured somewhere between 2.5 and 4 million Spanish dollars, which Orde eventually sent back to England in *Lively*.⁴³ If the command off Cádiz had remained a part of Nelson's Mediterranean Fleet, then a share of the bounty would have been Nelson's; instead, it was Orde's. If Orde congratulated himself on having balanced his karmic ledger with Nelson, the evidence has not survived. We can be certain that he was immensely pleased with the haul, even if there were significant legal battles still to be fought about whether the Spanish ships had been captured before the official declaration of war.⁴⁴

Orde's enthusiasm for prizes soon got the better of him, however. The routine he established while blockading Cádiz was more relaxed than that of his arch-enemy, St. Vincent. In 1798, in the wake of the great mutinies at Spithead and the Nore, St. Vincent had enforced a close blockade to keep his squadron occupied and disciplined. The ships were so close to Cádiz that officers had their laundry done in town and individuals in the city could be discerned easily from the decks.⁴⁵ Orde took a more reasonable approach, generally staying ten to fifteen

miles offshore.⁴⁶ Such a distance provided flexibility, as he was close enough to monitor enemy preparations from his flagship. Orde deployed most of his frigates and sloops elsewhere, and did so aggressively. *Lively*, *Amphion*, and *Wasp* received regular two-week cruises intended to capture prizes, while *Polyphemus*'s capture of the valuable Spanish frigate suggests that Orde was even willing to detach ships of the line from his squadron. The more ships cruising, the more likely he would be to get an eighth of the value of a prize.⁴⁷

The Admiralty was not impressed. On 11 January 1805, their lordships reminded Orde of his duty. In a public letter, they accused him of being jealous of Nelson's allocation of frigates because they increased his chances at prize money. This was unacceptable: "Their Lordships are unwilling to believe that any officer in His Majesty's Service would consider prize money as an object to which any part of the force under his command be primarily appropriated." They expressed their "dissatisfaction" that Orde had wasted their time with "correspondence in which competition for prize money seems to be the chief if not the only subject of discussion."⁴⁸ This was strong language indeed. To reprimand a serving admiral for greed in an official letter was both shocking and exceedingly rare.

Orde clearly was stung. From his perspective, he had behaved exactly as anyone in his situation would have. And furthermore he had not failed in his core mission: the Spanish were still in Cádiz, after all. The prize money dispute was ancillary to that (although he was very disappointed when subsequent rumors reached him that Nelson had been given a prize agent in Gibraltar with permission to lay claim to the prizes captured by Orde's frigates).

But in any case, the real issue was that his orders had been written poorly. While the personal note from Melville had told him that his squadron was intended to protect British trade from Cape Saint Vincent to Gibraltar, his official orders said nothing about that; his mission was to blockade Cádiz. His squadron was big enough to do one mission or the other, but not both.⁴⁹

It is easy to imagine Orde keeping himself awake in the middle of the night by composing bitter, biting replies to the Admiralty. Nevertheless, the fact remained that he once again had managed to annoy his superiors. This time, presumably, he did not contemplate challenging one of them to a duel. Instead, in a letter written in his own hand and dated 27 March 1805, he resigned.⁵⁰ The same day, Villeneuve sailed from Toulon.

THE FRENCH ARE OUT

Nelson anticipated that, when Villeneuve sortied, he would head east toward Egypt. Setting up a long-range blockade, Nelson kept his frigates off Toulon to keep an eye on French movements and deployed his fleet in the close waters among Sicily, Sardinia, and Tunisia. If the French went east, they would have to

pass through these waters, and Nelson hoped to bring them to battle. From 27 to 30 March, Nelson was south of Sardinia.

Villeneuve left Toulon and initially made his way south to avoid the British, who he thought were off Barcelona.⁵¹ On 31 March, the French fleet was observed at sea by two frigates under Nelson's command. *Active* remained to shadow Villeneuve, while *Phoebe* sailed south in search of Nelson. *Active*, however, lost contact with the French that night, and so also went in search of Nelson in the morning.⁵² For Villeneuve the timing was perfect. On 1 April, he learned from a Sicilian merchantman that Nelson was not waiting off Barcelona, and he decided to turn west.

News that the French fleet was out reached Nelson on 3 April, first from *Phoebe* and a few hours later from *Active*, but the frigates told him the French were sailing south-southwest, indicating a likely destination to the east.⁵³ Nelson spent the next two weeks sailing between the south coast of Sardinia and the northwest coast of Sicily, waiting to pounce on the French fleet. He spread his frigates across the area, hoping to renew contact with Villeneuve.⁵⁴

Meanwhile, on 7 April, Villeneuve stopped briefly at Cartagena to collect the six Spanish ships of the line anchored there. However, on learning that they would not be able to sail for thirty-six to forty-eight hours, and probably expecting the British to be close behind him, he raised anchor late on the night of 7 April and set a course for the Strait of Gibraltar.⁵⁵

At Gibraltar, the early morning of 9 April did not appear to be much different from any other. *Fisgard*, a frigate from Nelson's fleet, was anchored behind the protective mole where it had been for almost four weeks making major repairs. *Fisgard's* captain, Lord Mark Kerr, busied his crew loading provisions.⁵⁶ Twenty-four hours earlier, a convoy of forty-six merchant ships had left Gibraltar for England, escorted by one of Orde's frigates, *Mercury*, and a sloop. A seventy-four-gun ship of the line from Nelson's fleet, *Renown*, commanded by Sir Richard Strachan, also was refitting at Gibraltar. Strachan sailed with the convoy to provide extra protection through the Strait of Gibraltar, known as the Gut.⁵⁷ Spanish gunboats and privateers often took advantage of the fourteen-mile-wide choke point, picking off merchantmen that strayed too far from Royal Navy protection. Strachan parted with the westbound convoy just off Cape Trafalgar at noon on 8 April, and by first light on 9 April he had positioned *Renown* at the southwestern end of the Gut, about five or six miles northeast of Cape Spartel, preparing to fight the fresh easterly headwind and beat his way back to Gibraltar. Strachan could see the Rock rising slowly above the horizon in the early morning light, as *Renown* made headway back through the Gut.

The calmness of the morning was shattered when sails began to appear over the eastern horizon. By 10 AM, it was clear that these sails belonged to a large fleet.

Kerr signaled Strachan about the strange fleet, then hastily set about making his ship ready for sea.⁵⁸ Strachan also had spotted the ships and was using the fresh easterly wind to make all possible speed to the northwest to warn Orde's squadron off Cádiz, collecting the sloop *Sophie* en route. By 11 AM, Kerr, still making ready for sea at Gibraltar, counted eleven French ships of the line, five or six frigates, and two brigs passing through the Gut—no doubt an impressive sight. Kerr quickly issued orders to send a recently captured brig east with dispatches to warn Nelson.⁵⁹ By 2 PM, *Fisgard*'s crew had completed the herculean effort of readying their ship for sea. Kerr gave orders to haul *Fisgard* out of the mole at Gibraltar, making all sail westward to take advantage of the easterly wind to pass well south of the last known French position. Kerr raced back to England to notify the Admiralty that the French were out, but all he knew was that they had passed through the strait—nothing more.⁶⁰

At 2 PM, Orde and his flag captain both observed a strange ship of the line approaching, firing guns, but it was 2:20 PM before they could make out the signal for "enemy approaching," and 2:45 PM before they could identify the ship as *Renown*. Orde's squadron was in a precarious position at anchor nine miles off Cádiz. Included in the convoy that had sailed through the Strait of Gibraltar on the previous day were six transport ships filled with supplies, and Orde's ships were badly in need of water and provisions. The transports were currently alongside, and the ships' yards were employed hoisting provisions on board. When *Renown* made contact, decks were littered with supplies waiting to be lowered into the hold, and the squadron was not in a position to set sail quickly, much less clear the decks and prepare for action.⁶¹

At that time, Orde could not have known Villeneuve's mission. There was a very real possibility that it was to catch and overpower Orde's squadron off Cádiz, and since the wind was coming from the east, Villeneuve had the weather gauge. Accordingly, Orde's squadron began casting off the transports, throwing overboard the casks and staves that had yet to be stored in the hold, and clearing for action. Orde busied himself sending dozens of signals, annoying his captains. Even working at a frantic pace, it was 4 PM before the ships of the squadron were ready to weigh anchor, which they did in company with the transports, and made sail to the west, joined by *Renown* and *Sophie*. At this point, Villeneuve's squadron was within sight of Orde's flagship and was observed to be sailing along the coast toward Cádiz. By 7 PM, Orde's squadron had lost sight of the French fleet in the fading light. The immediate threat of action with a superior enemy force to windward had passed.⁶²

After recognizing that his squadron was outnumbered, Orde quickly decided to sail west and retreat to the Channel. Whatever plans the Combined Fleet might have, Orde could not force it into Cádiz, fight it on equal terms, or (as he later

claimed) shadow it without risking disastrous battle. It was also at this time—on the evening of 9 April—that Orde first had an opportunity to relay information of the French presence to the surrounding British forces and the Admiralty. Orde had no way of knowing that Kerr had sent a ship in search of Nelson, nor that he had sailed to England. Regardless, Kerr's intelligence did not include what the French had done once they passed through the strait. At that moment, Orde knew more about the French disposition and intentions than any other officer in the Royal Navy. It was essential to share that information with the Admiralty and the commanding officers of other British fleets. Only hours after getting his squadron safely under way, Orde gave dispatches to Commander Philip Rosenhagen aboard *Sophie* and ordered him to “inform [the Channel Fleet] of the Convoy sailing and of the French Fleet having passed the Gutt, also the Spaniards having 9 or 10 sail of the line ready for Sea.”⁶³ Orde also stated that he did not know the Combined Fleet's intentions, but he was “of opinion it *must be westward*.”⁶⁴

