

**CHARTING THE ARCTIC: SECURITY, ECONOMIC,
AND RESOURCE OPPORTUNITIES**

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON EUROPE, EURASIA, AND
EMERGING THREATS

AND THE

SUBCOMMITTEE ON
THE WESTERN HEMISPHERE

OF THE

COMMITTEE ON FOREIGN AFFAIRS
HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTEENTH CONGRESS

FIRST SESSION

NOVEMBER 17, 2015

Serial No. 114-127

Printed for the use of the Committee on Foreign Affairs



Available via the World Wide Web: <http://www.foreignaffairs.house.gov/> or
<http://www.gpo.gov/fdsys/>

U.S. GOVERNMENT PUBLISHING OFFICE

97-634PDF

WASHINGTON : 2016

For sale by the Superintendent of Documents, U.S. Government Publishing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2104 Mail: Stop IDCC, Washington, DC 20402-0001

COMMITTEE ON FOREIGN AFFAIRS

EDWARD R. ROYCE, California, *Chairman*

CHRISTOPHER H. SMITH, New Jersey
ILEANA ROS-LEHTINEN, Florida
DANA ROHRBACHER, California
STEVE CHABOT, Ohio
JOE WILSON, South Carolina
MICHAEL T. McCAUL, Texas
TED POE, Texas
MATT SALMON, Arizona
DARRELL E. ISSA, California
TOM MARINO, Pennsylvania
JEFF DUNCAN, South Carolina
MO BROOKS, Alabama
PAUL COOK, California
RANDY K. WEBER SR., Texas
SCOTT PERRY, Pennsylvania
RON DeSANTIS, Florida
MARK MEADOWS, North Carolina
TED S. YOHO, Florida
CURT CLAWSON, Florida
SCOTT DesJARLAIS, Tennessee
REID J. RIBBLE, Wisconsin
DAVID A. TROTT, Michigan
LEE M. ZELDIN, New York
DANIEL DONOVAN, New York

ELIOT L. ENGEL, New York
BRAD SHERMAN, California
GREGORY W. MEEKS, New York
ALBIO SIRES, New Jersey
GERALD E. CONNOLLY, Virginia
THEODORE E. DEUTCH, Florida
BRIAN HIGGINS, New York
KAREN BASS, California
WILLIAM KEATING, Massachusetts
DAVID CICILLINE, Rhode Island
ALAN GRAYSON, Florida
AMI BERA, California
ALAN S. LOWENTHAL, California
GRACE MENG, New York
LOIS FRANKEL, Florida
TULSI GABBARD, Hawaii
JOAQUIN CASTRO, Texas
ROBIN L. KELLY, Illinois
BRENDAN F. BOYLE, Pennsylvania

AMY PORTER, *Chief of Staff* THOMAS SHEEHY, *Staff Director*
JASON STEINBAUM, *Democratic Staff Director*

SUBCOMMITTEE ON EUROPE, EURASIA, AND EMERGING THREATS

DANA ROHRABACHER, California, *Chairman*

TED POE, Texas	GREGORY W. MEEKS, New York
TOM MARINO, Pennsylvania	ALBIO SIRES, New Jersey
MO BROOKS, Alabama	THEODORE E. DEUTCH, Florida
PAUL COOK, California	WILLIAM KEATING, Massachusetts
RANDY K. WEBER SR., Texas	LOIS FRANKEL, Florida
REID J. RIBBLE, Wisconsin	TULSI GABBARD, Hawaii
DAVID A. TROTT, Michigan	

SUBCOMMITTEE ON THE WESTERN HEMISPHERE

JEFF DUNCAN, South Carolina, *Chairman*

CHRISTOPHER H. SMITH, New Jersey	ALBIO SIRES, New Jersey
ILEANA ROS-LEHTINEN, Florida	JOAQUIN CASTRO, Texas
MICHAEL T. McCAUL, Texas	ROBIN L. KELLY, Illinois
MATT SALMON, Arizona	GREGORY W. MEEKS, New York
RON DeSANTIS, Florida	ALAN GRAYSON, Florida
TED S. YOHO, Florida	ALAN S. LOWENTHAL, California
DANIEL DONOVAN, New York	

CONTENTS

	Page
WITNESSES	
Admiral Robert Papp, Jr., USCG, Retired, U.S. Special Representative for the Arctic, U.S. Department of State	7
Vice Admiral Charles D. Michel, USCG, Vice Commandant, U.S. Department of Homeland Security	23
Rear Admiral Timothy C. Gallaudet, USN, Oceanographer and Navigator, U.S. Department of Defense	31
LETTERS, STATEMENTS, ETC., SUBMITTED FOR THE HEARING	
Admiral Robert Papp, Jr., USCG, Retired: Prepared statement	10
Vice Admiral Charles D. Michel, USCG: Prepared statement	25
Rear Admiral Timothy C. Gallaudet, USN: Prepared statement	34
APPENDIX	
Hearing notice	50
Hearing minutes	51
The Honorable Dana Rohrabacher, a Representative in Congress from the State of California, and chairman, Subcommittee on Europe, Eurasia, and Emerging Threats: Questions submitted for the record to Admiral Robert Papp, Jr., and Vice Admiral Charles D. Michel, USCG	52

CHARTING THE ARCTIC: SECURITY, ECONOMIC, AND RESOURCE OPPORTUNITIES

TUESDAY, NOVEMBER 17, 2015

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON EUROPE, EURASIA, AND EMERGING THREATS AND
SUBCOMMITTEE ON THE WESTERN HEMISPHERE,
COMMITTEE ON FOREIGN AFFAIRS,
Washington, DC.

The subcommittees met, pursuant to notice, at 2:07 p.m., in room 2172, Rayburn House Office Building, Hon. Dana Rohrabacher (chairman of the Subcommittee on Europe, Eurasia, and Emerging Threats) presiding.

Mr. ROHRABACHER. This hearing will come to order. This hearing is called to examine the Arctic-focused agenda, and I am pleased to be joined by Chairman Duncan and members of the Western Hemisphere Subcommittee.

Just under 1 year ago, the Europe, Eurasia and Emerging Threats Subcommittee held its first hearing on the Arctic. Since then, the United States has assumed the chairmanship of the Arctic Council, and the level of congressional interest in our Government's Arctic agenda has grown. While the Alaskan congressional delegation, Don Young in particular, or as—or he perhaps is the whole delegation, has been in the forefront of efforts to champion the U.S. Arctic positions.

Elected representatives from the lower 48 have increasingly come to appreciate the potential of the Arctic to benefit the entire country.

As I noted last time, while we all recognize the receding ice, the purpose of this hearing is not to debate science, whether or not what is taking place is part of a natural cycle, or whether it can be traced to the human production of CO₂. The fact remains the Arctic is in stark contrast to the Antarctic, and is now more accessible than it has been for decades.

The purpose of today's hearing is to ask and discuss what are we doing with the Arctic? And what do we want to do with the Arctic? Scientific programs and research into topics such as ocean acidification and science of the ice flows help us to understand the Arctic environment, but to what end? Is our Government working with private industry and our allies, such as Canada, to build the infrastructure which enables strategic economic development, mineral, oil, natural gas extraction, as well as the possibility of commercial fishing? Or, as I fear, is this administration so focused on global

warming, that we are passing up ways of expanding prosperity and the well-being of these emerging opportunities in the Arctic?

Let me note that while sometimes the rhetoric associated with the so-called race for the Arctic can be a bit exaggerated, the Arctic is not immune from the same forces of geopolitics which apply to other areas of the globe. One disturbing element, at least to me, of the Arctic discussion is the Cold War analogy that everything Russia is doing in the Arctic is a national security threat. We should not be finding ways—excuse me. We should be focusing on finding ways to cooperate in mutually beneficial development with Russia rather than approach the Arctic issues with hostility and belligerence.

Admiral Papp, during your testimony in December, you laid out a vision for the U.S. chairmanship of the Arctic Council. I look forward to hearing about the progress we have made and how those concepts have been put into action.

Admiral, and I will pronounce it Gallaudet—

Admiral GALLAUDET. Gallaudet, sir.

Mr. ROHRABACHER. Okay—and Michel, the subcommittee—we all on the subcommittee look forward to learning about how the Coast Guard and Navy are preparing to carry out their missions in the Arctic and where those lines of authority rest at this moment.

