

PROTECTING THE ARCTIC MARINE ENVIRONMENT

AN EVALUATION OF THE UNITED STATES PARTICIPATION IN THE ARCTIC COAST GUARD
FORUM

by

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Executive Summary

Developed under the leadership of retired Commandant, Admiral Papp, and introduced in May 2013, the United States Coast Guard (U.S. Coast Guard) Arctic Strategic Plan highlighted the need for the United States to broaden partnerships in the Arctic through international collaborative efforts. Specifically, the 2013 Arctic Strategic Plan called for future Coast Guard and Department of Homeland Security leadership to explore the concept of an Arctic Coast Guard Forum (Papp, 2013). Two years later, on October 30, 2015, Coast Guard Commandant Admiral Paul Zukunft joined leaders from seven other nations to sign a joint statement that officially established the Arctic Coast Guard Forum (ACGF). Individual agencies with coast guard functions from Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden, and the United States comprise the members of the ACGF.

This Masters Project evaluates the United States' participation in the ACGF. Specifically, this project focuses on evaluating benefits of the United States' participation in the forum directly related to protection of the marine environment and makes recommendations for future planning purposes. Semi-structured interviews were conducted with high-ranking officials having firsthand experience with the forum and the United States Coast Guard. The interview data was then analyzed to identify strategic threats, opportunities, weaknesses, and strengths related to United States participation in the ACGF.

The establishment of the ACGF was a direct result of changing environmental conditions in the Arctic Region. As retreating seasonal sea ice has given way to open water and northern shipping lanes have become viable for maritime transportation and shipping. Furthermore, open water allows new opportunities to explore the extraction of oil from seafloor that was once protected by sheets of multi-year ice. Additional vessel traffic and an increase in oil and gas lease sales related to pending resources extraction has drastically increased the region's exposure to the threat of a coastal oil spill in U.S. waters. However, the United States currently lacks the resources and experience necessary to successfully manage an environmental response in the Arctic.

The geographic proximity of U.S. Arctic waters reduces the likelihood that oil response equipment from European nations would be of any benefit to a U.S. Coast Guard led response operation. Additionally, the remote nature of the Arctic region limits access to pre-staged domestic equipment in a timely manner necessary for oil recovery. In response, the United States must leverage international partnerships to address the environmental risks associated with a significant increase in regulated commercial vessel traffic and offshore oil drilling in the Arctic (Papp, 2013, p. 10; Torres, 2019; Ottenwaelder, 2018).

The results of this study show that the United States has not experienced significant benefit directly related to protection of the marine environment by participating in the ACGF. However, while the ACGF is still in the early stages of development, there are a growing number of opportunities for the U.S. Coast Guard to mold the future of the organization its benefit. The United States' establishment and participation in the ACGF has yielded benefits to the nation's

regional influence, the organization itself, and the Earth. In fact, as the ACGF continues to strengthen the connective tissues between member nations and increases regional preparedness, the United States is well positioned to ensure these benefits only continue to increase.

The development of future U.S. Coast Guard Arctic Strategic Plans should leverage the ACGF as well as the Arctic Councils' working group. This course of action would help to ensure the United States continues to maintain its role as a global environmental leader while addressing increased risk to the marine environment in the region.

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Introduction

As conditions in the Arctic Region continue to change, retreating seasonal sea ice has given way to open water and northern shipping lanes have become viable for maritime transportation and shipping. Regional vessel traffic has drastically increased the region's exposure to the threat of a vessel sourced oil spill. Additionally, open water allows new opportunities to explore the extraction of oil from seafloor that was once protected by sheets of multi-year ice. In response, the United States must leverage international partnerships to address the environmental risks associated with a significant increase in regulated commercial vessel traffic and offshore oil drilling in the Arctic (Papp, 2013, p. 10; Torres, 2019; Ottenwaelder, 2018).

Developed under the leadership of retired Commandant, Admiral Papp, and introduced in May 2013, the United States Coast Guard (U.S. Coast Guard) Arctic Strategic Plan highlighted the need for the United States to broaden partnerships in the Arctic through international collaborative efforts. While acknowledging the existence of several intragovernmental collaborations including the Arctic Council, the North Atlantic Coast Guard Forum, and the North Pacific Coast Guard Forum, the 2013 Arctic Strategic Plan called for future Coast Guard and Department of Homeland Security leadership to explore the concept of an Arctic Coast Guard Forum (Papp, 2013).

On October 30, 2015, Coast Guard Commandant Admiral Paul Zukunft joined leaders from seven other nations to sign a joint statement that officially established the Arctic Coast Guard Forum (ACGF). Individual agencies with coast guard functions from Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden, and the United States comprise the

members of the ACGF (hereinafter referred to as “ACGF Members”). The ACGF members signed a joint statement of the intent to further develop multilateral cooperation of agencies with coast guard-like functions and it served as the foundation for establishing the ACGF’s mission and vision statement.

Mission: The Forum progressively fosters safe, secure and environmentally responsible maritime activity in the Arctic.

Vision: The Forum is an independent, informal operationally driven organization, not bound by treaty to foster safe, secure, and environmentally responsibly maritime activity in the Arctic.

The forum was developed and designed to be an operationally-focused and consensus-based organization that was independent, but complementary to the Arctic Council (Kavanaugh, 2015). To ensure the complementary nature of the two organizations, the ACGF founding agreement stated that the chairmanship of the ACGF shall coincide with the chairmanship of the Arctic Council.

All participating members of the forum believe the vast and remote nature of the Arctic necessitates the need for countries to work collaborative to address environmental changes and increased human impact on the region (Kavanaugh, 2018). However, simply signing a joint statement and establishing a new forum is not enough to ensure proper protection of the Arctic environment. Indeed, policies and organizations must be effective in achieving specific goals or risk becoming burdensome, ineffective, or a waste of limited resources. This study seeks to provide a review of the United States participation in the ACGF and evaluate if the nation has experienced any significant benefits directly related to the goal of protecting the Arctic marine environment of the United States. Additionally, this study seeks to provide recommendations for

future strategic planning in the region and enhance cooperation among ACGF Members while eliminating possible inefficiencies.

Arctic Jurisdiction

The remote location of the region poses unique challenges for Arctic countries responsible for protecting the marine environment. Members established the ACGF as part of an effort to address these challenges. There are three well-defined commercial shipping routes in the Arctic: the Northwest Passage, the Northern Sea Route, and the Transpolar Sea Route (see Image 1). Each of these routes involves passage through the Bering Sea and represents increased risk of an incident involving an oil spill potentially impacting U.S. waters.