Orde correctly gauged that his first action should be to inform the Admiralty. However, once *Sophie* had departed, Orde also had responsibility to spread this information across the seams of the surrounding commands. One problem he immediately faced was that the wind changed. The easterly wind, which had been favorable to his quick departure from the waters off Cádiz and the French fleet's push through the strait, shifted over the course of 10 April to a strong wind blowing from the west-southwest. Orde's squadron therefore made little progress toward the west over the next two days, not arriving off Cape Saint Vincent until late on 12 April, when the wind shifted again and blew strongly from the north-northwest. This prevented the squadron from making any northern progress until the 19th.⁶⁵

During his slow passage, Orde had plenty of opportunities to think carefully about how to arrange his forces and communicate his intelligence. On 11 April, he ordered the frigate *Amphion* and two sloops, *Wasp* and *Beagle*, to cruise off Cape Saint Vincent until they received further orders. Captain Sutton of *Amphion* was directed to inform any British ships passing of the presence of the French fleet and to order warships to return to the Channel or, if the French returned through the strait, to head to the Mediterranean. Along with these orders were dispatches that Sutton was to have delivered to Lisbon.⁶⁶ On 12 April, Orde dispatched the frigate *Mercury* to Barbados and Jamaica, warning that the Combined Fleet was at large and possibly sailing for the West Indies.⁶⁷ Orde ordered *Mercury* to call at Madeira en route, “without anchoring,” and forward a letter to the East Indies with similar information.⁶⁸

At no point after making contact with the French fleet did Orde attempt to send any information east to Nelson; instead, he left a letter for Nelson at Lisbon, where the chances of Nelson receiving it were low. The Mediterranean is,

admittedly, large, and Nelson's fleet could have been anywhere from Egypt to Spain; furthermore, the areas of responsibility as laid out by the Admiralty clearly separated Orde from the Mediterranean. Nevertheless, given that his ships were allowed to resupply at Gibraltar, it would have been reasonable to leave a letter for Nelson there.

Strachan clearly thought that was the correct course of action. In the week after joining Orde's squadron, he sent him five letters, first suggesting, and then pleading, that contact needed to be made with Nelson. On 9 April, Strachan told Orde that he thought *Fisgard* was still fitting out at Gibraltar and unlikely to sail until the next day, with unknown intentions, but possibly east to find Nelson. He also stressed that he did not know where Nelson was, and feared he had gone east to Egypt. The following day, seemingly aware that Orde had no intentions of going east or sending news east, Strachan claimed that he may have misspoken about Nelson's location. Nelson was probably somewhere between Sardinia and Malta, and would not sail toward Egypt if the French were out with an easterly wind. He also said that he thought it likely that Nelson was in pursuit of the French, possibly a couple of days behind. In his third letter, Strachan reinforced this guess, and also stressed that *Renown* was critically low on water—a clear hint that he thought Orde should let him return to Gibraltar. In his fourth and fifth letters, written as Orde's squadron struggled to make northern progress, he doubled down on the poor condition of *Renown*, which he said was leaking more every day, and with masts and rigging in such poor condition that he feared they would be carried away in a strong wind. From his tone, it is clear that Strachan did not wish to leave the vicinity of the strait or to be detached from Nelson's fleet. He grew increasingly desperate to return to Gibraltar, although once the squadron began making progress north he resigned himself to his fate.⁶⁹

In a personal letter to Nelson written two weeks later, Strachan expressed his frustration with Orde's decision-making. Strachan said he had planned to return to Gibraltar once he had warned Orde of the French fleet, but Orde forced him to join his squadron. Moreover, Orde had taken "*Renown* from her station at a time he had determined to leave Cadiz without entertaining whether the enemy proceeded from Cadiz to the westward, or returned up the Mediterranean, or whether your Lordship followed them."⁷⁰ Strachan and Orde had a fraught relationship even before the incident off Cádiz. In December, Orde had accused Strachan of lingering in the strait in pursuit of a prize, disobeying direct orders from Orde to return to the Mediterranean—here again, the seams of the area of responsibility created unnecessary conflicts. Orde had taken his complaint all the way to the Admiralty, which responded (the day after rebuking him for pursuing prizes) that it hoped "from the character which Sir Richard holds in the Service, that he will be able to assign such reasons as will remove any unfavorable

impression which may have been formed.⁷¹ The Admiralty agreed to investigate the complaint, but said in so many words that they highly doubted Strachan had misbehaved. Orde's greed and grating personality compounded the confusion of communicating among commands.

Meanwhile, on 16 April, as Orde fought adverse winds off Cape Saint Vincent, Nelson first learned the French fleet had been seen off Cartagena. Two days later, stationed off Sardinia, he learned that the French had passed the strait—but not from Orde or Kerr. Instead, *Amazon* arrived with intelligence from a Ragusan brig, which had seen the French in transit. Nelson had a hard time believing it was not a feint, convinced as he was that the Toulon Fleet was destined for Egypt. He detached his frigates and smaller vessels to cover the Barbary Coast in case the French sent a secondary expedition east.⁷² On 19 April, he reluctantly decided to sail west, into the teeth of the wind. It was a long and slow fifteen-day passage to Gibraltar.⁷³

Back in London, the Admiralty was in crisis. On 8 April, Melville had been forced to resign following a financial mismanagement scandal dating from his time as treasurer of the Royal Navy. His replacement, Admiral Charles Middleton, now ennobled as Baron Barham, did not assume office until 29 April. It was not a moment too soon: on his first day news arrived from *Fisgard* of the French escape from Toulon and passage through the Strait of Gibraltar. Pitt came to Barham's office at 2 AM on the 30th to find him hard at work at his desk. They ordered Collingwood to take fourteen ships of the line from the Channel Fleet and sail to Cádiz.⁷⁴

On 4 May, Nelson finally reached Tétouan bay, at the eastern approaches to the strait, and took on water and provisions.⁷⁵ He was surprised to have no new news of the French. In a letter to the Admiralty, he expressed his frustration with the situation: "I believe my ill luck is to go on for a longer time, and I now much fear that Sir John Orde has not sent his small ships to watch the Enemy's fleet, and ordered them to return to the Straits' mouth, to give me information, that I might know how to direct my proceedings." The key question for Nelson was whether to try to guess Villeneuve's destination. The West Indies seemed likely, but, as Nelson put it, he could not sail the Mediterranean Fleet to the West Indies "without something beyond mere surmise." In any case, the Combined Fleet had a month's head start.⁷⁶ Clearly, Nelson expected up-to-date information, primarily from Orde, when he arrived at the strait. The news that he received—that the French had passed Gibraltar and had not returned—was almost four weeks old. Ideally, what he needed was word from ships that had shadowed the French and determined their destination. Orde had not dispatched any of his frigates or cruisers in this capacity. Like Nelson, Orde thought the West Indies were a likely destination, and had told the Admiralty and the commanders in the West Indies were a likely destination, and had told the Admiralty and the commanders in

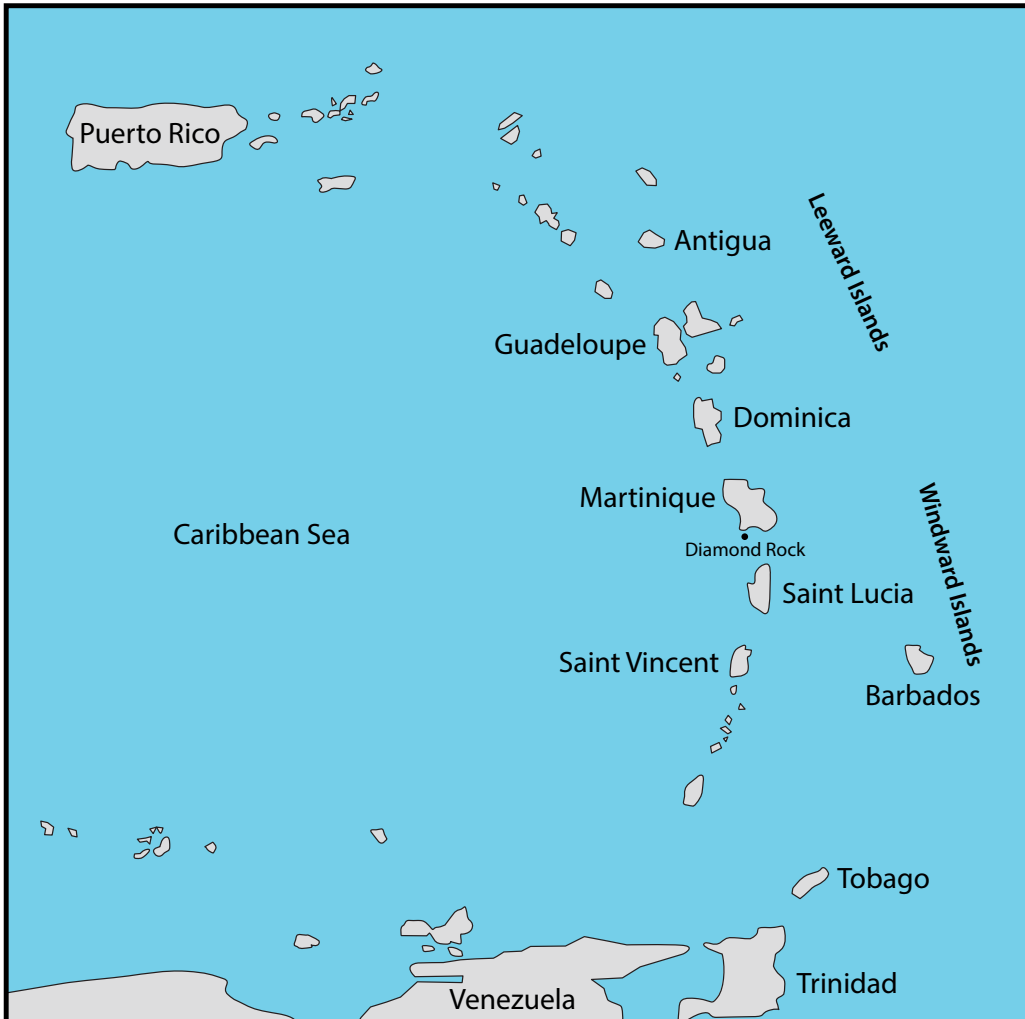
the West Indies as much. But he had not told Nelson, the admiral most directly concerned with the Toulon Fleet.⁷⁷

Without fresh information, Nelson passed through the Strait of Gibraltar on 6 May and arrived at Lagos Bay two days later, where Orde's supply ships were anchored.⁷⁸ *Amphion*, *Wasp*, and *Beagle* were nearby off Cape Saint Vincent, but they had no new information. The only intelligence Nelson gathered was that the French had not sailed north and had not been seen in over three weeks.⁷⁹ That increased the chances that the French had gone west, but it was only after he met Rear Admiral George Campbell, a Scot in Portuguese service, that he had any positive intelligence to support that guess.⁸⁰ On 11 May, a week after he had arrived in the strait, he finally made the decision to commit to the West Indies—thirty-two days behind Villeneuve.⁸¹ Orde's failure to leave any information for Nelson cost valuable time and confused the intelligence situation.