It would be especially useful to hear about how our country is working with our allies and Arctic partners to leverage and to build on the experiences that we have so far in order to have some real progress that we can demonstrate in the years ahead. Additionally, is the current division of labor between the Coast Guard and the Navy the best way to carry out our Arctic strategy, or might some realignment allow our Government to be more effective? I would be interested to hear your opinions on that.

I hope that our hearing today will help illuminate answers to these and other questions, so I thank you all for appearing today.

And without objection, all members will have at least 5 legislative days to submit additional written questions or extraneous materials for the record.

And with that, Mr. Meeks, you are recognized.

Mr. MEEKS. Thank you, Chairman Rohrabacher. And it is great to be with Chairman Duncan and Ranking Member Sires. And I thank everybody for holding this hearing to provide us with an opportunity to examine our policy toward the Arctic and the opportunities within the region. At the 6-month mark of the American chairmanship, we can now honestly assess the progress thus far, and the challenges that lie ahead. The Arctic has become a popular topic recently. It is the new geopolitically relevant region where energy, trade, military, and environmental interests intersect and perhaps clash. I am specifically concerned about our economic interest in the region, given the changing landscape. And when I say “changing landscape,” I mean it literally.

Mr. ROHRABACHER. Changing landscape.

Mr. MEEKS. I am referring to the melting ice caps, and the subsequent new trade routes, reachable—trade routes, reachable resources, and uncharted territory. Recently, we saw, for example, where Shell abandoned its Arctic drilling plans due to low energy prices, regulatory pressure, and a misunderstanding of the geology.

There are other private actors that are considering business and trade in the region as well.

In America's role as chairman of the Arctic Council, what drives the economic opportunities in the region, and are we taking the environmental impact of economics into account? We need look at all of those things. Furthermore, from a geopolitical perspective, one can sense that a number of nations are scrambling to be the first mover in the territory. Russia, for example, is ahead of everyone in the ice-breaking capabilities. This has both economic and military implications. And I would like to encourage cooperation between all of the actors and acknowledge the Arctic Council for being an instrumental organization in the effort to bring all concerned nations together, including China, because it is important for every nation that we have a clear understanding, because it affects all of us that share this place that we call the Planet Earth.

You know, on one of my first trips that I was able to take as a Member of Congress back in 1999, I had always dreamed of going to Alaska, and I saw a trip, and I went to Alaska. And if the truth be told, I did not know what I was in for. I thought that the trip to Alaska was going to take me someplace where I had a nice hotel room and I would get to see, you know, some of the ice by air, and get back home.

No one—I didn't realize that it was a camping trip. Even though I had camping gear, I didn't realize it. I didn't realize that they were going to take me on a small plane and I would fly over and I would see the glaciers and everything and caribou that were moving and—and I didn't realize that polar bears and grizzly—so I didn't realize that. I didn't realize this little plane would land in the middle of the tundra and they would tell this guy from New York City, who had never gone camping in his life, that that plane then would take off and they would tell me, we will see you in 4 days.

And so now I am stuck out on this place 4 days, and it was fortunately, in one extent, that it was unusually warm at the time, but what I did not realize with that warmth came trillions of mosquitos. And so I thank God, though, for the 24-hour sun, so it never got dark and I was able—I had to eat some of those mosquitos as we tried to, because that was the only thing, but I saw the beautiful landscape. I saw, even though it was unusually warm, the rivers full of salmon swimming, and some of it still iced. I saw and had and tasted some of the greatest tasting water I have ever tasted as it came down off the mountain. I can still taste it as I sit here.

I saw golden eagles flying and hawks with the nests with their babies. I saw nature as I had never seen it before. Even though while I was there, I was praying saying, God, just get me home and I promise you I won't do this again, but when I got home, I saw the magnificence of this place, great place that we call Alaska, and the significance it has to us as mankind, as humankind, no matter where we are or where we come from on this planet.

So the interest that we have in it, I believe, has something to do with the essence of who we are as human beings. And by every nation being a part of this, and why we are chairing it, it is tremendously important to know the outcome of what we can do to let—

the common good of all of us. If there is anything that we should unite on, is that we are protecting and making sure that this place we call home, Earth, is taken care of, and we weigh and utilize the economic opportunities with the environmental concerns and the benefit for all.

Thank you, Mr. Chairman. I yield back.

Mr. ROHRABACHER. Well, I would have to say, that is very inspiring. And let me just announce, I will be giving the hammer here to—or the gavel, I should say, to Mr. Duncan, who is, of course, the chairman of the subcommittee overseeing the Western Hemisphere, and I will be gone for about 10 to 15 minutes and then I will return.

And, Mr. Duncan, you may proceed and be in charge.

Mr. MEEKS. You don't want me to have the gavel?

Mr. ROHRABACHER. You got to win the election first.

Mr. DUNCAN [presiding]. Okay. So I am just going to stay here while the chairman is gone. Let me just start by saying when I came to Congress, I, too, wanted to go to New York City, and while I was in New York City, it was a different environment than South Carolina. Meeks, you are funny.

I am glad you had a good experience up in Alaska; beautiful part of the world, as Chairman Young will say.

But today we meet to examine the enormous potential of the Arctic, a region that is too often overlooked and misunderstood. Lands and ocean above the Arctic Circle are home to oil, minerals, and other natural resources. These resources also represent economic opportunity in the form of investment and job creation. Beyond these considerations, there are also major security components to the Arctic puzzle. All these issues must be addressed during our Nation's tenure at the helm of the Arctic Council, as it provides an excellent platform for the advancement of U.S. interests.

The energy opportunity in the U.S. Arctic territory is vast. There is an area offshore of Alaska totaling about 1 billion acres. Reportedly 6,000 miles of coastline as a potential for energy development. Moreover, a change in the patterns of sea ice will mean that there will be more time to explore for oil and gas each year, and also indicates that the time frame for offshore drilling and activity will remain open longer.

A 2008 geological survey, Appraisal of Undiscovered Oil and Gas Resources, state that the extensive Arctic continental shelves may constitute the geographically largest unexplored area for petroleum on the earth. Further studies propose that 30 percent of the planet's undiscovered natural gas and possibly 13 percent of undiscovered oil are in the region. Developing these energy stores and other mineral resources in the north will also generate economic progress in the form of investment and jobs. Currently, there is an absence of adequate infrastructure for proper development. Many of the natural resources are far from existing storage facilities, pipelines, and shipping lanes, so construction of better infrastructure will represent yet another economic opportunity.

In terms of security, the Arctic presents a unique set of challenges. Traditional concerns exist, such as the ability to monitor geopolitical rivals operating in the same area. Both Russia and

China are active in the north, and an increased U.S. presence is necessary to demonstrate that we are not falling behind.

Russia has shown a commitment to establishing a strong presence in the far north, beginning construction on bases on Alexander and Kotelnny Islands. Though these installations are mostly suited for limited operational capacity and surveillance, the intention is very clear: To project power and stake claims in the Arctic. However, security is far more complex than merely positioning assets. The Arctic is home to some of the harshest conditions on the planet, with strong storms and deadly cold temperatures.

As tourism in the region expands, so, too, must military cooperation and preparation. Joint exercises with our Arctic Council allies would help countries prepare for any disasters that might befall travelers or workers in the north. Search and rescue coordination and disaster relief exercises will be important initiatives, as more people begin to flow into the region and energy activities would certainly expand.

In the near future, cruises will explore the northern coastline of Alaska and Canada, and it is imperative that both the U.S. and Canada are prepared to navigate the harsh landscape in an event of an emergency. I think we can learn a lot from our allies in Canada and other Slavic nations that participate already in those search and rescue operations.

In addition to these concerns, it will be crucial to respect the rights of these American citizens already occupying the land in the Arctic. I am sure Mr. Young will talk about some of those. Each Arctic nation has citizens that already inhabit Arctic territory, and it is in the U.S. national interest that American citizens and these other citizens join in the development through job creation and economic opportunity.

It is crystal clear that the Arctic is not a one-dimensional area. There are economic, energy, security, infrastructure, and human rights concerns in the region, yet the Obama administration is focused on climate change at the expense of these other important U.S. interests. Indeed, the U.S. Arctic Council chairmanship has become a platform for the extension of President Obama's climate change agenda, another page in the legacy that he has pursued without regard to proper constitutional checks and balances in a lot of ways.