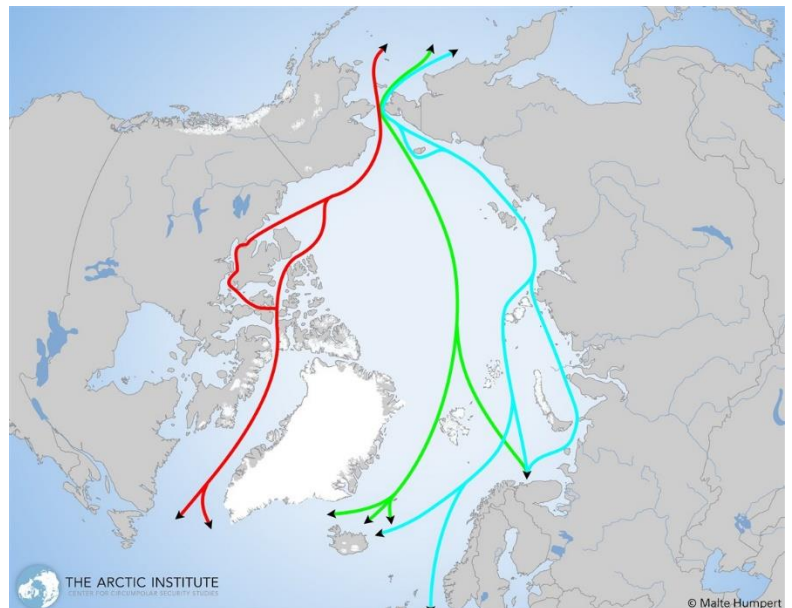


Image 1: Illustration of the northern shipping route; Northwest Passage (red), the Northern Sea Route (blue), and the transpolar Sea Route (green).

In addition to the observed increase in commercial vessel traffic in the Arctic, the Bureau of Ocean Energy Management (BOEM) is expecting to see an increase in oil and gas lease sales for the Beaufort Sea from 2019-2024 (Bureau of Ocean Energy Management, 2018). As sea ice continues to retreat, exposing more open water in Alaska's Beaufort Sea, an increase in lease sales and pending resources extraction pose other significant risks for an oil spill potentially impacting U.S. waters in that region. As seen in the Gulf of Mexico with the Deepwater Horizon oil spill of 2010, the oil industry's ability to extract previously inaccessible oil can pose a significant threat to the environment if proper planning and

response exercises are not in place prior to permitting the extraction. While lease sales and approval fall under the authority of BOEM, the Bureau of Safety and Environmental Enforcement (BSEE) is “charged with improving safety and ensuring environmental protection related to the offshore energy industry, primarily oil and natural gas” (Bureau of Safety and Environmental Enforcement, n.d.). As such, the U.S. Coast Guard and BSEE have overlapping jurisdiction related to the enforcement of pollution prevention and response regulations in the Arctic. The issue of overlapping jurisdictional authority is also seen within individual ACGF member states with multiple agencies that have an overlapping authority with Sweden being the only exception (see Table 1).

State	Authority & Coordinating Agencies for Preparedness & Response per MOA (additional USCG coordination points in parenthesis)
Russia	Ministry of Transport (SMPCSA), Agency of Maritime & River Transport / Civil Defense, Emergencies, Elimination of Consequences of Natural Disasters (EMERCOM)
Finland	Ministry of the Environment (Finnish Environment Institute – SYKE)
Sweden	Swedish Coast Guard
Norway	Fisheries & Coastal Affairs / Coastal Administration
Iceland	Environment Agency/ Icelandic Coast Guard/ Maritime Agency
Denmark (Greenland)	Ministry of Defense / Joint Arctic Command / Bureau of Minerals & Petroleum
Canada	Canadian Coast Guard / Transport Canada / National Energy Board
U.S.	U.S. Coast Guard / DOI Bureau of Safety & Environmental Enforcement

Table 1: Comparison of ACGF states and the corresponding agency with authority to act in a coast guard-like capacity

Domestic Response Priority

Within the U.S. Coast Guard, a mission represents the agency’s statutory responsibility to act. Under U.S. law, the U.S. Coast Guard is responsible for the execution of eleven official missions mandated by federal statute and funded by annual appropriations. Each of these missions aligns with the authority and jurisdiction of the U.S. Coast Guard. In accordance with domestic regulation, the U.S. Coast Guard has a statutory obligation to plan for and execute marine environmental response operations in all navigable waters of the U.S. including those in

the Arctic (U.S. EPA, 2015). Domestically, the Federal Water Pollution Control Act and National Oil and Hazardous Substances pollution contingency plan outlines the response priorities that guide U.S. Coast Guard environmental response planning and operations. The first priority outlined in regulation is safety of human life and specifically speaks to search and rescue (search and rescue) operations. The second priority is stabilization of the situation to preclude an event from causing additional harm. This hierarchy of response priorities ensures that responders do not accept unnecessary risk or prioritize the use of a search and rescue resource for anything other than safety of human life. Oil removal and spill remediation fall under the second priority of stabilization and is the reason why most U.S. Coast Guard environmental response operations do not start until search and rescue is complete and no immediate threat to human life or safety exists. In unique circumstances, the two operations can happen in parallel. However, the tasking of critical resources will be assigned to search and rescue operations first. These national priorities and hierarchy of critical resources assignments are mirrored within the guiding documents of the ACGF.

Background: Pre-existing International Collaborations

While developing the U.S. Coast Guard Arctic Strategic Plan, Admiral Papp reviewed the functionality of several pre-existing international collaborative organizations including North Pacific Coast Guard Forum (NPCGF), North Atlantic Coast Guard Forum (NACGF), and Arctic Council. The ACGF was not intended to replace, but rather strengthen these organizations while leveraging lessons learned from each of them. Specifically, the one of the ACGF primary functions is to operationalize the policies and plans of the Arctic Council's working groups. While similar in nature, each of these three organizations is unique in its functionality and membership.

North Pacific Coast Guard Forum

Formally established by Japan in 2000, the North Pacific Coast Guard Forum (NPCGF) is a multi-lateral agreement among six member states with representation from the Coast Guards of China, Japan, South Korea, Canada, Russia and the United States. The NPCGF has identified six areas of focus for the forum to address:

- Maritime security
- Illegal trafficking
- Combined operations
- Emergency response
- Fisheries enforcement
- Information exchange

For the United States' participation in the NPCGF, the U.S. Coast Guard's Thirteenth District serves as primary representation for the expert level and the senior summit. The Thirteenth District, headquartered in Seattle, Washington, oversees all Coast Guard operations in the Pacific Northwest including the states of Washington, Oregon, Idaho, and Montana. The U.S. Coast Guard homeport two high range vessels, three range endurance vessels, a heavy icebreaker and a medium icebreaker in Seattle (USCG, 2019) each of which have the ability to operate in the Arctic region. However, operational control of those assets remains with the Pacific Area Commander in Alameda, California. As a result, the Thirteenth District Commander that serves as the United States Head of Delegation for the North Pacific Coast Guard Forum does not have tactical control over several of the assets that support the collaborative efforts of the forum. In this instance, the Head of Delegation does not have the authority to deploy assets in the region without requesting support from the Area Commander.

North Atlantic Coast Guard Forum

Formally established in 2007, the North Atlantic Coast Guard Forum (NACGF) is a multilateral agreement that exists among Belgium, Iceland, Portugal, Canada, Ireland, Russia, Denmark, Latvia, Spain, Estonia, Lithuania, Sweden, Finland, Netherlands, United Kingdom, France, Norway, United States, Germany, and Poland. Each member state has assigned a head of delegation that represents the nation's coast guard agency. Slightly different than the NPCGF, the NACGF has identified six areas of focus and have assigned working groups to address the following missions:

- Search and rescue
- Environmental Response
- Maritime Security
- Illegal drug trafficking
- Illegal migration
- Fisheries enforcement

The NACGF is an informal organization not bound by treaty, policy, or regulation. For the United States' participation in the NACGF, the U.S. Coast Guard's First District serves as primary representation for the expert level and the senior summit. Headquartered in Boston, Massachusetts, the U.S. Coast Guard's First District oversees all Coast Guard operations in the states of Maine, New Hampshire, Vermont, Massachusetts, New York, Connecticut, and New Jersey. Similar to the NPCGF, while several of the larger assets used to support the forum's operations are homeported in this district, operational control remains with the Atlantic Area Commander in Virginia. In the United States, the U.S. Coast Guard's participation in the NACGF is unfunded, and the First Coast Guard District is not given additional staff to support participation.