Nelson arrived at Barbados on the evening of 4 June, after a twenty-six-day passage. This was fast by fleet standards, and certainly better than the thirty-five-day passage Villeneuve had made a few weeks earlier.⁸² Nelson immediately met with Lieutenant General Sir William Myers, the commanding officer in Barbados and the Leeward Islands, and Rear Admiral Alexander Cochrane, who had arrived two months earlier in pursuit of a French squadron out of Rochefort. Myers had received a letter the day before from the commanding officer at Saint Lucia reporting that the Combined Fleet had been spotted sailing south toward Barbados or Trinidad. It obviously was not Barbados, so Myers offered Nelson two thousand troops from Barbados to help defend, or possibly retake, Trinidad. Nelson harbored doubts about the intelligence, but the added need to take additional troops to Trinidad convinced him to go south.

The following morning at 9:30 AM, Nelson's fleet was making sail to the south. As Nelson approached Tobago, he received news from a brig sent ahead that an American merchantman had reported being boarded by the French off the island of Saint Vincent, and that they were sailing south. On the morning of 7 June, Nelson's fleet prepared for battle, expecting the Combined Fleet to be in the channel between Trinidad and mainland South America. However, on arriving, Nelson found only empty sea. The lookouts who had spotted the French from Saint Lucia had mistaken three French frigates for the Combined Fleet, and the information the American merchant had provided was deliberately false. As Nelson pondered his next move, news arrived that the Combined Fleet had taken *Diamond Rock*, a small, fortified British outpost situated on a tiny rocky island (and commissioned as a sloop) about a mile and a half off the southwestern coast of Martinique.⁸³

Villeneuve had been at Martinique all along—only 140 miles away from Nelson when he arrived in Barbados. Only a couple of hours before Nelson sailed south toward Trinidad, Villeneuve had sailed north to Guadeloupe, where he



embarked troops, and then continued north past Antigua. On 8 June, he captured fifteen of the sixteen merchant ships in a homeward-bound British convoy, worth five million francs. After interrogating the prisoners, Villeneuve learned of Nelson's presence in the West Indies and decided to return across the Atlantic. On 11 June, the Combined Fleet set sail for Ferrol.⁸⁴

On 8 June, Nelson frantically sailed north from Trinidad, frustrated that he had turned the wrong way. At Dominica, he learned that the Combined Fleet was heading north, and at Antigua on 12 June he learned that it was returning to Europe, although among his captains opinion on its destination was divided. Nelson thought Cádiz or Toulon was the likely destination, in part because he still thought that the true target was Egypt.⁸⁵ He set a more southerly course for the Strait of Gibraltar—only two days behind his adversary. A few days later, he sent a frigate and a sloop ahead to Ferrol to warn the British squadron there in

case Villeneuve appeared. Both fleets crossed the Atlantic, initially only a couple of hundred miles apart but sailing courses for different destinations. Nelson arrived at Gibraltar on 19 July, where he was disappointed at receiving no news of the French.⁸⁶

Villeneuve's luck ran out when he arrived back in European waters. *Curieux*, the brig Nelson had sent ahead, had spotted the Combined Fleet at sea on the passage and realized that its course would take it north of the Azores, toward Ferrol. This news reached the Admiralty in the early hours of 9 July, and Barham dispatched immediate orders for the Rochefort squadron of five ships of the line to combine with the ten ships of the line off Cape Finisterre under the command of Vice Admiral Sir Robert Calder. Calder's fifteen ships of the line intercepted the Combined Fleet of twenty ships of the line on 22 July in light winds with a heavy swell and patchy fog. After an indecisive battle that evening, both fleets spent several days maneuvering for position before Villeneuve, demoralized, sailed southeast for the port of Vigo. Although Calder was later court-martialed for not bringing the Combined Fleet to battle on the 23rd or 24th, his actions proved to be the strategic victory that thwarted Napoléon's plans for combining the naval power of France and Spain in the Channel to cover an invasion of England.⁸⁷

It is impossible to say whether Nelson would have caught Villeneuve in the West Indies had he received proper intelligence from Orde. However, we can say that the near miss was a matter of hours. Had Nelson departed European waters a few days earlier, it is unlikely that he would have sailed to Trinidad after arriving at Barbados. The bad intelligence that caused him to do so was received in Barbados only a few hours before his fleet arrived on 4 June. Rather, Nelson would have considered Martinique, France's stronghold in the Windward Islands, a logical point to have begun his search. Nelson also might have been able to prevent the French capture of the West India convoy. While this is all speculation, we can say that the margins in the Trafalgar campaign were small—matters of hours and days. Orde leaving Nelson in the dark was significant, even if the alternative outcomes are impossible to know.

ORDE'S DEFENSE

Nelson's near miss in the West Indies, combined with Calder's action, resulted in the Combined Fleet being shut up, ironically, back in Cádiz, now watched by the entire Mediterranean Fleet under Collingwood. Orde had returned to England, but his passage had been slow and ridden with angst. After arriving at Spithead on 11 May, he was sent into quarantine, stemming from his squadron's proximity to the plague-ridden Gibraltar garrison.⁸⁸ While awaiting release, he received letters (one of which was quoted earlier in this article) that questioned his actions and attacked his character.

Accused of cowardice, and of failing to do as Nelson would have done, Orde proceeded as soon as he could to the Admiralty for an interview with Barham. Orde asked whether the Admiralty approved of his bringing his fleet back to the Channel; Barham said yes, and then asked whether Orde was interested in being employed again. Orde, who clearly had expected to have to defend his actions and was eager to do so, was taken aback. He said he would consider employment again, but could he please explain his actions anyway? Barham pointed to a stack of unopened letters on his desk; Orde got the hint and left.⁸⁹ Orde never was employed again. Barham likely asked the question as a courtesy and to avoid being accused of treating Orde unfairly. He probably did legitimately approve of Orde's decision to bring his squadron back, but Orde's behavior in the months—and years—prior had disqualified him from future consideration.

Even as early as his retreat from Cádiz, Orde seems to have become increasingly uncomfortable with his own actions. While on the passage from Cádiz to Spithead he had written nearly daily to the Admiralty, and each letter contained a new justification. In early January 1806, Orde participated in Nelson's funeral, but he was still frustrated by how his active career had ended. Sometime after the funeral, he wrote a four-thousand-word defense of his actions, followed by a second, six-thousand-word additional defense. Neither is dated, and he claimed later that the documents were written confidentially for his friends. Their tone is that of a proud, wounded animal. When combined with the letters he wrote in April 1805, they create a comprehensive but internally incoherent picture of Orde's thinking.⁹⁰

His best defense, as laid out primarily in the letters written on his way back to the Channel, comes in his reasonable assessment of the likely plans of the French and Spanish. In January 1805, he noted, the Toulon Fleet had sortied and attempted to link up with the Rochefort squadron before being forced back by poor weather. Orde suggested that the French would not squander the chance presented by freedom of movement in the Atlantic. It seemed reasonably unlikely that they would return to the Mediterranean if they had the chance to leave.⁹¹ This is the analysis that Corbett rightly praises as insightful, and Orde deserves credit for having guessed the outline of Napoléon's invasion plans—even if Orde's guesses conveniently justified his decision to desert Cádiz.

Less persuasively, Orde claimed he could not have given the Admiralty or Nelson any more information about the destination of the Combined Fleet because he could not track it at sea. He gave many reasons why this was impossible, each of varying degrees of legitimacy. Initially, he claimed that his squadron was too weak to shadow the Combined Fleet. *Glory*, *Agamemnon*, and *Renown* were poor sailors, and Orde correctly pointed out that if he had tried to stay in contact with the Combined Fleet he might have been forced into a disadvantageous

battle. At the very least, deploying his full squadron in such a way would have cost the Admiralty the use of his ships of the line for an extended period. Tracking an enemy fleet with an unknown destination was indeed challenging, and in his later defense Orde pointed to Nelson's own difficulties in having his frigates track the Toulon Fleet in the last days of March.