Additionally, the recent decision by the Obama administration to close the possibility of drilling in Alaska's Arctic Ocean over the next 2 years by terminating options for drilling rights is a disservice to our national interests. It would be a shame to let the pursuit of a more economically viable, energy-rich Arctic fall by the wayside for the U.S. at the expense of an aggressive climate change regime, all the while, Russia and China stand poised to reap the benefits through their active engagement in the far north.

In conclusion, the Arctic is of immense economic and strategic value for the U.S. national interest. We need to make sure that we are using the platform of the chairmanship of the Arctic Council and our own tools of power to advance U.S. national interests, support our allies and friends of similar interest in the common area.

And with that, I will look forward to hearing from the witnesses today on how the State Department, the Department of Defense,

and the Department of Homeland Security are cooperating and coordinating to support our interests in the far north.

And with that, I will turn to the ranking member, Mr. Sires, for an opening statement.

Mr. SIRES. Thank you, Mr. Chairman. Thank you both Chairman Rohrabacher and Duncan, for holding today's timely hearing on America's role as an Arctic nation. As a member of both the Western Hemisphere and Europe, Eurasia, and Emerging Threats Subcommittees, this topic is particularly important to me.

Since Alaska's inclusion into the Union over 50 years ago, the United States has had a stake, an interest in Arctic relations. Over the past decade, our interests have increased with receding ice caps and diminishing glaciers as a result of climate change. The changing geography of the Arctic places the United States in a unique position to work with other Arctic nations to ensure security of the region, including the people, wildlife, and resources. An increase in navigable waters opens the platform for new trade routes and economic benefits. Trade routes can be shortened by as much as 30 percent, saving money and avoiding prior infested waters. Even though these Arctic routes aren't safe at the moment, that time is approaching, and countries like Russia and China are greatly interested in increasing their footprint in the Arctic and securing these routes for themselves.

The melting ice in the Arctic also poses security concerns we need to consider. Within the last few years, we have witnessed Russia's continued pattern of encroachment with Ukraine, Crimea and Syria. Now Russia is racing to control the Arctic, operating over 30 icebreakers, where the U.S. only has two. We must remain vigilant to the growing aggression and ensure that it does not spread to the Arctic, running counter to U.S. interests.

The administration's selection of Admiral Papp as the first U.S. Special Representative for the Arctic and the implementation of the national strategic—of the national strategic for the Arctic region are encouraging signs of increased engagement in the region.

I look forward to hearing from Admiral Papp and other members of the esteemed—of the panel on how Congress can best work with the administration to realize the goals and our plans for the high north.

And I wanted to say that if you go to my friend, Don Young's office, half of the wildlife in Alaska is hanging in his office. Beautiful ones.

Mr. DUNCAN. Meeks has flashbacks when he goes there.

As the one Member of Congress that has a territory, a district that actually touches the Arctic, so I am going to use some leniency here and recognize the gentleman from Alaska for an opening statement.

Mr. YOUNG. Thank you, Mr. Chairman, and thank you for this important hearing. And I want to thank the people in the Arctic Council. I will tell you, Alaska sort of feels like the ugly debutante. No one paid any attention to the Arctic until recently. We kept saying, we are here, we are here, and there was little acknowledgement of, and now we have a great deal of interest. And I think it is our responsibility as a Congress, especially this committee, that we look at the total picture. I don't want us to become the

spokeschild for the climate change battle. I want us to say, what can we do to adapt to it, how we can compete and work with the neighbors that are trying to grasp it right now?

We talk about Russia as a security issue, but they really want to claim that area with China, and we sit on our hands. We have two worn-out icebreakers, which I funded for 40 years ago. We need new icebreakers, we need new docks. We don't have any docks. And there has been a lack, and this is what this council, this Arctic Council, and this group here has to recognize the economic side of it, not just the environmental side of it.

This Congress has to recognize we have to put an infrastructure in place. Where will we build our docks? Will we be able to service the navigational needs? What role will the Navy play? What role is the Coast Guard playing? What role is the Corps of Engineers? There has to be an Arctic policy. It can be established through this group right here, but you better work together. And if all I hear about, you know, we are not going to listen to the local people, which just recently occurred with this administration. We talk about the indigenous people, they are not being heard. They are being heard by the industry, but not this administration. This is a big picture. I represent that whole State, every lick, and including the mosquitos, Mr. Meeks.

Did they give you a 410 with your survival gear?

Mr. MEEKS. They did.

Mr. YOUNG. Because 410s will shoot the mosquitos, by the way, and knock them out.

So I want this hearing to bring out where are we going to be 10 years, 5 years, 2 years, 1 year, next month. I don't want to hear a lot of talk, we have a tendency to do that, and allow Russia and China to take over the Arctic. It is too important to this Nation. And without Alaskans, we wouldn't even have this hearing. People forget that. That is why we are an Arctic nation. But the potential of the Arctic nation, the potential of the Arctic, not only the minerals, but the potential to improve the well-being of the people of the United States has to be done with a concrete plan with everybody working together.

Thank you, and I yield back.

Mr. DUNCAN. I thank the gentleman.

And other members are advised they can submit opening statements for the record.

We also have a lighting system for our panelists. You will be given 5 minutes. If you could stay as close to that as possible. Your biographies are already provided to the members, so we are not going to read those.

And I will now recognize Admiral Papp for a 5-minute opening testimony. Admiral.

**STATEMENT OF ADMIRAL ROBERT PAPP, JR., USCG, RETIRED,
U.S. SPECIAL REPRESENTATIVE FOR THE ARCTIC, U.S. DE-
PARTMENT OF STATE**

Admiral PAPP. Well, thank you, Chairman Duncan. And I look forward to seeing Chairman Rohrabacher back here in a little bit. Ranking Member Meeks, Ranking Member Sires, and welcome as well to Chairman Young, who has been such a great supporter to

us for so long. And, yes, sir, I have had the taxidermy lecture in the office in the past, and I agree with you, it is educational.

I know it is perfunctory to say that we are delighted to be here. I am, in fact, delighted to be here, because I was supposed to be in Belgium today speaking at an Arctic conference, and all things considered now, I think I would rather be here, but also, because we get a chance to talk about this program and give it broader exposure. So thank you for having me here.

As the Special Representatives for the Arctic, my broad charge is to lead the Nation's international efforts to promote our priorities to advance U.S. policy in the Arctic region. I also represent the Department of State at the Arctic Executive Steering Committee that was a result of the President's Executive order on implementation of the Arctic Strategy.

The State Department recognizes that significant changes in the Arctic are creating new challenges and opportunities for the United States and other Arctic nations. A rapidly warming Arctic offers new shipping routes, increased opportunities for trade and tourism, and the potential for resource exploitation. But it also threatens traditional ways of life and increases the risk of environmental disasters.

Our Arctic engagement takes place primarily through the Arctic Council, and the Arctic Council is the preeminent forum for international diplomacy on Arctic matters. The United States assumed the chairmanship at the Arctic Council in April of this year. Our chairmanship theme, One Arctic: Shared Opportunities, Challenges, and Responsibilities, echoes the belief that all eight Arctic states must work together to address the challenges of a changing Arctic, to embrace the opportunities it presents, and to face the responsibilities we all have as stewards of this vast region.

We are already a quarter of the way through our U.S. chairmanship, and have already convened two meetings of the senior Arctic officials and several meetings of the council's various working groups, task forces, and expert groups. These groups are pursuing an ambitious work plan for the next 2 years under the themes that we have chosen to highlight during the U.S. chairmanship: The first, Arctic Ocean Safety Security and Stewardship; the second, Improving Economic and Living Conditions; and the third, Addressing the Impacts of Climate Change.

We are off to what is perhaps the most aggressive start to an Arctic Council chairmanship. The April ministerial in Iqaluit, Canada, was followed in rapid succession by a kickoff event at the State Department, and then the earliest convening ever of the senior Arctic officials in memory.

We have already just recently conducted a second senior Arctic official meeting in Anchorage, Alaska, and initial meetings of all working groups. We have cosponsored an Arctic energy summit in Fairbanks, Alaska, and hosted an Arctic search and rescue exercise with the United States Coast Guard and the Department of Defense.