Athar A. Pirzada is a senior advisor in the U.S. Coast Guard Office of International Affairs and acknowledges that not all NACGF members function with the same missions, authorities, or capabilities. “Each agency sits at a different position in the organizational hierarchy to their government,” Pirzada said. “But we all can share lessons learned based on everyone’s own experiences, and agencies can better represent themselves to their own governments based on how it’s done elsewhere.” (Lundquist, 2019). This dynamic is also present in the ACGF and explored in detail later in this analysis.

Arctic Council – Emergency Prevention, Preparedness and Response (EPPR)

The Arctic Council is “the leading intergovernmental forum promoting cooperation, coordination and interaction among the Arctic States, Arctic indigenous communities and other Arctic inhabitants on common Arctic issues, in particular on issues of sustainable development and environmental protection in the Arctic” (Arctic Council, 2017). The Arctic States include Canada, the Kingdom of Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden, and the United States.

The Arctic Council has six well-defined working groups that assist in performing the primary functions of the council. The working groups are defined as:

- *Arctic Contaminants Action Program (ACAP)*
- *Arctic Monitoring and Assessment Program (AMAP)*
- *Conservation of Arctic Flora and Fauna Working Group (CAFF)*
- *Emergency Prevention, Preparedness and Response Working Group (EPPR)*
- *Protection of the Arctic Marine Environment (PAME) Working Group*
- *Sustainable Development Working Group (SDWG)*

While each of these working groups offer unique benefits, the Emergency Prevention, Preparedness and Response (EPPR) Working Group. As mentioned previously, the ACGF was

designed with the intention of operationalizing the plans and policies of the EPPR. As a function of the Arctic Council, the EPPR is responsible for addressing environmental response operations and risks related to the harsh and remote nature of the Arctic region (EPPR, 2017b). The EPPR operates with an understanding that any “actions for prevention, preparedness and response must be carefully pre-planned and adapted to the conditions and remoteness of the Arctic to maximize the use of available resources” (ACGF, 2017).

In support of the working groups’ overall goals, EPPR has recently achieved two significant accomplishments in support of the Council related directly to oil spill response. In 2013, the Council signed the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic. In 2017, EPPR released the Circumpolar Oil Spill Response Viability Analysis to “better understand the potential for different oil spill response systems to operate in the Arctic marine environment” (EPPR, 2017a).

Arctic Coast Guard Forum Organizational Structure

Adopting an organizational structure similar to the NACGF and the NPCGF, the ACGF is a “consensus based, independent, informal, operationally driven organization, not bound by treaty, to foster safe, secure, and environmentally responsible maritime activity in the Arctic” (ACGF, 2017). The ACGF has representation from coast guard-like agencies from Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden, and the United States.

Identified as one of the primary strategic goals, the ACGF is committed to working collaboratively to advance the protection of the marine environment. Additionally, the forum has identified a need to improve information sharing, including best practices regarding contingency planning and coordinated response efforts. During the 2015 ACGF Experts Meeting, the delegates reached consensus to establish the Secretariat group and the Combined Operations group. Both groups are assigned in alignment with the chairmanship and are currently assigned to Finland.

Arctic Nations Coast Guard Agencies

<i>Canada</i>	Canadian Coast Guard
<i>Denmark</i>	Joint Arctic Command
<i>Finland</i>	Finnish Border Guard
<i>Iceland</i>	Icelandic Coast Guard
<i>Norway</i>	Norwegian Coast
<i>Russia</i>	Federal Security Services
<i>Sweden</i>	Swedish Coast Guard
<i>United States</i>	United States Coast Guard

Table 2: ACGF member states listed with corresponding agency that serves as Head of Delegation.

Secretariat group governs the meeting cycle, missions, topics, and business portion of the forum. Additionally, the Secretariat group is responsible for the overall administration of the forum. The Combined Operations group is principally concerned with the design and development of each exercise. Responsible for generating a proposal for each exercise, this working group has the ability to influence whether an exercise focuses strictly on search and rescue in the case of the 2017 Arctic Guardian exercise or a post-search and rescue incident where the focus would be protection of the environment. Additionally, this working group is responsible for briefing out and writing the formal after action report for the most recent exercise.

When the ACGF was initially formed, the intention was for the U.S. Coast Guard's Seventeenth District to serve as the primary representative at the expert level and facilitate the Commandant's participation at the principal level. The Seventeenth District Commander is responsible to Coast Guard operations throughout Alaska, the Bering Sea, and into the Arctic Ocean. While this was seen as a natural fit, because the ACGF remains unfunded and supporting the forum does not result in additional staff, the forum was reassigned to the office of the Deputy Commandant of Operations' Director of International Affairs and Foreign Policy (CG-DCO-I). However, while the ACGF attempts to focus on direct operations, CG-DCO-I does not maintain tactical control of any assets that would be used to support an exercise or real world incident in the Arctic. By policy, this office fills only a supporting role for operations.

In 2017, the ACGF successfully completed its first full scale operational exercise, Arctic Guardian 2017, and is determined to use the lessons identified and learned during this exercise to inform future exercises planned within the ACGF framework. While Arctic Guardian 2017 focused on testing the operational coordination for search and rescue efforts, the United States has the ability to leverage the lessons learned to inform domestic policy regarding the protection of the marine environment in the Arctic.

Officially meeting twice a year in the country of the chairmanship, the ACGF relies upon two well-defined levels of each delegation: the Expert Level and the Principal Level. A senior officer attends the Experts' Meeting from each delegation with the rank equivalent to a Captain in the U.S. Coast Guard. One of the primary functions of the experts meeting is to ensure the forum will be prepared to provide actionable items for the heads of delegation to vote upon at the

Principals' Meeting. In the United States, the acting Commandant of the Coast Guard has filled this role.

Current Goals and Strategic Objectives

Signed in 2015, the ACGF's terms of reference outlines the following strategic objectives:

- I. *Strengthen multilateral cooperation and coordination within the Arctic maritime domain, and existing and future multilateral agreements*
- II. *Seek common solutions to maritime issues related to the agencies fulfilling the functions of coast guards within the region*
- III. *Collaborate with the Arctic Council through the sharing of information*
- IV. *Facilitate safe and secure maritime activity in the Arctic region, with sustainable development to be promoted as appropriate*
- V. *Contribute to a stable, predictable, and transparent maritime environment*
- VI. *Build a common operational picture to ensure proper protocols for emergency response coordination, and safe navigation*
- VII. *Work collaboratively to advance the protection of the marine environment*
- VIII. *Maximize the potential for Arctic maritime activities to positively impact the communities, lives, and culture of Arctic communities including indigenous peoples*
- IX. *Integrate scientific research in support of Coast Guard operations as appropriate*
- X. *Support high standards of operations and sustainable activities in the Arctic through the sharing of information, including best practices and technological solutions to address threats and risks*
- XI. *Combat illegal, unregulated, and unreported (IUU) fishing in the Arctic (ACGF, 2017)*

Methodology

Interviews

In addition to reviewing the current goals and policies of the U.S. Coast Guard Arctic Strategy and the ACGF, this study incorporates interviews from subject matter experts each with

various roles related to U.S. environmental response requirements in the Arctic. The interview method was selected to gain insight directly from oil response experts with first-hand experience with the forum. Due to the current structure of the ACGF and structure of the United States Coast Guard, there is a very limited number of individuals with first-hand experience related to the forum. Additionally, because the ACGF is relatively new, there is very limited published material related to the organization. Individuals were selected based upon their current or past roles in the ACGF and provided a unique perspective. Interviewees included senior officers from the U.S. Coast Guard, recently retired senior U.S. Coast Guard officers, the Executive Director of the Interagency Coordinating Committee on Oil Pollution Research (ICOPR), and the Senior Head of Delegation of the United States for the experts group of the ACGF.