Orde also argued, strangely, that it was impossible to know an enemy's destination. He noted that the expedition led by General Lazare Hoche had left Brest in 1796 and "proceeded for the sake of deception so far to the westward as to strike soundings in the Banks of Newfoundland, before they steered for Ireland."⁹² Not only did targeting the West Indies fit the pattern of Napoléon's deployments that Orde had identified, but there were well-known routes from Cádiz to the West Indies, and it beggars belief that a frigate trailing Villeneuve's ships could not have made an educated guess about their destination after a few days at sea. *Curieux* did precisely this when encountering Villeneuve in the middle of the Atlantic in June on the return leg.⁹³

Another strand of Orde's defense is that Nelson would have been, or perhaps should have been, in a better position to act than Orde. Guessing that Villeneuve had gone west conveniently made Orde's decision to go north the correct one. Had Villeneuve gone east, he wrote, "I should not have hesitated one moment to risk passing the Strait." How he would have known that Villeneuve had done so is not clear, since he had sailed well to the west by the time Villeneuve departed Cádiz. He did not let such practicalities impede spinning out hypotheticals. He worried in the same letter that entering the Mediterranean would have been met with disapproval—recall that his orders strictly prohibited him from doing so. In that scenario, as the senior officer, he would have had to assume command of the Mediterranean station. He was quick to say that he had no desire to be in high command.⁹⁴ It was Nelson's burden to bear, and Orde was happy to let him carry it. While on the passage back from Cádiz, he expressed confidence that, if the French had gone east, "Nelson will be found in condition, with his 12 ships of the line and numerous frigates, to act on the defensive without loss, and even to hang heavily on the skirts of the enemy's fleet."⁹⁵ Orde wanted it both ways—to claim to have been willing to enter the Mediterranean in pursuit of Villeneuve, but without having to determine Villeneuve's course. He went on to argue that the Toulon Fleet was Nelson's responsibility, not his, so he need not have tracked it when it appeared off Cádiz.⁹⁶ Nelson's fleet was stronger than Orde's, and the Toulon Fleet had been Nelson's responsibility originally, but the stakes were too high to abdicate responsibility in this way, on a technicality.

Orde defended his failure to communicate with Nelson on the grounds that he could not have known where Nelson was, nor predict where Nelson might go. Yet he simultaneously claimed that he and Strachan worked out where Nelson was

likely to be, and where he was likely to go: “Lord Nelson on being informed of [the Toulon Fleet’s] escape from Port, even were it reported as steering westward, would proceed with his Squadron to the Coast of Egypt, or at least to some position whence he might interrupt an attack on that Country, the Morea at Naples.”⁹⁷ Why not give that educated guess to an intrepid frigate captain, or at least to a ship at Gibraltar, with instructions to attempt to find Nelson? Strachan clearly thought this was the correct course of action. The Admiralty’s poor command design is partly to blame, but Orde’s lack of imagination and confidence contributed significantly. Orde also knew that Nelson was likely to come west as quickly as possible once news of the French transit of the strait reached him, but Orde downplayed the significance of this move by claiming that Nelson might be stuck in the Mediterranean for “five or six weeks, nay more,” while waiting for a favorable wind.⁹⁸ In other words, Nelson was too far away and too unlikely to influence events in the Atlantic to be worth any effort to contact him—yet Orde thought it was worthwhile to send news to the East Indies Station, six months’ sail away.

On 1 May, Orde expressed surprise that his letters with news of Villeneuve’s escape were “unaccountably . . . preceded by account from Lord Mark Kerr who I trusted had gone in quest of Lord Nelson.”⁹⁹ It was unaccountable because of the seam along the areas of responsibility at Gibraltar. Orde later claimed that both he and Kerr had intelligence that the Spanish ships were not prepared for a long voyage. Furthermore, “so confident were they at Gibraltar that the Toulon Fleet when seen passing the Straits were bound to Ireland” that Kerr sailed directly for Ireland, “instead of apprising Lord Nelson or Sir John Orde, as it would have been his duty in case of uncertainty.”¹⁰⁰ We know that Kerr did attempt to apprise Nelson, and we also know that Kerr did not sail directly for Ireland. Instead, he landed at Portsmouth, and it was his news that first informed the Admiralty of the French passage of the strait.¹⁰¹ Orde knew more than Kerr—he knew that the French had combined with the Spanish in Cádiz, and he guessed that they were headed west. Orde’s strategic insight and educated guesses justified his own actions, but in failing to share those insights with Nelson he wasted much of their potency.

Among the more curious decisions that Orde made was to station *Amphion*, *Wasp*, and *Beagle* together off Cape Saint Vincent, rather than scattering them. One of the three should have gone to Gibraltar with the latest intelligence and to await Nelson. It did not require more than one cruiser to warn British shipping in the area about the presence of the French fleet. In his defense, Orde claimed that he left them “on [his] Station” with orders “to ascertain and counteract . . . the movements of the enemy.”¹⁰² They did no such thing, in the end, except for one nearly disastrous investigation of Cádiz’s harbor. A lieutenant from *Wasp* took a Portuguese fishing boat to Cádiz and reported that the entire Combined

Fleet was still there on 22 April—almost two weeks after it had left for the West Indies.¹⁰³ Rather than relay this intelligence to Gibraltar, the senior captain sent it to Lisbon, where the British consul forwarded it on to the foreign secretary.¹⁰⁴ If a frigate or sloop had been stationed off Cádiz, such a mistake would not have been made; Orde's claim that the frigates were "on [his] Station" may be technically true—his station included Cape Saint Vincent—but they were not optimally placed for intelligence-gathering purposes, nor were they given instructions about communicating with Nelson. Why this curious deployment? The archival record provides hints, but nothing definitive. By stationing three small ships on the western fringe of his station, Orde could claim that he had not abandoned it entirely; perhaps he thought they might capture prizes. We cannot know for sure, but Orde's orders to his cruisers stand alongside his botched communication with Nelson as significant failures.

Orde also claimed that standing and fighting Villeneuve, or even hanging on his skirts as he thought Nelson might do, "would have led to the gratification of every wish of my heart, to superior command, to increased patronage and emolument, and possibly to great distinction." Orde wanted credit for, in his words, "the sacrifice I have made" in forgoing the chance of bringing about a fleet action.¹⁰⁵ Even before he reached Spithead, he realized that running from the Combined Fleet exposed him to accusations of cowardice. This article's analysis does not seek to accuse Orde of cowardice—he faced odds of three to one—but his pleading is an indication of the pressure he and other British naval officers were under to fight no matter the odds.

Orde's defense collapses amid internal inconsistencies and obscures his true motives. He was fed up with his station off Cádiz, from which he had just requested to be allowed to resign. The rebuke by the Admiralty in January, coupled with the ongoing friction between his command and Nelson's, had shattered his morale. Personal disputes with respected officers such as Strachan undermined his authority. He had made money from prizes, but those winnings were now under threat from the appointment of Nelson's prize agent in Gibraltar and the legal battles over the legitimacy of Spanish prizes taken before the declaration of war. He thought his responsibilities were to blockade the Spanish (and capture prizes); the Admiralty thought he was there to blockade the Spanish (and protect British trade). When the French appeared, he was caught in a precarious situation with transports alongside and decks covered in stores. Outnumbered three to one, he sensibly retreated, but in doing so he neglected his most important duty: to put aside personal history and communicate across the boundaries of his area of responsibility. Orde's failure cost Nelson a good chance of bringing the Combined Fleet to action in the West Indies.

What-if history has limited value; of more importance, both for our understanding of the Trafalgar campaign and for navies today, are the preventable mistakes that both the Admiralty and Orde made. Some of the contributing factors are beyond the scope of this article: St. Vincent's disastrously timed dockyard reforms had destroyed the fleet's readiness during the recent peace, and the decision to strike the Spanish preemptively was morally dubious and strategically disastrous.¹⁰⁶ But once a squadron was needed off Cádiz, there was no reason to appoint Orde to that post. He was senior to Nelson, with a history of conflict between them well-known to the public and certainly to Melville. Compounding this mistake were Orde's strict instructions not to encroach on Nelson's territory, even though Gibraltar is one of the world's great choke points—all information in and out of the Mediterranean must pass through it. Drawing a line across it was only likely to result in confusion and delay. Today, the United States organizes its combatant commands geographically. If it continues to operate this way, it is important to understand how geopolitics can warp traditional boundaries. For the British in the age of sail, bases in the Mediterranean itself were unreliable, poorly located, or underequipped; adverse winds easily could make the Strait of Gibraltar impassable; and the Spanish had major bases on both sides of the strait. Cádiz therefore should not have been separated from the Mediterranean command by placing it under a senior admiral.

The Admiralty bears responsibility for this mistake, although that is not sufficient to explain what happened off Cádiz. It is easy to play armchair admiral about Orde's actions in the face of an overwhelming enemy force. Orde handled the surprise on the afternoon of 9 April well, all things considered. He protected his transports, organized his forces, and prepared for action. Corbett's assessment of Orde's subsequent retreat is sound. Orde helped concentrate British naval forces (which otherwise were spread dangerously thinly) on the Channel, lessening the chances of Napoléon's fleets gaining control of the invasion route. Orde did not know much about Calder's squadron off Finisterre, so subsequent accusations that he should have joined Calder do not stand up to scrutiny.¹⁰⁷ Indeed, it raises further questions about the Admiralty's ability to coordinate its various commands.

Orde also communicated efficiently to the West Indies and the Admiralty. His failure was to the east, to Nelson. The actions of the officers on the spot support this judgment: Kerr tried to communicate with Nelson; Strachan tried to convince Orde to communicate with Nelson; and Nelson complained that Orde had not communicated with him. The Lords of the Admiralty had demarcated the command areas poorly and had given conflicting orders to their chosen commander. Even if they did not grasp fully the problem presented by stationing a senior admiral off Cádiz, they trusted that such an experienced officer, familiar

with the responsibilities of the station and the intent of the Admiralty, would set aside personal jealousies and the annoyances of minor differences in seniority in the face of a crisis. Their trust was misplaced, demonstrating the importance of the human element in what we now refer to as *mission command*. It would be unfair to say that any other admiral would have behaved differently, but it does seem as if Orde was uniquely unsuited for his command. Tempted by rich prizes, he neglected the protection of trade; jealous of Nelson, he treated the seams of his command too literally; sensitive to questions of character, he reacted badly when reprimanded. Only by understanding the interaction between the human failings of commanders and the challenges presented by command boundaries can senior leaders deploy naval forces effectively. The incident off Cádiz is an example of poor mission command: the Admiralty chose the wrong man for an ill-defined mission.