I believe our most significant accomplishment to date has been the conference on Global Leadership in the Arctic, Cooperation, Innovation, Engagement and Resilience, otherwise known by the acronym GLACIER, which took place in late August in Anchorage.

While technically not an Arctic Council event, GLACIER served as a centerpiece of the mission of the U.S. chairmanship to broaden awareness of the Arctic, both domestically and abroad. GLACIER featured keynote speeches from Secretary Kerry and President Obama and other senior U.S. officials.

Twenty-one countries participated in GLACIER, including seven foreign ministers. The White House and Department of State are continuing to build upon the momentum created by GLACIER, fulfilling the obligations as set forth in the Presidential commitments and strengthening relationships with Alaskans in our American Arctic.

It is important to note that the United States and other Arctic states are pursuing our mutual interests in what is currently a safe and stable Arctic region marked by international cooperation and governed by international law. We cannot ignore that our international efforts in the Arctic are taking place during a difficult time in our relationship with Russia. Russia's annexation of Crimea, its aggression in Ukraine, and its efforts to intimidate its neighbors are an affront to a rules-based international system, and put at risk the peace that we and our allies have worked so hard to achieve in Europe.

The international community's disagreements with Russia have complicated our efforts in the Arctic, but have not stalled them. It is not business as usual, but we have worked with Russia on Arctic issues during past political crises, and are maintaining multilateral activities within the Arctic Council, such as those to protect the Arctic environment, ensure maritime safety, and promote scientific cooperation.

The Arctic region has enormous and growing geostrategic, economic, environmental, and national security implications for the United States.

We are at a pivotal point in history as the Arctic is rapidly changing, creating significant challenges and opportunities for every Arctic nation. The challenge of charting a course toward a sustainable future in the Arctic is important for all of us. The world looks to the United States for leadership, and as chair of the Arctic Council, we have a unique opportunity to demonstrate our leadership as an Arctic nation. In this role, we look forward to advancing national priorities, pursuing responsible stewardship, and strengthening international cooperation in the Arctic.

So I, once again, thank you for the opportunity to testify, and I look forward to your questions. Thank you.

[The prepared statement of Admiral Papp follows:]

**Statement of
Admiral Robert J. Papp, Jr.
Special Representative for the Arctic
U.S. Department of State**

**Before the Committee on Foreign Affairs,
Subcommittees on Europe, Eurasia, and Emerging Threats,
and Western Hemisphere
U.S. House of Representatives
November 17, 2015**

Introduction

Good afternoon Chairman Rohrabacher, Chairman Duncan, Ranking Member Keating, Ranking Member Sires, and other Members of the Europe, Eurasia, and Emerging Threats, and Western Hemisphere Subcommittees. I appreciate the opportunity to appear before you today to discuss how the Department of State is working to advance our security and economic interests in the Arctic.

Recognizing the importance of the Arctic, and in line with the President's commitment to elevate Arctic issues in our Nation's foreign policy, particularly as the United States chairs the Arctic Council through spring of 2017, Secretary Kerry appointed me as the Special Representative for the Arctic. My broad charge is to lead our Nation's efforts to promote our priorities and advance U.S. policy in the Arctic, a region in which we have vital national interests.

The Arctic and National Security

It is important to note from the outset that the United States and the other Arctic States are pursuing our mutual interests in a safe, stable, and prosperous Arctic region during a difficult time in our relationship with Russia. Russia's attempted annexation of Crimea, its aggression in Ukraine, and its efforts to intimidate its neighbors are an affront to the rules-based international system and put at risk the peace that we and our allies have worked so hard to achieve in Europe.

The international community's disagreements with Russia caused by Moscow's actions have complicated our efforts in the Arctic. Fortunately,

we have worked with Russia on Arctic issues during past political crises and are maintaining activities related to protecting the Arctic environment, ensuring maritime safety, including search and rescue, and law enforcement. We also continue to work with Russia in multilateral fora, including under the auspices of the Arctic Council, and our allies are following similar policies.

We cannot and will not ignore Russian aggression, even as our Arctic cooperation continues. The U.S. is in lockstep with the E.U. and Norway on sanctions that target, among other things, Russian's ability to develop resources in its Arctic waters.

At the same time, we continue to work with Russia and all our Arctic partners on global issues such as those in the Arctic where we share common interests. As we do so, we remain cognizant of how significant changes in the Arctic are creating new challenges and opportunities for the United States and the other Arctic nations. A rapidly warming Arctic climate presents new shipping routes, increased opportunities for trade and oil and gas exploration, and additional tourism. But it also threatens traditional ways of life and increases the risk of environmental pollution. Arctic communities face food and energy insecurity, health concerns, and increased rates of suicide. The challenge of charting a course toward a sustainable future in the Arctic is not lost on me. The federal interagency community is committed to working within our capacities to improve the future of this region.

International Governance

United States engagement with international partners in this region is extremely important, as governance of the Arctic region falls to the United States and the seven other Arctic States: Canada, Iceland, Denmark (through Greenland), Finland, Russia, Norway, and Sweden. International cooperation takes place in multiple fora, such as the Arctic Council, International Maritime Organization, and the new Arctic Coast Guard Forum. Each of these serves a purpose to advance specific priorities and affords the opportunity to engage with appropriate delegations. By and large, our international Arctic engagement takes place through the Arctic Council, the preeminent forum for international diplomacy on Arctic matters.

The Arctic Council

The Arctic Council, a high-level intergovernmental forum of the eight Arctic States and the Arctic indigenous peoples, was created in 1996 to provide a means for promoting international cooperation, coordination and interaction on common Arctic issues. Its founding document focuses the Council's work on environmental protection and sustainable development, but its mandate is not limited to these areas. The one area explicitly excluded from the Council's mandate is "military security"¹; thus, the Council does not handle military issues or military-to-military cooperation among the Arctic States.

As the challenges and opportunities facing the Arctic have grown in volume and complexity, the Council's workload has increased dramatically in recent years. The Council has six permanent working groups covering a broad range of issues such as human health, climate change impacts, biological diversity, emergency response, and protection of the Arctic marine environment. The Council also periodically mandates task forces and expert groups for limited periods to address specific, cross-cutting issues. Each Arctic State appoints a Senior Arctic Official to run the Council's day-to-day operations. Six Permanent Participant organizations represent the interests of the region's indigenous peoples in the Council. The Council meets at the Ministerial level once every two years at the conclusion of each chairmanship, and most Arctic States send their foreign minister. Each Arctic State assumes the chairmanship of the Council for a two-year period during which the chairing State hosts numerous meetings and other diplomatic events, and assumes all associated costs.

The United States has led or co-led many of the Council's important initiatives including the 2004 Arctic Climate Impact Assessment, the 2008 Arctic Oil and Gas Assessment, and the 2009 Arctic Marine Shipping Assessment. In addition, work under the auspices of the Arctic Council has resulted in two binding agreements among the Arctic States: one on search and rescue cooperation, signed in 2011, and the other on marine oil pollution preparedness and response, signed in 2013. Over the past 19 years, the

¹ Declaration on the Establishment of the Arctic Council: Joint Communique of the Governments of the Arctic Countries on the Establishment of the Arctic Council. Ottawa, Canada. September 19, 1996.

Council's cutting-edge work has paved the way for international cooperation to address shared environmental challenges. No other body in the world is doing work of such high caliber on the issues we face in the Arctic, which is why the Council is so important to the United States. Our collaboration with the other seven Arctic States has worked well over the life of the Council, and we could not have done this work without them.

U.S. Chairmanship

The United States assumed Chairmanship of the Arctic Council in April 2015. Our Chairmanship theme, "One Arctic: Shared Opportunities, Challenges, and Responsibilities," echoes the belief that all eight Arctic States must work together to address the challenges of a changing Arctic, to embrace the opportunities it presents and to face the responsibilities we all have as stewards of this great region. In recognition of the urgency of the issues facing the region, we convened the first Senior Arctic Official Executive Meeting under the U.S. Chairmanship in June, the first time such a meeting has been held so soon after an Arctic Council Ministerial meeting. This gathering enabled the Council's working groups, task forces and expert group to expeditiously launch their ambitious work plans for the next two years, tackling themes we have chosen to highlight during the U.S. Chairmanship:

- Arctic Ocean Safety, Security, and Stewardship
- Improving Economic and Living Conditions
- Addressing the Impacts of Climate Change

Climate change impacts in the Arctic have resulted in significant reductions in sea ice, making the Arctic Ocean increasingly accessible. We have also seen an increase in shipping through the Bering Strait, a potential future funnel for trans-Arctic shipping traffic. In addition, the ice-diminished maritime environment is attracting resource exploration in areas previously inaccessible. Advancing safety in the Arctic Ocean requires improved maritime domain awareness, for which navigational services such as weather and sea ice forecasting and nautical charting are critically important.