Each interview participant was asked to identify significant benefits the United States has gained from participating the forum and if those benefits were possible via another pre-existing international partnership. Additionally, interview questions (appendix A) focused on the strengths and weaknesses that exist within the ACGF regarding the United States' ability to gain benefits related to environmental response in the Arctic. The participants were also asked to identify domestic policy barriers that hinder the United States' ability to incorporate best practices learned from other member states. Finally, the interviewees were asked to provide information regarding threats and opportunities related to the ACGF's ability to advance the protection of the marine environment. Each interviewee agreed to participate and provided verbal consent.

SWOT Analysis

The SWOT analysis method was selected as a means to identify individual factors that are influencing the overall success of the forum. Utilizing this method provided a framework to

develop a situational understanding of the ACGF and its ability to achieve its goals. Following the transcription of each interview, a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis categorized interview comments related to the ACGF strategic plan. Beneficial comments are categorized as either internal strengths or external opportunities. Harmful comments are categorized as either internal weaknesses or external threats. In this project, identical SWOT data provided independently by multiple interviewees was determined to be significant. Significant SWOT data was utilized in conducting a TOWS analysis and led to the development of all key recommendations. Utilizing this method did have limitations. By just using the data collected from such a small group of interviews, the resulting situational analysis is restricted to a very limited number of expert observations.

TOWS Analysis

The Threats Opportunities Weaknesses Strengths (TOWS) method was utilized to develop strategies that focus on internal resources of the U.S. Coast Guard and attempt to maximize potential future benefits. The TOWS Matrix for strategic planning utilizes the systematic identification of relationships between internal and external factors (Wehrich, 1982). The relationships between these factors are then developed into actionable strategies. For instance, relationships between strengths and opportunities allow an organization to develop a strategy to utilize internal resources to optimize a potential benefit as a Strengths-Opportunities (SO) strategy. In addition, this TOWS analysis also looked at relationships that exist between Strengths-Threats (ST), Weaknesses-Threats (WT) and Weaknesses-Opportunities (WO).

Data and Analysis

Interview Summaries

Capt. Roberto Torres – CG-DCO-I – ACGF Expert Level Head of Delegation

Capt. Torres emphasized the fact that Admiral Zukunft's original vision for the forum was to operationalize some of the Arctic Council EPPR working group's actions. Key was to focus on direct cooperation with coast guard or coast guard-like agencies within each of the arctic countries. In the initial forming stages of the forum, identifying which agencies best fit this need caused some confusion among the member states. As such, Russia sent multiple agencies to the first meeting unsure as to which would best fit the intent before finally settling on their

Russian Federal Security Services (FSB; former KGB and a sub-agency of the Russian Border Guard) is the senior agency for their Coast Guard. The Russian Federal Security Services primarily focuses on law enforcement with no involvement in search and rescue or marine environmental protection. The Russian Federal Security Services was also a principle actor in military hostilities in Croatia that eventually lead to the Russian annex of Crimea. This forced the U.S. Coast Guard to reassess their relationship with Russian and the role the ACGF played in that relationship. While the U.S. Coast Guard values the relationship the two counties have established in the North Pacific, the annex of Crimea threatened to undermine the relationships the U.S. Coast Guard had with European Nations in the North Atlantic Coast Guard Forum that were expressed increased concern related to partnering with the Russia.

As the United States prepares to assume the chairmanship of the North Atlantic Coast Guard forum, there was consideration for inviting Russia to participate. This course of action was eliminated following consultation with the U.S. Department of State. As it stands, the U.S. is not pursuing Russian participation in the North Atlantic Forum, but is very interested in their

participation in the ACGF. This represents an interesting dynamic that Capt. Torres is keenly aware of with his office constantly engaged with the U.S. Department of State regarding all U.S. Coast Guard interactions with Russia.

Capt. Torres highlighted that while the ACGF was designed to operationalize the concepts and plans of the Arctic Council's EPPR, several members of the Arctic Council sees the ACGF as a competing organization. This represents an external limitation that has limited how receptive other countries have been to the development and utilization of the ACGF.

While describing benefits of the U.S. Coast Guard participation in the ACGF as somewhat intangible, he states, "the benefit is that we have an established relationship in case something "real" happens" (2019). He also cited an increased understanding of each member's operational capacity. As an example, he discussed how the U.S. Coast Guard recently exposed the ACGF members to the functionality of an incident management structure regularly used domestically. While this management structure had some attention in the other forums, it seemed of particular interest to the members of the ACGF.

While there is a niche for the ACGF to assume a leadership role as the operating environment of the Arctic changes, Capt. Torres expressed concern that the ACGF could not sustain itself without the presence of the U.S. Coast Guard.

"As the Arctic frontier gains more and more traction, as the ice starts melting, as more maritime shipping lines are opened, as more tourism expands, there is defiantly an opportunity for these countries to work together." While the U.S. works closely with each of the involved countries outside of the ACGF, Capt. Torres "there is a value to personalities" and for the Commandant knowing head of the Icelandic Coast Guard". While the two countries have a

positive relationship, the ACGF has allowed for officials at a lower level to establish relationship that could prove critical to the success of a response to a major incident in the Arctic.

Kirsten Trego - Executive Director of ICCOPR

Ms. Trego highlighted the fact that of the eight ACGF member agencies, only the U.S. Coast Guard has marine environmental response as a primary mission. The other coastguard-like agencies have resources that may be used for the same purpose, but marine environmental response it is not a primary mission. In fact, marine environmental response is only a priority of the ACGF primarily because of pressure from the U.S. Coast Guard. As a result, that specific mission has been pushed aside as the forum remains focused on search and rescue. This is reflected in the current primary goal for the Polaris 2019 exercises that still focuses mainly on search and rescue.

Ms. Trego stated that one of the strengths of the ACGF is the fact that it is notionally still in the forming stage and members still have a willingness to engage. Established as one of the United States' multiple bilateral agreements, the operational focus of the ACGF allows this organization to stand out from previous agreements. While organizations may exist, the ACGF is the only entity that has deployed resources into the Arctic as part of a joint real world exercise where assets are deployed and operated in conjunction with other member states. In contrast, the Arctic Council's EPPR focuses mainly on notification drills and tabletop exercises that are mostly theoretical in nature.

While the Arctic Guardian exercise was based on the joint execution of a search and rescue mission, several lessons learned could benefit the future of environmental response in the arctic. Of these benefits, she identified the fact that Finland brings expertise in ice navigation and

vessel design. Most significantly, she proposed that our increased understanding of effective communications at high latitude may be the largest benefit to our marine environmental protection goals.