NOTES

1. Sir Julian Corbett, *The Campaign of Trafalgar* (London: Longman, 1910), pp. 57–68.
2. N. A. M. Rodger, *The Command of the Ocean: A Naval History of Britain, 1649–1815* (New York: W. W. Norton, 2005), p. 534; Roger Knight, *The Pursuit of Victory: The Life and Achievement of Horatio Nelson* (New York: Basic Books, 2005), p. 486; James Davey, *In Nelson's Wake: The Navy and the Napoleonic Wars* (New Haven, CT: Yale Univ. Press, 2015), p. 80. The rest of the literature varies in quality and depth of coverage of Orde's role in the campaign. For a detailed account emphasizing Nelson's frustration with Orde, see Mark Adkin, *The Trafalgar Companion: A Guide to History's Most Famous Sea Battle and the Life of Admiral Lord Nelson* (London: Aurum, 2005), pp. 47–49. Some accounts mistakenly credit Orde with shadowing Villeneuve's fleet: Andrew Lambert, *Nelson: Britannia's God of War* (London: Faber and Faber, 2004), p. 265. The only modern critic of Orde's actions ("panic-stricken") is Alan Schom, *Trafalgar: Countdown to Battle, 1803–1805* (New York: Atheneum, 1990), p. 211. A sketch of the faulty command structure from Nelson's perspective can be found in both John Sugden, *Nelson: The Sword of Albion* (London: Bodley Head, 2012), pp. 723–24, and Edgar Vincent, *Nelson: Love and Fame* (New Haven, CT: Yale Univ. Press, 2003), p. 542.
3. Davey, *In Nelson's Wake*, p. 80.
4. Corbett, *Campaign of Trafalgar*, pp. 57–68.
5. Sir John Orde to Lord Barham, 12 May 1805, enclosing a letter from H. Thompson to Orde, 9 May 1805, OSB MSS 133, series 2, box 9, f. 165, Sir John Orde Papers, James Marshall and Marie-Louise Osborn Collection, Beinecke Rare Book and Manuscript Library, Yale Univ., New Haven, CT [hereafter Orde Papers, Beinecke]. Emphasis original.
6. Evan Wilson, "Britain: Practicing Aggression," in *Eighteenth-Century Naval Officers: A Transnational Perspective*, ed. Evan Wilson, AnnaSara Hammar, and Jakob Seerup (Basingstoke, U.K.: Palgrave Macmillan, 2019).
7. These points are echoed in Martin E. Dempsey, *Mission Command White Paper* (Washington, DC: U.S. Joint Chiefs of Staff, 3 April 2012).
8. *Oxford Dictionary of National Biography* [hereafter ODNB], s.v. "Orde, Sir John, First Baronet (1751–1824)."
9. Evan Wilson, *A Social History of British Naval Officers, 1775–1815* (Woodbridge, U.K.: Boydell, 2017), pp. 1–7, 105–29.

10. *ODNB*, s.v. “Nelson, Horatio, Viscount Nelson (1758–1805).”
11. Cuthbert Collingwood to Orde, 29 May 1793, OSB MSS 133, series 1, box 1, f. 31, Orde Papers, Beinecke.
12. Collingwood later revised his own opinion of Orde, writing that he “is proud and carries himself very high”; Knight, *Pursuit of Victory*, p. 660.
13. Audit Office investigation of Orde, 1810, OSB MSS 133, series 2, box 13, f. 170, Orde Papers, Beinecke.
14. Knight, *Pursuit of Victory*, pp. 660–61.
15. G. E. Hamond to A. S. Hamond, 6–23 December 1804, Hamond Papers, Add. MSS 9394, Cambridge Univ. Library, Cambridge, U.K.
16. H. W. Richmond, ed., *Private Papers of George, Second Earl Spencer, First Lord of the Admiralty, 1794–1801* (London: Navy Records Society, 1913–24), vol. 2, p. 451.
17. Knight, *Pursuit of Victory*, pp. 630–31, 660.
18. Newspaper clipping, 1798, OSB MSS 133, series 2, box 13, f. 180, Orde Papers, Beinecke.
19. Knight, *Pursuit of Victory*, p. 660.
20. *ODNB*, s.v. “Orde, Sir John, First Baronet (1751–1824)”; Brian Lavery, *Nelson and the Nile: The Naval War against Bonaparte, 1798* (Annapolis, MD: Naval Institute Press, 1998), p. 105. On dueling, see Wilson, *Social History*, pp. 196–202.
21. Orde to William Marsden, 20 March 1804, Admiralty: Letters from Admirals Unemployed, ADM 1/580, The National Archives, Kew, U.K. [hereafter TNA].
22. Sir William Cornwallis to Orde, letters of 1804, OSB MSS 133, series 1, box 1, f. 34, Orde Papers, Beinecke.
23. Sir John Colpoys to Orde, 24 August 1804, OSB MSS 133, series 1, box 1, f. 32, Orde Papers, Beinecke.
24. Sir Andrew Snape Hamond to Orde, Sir James Saumarez to Orde, and Sir Thomas Louis to Orde, 20–24 October 1804, OSB MSS 133, series 1, boxes 1–3, ff. 66, 86, and 131, Orde Papers, Beinecke.
25. Rodger, *Command of the Ocean*, pp. 530–32.
26. *Ibid.*, pp. 90, 164–80.
27. Cádiz was occasionally a subordinate command to the Mediterranean, as in 1799 when Vice Adm. Lord Keith commanded more than a dozen warships off Cádiz while St. Vincent, the commander in chief of the Mediterranean, remained ashore at Gibraltar in overall command. Even more common was for the detachment off Cádiz to be commanded by a rear admiral, as in 1800. Kevin D. McCranie, *Admiral Lord Keith and the Naval War against Napoleon* (Gainesville: Univ. of Florida Press, 2006), pp. 65–66, 93.
28. Rodger, *Command of the Ocean*, pp. 527–28.
29. Orde reproduced his official orders in his defense. Cadiz Incident: statements by Orde defending his actions at Cadiz and his request for recall to England, circa 1805, OSB MSS 133, series 2, box 13, f. 171, Orde Papers, Beinecke.
30. Viscount Melville to Orde, 27 October 1804, OSB MSS 133, series 1, box 2, f. 91, Orde Papers, Beinecke.
31. Secretary of the Admiralty to Keith, 13 August 1801, in *Keith Papers*, ed. Christopher Lloyd, vol. 2 (London: Navy Records Society, 1950), pp. 382–83.
32. Lords of the Admiralty to Orde, and Orde’s Regulations to His Squadron, 27 October 1804, OSB MSS 133, series 2, box 13, f. 179, Orde Papers, Beinecke. Orde’s regulations give a good sense of his meddlesome command style. Running to more than six pages closely written, they provide detailed instructions for even the most minor and obvious points: forcing marine subalterns to stand watches, making sure his officers wear their uniforms, telling the admiral about any sick men on board, and more.
33. Orde to Nelson, 17 November 1804, Add. MSS 34927, f. 5, Nelson Papers, British Library, London.
34. Cadiz Incident, circa 1805.
35. Knight, *Pursuit of Victory*, p. 661.
36. Nelson to Marsden, 30 March 1805, Admiralty: Letters from Commanders-in-Chief, Mediterranean, ADM 1/410, TNA. This was a recurring problem. Nelson also learned about General Craig’s expedition to the Mediterranean by chance, rather than from

- the Admiralty, in May 1805. Knight, *Pursuit of Victory*, p. 486.
37. Orde to Nelson, 7 February 1805, Add. MSS 34927, f. 209, Nelson Papers, British Library, London.
 38. Nelson to Marsden, 30 March 1805.
 39. Vincent, *Nelson*, pp. 530–31; Sugden, *Nelson*, p. 724.
 40. Orde to H. W. Pearse, 27 March 1805, OSB MSS 133, series 2, box 10, f. 98, Orde Papers, Beinecke. There is some suggestion that *Amazon* was under orders to fly a quarantine flag to avoid Orde. Vincent, *Nelson*, p. 531.
 41. Alexander Ball to Nelson, 12 December 1804, Phillipps-Croker Collection, CRK/1/158, National Maritime Museum, Greenwich, U.K. [hereafter NMM].
 42. George Campbell to Nelson, 15 December 1804, Phillipps-Croker Collection, CRK/3/18, NMM.
 43. *Lively's* captain wrote in a letter to his father that he had 2.5 million dollars on board, but Orde's orders to him said he should carry 4 million dollars back to England. Presumably the difference arises from the difficulty in counting so much money and challenges in currency conversions. G. E. Hamond to A. S. Hamond, 29 March 1805, Hamond Papers, Add. MSS 9394, Cambridge Univ. Library, Cambridge, U.K.; Orde to G. E. Hamond, 28 March 1805, OSB MSS 133, series 2, box 10, ff. 98–99, Orde Papers, Beinecke.
 44. G. E. Hamond to A. S. Hamond, letters of 6–23 December 1804, 13–20 January 1805, and 4 March 1805, Hamond Papers, Add. MSS 9394, Cambridge Univ. Library, Cambridge, U.K.
 45. Rodger, *Command of the Ocean*, p. 454.
 46. Journal of Sir John Orde, March 1805, Admiralty: Admirals' Journals, ADM 50/43, TNA.
 47. G. E. Hamond to A. S. Hamond, letters of 6–23 December 1804 and 22 March–7 April 1805, Hamond Papers, Add. MSS 9394, Cambridge Univ. Library, Cambridge, U.K.
 48. Marsden to Orde, 11 January 1805, OSB MSS 133, series 1, box 2, f. 89, Orde Papers, Beinecke.
 49. Cadiz Incident, circa 1805.
 50. Orde to Melville, 27 March 1805, ADM 1/410, TNA.
 51. Adkin, *Trafalgar Companion*, p. 47; Davey, *In Nelson's Wake*, p. 80; Knight, *Pursuit of Victory*, p. 483; Rodger, *Command of the Ocean*, p. 534.
 52. Adkin, *Trafalgar Companion*, p. 48.
 53. Journal of Lord Horatio Nelson, 3 April 1805, ADM 50/38, TNA; Adkin, *Trafalgar Companion*, pp. 47–48.
 54. Knight, *Pursuit of Victory*, pp. 483–85.
 55. Édouard Desbrière, *The Naval Campaign of 1805: Trafalgar*, ed. and trans. Constance Eastwick, vol. 1 (Oxford, U.K.: Oxford Univ. Press, 1933), p. 6.
 56. Captain's Log: HMS *Fisgard*, 9–10 April 1805, Admiralty: Captains' Logs, ADM 51/1549, TNA.
 57. Captain's Log: HMS *Renown*, 8–10 April 1805, ADM 51/1500, TNA.
 58. Captain's Log: HMS *Fisgard*, 9–10 April 1805.
 59. Kerr to Marsden, 23 April 1805, Letters from Captains, Surnames K, K-55, ADM 1/2021, TNA. A copy of the letter is in a packet Kerr sent to the Admiralty. The brig dispatched from Gibraltar never reached Nelson.
 60. Captain's Log: HMS *Fisgard*, 9–10 April 1805. Because Kerr had observed Strachan sailing northwest to warn Orde's squadron, Kerr had no reason to report to Orde after passing the strait in the fading light of 9 April. He knew that the winds in the Gulf of Cádiz could be adverse and were only likely to delay him. He brought the first news of the French escape to the British squadron off Finisterre on 15 April and to the Channel Fleet on 28 April.
 61. Journal of Sir John Orde, 8–9 April 1805; Captain's Log: HMS *Glory*, 9–10 April 1805, ADM 51/1503, TNA.
 62. Journal of Sir John Orde, 8–9 April 1805; Captain's Log: HMS *Glory*, 9–10 April 1805; Captain's Log: HMS *Mercury*, 9–10 April 1805, ADM 51/1494, TNA; Captain's Log: HMS *Sophie*, 9–10 April 1805, ADM 51/1483, TNA.
 63. Captain's Log: HMS *Sophie*, 10 April 1805.