We are prioritizing emergency response by convening exercises under the auspices of the *Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic* and the *Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic* to examine

the coordination of emergency response capabilities of the Arctic States, in conjunction with local communities. We are fostering new partnerships with government institutions, the private sector and indigenous communities for emergency response and environmentally responsible maritime activity in the region. The Arctic Council also continues to develop a network of existing marine protected areas to leverage international best practices for sensible maritime activities that avoid areas of ecological and cultural significance where possible. In addition, a Task Force on Arctic Marine Cooperation is assessing future needs for deepened coordination among the Arctic States in the Arctic Ocean.

The cold temperatures of the Arctic Ocean make it particularly vulnerable to ocean acidification. If current emissions trends continue, scientists predict that, by the end of the century, the Arctic waters will become corrosive to all shell-building organisms, thereby threatening an important component of the marine ecosystem as these organisms are a critical food source. The Arctic Council is working to expand the Arctic reach of the Global Ocean Acidification Observing Network, increase the number of stakeholders trained to conduct ocean acidification monitoring, and raise public awareness of this threat to the entire Arctic food web and the people whose livelihoods depend on these creatures.

We remain cognizant of how changes in the Arctic have created significant challenges and opportunities for every Arctic nation, especially for our own American citizens in Alaska. The warming climate threatens the traditional ways of life of Arctic residents and risks disrupting ecosystem balance. During the U.S. Chairmanship, we are striving to bring tangible benefits to communities across the Arctic.

Preventing suicide, especially among youth, is one of the most pressing public health imperatives in the Arctic today. Assessing progress on suicide prevention is a challenging task anywhere - but especially in the Arctic, where communities are small and often geographically distant from health care providers and other resources. The Arctic Council's continued work on suicide intervention aims to aid health workers to better serve the needs of their communities, while helping policymakers to measure progress, identify challenges and scale up interventions.

There are major disparities in water and sewer access in Arctic communities. Access rates in parts of Alaska are similar to those found in the contiguous

48 states in the 1950s. The Arctic Council is supporting innovative efforts to devise decentralized, Arctic-friendly solutions to address the lack of access to water and sanitation, a major driver of infectious diseases, especially those related to hygiene, and which are also a drag on economic development. The Arctic Council is also promoting enhanced circumpolar health cooperation through the concept of One Health, which argues that human health is unavoidably linked to the health of animals and ecosystems.

Access to reliable, affordable energy is a barrier to economic development for many communities in the Arctic. That is why we have made energy diversification and clean energy access one of the priorities of our Arctic Council Chairmanship. To this end, we are prioritizing local capacity building to create a set of clean energy champions within Arctic communities and sharing policy and technical best practices. Through cooperation with the State of Alaska and all of our Arctic neighbors, the Arctic Council has the opportunity to accelerate the great work already being done by dedicated practitioners in the region.

Under the U.S. Chairmanship, the Arctic Council has initiated a circumpolar telecommunications assessment of the infrastructure necessary to support ever-increasing human activity throughout the Arctic region. Building telecommunications infrastructure across the Arctic is critical for addressing the growing communication needs of Arctic communities as well as supporting growing navigation demands, economic development activities, search-and-rescue operations, and environmental and humanitarian emergencies.

The Arctic is experiencing rapid changes that are threatening the well-being of four million inhabitants who live north of the Arctic Circle. According to a recent report from the U.S. Geological Survey, Alaska's remote northern coast has some of the largest rates of shoreline erosion in the world. Melting sea ice and thawing permafrost has contributed to increased erosion and flooding along the Alaskan coastline. As a result, shorelines are retreating at rates averaging tens of feet per year, threatening Alaska Native coastal villages. Some Alaskans who live in areas sensitive to permafrost degradation face the difficult and costly need to relocate. Alaska Natives have depended on a subsistence-based economy for generations, which is a traditional way of life centered on hunting, fishing and gathering of plants. However, as sea ice is melting, habitat for polar bears, walrus, moose, caribou and seals is being reduced, dramatically decreasing the availability

of subsistence resources. The Arctic is therefore subject to major and rapid changes that could interact in ways that have profound implications on the well-being of both Arctic and non-Arctic communities and ecosystems.

The United States, through many departments and agencies, is using our Arctic Council Chairmanship to enhance climate resilience throughout the region. The Arctic Council is contributing to detailed examinations of Arctic ecosystems, and expanding the Local Environmental Observer Network to encourage citizens to get involved in monitoring their own surroundings. The Arctic Council is also developing a circumpolar plan to prevent, detect, and manage invasive species, as growth in shipping and development activities in the region increases the risk of introduction. There is an immediate opportunity—already largely lost in many other regions of the world—to proactively build resilience to the risks posed by invasive species. The development of an enhanced digital elevation model of the Arctic, will provide better baseline mapping information, both for scientific endeavors and to national security needs as Arctic activities continue to increase. The greater our scientific understanding of current and forthcoming challenges – the better we are able to forecast the impacts of climate change in the region before they hit – the better suited we will be to adapt to new realities.

The Arctic Council is moving to fully implement the Framework for Action on Enhanced Black Carbon and Methane Emissions, which includes the development of national black carbon and methane emission inventories, national reporting on domestic mitigation efforts, and greater international cooperation on reducing these dangerous pollutants. We have also invited Observer States in the Arctic Council to join us in this effort because these pollutants are global in origin. Our cooperation is particularly timely in the run-up to the Conference of the Parties to the United Nations Framework Convention on Climate Change in December, when the United States will join nations around the world to push for joint action on climate change.

GLACIER

The conference on Global Leadership in the Arctic: Cooperation, Innovation, Engagement and Resilience, otherwise known as GLACIER, took place in late August of 2015 in Anchorage, Alaska. Although not a formal component of the Arctic Council, GLACIER served as a centerpiece of the mission of the U.S. Chairmanship to broaden awareness domestically

and abroad. GLACIER featured remarks by President Obama and other senior U.S. officials, and panel discussions that brought together influential policy makers, community leaders, and subject matter experts from Alaska, the Arctic region, and around the world. Twenty-one countries participated in GLACIER, including seven foreign ministers, and there were press reports that mentioned GLACIER in at least 25 countries. The White House and the Department of State are now focused on continuing to build on the momentum created by GLACIER, fulfilling the obligations set forth in Presidential commitments, and strengthening the relationship with Alaskans in our American Arctic.

Arctic Fisheries

I am pleased to report that we are making significant progress toward a long-standing U.S. objective of preventing unregulated fishing from starting in the high-seas portion of the central Arctic Ocean. As described below, the United States will convene a new set of international negotiations toward an agreement on this subject before the end of the year.

Although currently there are no commercial fisheries of consequence in the high-seas area of the Arctic Ocean, it is reasonable to expect that, with diminishing sea ice and the possible migration of species, commercial fisheries are possible in the foreseeable future.

Scientific information about the Arctic's marine biodiversity is limited, and even less is understood about the extent to which climate change and increasing industrial and other human activities in the Arctic may threaten marine ecosystems and resources, including fisheries. In light of this, in 2009 the United States took the precautionary step of prohibiting commercial fishing in its own exclusive economic zone (EEZ) north of the Bering Strait until there is a better scientific foundation for a sound fisheries management regime. Other Arctic countries have taken similar steps, most recently Canada.

In our view, this same approach should apply in the high seas area of the central Arctic Ocean, an area beyond the EEZs of the United States, Canada, Norway, Russia and Denmark/Greenland. In that high seas area, with the exception of the small wedge that is within the area covered by the North East Atlantic Fisheries Commission, there is no governance regime in place by any fisheries management organization or arrangement. Thus, we have

been working for a number of years with other governments towards an understanding that commercial fishing should occur there only on the basis of adequate scientific information on which to base proper fisheries management and after an international fisheries management regime is in place.