CDR Tommy Ottenwaelder- CG-MER-2 - Arctic Council’s Perspective

During the initial phases of development of the ACGF, CDR Ottenwaelder developed a Venn diagram to help senior officials understand the major differences between the ACGF and EPPR (see Image 2).

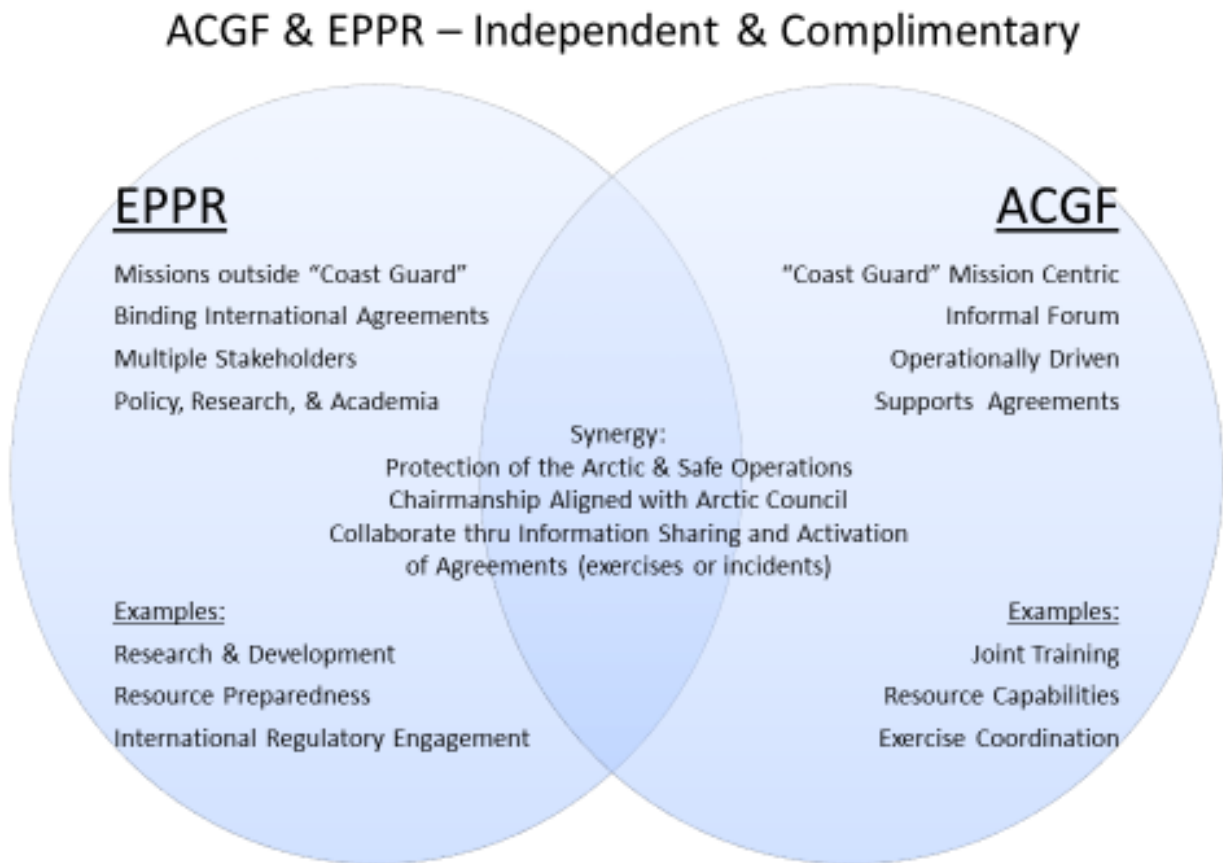


Image 2: Venn diagram illustrating the differences and synergy between the Arctic Council's EPPR and the ACGF. Developed and provided by CDR Ottenwaelder.

Expanding upon this illustration, he discussed several other differences between the ACGF and the Arctic Council's EPPR that he has observed. ACGF is designed to be a group of operators from coast guard and coast guard entities that can bring resources to an event in the Arctic. EPPR is more diplomatic and planning in nature. When asked about his observation of significant benefit from the ACGF that were not gained from U.S. participation with the Arctic Council's EPPR, he highlighted the direct relationship among responders from the different agencies from ACGF member states. This relationship represents a circumvention of more cumbersome diplomatic channels experienced in the EPPR. Allowing direct responder to direct responder interactions and information exchange, this benefit is not unique to the U.S. but rather shared among all members of the ACGF.

CDR Ottenwaelder also stated that the ACGF was designed around the function of the U.S. Coast Guard, and this functionality is not directly mirrored in one specific agency of the other ACGF member states. For instance, while the Canadian Coast Guard is the representing agency in the ACGF, it must coordinate with Environment Canada and Transport Canada to accomplish all of the same functions of the U.S. Coast Guard.

CDR Ottenwaelder reiterated the idea that the U.S. Coast Guard stands to gain significant technical insight as to how Norwegian and Russian operators address communications issues related to different magnetic fields at high latitudes. While this benefit is not unique to marine environmental response, it is clearly a benefit can carry over between joint exercises regardless of the specific nature of each scenario.

CDR Ottenwaelder would like to see the ACGF work more closely with the EPPR. He stated that the ACGF tends to be very closed off by design. He believed this isolation is done to

limit possible exposure to outside influences. However, that functionality also serves the purpose of isolating the ACGF from what could be a positive influence of the EPPR.

Regarding the specific operational exercises of the ACGF, CDR Ottenwaelder stated that it is “always best to exercise for pollution response. Search and rescue is easy.” Due to the nature of search and rescue, the mission is always a priority for resources and operators are typically looking for something that wants to be found. However, the nature of an environmental response is very different. The fate and trajectory of an oil spill can change significantly over time. In colder environments, the harsh weather conditions and the presence of ice can have significant impact on the viability of response operations. EPPR explored these limitations in detail and published its findings in a 2017 technical report. The report provided an in-depth viability analysis of mechanical recovery, the application of dispersants, and in-situ burning operations at high latitudes. The analysis categorized viability under favorable, marginal, and not favorable conditions. While the analysis provided significant insight that can assist in future planning, it failed to account for how much time is needed for a system to be deployed by operators following an incident (EPPR, 2017a). The report also failed to account to the viability of logistical support that would be needed for a successful environmental response for an oil spill. These are a few of the reasons why CDR Ottenwaelder would like to see the ACGF plan for a real world pollution response exercise where these and other emergency environmental response planning shortfalls can be identified.

CDR Ottenwaelder discussed the lack of uniformity across the represented agencies within the ACGF. As an example, the Norwegian Coast Guard is not involved in oil spill response. In Norway, that is one of the statutory obligations associated with the function of the Norwegian Coastal Administration (NCA). The NCA is not invited to participate in the ACGF

even as an observer. For this reason, CDR Ottenwaelder suggested the ACGF should focus on lessons learned and best practices developed in the execution of search and rescue would easily translate to the execution of a joint environmental response.

In addition, CDR Ottenwaelder discussed the importance of the U.S. Coast Guard managing the AGCF at the appropriate level. Referring back to the original intention of the ACGF, CDR Ottenwaelder felt the appropriate office to serve as the head of delegation at the expert level would be the U.S. Coast Guard Seventeenth District headquartered in Anchorage, Alaska. The Seventeenth District is responsible for 47,300 miles of shoreline throughout Alaska and the Arctic (USCG , 2018). This interview was conducted on November 27, 2018.