64. Orde to Marsden, 10 April 1805, Letterbook, OSB MSS 133, series 2, box 9, ff. 169–71, Orde Papers, Beinecke. Emphasis in original. Although the letter is dated 10 April, it likely was written on the evening of 9 April, before *Sophie* departed Orde's squadron. *Sophie's* passage to England was not easy. Chased by a large frigate on the afternoon and through the night of 10 April, to get away Rosenhagen was forced to throw overboard his best bower anchor, the ship's boats, and almost anything that was not considered essential. The strange ship chased *Sophie* by moonlight until 4 AM on the following morning. *Sophie* reached British forces off Finisterre and Portsmouth on 22 April and 5 May, respectively, about a week after *Fisgard* had delivered the first news of Villeneuve's passage through the Strait of Gibraltar. Captain's Log: HMS *Sophie*, 9 April–5 May 1805.
65. Captain's Log: HMS *Glory*, 12–13 April 1805.
66. Orde to Sutton, 11 April 1805, OSB MSS 133, series 2, box 10, ff. 102–104, Orde Papers, Beinecke.
67. Those dispatches arrived on 3 and 9 May, respectively. Captain's Log: HMS *Mercury*, 3–10 May 1805.
68. Orde to Bouverie, 12 April 1805, OSB MSS 113, series 2, box 10, ff. 101–102, Orde Papers, Beinecke.
69. Strachan to Orde, 9–16 April 1805, Letterbook, OSB MSS 133, series 2, box 8, Orde Papers, Beinecke.
70. Strachan to Nelson, 30 April 1805, Add. MSS 34929, ff. 192–93, Nelson Papers, British Library, London.
71. Marsden to Orde, 12 January 1805, series 1, box 2, f. 289, Orde Papers, Beinecke.
72. Parker to Nelson, 10 and 18 April 1805, Add. MSS 34929, ff. 169–70, Nelson Papers, British Library, London; Adkin, *Trafalgar Companion*, p. 48; Knight, *Pursuit of Victory*, p. 486.
73. Captain's Log: HMS *Victory*, 19–20 April 1805, ADM 51/1482, TNA; Journal of Lord Horatio Nelson, 19 April 1805; Adkin, *Trafalgar Companion*, p. 48.
74. Davey, *In Nelson's Wake*, p. 81; Rodger, *Command of the Ocean*, pp. 534–35.
75. Adkin, *Trafalgar Companion*, p. 49; Knight, *Pursuit of Victory*, p. 488.
76. Nelson to Commissioner Otway, 4 May 1805, in *The Dispatches and Letters of Vice Admiral Lord Viscount Nelson*, ed. Nicholas Harris Nicolas (London: Henry Colburn, 1844–46), vol. 6, p. 419.
77. Orde had left a letter for Nelson in Lisbon, as previously noted, but Nelson was unlikely to receive it.
78. Adkin, *Trafalgar Companion*, p. 49; Rodger, *Command of the Ocean*, p. 534.
79. Adkin, *Trafalgar Companion*, p. 49; Desbrière, *Naval Campaign of 1805*, vol. 1, p. 23.
80. James Stanier Clarke and John M'Arthur, *The Life of Admiral Lord Nelson, K. B., from His Lordship's Manuscripts* (London: T. Bensley, 1809), vol. 2, p. 406.
81. Nelson was delayed slightly by the arrival, on 10 May, of a convoy carrying Gen. Sir James Craig's forces for an attempted Anglo-Russian invasion of Naples. After taking on provisions from the convoy for his own fleet, Nelson detached *Royal Sovereign* as additional protection for the convoy. Journal of Lord Horatio Nelson, 9–12 May 1805; Captain's Log: HMS *Victory*, 9–12 May 1805; Adkin, *Trafalgar Companion*, p. 49; Davey, *In Nelson's Wake*, p. 83; Knight, *Pursuit of Victory*, p. 489; Rodger, *Command of the Ocean*, p. 534.
82. Journal of Lord Horatio Nelson, 4 June 1805; Captain's Log: HMS *Victory*, 4–5 June 1805; Adkin, *Trafalgar Companion*, p. 52.
83. Journal of Lord Horatio Nelson, 7–8 June 1805; Captain's Log: HMS *Victory*, 7–9 June 1805; Adkin, *Trafalgar Companion*, p. 52; Knight, *Pursuit of Victory*, p. 492.
84. Adkin, *Trafalgar Companion*, p. 51; Davey, *In Nelson's Wake*, p. 84; Knight, *Pursuit of Victory*, p. 492; Rodger, *Command of the Ocean*, p. 535.
85. Knight, *Pursuit of Victory*, p. 493.
86. Corbett, *Campaign of Trafalgar*, pp. 162–67; Adkin, *Trafalgar Companion*, p. 53–54; Knight, *Pursuit of Victory*, p. 493; Rodger, *Command of the Ocean*, p. 535.
87. Corbett, *Campaign of Trafalgar*, pp. 193–207; Adkin, *Trafalgar Companion*, pp. 54–57;

- Davey, *In Nelson's Wake*, pp. 84–85; Rodger, *Command of the Ocean*, p. 536.
88. The decision to quarantine Orde and his squadron seems overly cautious, as Gibraltar had been free from plague since mid-January 1805. Orde's squadron had had limited contact with Gibraltar and had been at sea for the past month. Jason Musteen, *Nelson's Refuge: Gibraltar in the Age of Napoleon* (Annapolis, MD: Naval Institute Press, 2011), pp. 67–71.
89. Cadiz Incident, circa 1805. It is likely that both defenses were written in 1806 rather than 1805.
90. Ibid.
91. Orde to Marsden, 17 April 1805, ADM 1/410, TNA.
92. Cadiz Incident, circa 1805.
93. Orde to Marsden, 12 April 1805, ADM 1/410, TNA.
94. Ibid.
95. Orde to Marsden, 17 April 1805.
96. Cadiz Incident, circa 1805.
97. Ibid.
98. Ibid.
99. Orde to Marsden, 1 May 1805, Admiralty: Letters from Commanders-in-Chief, Mediterranean, ADM 1/411, TNA.
100. Cadiz Incident, circa 1805.
101. Kerr to Marsden, 23 April 1805.
102. Cadiz Incident, circa 1805.
103. Eastwick, in an editorial note, suggests that in Cádiz, "it was known that [the lieutenant] was on board and that deceptive appearances were arranged accordingly." Desbrière, *Naval Campaign of 1805*, pp. 20–21, note 3.
104. Lord Robert Fitzgerald, Consul in Lisbon, to Lord Mulgrave, 3 May 1805, Foreign Office and Predecessor: General Correspondence before 1906, Portugal, FO 63/47, TNA.
105. Orde to Marsden, 17 April 1805.
106. Rodger, *Command of the Ocean*, pp. 528–35.
107. Corbett, *Campaign of Trafalgar*, pp. 57–68; Cadiz Incident, circa 1805.

BOOK REVIEWS

“WHATEVER IS WORTH DOING AT ALL, IS WORTH DOING WELL”

Just War Thinkers: From Cicero to the 21st Century, ed. Daniel R. Brunstetter and Cian O’Driscoll. London: Routledge, 2018. 282 pages. \$128.

In his foreword to *Just War Thinkers*, Joel H. Rosenthal, president of the Carnegie Council for Ethics in International Affairs, refers to war as humanity’s oldest story and draws attention to how Homer reasoned from the *Iliad* that warfare is beyond the control of mere mortals and transpires within the provenance of the gods alone. Contrary to that reference to Greek mythology and ancient literature, Rosenthal hastens to assert that the just war tradition represents the noble attempt to impose moral limits on the conduct of warfare, as guided by the most cherished ideals in human civilization.