In July 2015, the United States and the other four nations whose EEZs surround this high seas area signed the Declaration Concerning the Prevention of Unregulated High Seas Fishing in the Central Arctic Ocean. In the Declaration, which is non-binding, the five nations committed not to authorize their own vessels to engage in fishing in this high-seas area until there is an effective international mechanism in place to manage such fishing in accordance with modern standards. They also committed to establish a joint program of scientific research aimed at improving our understanding of the ecosystems of this area.

The Declaration also acknowledges the interest of other States' in this topic and looks forward to working with them in a broader process to develop measures consistent with the Declaration that would include commitments from all interested States.

With that in mind, the United States has invited representatives from the original five States and China, Japan, South Korea, Iceland and the European Union, to a new set of negotiations with the goal of transforming the non-binding declaration into a binding agreement. The State of Alaska, the Alaska Native Community, the Alaska-based fishing industry and the environmental community all support this objective. We expect the new set of negotiations to start in Washington, D.C., in early December.

Arctic Ocean – ECS and Maritime Boundaries

Efforts by the United States and other Arctic States to define their continental shelf in the Arctic Ocean are sometimes described as a “race for resources” or “competing territorial claims.” Such hyperbole is inaccurate and unhelpful.

There are two underlying issues here: delineating the continental shelf beyond 200 nautical miles - commonly called the extended continental shelf or ECS; and delimiting the maritime boundaries where ECS may overlap one or more neighboring States. In other words, first, what is the extent, or

outer limit, of a country's ECS and, second, how do neighboring countries divide that ECS when it overlaps.

Contrary to many media reports, there is no race for resources or land grab underway in the Arctic. The Arctic coastal States are proceeding in an orderly manner to define their continental shelf limits according to the provisions set out in the Law of the Sea Convention.

Determining the extent of a State's ECS is not simply a matter of measuring a specified distance from its shore. To determine whether a State meets the criteria in the Convention, it must collect data that describe the depth, shape, and geophysical characteristics of the seabed and sub-sea floor. That data is then analyzed in order to determine a set of coordinates of the seaward extent of the ECS.

Each of the five States surrounding the Arctic Ocean—Russia, Canada, Norway, Denmark (via Greenland), and the United States – has an ECS. All five States also have ECS outside of the Arctic Ocean, but the Arctic has received a disproportionate amount of public attention.

The United States, like the other Arctic States, has made significant progress in determining its ECS. All of the necessary data collection to delineate the U.S. ECS in the Arctic Ocean has been completed through tremendous efforts by the U.S. Coast Guard, the National Oceanic and Atmospheric Administration (NOAA), the United States Geological Survey (USGS), and the Department of State. Nine successful cruises were completed in the Arctic Ocean over 12 years, and four of those missions were jointly conducted with Canada.

Last year the Office of Ocean and Polar Affairs at the Department of State established the ECS Project Office at a NOAA facility in Boulder, Colorado. This office is dedicated to completing the data analysis and documentation necessary to establish the limits of the U.S. ECS in the Arctic and for other U.S. ECS areas, such as the Bering Sea, Atlantic Ocean, and the Gulf of Mexico.

While the United States has a significant amount of ECS in the Arctic, as a non-party to the Law of the Sea Convention, the U.S. is at a disadvantage relative to the other Arctic Ocean coastal States. Those States are parties to the Convention, and are well along the path to obtaining legal certainty and international recognition of their Arctic ECS.

Becoming a Party to the Law of the Sea Convention would help the United States maximize international recognition and legal certainty regarding the outer limits of the U.S. continental shelf, including off the coast of Alaska, where our ECS is likely to extend out to more than 600 nautical miles. U.S. accession is a matter of geostrategic importance in the Arctic (where all other Arctic nations, including Russia, are Parties). The Administration remains committed to acceding to the LOS Convention.

Overlapping continental shelves are inevitable in the Arctic Ocean, as elsewhere. Where boundaries have not yet been concluded, we expect that neighboring States will continue to work together on a bilateral basis to reach agreement on what are often complex and time-consuming processes. It is important to keep in mind this is not a question of first-come, first-served.

We have two maritime boundaries in the Arctic, one with Russia and one with Canada. The United States and the Soviet Union signed a maritime boundary agreement in 1990. Although only provisionally in force, Russia has respected this maritime boundary, and has not defined an ECS on the U.S. side of the boundary. The United States is taking the same approach.

Canada and the United States have yet to agree to a maritime boundary that would divide our overlapping ECS. We have made this a key objective for implementation of our National Strategy for the Arctic Region, and this will be an important future effort. Nonetheless, we have managed to work together to collect mutually beneficial data necessary to define our respective ECS areas.

Resource Exploration

Diminishing Arctic Ocean sea ice is unlocking access to significant energy resources and other potentially lucrative natural resources. Estimates of technically recoverable conventional oil and gas resources north of the Arctic Circle include 13 percent of the world's undiscovered oil, 30 percent of the world's undiscovered gas, and 20 percent of the world's natural gas liquids deposits, as well as vast quantities of mineral resources, including rare earth elements, iron ore, and nickel. That said, the Arctic is now and will remain long into the future an extremely challenging environment in which to operate.

The Department of State aims to promote good governance and environmentally responsible development of all energy resources – oil and gas production, as well as clean, renewable energy – with an emphasis on consistency among Arctic States and environmental sustainability. We are committed to implementing international agreements to reduce the risk of marine oil pollution; conducting international joint oil spill response exercises; and increasing global capabilities for preparedness and response to oil pollution incidents in the Arctic. Collaborating closely with domestic agencies, the Department of State aims to work with stakeholders, industry, and the other Arctic States to understand the energy resource base, develop and implement best practices, and share knowledge and experience.

While we acknowledge the importance of fossil fuels to powering Arctic development, affordable renewable energy technologies are also enormously important for the region. Development of renewable energy resources including solar, wind, geothermal, and tidal, has accelerated in recent years. Renewable energy already enjoys a global cost-competitive advantage over diesel fuel. Today, wind and solar technologies have a comparative cost advantage over fossil fuels in the power sector in the mid-West U.S. Midwest and in Europe. As capacity factors for renewable technologies increase, and costs continue to decline for these technologies, more and more regions and energy end-use sectors will transition to higher proportions of renewable energy. There are many dedicated people across the Arctic, including in Alaska, working to make these technologies work effectively for healthier and more sustainable energy generation in the Arctic. We will continue to work with stakeholders to promote a regional focus on addressing barriers to renewable energy development, with the goal of improving the quality of life in Arctic communities and addressing climate impacts.

Conclusion

The Arctic Region has enormous and growing geostrategic, economic, environmental, and national security implications for the United States. We are at a pivotal point in history as the Arctic is rapidly changing and we have assumed the Chairmanship of the Arctic Council. We look forward to advancing national priorities, pursuing responsible stewardship, and strengthening international cooperation in the Arctic Council and other fora.

Again, thank you for the opportunity to testify today. I look forward to your

questions.

Mr. DUNCAN. Thank you, Admiral.

The Chair will now recognize Vice Commandant Michel for 5 minutes.

**STATEMENT OF VICE ADMIRAL CHARLES D. MICHEL, USCG,
VICE COMMANDANT, U.S. DEPARTMENT OF HOMELAND SECURITY**

Admiral MICHEL. Well, thank you, Chairman Duncan, Ranking Member Meeks, Ranking Member Sires, Representative Young, distinguished members of the subcommittees. Thank you for the opportunity to testify before you today on Coast Guard operations in the Arctic, the Coast Guard's Arctic strategy, as well as our international and domestic efforts to ensure safe, secure, and environmentally responsible maritime activity in this region.

Mr. Chairman, Coast Guard and our predecessor agencies have been operating in the Arctic since 1867, when Alaska was purchased from Russia. For example, the Revenue Cutter *Bear* was essentially the sole face of Federal presence to many remote parts of the territory of Alaska for over 40 years. Then, as now, our missions are to enforce U.S. laws and regulations, conduct search and rescue, assist scientific exploration, foster navigation safety and environmental stewardship, and provide assured access in preserving U.S. sovereignty.

Unlike the days of the Revenue Cutter *Bear*, today we find significant growth in human activity because the region is more accessible. There is water where there used to be ice, and the Coast Guard must increasingly be present to exercise our authorities and protect the Nation's maritime interests.