CRD Richard Kavanaugh- International Affairs – ACGF Developer’s Perspective

CDR Kavanaugh served as the Former Chief of Regional Affairs in the U.S. Coast Guard Office of International Affairs. His team drove the creation of the ACGF and held the initial meeting in October of 2014. Due to the fact that the North Atlantic Coast Guard Forum had lost its operational focus over the years, the ACGF was modeled after the North Pacific Coast Guard Forum.

The North Pacific Coast Guard Forum also served as a benchmark for how the U.S. Coast Guard is able to cooperate directly with its counterparts in the Russian Federation. However, the U.S. Coast Guard’s counterpart is the Russian Federal Security Services (FSB) and does not engage in the primary mission of search and rescue or Environmental Response. This poses a significant challenge for their membership in the ACGF that has clearly defined its goals as not aligning with the primary mission of the FSB.

CDR Kavanaugh also discussed the Russian Federation’s annex of Crimea, Ukraine, in 2014 and how the FSB had been the Russian Agency primarily responsible for the operations.

This event highlighted security concerns with several European members of the ACGF and related difficulty in achieving effective cooperation across the Arctic. As highlighted during the minutes from the 2018 ACGF Experts' Meeting, there was little support among the ACGF Members to support the Russian delegation's continuous insistence for all ACGF countries to adopt the use of their automated information exchange system (AIES). A FSM spokesperson explained, "the AIES is a new step forward towards the establishment of effective information exchange between the member-states of the Arctic Coast Guard Forum" (The Arctic, 2017). CDR Kavanaugh suggests a lack of trust among ACGF members may be the reason why they have failed to adopt the AIES system in the same way that it has been accepted by the NPCGF members.

CDR Kavanaugh cited the fact that United States does not have response equipment staged in the arctic or experience responding in that environment. As such, he emphasized the importance of leveraging the lessons learned and experience of the European member states that have conducted successful marine environmental response operations in the Arctic. He also emphasized that fact that all Arctic waters of the United States are on the West Coast and not easily accessible to the European member states that may otherwise provide assistance to an oil spill in the Eastern arctic. As a result, Russia and Canada are the only ACGF member states that may have equipment and operators available to assist the US during an environmental response in that region. However, CDR Kavanaugh cited the fact that prior to the creation of the ACGF the United States already had joint oil spill contingency plans in place with Russia and Canada that were designed to address that very scenario. Because of his firsthand knowledge and experience, CDR Kavanaugh does not see a significant environmental protection or response

benefit from the United States participation in the ACGF. However, he did discuss potential avenues the forum could explore to develop a significant benefit.

The international search and rescue agreement allows Rescue Coordination Centers (RCC) to request resources directly from one another. Nothing in the ACGF's foundation documents allow for this tactical level of resources requests' for marine environmental response (MER). For a MER incident, each resource request would need to be processed through each nation's respective Department of State representatives for approval. Currently, the ACGF has not created a mechanism to expedite the process. CDR Kavanaugh stated that the ACGF forum should develop such a mechanism and test it in a real time MER exercise.

Identified by the Secretariat during the March 2018 Experts' Meeting, CDR Kavanaugh discussed the importance of training cooperation within the ACGF. Specifically, he highlighted the proposed Incident Command System (ICS) training that was introduced by the U.S. Coast Guard delegation. While ICS has a domestic focus, it is a proven incident management technique. ICS focuses on "integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure" (USCG, 2016). While it is unlikely that ACGF members would adopt a single incident commander as outlined in ICS (Ottenwaelder, 2018), management practices taught in ICS provide a response framework to all hazards including search and rescue and environmental response incidents. Domestic mandate requires the U.S. Coast Guard to utilize ICS during major incidents, and this training would pave the way for ACGF members to support a response from within an ICS structure.

While the ACGF is free of the typical bureaucratic burden that is associated with international relationships, CDR Kavanaugh identified that fact that the ACGF is consensus based as also being a burden. As a consensus based organization, a single dissenting vote is enough to stop an initiative from moving forward. As an organization designed to operationalize plans, this can be very frustrating for tactical operators interested in gaining quicker results.

As an international initiative, CDR Kavanaugh acknowledged there are major political powers in play that have to be accounted for. For instance, Russia has proven to be very supportive of the ACGF and its goals despite the fact that environmental protection is not a function of the Russian FSB. CDR Kavanaugh indicated this may be due to Russia's desire to "rebrand" itself in the eyes of the international community as a good actor. Additionally, Finland has expressed a strong desire to be a leader in the Arctic but their arctic waters are limited to the Baltic Sea. This geographical reality is a limitation on their role as a leader within the region.

Commander Kavanaugh summarized this issue, "if the U.S. Coast Guard Commandant doesn't show up, this thing dies and it dies quickly" (2018). More specifically, he felt that if the U.S. Coast Guard leadership failed to support the forum, it becomes an event that is seen as a social hour for cocktails similar to how people currently see the NACGF (Kavanaugh, 2018). During the Principals' Meeting in 2018, Finland also "stressed the importance of Service heads continuing to support the Forum through their dedicated presence, which demonstrates interest in the Forum and its work" (Zukunft, 2018). The interview was conducted on November 30, 2018.

LCDR Mark Brass- U.S. Coast Guard Chief of Regional Affairs for the Arctic

LCDR Mark Brass cited the fact that the Arctic is constantly changing and developing region with each of the eight Arctic nations having "skin in the game" (2019) and have an

appetite for collaboration. While the Arctic Council serves as a governing body, the ACGF should serve to operationalize the objectives of the Arctic Council as intended. To be successful in this, ACGF should take regular guidance and direction from the Arctic Council to ensure the two bodies are operating in support of each other while limiting redundancy of effort.

LCDR Brass highlighted the ACGF is still very new and is utilizing a crawl, walk, run model. The 2017 Arctic Guardian exercise was the first exercise in the crawling phase of the forums development and involved 5 ships, 4 aircraft, and observers from each of the Arctic nations. Lcdr Brass applauded the success of the exercise, but hoped the Polaris 2019 full scale exercise would expand upon the 2017 success and move past search and rescue. As established, search and rescue will shall always be the priority during an incident response and there is great value in exercising response capabilities in the Arctic. However, in agreement with CDR Ottenwaelder, Lcdr Brass hopes the 2019 exercise will incorporate marine environmental response as a second priority.

LCDR Brass stated one of the forum's greatest opportunities for continued success involved a specific aspect that allows for academic experts engaged in studying various facets of the Arctic. The participation of academics in the various meetings of the ACGF has been well received and reciprocated by other member states. This was part of Admiral Zukunft's initial intention for the forum with hopes that it would ensure future decisions and policies were well informed regarding the various complexities of the Arctic. For this purpose, individuals from the Coast Guard Academy Center for Arctic Study and Policy (CASP) have been invited to attend ACGF meetings. CASP is an internal function of the U.S. Coast Guard, but "as an operationally focused academic think tank to promote research, broaden partnerships and educate future

leaders about the complexities of this unique region” (CASP, 2019) it naturally supports the efforts of the ACGF. The interview was conducted on January 09, 2018.