Informed by the time-honored wisdom of past sages and dynamic developments in modern statecraft, Daniel Brunstetter, associate professor of political science at the University of California–Irvine, and Cian O’Driscoll, senior lecturer in politics at the University of Glasgow, have compiled nineteen chapters on widely acclaimed authorities in the just war tradition.

Written by some of the foremost experts on the subject, these collected essays furnish profound insights on the moral parameters of warfare for the profession of arms.

In the helpful introduction, Brunstetter and O’Driscoll identify four challenges

encountered in attempting to assemble a set of central figures in the history of the just war tradition over a span of two thousand years. The first challenge is that the case easily can be made for any of a number of philosophers to be founder of the just war tradition, such as Aristotle, Augustine, or Aquinas. Both editors concede that the arguments for other philosophers are persuasive; nonetheless, they present strong evidence for accepting Marcus Tullius Cicero as the beginning point for exploration of the just war tradition. Those who study the thoughts of the Roman statesman in general will not be disappointed in the particularly keen intellect and admirable sense of integrity he displays as one among the first just war advocates.

Second, the editors lament that space does not allow the inclusion of all noteworthy contributors to the just war discussion. However, they strive to provide a varied assortment of authors, endeavoring to sustain an equitable balance between mainline and marginal just war theorists. Although they incorporate both extraordinary philosophers and theologians (Augustine, analyzed by James Turner Johnson; Thomas Aquinas, by Gregory

M. Reichberg; and Immanuel Kant, by Brian Orend), the editors also include less prominent thinkers (Gratian, by Rory Cox; Christine de Pisan, by Cian O'Driscoll; and Francis Lieber, by Stephanie Carvin) whose ideas inspire and enrich the heritage of human flourishing in war and peace no less than those first mentioned but without receiving the fanfare they deserve.

Third, Brunstetter and O'Driscoll caveat their choice of authors with the acknowledgment that they confined their consideration of political analysts to the Western tradition, even though they recognize the influence of other religious and cultural traditions outside Europe and Christendom. The discovery of the New World in the Americas, the recovery of texts and translations by Jewish and Islamic scholars from classical antiquity, and the trade of goods and ideas along the legendary Silk Road generated an indelible imprint on the philosophy and practice of war.

Fourth, the chapter authors are aware that the twin perils of anachronism and antiquarianism easily might undermine the credibility and the timely importance of their project, so they aspire to avoid those problems. Whereas anachronism sacrifices the authenticity of the historical record for the sake of contemporary pragmatism, antiquarianism reduces the just war tradition to historical obscurity and irrelevance for the sake of scholarly minutiae. The editors aim for an integration of competent historical scholarship with modern adaptations that recognize the significance of both continuity and change in the just war tradition.

Not only do Brunstetter and O'Driscoll satisfy these four challenges in their volume; they also achieve a thematic coherence throughout the anthology by establishing standard criteria for the examination of each seminal thinker. Every chapter investigates the contexts, texts, tenets,

controversies, and enduring legacies of each historical figure, especially pertaining to the primary concepts of *jus ad bellum* (justice toward war), *jus in bello* (justice in war), and *jus post bellum* (justice after war). The editors highlight the divergence of methodologies among the historical approach (James Turner Johnson), the legalist perspective (Emmerich de Vattel), and the revisionist trend (Jeff McMahan).

The poignant conclusions drawn at the end of the book leave the reader wanting more commentary from these eminent scholars, and Brunstetter and O'Driscoll wisely caution that *Just War Thinkers* is not the stopping point but the start for further research. Unconventional in its choice of designated thinkers, diverse in its selection of subject-matter experts, visionary in its formulation of overarching themes, *Just War Thinkers* promises to inform, surprise, and awe the reader with the "intimation of possibilities" for *jus pax* (just peace) in the twenty-first century.

EDWARD ERWIN



Into the Dark Water: The Story of Three Officers and PT-109, by John J. Domagalski. Havertown, PA: Casemate, 2014. 288 pages. \$29.95.

Writing an entertaining and readable account of one of the most famous naval vessels of World War II is a challenging task. However, John Domagalski displays his considerable knowledge of naval history in this well-informed narrative exploring the short-lived career of *PT-109*. The book is told through the lens of the vessel's three commanding officers, and thus is organized in three parts.

The first ten chapters concentrate on the background and construction of small boats, the self-propelled torpedo, the

arrival of *PT-109* in the Pacific, and the early skirmishes near Guadalcanal and the Solomon Sea. This exposition includes the evacuation by patrol torpedo (PT) boat of MacArthur from the Philippines, the keel laying of the eighty-foot *PT-109* by Elco in Bayonne, New Jersey, and a basic description of the boat and its armament. Including a blueprint of the boat at this juncture would have helped the reader visualize the ship's vulnerability. The author personalizes the story when he introduces the two officers who would command *PT-109* before John F. Kennedy: Rollin E. Westholm and Bryant Larson, both from Minnesota. Westholm was named squadron commander as well as commanding officer of *PT-109*; Larson served as his executive officer and later was named commanding officer of *109*.

These early chapters relate the nocturnal combat operations wherein the PTs attempted to interdict Japan's "Tokyo Express" destroyer supply runs. The narrative of the PTs' operations as they patrolled, looking for the enemy, is written and researched extremely well. While the PTs were fast and maneuverable, they also had drawbacks, and crews constantly were learning new lessons from their combat mistakes. Larson recalled a December 1942 engagement in which *PT-44* was lost: "[F]or some reason Frank [Freeland] chose a high speed attack, leaving behind the boat a tremendous phosphorescent wake that was like a searchlight pointing toward the boat. He never had a chance. . . . [F]rom the forty-four we learned two lessons—don't make a high speed night attack, and if you are hit, under fire, and dead in the water, get all hands off the boat before another salvo blows everyone to hell" (pp. 75–76).

Part 2 of the book consists of six chapters. John Kennedy was one of the volunteers recruited by Lieutenant John D. Bulkeley,

famous for his PT boat evacuation of MacArthur from the Philippines. Bulkeley recruited those sailors who "want[ed] to get into a scrap without delay and who had plenty of guts" (p. 126). Referencing Kennedy's letters to his parents, operational accounts, and related books, Domagalski skillfully weaves together the last few months of *PT-109*'s service. His description of the boat's August 1943 final patrol explains that "the Battle of Blackett Strait was one of the most poorly executed boat operations in the South Pacific. Dogged by unsound operating procedures, poor judgement among division commanders, and possibly just plain bad luck, the Americans failed to score a single hit on two passes of the Tokyo Express" (p. 173).

Domagalski helpfully employs maps as aids in the combat narrative, as well as other graphics to identify the combatants. The manner in which the maps are referenced, however, is a bit difficult to follow. Nevertheless, the author does a credible job of putting the reader into the "fog of war" and portraying the difficulties involved in assessing the success of a PT patrol.

The third part of the book has three chapters plus an epilogue. It traces the three *PT-109* commanding officers' service after the loss of the boat and briefly recounts their postwar experiences. Kennedy's evolving perspective on the war is noted, especially after the loss of two crewmen, which may be the foundation for his war-related learning as president. Domagalski summarizes Westholm's impressive thirty-plus-year career in the Navy, which included destroyer division command, and Larson's postwar business career, during which he remained in the Naval Reserve. Through these accounts, the reader is reminded of the "Greatest Generation's" accomplishments, as well as what might have been in store for the other lives cut short. The

book's epilogue reminds the reader that the U.S. Navy has a continuing need for small, fast warships and daring sailors willing to operate them against larger opponents.

Readers will appreciate the way the author uses oral histories, letters, newspaper accounts, deck logs, military after-action reports, written recollections, and background books and articles to tell an engaging sea story. This historical narrative will satisfy World War II buffs, sailors, and casual-interest readers. It is a quick and enjoyable read. Military scholars might appreciate the focused examination of small boats. Domagalski deftly accomplishes his mission: to pay homage to the intrepid war-fighting spirit of the patrol boat and motor torpedo boat sailors of World War II.

EDWARD GILLEN



Active Defense: China's Military Strategy since 1949, by M. Taylor Fravel. Princeton, NJ: Princeton Univ. Press, 2019. 392 pages. \$35.

During the Cold War, naval professionals working to understand Soviet military doctrine could call on a well-developed body of literature. Authoritative Western academic studies covered everything from the Soviets' overall strategic design to their philosophy of troop leadership. Advanced students could call on textbooks from Soviet military colleges in translation. Taken together, these works were essential to understanding that the Soviet military viewed warfare through a philosophical lens fundamentally different from our own.

Today, professionals trying to understand the modern Chinese approach to warfare find comparatively meager fare. Western academic interest in the approaches taken by the People's Republic of China (PRC) to military strategy waned after the

Maoist era. In many key areas, primary sources are scarce—often passed from practitioner to practitioner rather than being widely available. While a few overview works exist, there has been little focused academic analysis of the basics of Chinese military science.

In that context, Taylor Fravel's volume on PRC military strategy represents a groundbreaking contribution to Chinese military studies. In *Active Defense*, Fravel analyzes the nine "strategic guidelines" the People's Liberation Army (PLA) has issued since 1949. Each strategic guideline provided Chinese forces with four key elements: an authoritative analysis of the Chinese strategic situation, an explanation of warfare in the present era, and direction for both force development and force employment. Three of these documents—those issued in 1956, 1980, and 1993—each represented a major shift in direction for the PLA. Rebutting those who see the PLA as isolated and insular, Fravel concludes that these three revisions were driven primarily by PLA perception of significant shifts in the conduct of modern warfare. While in each case the Chinese Communist Party (CCP) wrote the overall analysis of the strategic situation—which is, at its core, a political assessment—the other three component parts of each strategic guidance document represented military judgments. Fravel suggests that such fundamental reassessments are possible only when the party leadership is internally unified and thus able to delegate this kind of work to its military experts. Many Western readers, focused on CCP control of the PLA, will be surprised at this long-standing empowerment of the PLA military leadership to decide foundational operational issues.