I have spent a significant amount of my career focused on Arctic and polar issues, and have traveled throughout the polar regions to better understand the challenges of operating in these extreme environments, the range of national and international issues and the impacts of increasing human activity. I can personally attest that these regions are remote, hostile, and unforgiving, distances are vast, weather is a constant factor, ice conditions are very dynamic, and infrastructure is almost nonexistent.

Operations in both polar regions demand detailed and deliberate planning supported by specialized, reliable, and unique equipment, and they often demand close coordination with Federal, State, local, academic, industry, and indigenous community stakeholders. The polar regions also offer valuable opportunities for international cooperation and interoperability.

The national strategy for the Arctic region and its implementation plan establish U.S. Arctic policy. The Coast Guard's supporting Arctic strategy includes three strategic objectives: Improving awareness, modernizing governance, and broadening partnerships. These three objectives directly support national policies.

With these objectives in mind, I would like to highlight four specific areas of emphasis. First, the Coast Guard conducts mobile and seasonal operations in the Arctic region as maritime activity and environmental conditions warrant. Highlights from this year's Arctic Shield deployment include establishing temporary forward operating locations along the north slope. The national security cutter *Waesche* and high endurance cutter MUNRO operating in the

Chuckchi and Bering Seas conducting maritime patrols and providing response and command and control capabilities during Shell's drilling operations. The medium icebreaker *Healy* conducted a perimeter circuit of the U.S. exclusive economic zone and an historic expedition to the North Pole.

Second, in facilitating safe global shipping, the Coast Guard was instrumental in the development of the Polar Code, a suite of safety and environmental protection regulations adopted by the International Maritime Organization in 2015. These regulations will enter into force in 2017.

Third, the Coast Guard continues to provide strong support to the Arctic Council and the U.S. chairmanship, including policy and programmatic support as well as being a key sponsor of various contingency response agreements and exercises.

Fourth, the Coast Guard is increasing engagement with peer maritime services from all Arctic nations, including Russia. Three weeks ago, the Arctic Coast Guard Forum was formally established at the U.S. Coast Guard Academy, with eight Arctic nations' heads of Coast Guards or equivalents, and Secretary Johnson in attendance.

Before closing, I want to emphasize the importance of assured access to the polar regions. The ability to operate year round safely and reliably, means having heavy icebreakers. Year-round access is vital to our Nation's security and economic interests. In August, at the GLACIER Summit in Anchorage, Alaska, the President expressed clear intent to maintain our ability to access polar regions year round, affirmed the Coast Guard's responsibility to provide heavy icebreaking capability, and announced plans to accelerate the acquisition of new heavy icebreakers.

Today the Coast Guard operates two icebreakers in the polar regions, the heavy icebreaker *Polar Star*, and the medium icebreaker *Healy*, which mainly provides scientific support to the National Science Foundation.

Polar Star is over 40 years old, and our only other heavy icebreaker, *Polar Sea*, is currently inoperable. The Coast Guard needs at least two heavy icebreakers to provide year-round assured access, and self-rescue-ability in the polar regions. The Coast Guard is moving forward at best speed to meet the President's intent to recapitalize our aging heavy icebreaker fleet, and we look forward to working with Congress on this important effort.

Thank you for the opportunity to testify before you today, and thank you for your support of our men and women in uniform. I look forward to your questions. Thank you.

[The prepared statement of Admiral Michel follows:]

U. S. Department of
Homeland Security
United States
Coast Guard



Commandant
United States Coast Guard

2703 Martin Luther King Jr. Ave Stop 7000
Washington, DC 20593-7000
Staff Symbol: CG-0921
Phone: 202 372-4411
Fax: 202 372-8300

**TESTIMONY OF
VICE ADMIRAL CHARLES D. MICHEL
VICE COMMANDANT, U. S. COAST GUARD**

ON

“ARCTIC OPERATIONS”

**BEFORE THE
HOUSE FOREIGN AFFAIRS COMMITTEE – WESTERN HEMISPHERE & EUROPE,
EURASIA, AND EMERGING THREATS SUBCOMMITTEES**

NOVEMBER 17, 2015

Good afternoon Chairman Duncan, Chairman Rohrabacher, Ranking Member Sires, Ranking Member Meeks, and distinguished members of the Subcommittees. I am honored to appear before you today to discuss Coast Guard operations to ensure Maritime Safety, Security and Stewardship in the Arctic Region.

THE COAST GUARD IN ALASKA AND THE ARCTIC REGION

The Coast Guard has been operating in the Arctic Ocean since 1867, when Alaska was purchased from Russia. Then, as now, our mission is to enforce U.S. laws and regulations, conduct search and rescue, assist scientific exploration, and foster navigation safety and environmental stewardship. The Coast Guard uses mobile command and control platforms including large cutters and ocean-going ice-strengthened buoy tenders, as well as seasonal air and communications capabilities to execute these missions within more than 950,000 square miles of ocean off the Alaskan coast.

Since 2008, the Coast Guard has conducted operations in the Arctic Region to assess our capabilities and mission requirements as maritime activity and environmental conditions warrant. These operations have included establishing small, temporary Forward Operating Locations along the North Slope to test our capabilities with boats, helicopters, and personnel. Each year from April to November we also fly aerial sorties to evaluate activities in the region. We will continue to deploy a suite of Coast Guard cutters to test our equipment, train our crews, and increase our awareness of Arctic activity.

NATIONAL STRATEGY FOR THE ARCTIC REGION

U.S. Arctic policy is set forth in the National Strategy for the Arctic Region and its Implementation Plan. The Coast Guard's efforts to foster safe, secure, and environmentally responsible maritime activity in the Arctic directly support national objectives of advancing U.S. security interests, pursuing responsible regional stewardship, and strengthening international cooperation.

In addition to the National Strategy for the Arctic Region, Executive Order (EO) 13689 – which was signed in January 2015 – established the Arctic Executive Steering Committee (AESC), set priorities for the 2015-2017 chairmanship of the Arctic Council, and outlined commitments which were re-affirmed by the President of the United States during his visit to Alaska in August 2015. I would like to further describe how we support the AESC, the Arctic Council, and the President's commitments to the Arctic.

ARCTIC EXECUTIVE STEERING COMMITTEE

Per EO 13689, the Deputy Secretary of the Department of Homeland Security (DHS) represents the Department on the Arctic Executive Steering Committee (AESC). In general, the Deputy Secretary has asked the Coast Guard to represent the Department at AESC meetings. The AESC was established to help coordinate Arctic-related activities across the Federal Government and to enhance collaborations with state, local, and tribal governments, academic institutions, and the nonprofit and private sectors. The AESC manages coordination of national policies, consultation with stakeholders, and advancement of Arctic initiatives.

The Coast Guard is the lead agency responsible for coordinating seven activities associated with the National Strategy for the Arctic Region and its Implementation Plan:

- Enhance Arctic Domain Awareness
- Sustain Federal Capability to Conduct Maritime Operations in Ice-Covered Waters
- Improve Hazardous Material Spill Prevention, Containment, and Response
- Promote Arctic Oil Pollution Preparedness, Prevention, and Response Internationally
- Enhance Arctic Search and Rescue
- Expedite International Maritime Organization Polar Code Development and Adoption
- Promote Arctic Waterways Management

SUPPORT FOR THE ARCTIC COUNCIL

The Coast Guard is actively engaged with international organizations and industry through two noteworthy Arctic Council activities. First, the Coast Guard, under the auspices of the Interagency Coordinating Council on Oil Pollution Research, is working with stakeholders to address critical research and development needs and capabilities for pollution response and oil spill prevention in the Arctic environment. As part of this initiative, the Coast Guard led the U.S. delegation to the Arctic Council that developed the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response, which was signed into force in May 2013. Additionally, the Coast Guard is a key participant in the Emergency Prevention, Preparedness and Response (EPPR) workgroup, and helps develop, implement, and sustain Arctic-wide prevention and response strategies. This past September the EPPR workgroup coordinated and hosted an Arctic Council oil spill workshop to test the oil pollution agreement, and will help lead a live exercise in 2016.

Second, the Coast Guard is a key sponsor of various contingency response agreements and exercises. Most notably, the Coast Guard was a prime mover in coordinating the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic.

The U.S. Government recently conducted an International Arctic Search and Rescue Exercise, ARCTIC ZEPHYR from October 19-22, 2015 in Anchorage Alaska to test the agreement in practice. Its focus was on the coordination of response capabilities of the Arctic Nations, local governments, private sector, and indigenous communities to a mass search and rescue operation in the Arctic Region.