SWOT

Utilizing the data collected from the interviews and literature reviews, this research identified strengths, weaknesses, opportunities, and threats related to the ACGF’s ability to benefit the U.S. Coast Guard’s mission of protecting the arctic marine environment. This process is commonly referred to as a SWOT analysis. The most significant SWOT items were then used to conduct a TOWS analysis designed to develop strategic recommendations for the ACGF.

SWOT Matrix

<p><i>Internal Strengths:</i></p> <p>S-1. All ACGF member states acknowledge risk of changing climate in the arctic and increase risk</p> <p>S-2. Current structure allows for the circumvention of cumbersome diplomatic interactions</p> <p>S-3. The AFGC is operationally driven based on direction of the EPPR</p> <p>S-4. The forum offers a unique line of communication between the U.S. and the Russian Federation</p> <p>S-5. The ACGF chairmanship aligns with Arctic Council</p>	<p><i>Internal Weakness:</i></p> <p>W-1. U.S. Coast Guard participation remains unfunded</p> <p>W-2. There is a perception that the ACGF represents a redundancy of effort</p> <p>W-3. There is a lack of trust among member nations (specifically European nations and Russia)</p> <p>W-4. Individual ACGF member state representing agency authorities/missions do not align</p> <p>W-5. The U.S. Coast Guard expert level office does not have operational control of surface assets within the Arctic</p> <p>W-6. The U.S. lacks a singular operational commander for assets utilized in the Arctic</p>
<p><i>External Opportunities:</i></p> <p>O-1. There is heightened domestic political interest to expand sovereignty in the polar region</p> <p>O-2. There is a desire to develop cross training opportunities (high latitude navigation and communication)</p> <p>O-3. Oil response experts have access to and should review lessons learned from search and rescue exercises for applicability in a marine environmental response operation</p> <p>O-4. The ACGF is well positioned to operationalize table-top exercises of Arctic Council's EPPR working group</p>	<p><i>External Threats:</i></p> <p>T-1. The harsh environment of the region is a significant limitation for oil recover operations</p> <p>T-2. The remote nature of the Arctic region hinders timely oil response operations</p> <p>T-3. The membership of the ACGF is subject to changes in international relations</p> <p>T-4. There is a lack of individual ACGF member oil response capabilities</p>

TOWS

The TOWS analysis focused on the most significant strengths, weaknesses, opportunities, and threats identified in the SWOT. These items were utilized to develop strategic recommendations related to the United States’ participation in the ACGF.

TOWS Matrix

<p>Internal Factors</p> <p>External Factors</p>	<p>Significant Internal Strengths (S):</p> <p>S-1. All ACGF members acknowledge risk associated with increased activity in the Arctic</p> <p>S-2. Direct relationships</p> <p>S-3. Operationally driven based on direction of the EPPR</p>	<p>Significant Internal Weakness (W):</p> <p>W-1. Lack of funding</p> <p>W-2. Redundancy of effort</p> <p>W-3. Lack of trust (dependent on US participation)</p>
<p>Significant External Opportunities (O):</p> <p>O-1. Domestic political interest to expand sovereignty in the polar region</p> <p>O-2. Desire to cross train (ICS, high latitude navigation)</p> <p>O-3. Review lessons learned from search and rescue exercises for applicability in marine environmental response</p>	<p>SO Strategy:</p> <p>1. Continue to expand training opportunities that support environmental response (S-1, S-2, O-2)</p> <p>2. Partner with Arctic Council EPPR to develop policies for limiting human footprint/pressure related to exercises (S-1, S-3, O-3)</p>	<p>WO Strategy:</p> <p>1. Highlight domestic value of maintaining leadership role (W-1, O-1)</p> <p>2. Develop increased training opportunities among all members of the ACGF at the operator level (W-2, W-3, O-2, O-3)</p>
<p>Significant External Threats (T):</p> <p>T-1. Environmental limitations</p> <p>T-2. Remote nature of the Arctic region</p> <p>T-3. Subject to changes in international relations</p>	<p>ST Strategy:</p> <p>1. Develop and maintain an active list of available response resources, response times, and limitations that is validated through exercises (S-2, S-3, T-1, T-2).</p> <p>2. Verify policies and plans developed by EPPR with real world exercises (T-3, S-3)</p>	<p>WT Strategy:</p> <p>1. Demonstrate commitment to maintaining leadership role by expand USCG presence in the Arctic with vessels capable of high latitude operations (W-3, T-1,T-2)</p>

Strategic Recommendations

The following recommendations are a direct result of the data collected via interviews and analysis via the SWOT and TOWS Method.

1. U.S. Coast Guard members of the combined operations group should work in close conjunction with the Arctic Council to ensure the sharing of information between the two separate but parallel organizations. While the ACGF does not allow for observers attend meetings, Arctic Council does. By leveraging this opportunity, the ACGF would also demonstrate direct support for operationalizing the EPPR vision. This should be leveraged to develop additional policies in support of the ACGF increased operations in the region.
2. The U.S. Coast Guard should explore opportunities to cross-train with other members of the ACGF regarding high latitude navigation and communication. Additionally, the U.S. Coast Guard should develop opportunities to export no-cost crisis management training or invite ACGF members to attend training sessions in the United States.
3. The U.S. Coast Guard should seek to develop and maintain an active list of available oil response resources, response times, and limitations that is validated through exercises.
4. The Coast Guard Office of Marine Environmental Response should introduce additional cold climate oil recovery training for response personnel. In keeping with the Coast Guard motto of “Always Ready”, this additional training would ensure the service is ready to support oil spill recovery operations in U.S. Arctic waters or support a request for personnel from another ACGF member country.

5. The U.S. Coast Guard should leverage its current leadership role within the ACGF to justify additional financial support from the current Administration. The current Administration has expressed resounding support for the United States Military to expand its presence in the Arctic. While that support is not directed toward environmental response and Arctic Council plan verification, funding the U.S. Coast Guard is able to gain in congressional appropriations stands to provide direct funding for ACGF participation.
6. The U.S. Coast Guard should develop partnerships with academic and strategic policy institutions to conduct an external analysis of the United States participation in the ACGF. Specifically, an external analysis should be conducted every 2-3 years. This would serve to provide a third party review of the ACGF's effectiveness in helping the U.S. Coast Guard protect the marine environment of the United States.
7. Department of Homeland Security and the U.S. Coast Guard leadership should continue to support United States participation in the ACGF. Understanding the United States' participation in the forum is critical to the organizations success and continued partnership, the greatest effort should be shown to ensure the Commandant of the Coast Guard attend each of the forum's principle level meetings.

Potential Benefits:

This research has identified several potential benefits related to the United States establishment and participation in the ACGF. Depending on the nature and scope of the benefit, each has been categorized as beneficial to the forum, benefits to the United States, or benefits to the Earth.

Benefits to the ACGF:

As a result of Admiral Papp's Arctic Strategic Plan, the United States was the driving force behind establishing the ACGF. In addition to developing the framework for the organization, the United States was successful in getting each of the member states to not only participate but also identify which of their organizations best fit the needs for operationalizing the plans and policies of the Arctic Council as intended.

Benefits to the United States:

As the United States is poised to withdraw from the 2015 Paris Agreement on climate change mitigation, there is growing concern regarding the leadership role of the nation and its willingness to address environmental issues on an international scale. While the ACGF is still in its infancy stages of development, it offers the United States an opportunity to maintain a seat at the table of an international organization that is well positioned to address significant changes in the Arctic. As multiple maritime industries continue to expand operations into the region, the U.S. Coast Guard must maintain its ability to provide regulatory oversight. To support this regulatory obligation, the U.S. Coast Guard must become more familiar with the operating conditions of the Arctic.