The level of trust the party extends to the military leadership in strategy development is only one of a number of arguments

that will be both new to most readers and controversial to specialists. While granting the significant influence of the Soviet Union on PLA *development*, Fravel offers a nuanced view of Soviet influence on PLA *doctrine*. During the 1950s, the Soviet Union provided extensive support to China, offering both military hardware and advisers. Despite this close relationship, the 1956 strategic guidance was developed in part to articulate a specifically Chinese approach to warfare. While Soviet doctrine emphasized abrupt and aggressive offensive action, China remained mindful that it would be fighting from a position of relative weakness, so therefore at the operational level it focused instead on a dynamic transition between offense and defense.

Fravel also notes that “people’s war”—a powerful idea in Chinese Communist ideology—was never officially a central PLA military doctrine; rather, the PLA used guerrilla warfare only in areas where mobile forces could not be sustained. The phrase *people’s war* properly referred to the political integration of Communist military forces with the population, whether those forces were guerrilla bands or armored columns. Fravel also provides the best explanation yet of the lineage and significance of the concept of *active defense*, noting that Mao used the phrase as early as 1935. Active defense was an element of all nine strategic guidelines,

and PLA officers still cite it today as an essential element of their strategy.

While the book covers the period from 1949 to 1993 extensively, the treatment of PLA doctrine after 1993 consists of only nineteen pages. The PLA issued new strategic guidelines in 2004 and 2014, but Fravel assesses that these did not represent a basic shift in PLA approach. Given the relative scarcity of sources on more-recent PLA developments, and the fact that strategic changes take time to become apparent in forces, this view could be subject to reassessment in coming years. Nuclear strategy is covered in a separate but well-crafted section at the end of the book, reflecting Fravel’s assessment that nuclear policy never was delegated to the PLA and thus represents a distinct topic.

With its focus on the long-term development of Chinese military strategy, *Active Defense* does not offer quick and easy insights into current PLA operations. Although Fravel does an admirable job of balancing academic depth with approachable overviews of complex historical events, this is not the first book a student should read on the PLA. It is, however, an extraordinary work that will endure as essential reading for any serious student of Chinese military issues.

DALE C. RIELAGE

OUR REVIEWERS

Edward Erwin is a Navy chaplain who holds a PhD in theology and ethics from Duke University. Dr. Erwin has taught world religions at Troy University and ethics at the University of Maryland University College.

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REFLECTIONS ON READING

Professor John E. Jackson of the Naval War College is the Program Manager for the Chief of Naval Operations Professional Reading Program.

In December 2019, Chief of Naval Operations (CNO) Admiral Michael M. Gilday, USN, issued his Fragmentary Order (FRAGO) 01/2019 that provided Navy leaders with guidance on how to simplify, prioritize, and build on the foundation established in *A Design for Maintaining Maritime Superiority, Version 2.0*, which was published in December 2018. In this FRAGO, he directed the Navy to focus on three principal lines of effort: war fighting, warfighters, and the future Navy.

While revisions to the CNO Professional Reading Program will be forthcoming, a number of books in the existing program already are clearly aligned with these three lines of effort.

WAR FIGHTING

Sea Power: The History and Geopolitics of the World's Oceans, by Admiral James G. Stavridis, USN (Ret.)

From one of the most admired admirals of his generation—and the only admiral to serve as Supreme Allied Commander Europe of NATO—comes a remarkable voyage through all the world's most important bodies of water, providing the story of naval power as a driver of human history and a crucial element in our current geopolitical path. In *Sea Power*, Admiral Stavridis takes us with him on a tour of the world's oceans from the admiral's chair, showing us how the geography of the oceans has shaped the destiny of nations, and how naval power has in a real sense made the world we live in today, and will shape the world we live in tomorrow. It is also a keen-eyed reckoning with the likely sites of our next major naval conflicts, particularly the Arctic Ocean, eastern Mediterranean, and South China Sea. Finally, *Sea Power* steps back to take a holistic view of the plagues to our oceans that are best seen that way, from piracy to pollution. When most of us look at a globe, we focus on the shape of the seven continents. Admiral Stavridis sees the shapes of the seven seas. Not since Alfred Thayer Mahan's legendary *The Influence of Sea Power upon History* have we had such a powerful reckoning with this vital subject.

Red Star over the Pacific, by Toshi Yoshihara and James R. Holmes

Combining a close knowledge of Asia and an ability to tap Chinese-language sources with naval combat experience and expertise in sea-power theory, the authors assess how the rise of Chinese sea power will affect U.S. maritime strategy in Asia. They argue that China has laid the groundwork for a sustained challenge to American primacy in maritime Asia, and to defend this hypothesis they look back to Alfred Thayer Mahan's sea-power theories, now popular with the Chinese. The book considers how strategic thought about the sea shapes Beijing's deliberations and compares China's geostrategic predicament to that of the kaiser's Germany a century ago. It examines the Chinese navy's operational concepts, tactics, and capabilities and appraises China's missile force. The authors conclude that China now presents a challenge to America's strategic position of such magnitude that Washington must compete in earnest.

WARFIGHTERS

Make Your Bed, by Admiral William H. McRaven, USN (Ret.)

If you want to change the world, start off by making your bed. On 17 May 2014, Admiral William H. McRaven addressed the graduating class of the University of Texas at Austin on commencement day. Taking inspiration from the university's slogan, "What starts here changes the world," he shared the ten principles he learned during Navy SEAL training that helped him overcome challenges not only in his training and long naval career but also throughout his life; and he explained how everyone can use these basic lessons to change themselves—and the world—for the better. Admiral McRaven's original speech went viral with over ten million views. Building on the core tenets laid out in his speech, McRaven now recounts tales from his own life and from those of people he encountered during his military service who dealt with hardship and made tough decisions with determination, compassion, honor, and courage. Told with great humility and optimism, this timeless book provides simple wisdom, practical advice, and words of encouragement that will inspire readers to achieve more, even in life's darkest moments.

Team of Teams: New Rules of Engagement for a Complex World, by General Stanley McChrystal, USA (Ret.)

When General Stanley McChrystal took command of the Joint Special Operations Task Force in 2004, he quickly realized that conventional military tactics were failing. Al-Qaeda in Iraq was a decentralized network that could move quickly, strike ruthlessly, and then seemingly vanish into the local population. The allied forces had a huge advantage in numbers, equipment, and training—but none of that seemed to matter. General McChrystal led a hierarchical, highly

disciplined machine of thousands of men and women. But to defeat al-Qaeda in Iraq, his task force would have to acquire the enemy's speed and flexibility. McChrystal and his colleagues discarded a century of conventional wisdom and remade the task force, in the midst of a grueling war, into something new: a network that combined extremely transparent communication with decentralized decision-making authority. The task force became a "team of teams"—faster, flatter, more flexible—and beat back al-Qaeda. In this powerful book, McChrystal and his colleagues show how the challenges they faced in Iraq can be relevant to countless businesses, nonprofits, and other organizations. The world is changing faster than ever, and the smartest response for those in charge is to give small groups the freedom to experiment while driving everyone to share what they learn across the entire organization. It has the potential to transform organizations large and small.

FUTURE NAVY

7 Deadly Scenarios: A Military Futurist Explores War in the 21st Century, by Andrew F. Krepinevich

A global pandemic finds millions swarming across the U.S. border. Major American cities are leveled by black-market nukes. China's growing civil unrest ignites a global showdown. Pakistan's collapse leads to a hunt for its nuclear weapons. What if the worst that could happen actually happens? How will we respond? Are we prepared? These are the questions that Andrew F. Krepinevich asks—and answers—in this timely and often chilling book. As a military expert and consultant, Krepinevich must think the unthinkable on the basis of the latest intelligence and geopolitical trends—and devise a response in the event our worst nightmares become reality.

As riveting as a thriller, *7 Deadly Scenarios* reveals the forces—both overt and covert—that are in play; the real ambitions of world powers, terrorist groups, and rogue states; and the actions and counteractions both our enemies and our allies can be expected to take—and what we must do to prepare before it's too late.

Seapower: A Guide for the Twenty-First Century, by Geoffrey Till

The rise of the Chinese and other Asian navies, worsening quarrels over maritime jurisdiction, and the U.S. maritime pivot toward the Asia-Pacific region remind us that the sea has always been central to human development as a source of resources, and as a means of transportation, information exchange, and strategic dominion. It has provided the basis for mankind's prosperity and security, and this is even more true in the early twenty-first century, with the emergence of an increasingly globalized world trading system. In contemporary conditions, navies, and other forms of maritime power, are having to adapt, in order to exert

the maximum power ashore in the company of others and to expand the range of their interests, activities, and responsibilities. While these new tasks are developing fast, traditional ones still predominate. Deterrence remains the first duty of today's navies, backed up by the need to "fight and win" if necessary. How navies and their states balance these two imperatives will tell us a great deal about our future in this increasingly maritime century. This book investigates the consequences of all this for the developing nature, composition, and functions of all the world's significant navies, and provides a guide for anyone interested in the changing and crucial role of sea power in the twenty-first century. *Seapower* is essential reading for all students of naval power, maritime security, and naval history, and highly recommended for students of strategic studies, international security, and international relations.

These six titles are among many others that comprise the CNO Professional Reading Program. They will help all sailors meet the challenges we face as we move into the second decade of the twenty-first century. As the CNO has noted, "We have much to do. Your tenacity, drive, and initiative will take us where we need to go—and do so at flank bell." Each and every one of us must be standing by to answer all bells!

JOHN E. JACKSON

(Note: All book descriptions are drawn from Amazon.com.)