In his April 21st, 2019 State of the Coast Guard Address, U.S. Coast Guard Commandant, Admiral Schultz, stated, "In the Polar Regions, presence absolutely equals influence". While he was discussing the physical presence with our ageing fleet of icebreakers, the United States' participation in the ACGF provides a means for the United States to maintain a presence in the region and while hopefully leveraging our influence to the benefit of the environment.

Benefits to the Earth:

Increased temperatures and retreating sea ice have significantly increased risk of an oil spill in the Arctic and environmental pressure from a growing number of human activities. While the policies and plans for addressing these changes largely rests under the purview of the Arctic Council, the ACGF fills a unique niche that offers clear benefit to the protection of the marine environment of the Arctic. As our understanding of how conditions in the Arctic can affect the planet, it is possible the U.S. Coast Guard participation the ACGF stands to benefit the entire Earth.

Conclusion

The United States currently lacks the resources and experience necessary to successfully manage an environmental response in the Arctic. The geographic proximity of U.S. Arctic waters reduces the likelihood that oil response equipment from the European members of the ACGF would be of any benefit to a U.S. Coast Guard led response operation. The remote nature of the Arctic region limits access to pre-staged equipment in a timely manner necessary for oil recovery. In reality, a general assessment of risk analysis might support search and rescue operations in the harsh arctic environment where the benefit is the preservation of human life. The same may not be true for an environmental response operation where the risk to the responders may outweigh the benefit to the environment for recovering oil. Indeed, the ACGF remains untested in its ability to accomplish its goal to work collaboratively to advance the protection of the marine environment.

While the ACGF is still in the early stages of development, there are a growing number of opportunities for the U.S. Coast Guard to mold the future of the organization its benefit. The U.S. Coast Guard should continue to support the ACGF at the highest level of the organization. The development of future U.S. Coast Guard Arctic Strategic Plans should leverage the ACGF as well as the Arctic Council's EPPR working group. This course of action would help to ensure the United States continues to maintain its role as a global environmental leader while addressing increased risk to the marine environment in the region.

The United States' establishment and participation in the ACGF has yielded benefits to the nation's regional influence, the organization itself, and the Earth. In fact, as the ACGF continues to strengthen the connective tissues between member nations and increases regional preparedness, the United States is well positioned to ensure these benefits only continue to expand.

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Appendix A: Semi-structured Interview Questions

ACGF Interview

Interview Details

Name: _____ Date: _____

Representing Entity
and position: _____

Role in ACGF: _____

Questions to Ask Interviewer

Question: *What environmental benefits should the U.S. expect from participating in the ACGF?*

Notes: _____

Question: *Are those benefits unique to the U.S.?*

Notes: _____

Question: *When do you hope to achieve them (time period)?*

Notes: _____

Question: *Are any of the possible benefits limited by existing domestic policy or law?*

Notes:

Question: *Are there any other INTERNAL agency limitations that may act as a barrier?*

Notes:

Question: *Are there any other EXTERNAL agency limitations that may act as a barrier?*

Notes:

Question: *What is the greatest shortfall of the ACGF?*

Notes:

Question: *Have any of the ACGF environmental goals changed the policies or laws of other participating countries?*

Notes:

Question: *What does the ACGF offer that was not previously addressed by international partnerships?*

Notes:

Additional Notes

Appendix B: Interview Participants Credentials

Capt. Roberto Torres – CG-DCO-I – ACGF Expert Level Head of Delegation

Captain Torres is Chief of Regional Affairs (CG-DCO-I) and serves as the Head of the U.S. Delegation at the Expert Level of the ACGF. The Coast Guard's office of the Director of International Affairs & Foreign Policy is the service's primary point of contact for all interactions with the ACGF. The Office of CG-DCO-I has a mission statement to "advance foreign policy, national security, and enhance U.S. Coast Guard operations through meaningful international engagements, partnerships, and security cooperation to promote global maritime governance" (USCG Director of International Affairs & Foreign Policy, 2019). Captain Torres assumed the duties and responsibilities of his current office in the summer of 2018 and attended the Expert meeting in Helsinki, Finland, in October 2018.

Kirsten Trego - Executive Director of ICCOPR

Ms. Trego is the Executive Director of The Interagency Coordinating Committee on Oil Pollution Research (ICCOPR) was established by the Oil Pollution Act of 1990. ICCOPR was established to "coordinate a comprehensive program of oil pollution research, technology development, and demonstration among the federal agencies, in cooperation and coordination with industry, universities, research institutions, state governments, and other nations, as appropriate, and shall foster cost-effective research mechanisms, including the joint funding of the research" (USCG, 2017) Prior to serving in her current function as the Executive Director for ICCOPR, from 2013-2016 Ms. Trego worked in the U.S. Coast Guard Office of Arctic Policy during the promulgation of the Arctic Strategic Plan and assisted with the development of the ACGF. Ms. Trego also worked with the White House Arctic Executive Steering Committee, the

Arctic Council, and other agencies engaged in advancing national strategic priorities in the Arctic (USCG, n.d.).

The interview with Ms. Trego was conducted on November 13, 2018, and she provided insight based on her time working in the U.S. Coast Guard Office of Arctic Policy.

CDR Tommy Ottenwaelder- CG-MER-2 - Arctic Council's Perspective

The U.S. Coast Guard Office of Marine Environmental Response Policy has three supporting divisions: Industry Preparedness & Incident Coordination (CG-MER-1), International & Domestic Preparedness (CG-MER-2), and Interagency Coordination (CG-MER-3). The primary function of CG-MER-2 is to ensure the functionality of international pollution response plans and agreements with neighboring nations including Canada, Russia, Mexico, and Cuba. Commander Ottenwaelder is the Chief of CG-MER-2 and serves as the Marine Environmental Response experts group chair for the Arctic Council's Emergency Prevention Preparedness and Response Working Group (EPPR). As chair for this working group, he coordinated directly with the ACGF to address overlapping responsibilities and interests. Leveraging his knowledge from the EPPR, he also assisted with the initial establishment of the ACGF.

CRD Richard Kavanaugh- International Affairs – ACGF Developer's Perspective

CDR Kavanaugh served as the Former Chief of Regional Affairs in the U.S. Coast Guard Office of International Affairs. While serving in this capacity, his team drove the creation of the ACGF under the leadership of Admiral Zukunft. He attended the first meeting for the development of the forum in October of 2014. CRD Kavanaugh served in this capacity until his retirement when the current Chief of Regional Affairs, Capt. Torres, assumed the duties and responsibilities of the office.

LCDR Mark Brass- U.S. Coast Guard Chief of Regional Affairs for the Arctic

LCDR Mark Brass works in the U.S. Coast Guard Office of International Affairs and Foreign Policy (DCO-I) and currently serves as regional advisor for the Coast Guard in the Asian-Pacific region and the Arctic region. In this capacity, he has regular interactions with the North Pacific Coast Guard Forum and the ACGF. Leveraging his understanding of the North Pacific Coast Guard Forum, Admiral Zukunft relied upon LCDR Brass to ensure the structure of the ACGF aligned with the success experienced in the Asian-Pacific region.