PRESIDENT'S ARCTIC COMMITMENTS

The DHS is working with the Administration to support the President's announced intention to accelerate the acquisition of a replacement heavy polar icebreaker and begin planning for construction of additional icebreakers. The Coast Guard currently operates and maintains two U.S. polar icebreakers, the U.S. Coast Guard Cutter (USCGC) HEALY and USCGC POLAR STAR, only one of which (the USCGC POLAR STAR) is a "heavy" icebreaker. The USCGC POLAR STAR operates with aging equipment and the recent reactivation effort is expected to extend its lifespan for only another five to eight years. The Coast Guard is finalizing operational requirements documentation as part of the acquisition process to acquire new heavy polar icebreakers to address future needs. Polar icebreakers are critical to supporting key national priorities laid out in the National Security Presidential Directive on Arctic Region policy and the National Strategy for the Arctic Region.

COAST GUARD ARCTIC STRATEGY

The Coast Guard's Arctic Strategy aligns with the National Strategy. The Coast Guard's strategic objectives in the Arctic are to improve awareness, modernize governance, and broaden relationships. In pursuing these objectives, the Coast Guard has initiated efforts that will enhance capabilities to continue performance of all of our statutory missions as the environment changes.

The Coast Guard's plan for implementing its strategy includes a number of initiatives that are planned to be in place by the year 2025. I would like to highlight five of our initiatives that are already in progress.

1. BROADEN ARCTIC SHIELD OPERATIONS

Arctic Shield is the Coast Guard's annual operation in the Arctic region. Using a seasonal and mobile approach, the Coast Guard executes its statutory missions in the region.

Arctic Shield 2015 is currently focused on Western Alaska and the Bering Strait with a three-pronged interagency operation consisting of outreach, operations, and assessment of capabilities. Since May, outreach has consisted of delivering education and awareness services to Arctic communities and outlying native villages. Coast Guard District Seventeen, which oversees Arctic operations in Alaska, employs a North Slope Liaison who engages local emergency management agencies regularly and recently participated in the Arctic Economic Partnership Mini Summit at Barrow. District Seventeen also supports a variety of community oriented projects sponsored by the University of Alaska in Anchorage and Fairbanks.

Our engagement with Alaska Native tribes continues to be mutually beneficial. Our continued partnership has made Coast Guard operations safer and more successful. We are working hard to ensure tribal equities are recognized, and that indigenous peoples and their way of life are protected, including managing our operations and the activities of other waterways users with the establishment of The Arctic Waterways Safety Committee.

This body works in close coordination with Alaska Native subsistence activities to ensure de-confliction of activities during open water operations. We will continue to engage other Federal agencies, Arctic nations, international organizations, industry, academia, and Alaskan state, local, and tribal governments to strengthen our relationships and inter-operability.

Arctic Shield Operations in 2015 involved the establishment of a temporary forward-operating location in Deadhorse, as well as the deployment of major cutter forces, air assets, communication equipment, and logistics support to conduct Coast Guard's missions. In 2015, the Coast Guard utilized the icebreaker USCGC HEALY for a perimeter circuit of the U.S. Economic Exclusive Zone (EEZ) and an historic expedition to the North Pole, supporting scientific research projects and operational evaluations of communications systems. Meanwhile, the national security cutter WAESCHE and high endurance cutter MUNRO operated in the Chuckchi and Bering Seas, conducting maritime patrols and stationing response capabilities during drilling operations. The seagoing buoy tender SYCAMORE conducted several waterway management surveys associated with Aids to Navigation missions. Additionally, the Coast Guard has partnered with NOAA and other agencies to conduct mapping operations, and to coordinate mass casualty prevention and response plans at all levels of government. Arctic Shield 2015 has been carefully tailored to deliver the appropriate set of capabilities to this remote area, and directly supported the priorities in the Coast Guard's Arctic Strategy.

The Coast Guard is also working with the Department of Defense, to advance maritime domain awareness by testing numerous types of technologies and capabilities for use in the Arctic, including communication systems, and unmanned vehicles. Recently, the Department of Homeland Security Science and Technology Directorate established the Arctic Domain Awareness Center (ADAC), as a Center of Excellence at the University of Alaska, Anchorage. ADAC's focus is to develop and transition technology solutions, which will improve situational awareness and crisis response capabilities related to emerging maritime challenges posed by the dynamic Arctic environment. The Coast Guard will work closely with ADAC and other agencies on projects such as sea ice forecasting and the development of remote sensors and power systems.

2. ESTABLISH AN ARCTIC COAST GUARD FORUM

The Coast Guard is increasing engagement with our peer maritime services from Arctic countries. The Arctic Coast Guard Forum (ACGF), modeled after the successful North Pacific Coast Guard Forum, is a unique maritime governance group where Principals of all eight Arctic countries discuss coordination of exercises, strengthen relationships, and share best practices. Complimentary to the Arctic Council, the chairmanship of the ACGF will reside with the country holding the rotating chair of the Arctic Council. The first "experts-level" meetings of the ACGF in 2014 garnered enthusiastic approval of the concept. Representatives of the eight Arctic nations finalized and agreed on a Terms of Reference document, determined working groups (Secretariat and Combined Operations), and drafted a Joint Statement. The first ever "Heads of Arctic Coast Guards" meeting took place on October 28-30, 2015 at the U.S. Coast Guard Academy, and the participating nations approved the Terms of Reference and released the Joint Statement.

3. ESTABLISH A CENTER FOR ARCTIC STUDY AND POLICY

The Coast Guard has established a Center for Arctic Study and Policy (CASAP) at the United States Coast Guard Academy. The CASAP is currently developing its credentials as a premier center, and building subject-matter expertise, by both presenting and participating in Arctic academic forums. Current projects include development of a workshop on shipping in confined waterways in conjunction with the DHS Center of Excellence at the University of Alaska - Anchorage.

4. PROMOTE WATERWAYS MANAGEMENT

With respect to waterways management in the Arctic, the Coast Guard is employing our Waterways Analysis and Management System and Port Access Route Study (PARS) methodologies to assess vessel traffic density and determine if a need exists for improved aids to navigation and other safety requirements. A thorough Bering Strait PARS, with input from other Arctic Nations, will provide valuable recommendations for the International Maritime Organization (IMO).

The Coast Guard is also engaged with industry to ensure adequate oversight of pollution prevention, preparedness, and response requirements to protect the Arctic environment. Pollution response is significantly more difficult in the Arctic region. This year, the Coast Guard partnered with the Bureau of Safety and Environmental Enforcement in coordinating and monitoring drilling operations in the Chuckchi Sea, and continued to enforce safety and security as drilling and mission support assets demobilized.

In addition to pollution response, those engaging in offshore commercial activity in the Arctic must also plan and prepare for emergency response in the face of a harsh environment, long transit distances for air and surface assets, and limited response resources. We continue to work to improve awareness, contingency planning, and communications. The Coast Guard is also participating in the Department of Interior-led interagency working group on Coordination of Domestic Energy Development and Permitting in Alaska (established by Executive Order 13580) to synchronize the efforts of Federal agencies responsible for overseeing the safe and responsible development of Alaska's onshore and offshore energy development projects in Alaska. Moreover, the Coast Guard is engaged with cruise ship and adventure explorers planning future voyages through the Northwest Passage.

5. ENGAGEMENT WITH RUSSIA

Engagement with the Russian Federation is a key feature of effective environmental response in the Arctic. The Russian Federation is an important partner with responsibility for vast regions of the Arctic and shares a maritime border with the United States. It is in the interests of U.S. national security for the U.S. Coast Guard to maintain open lines of communication with its Russian counterparts to ensure effective cross-border search and rescue operations, maritime law enforcement, and pollution response.

The United States Coast Guard, in coordination with the Department of State, has strengthened its engagements with the Russian Border Guard to coordinate fisheries law enforcement operations and search and response in the Bering Sea and North Pacific between the United States and Russia.

In support of the Arctic Executive Steering Committee's "Recommendations for a Plan to Strengthen Oil Spill Prevention and Response in the Arctic," the U.S. Coast Guard is engaging with the Russian State Marine Pollution Control, Salvage, and Rescue Administration to advance the bilateral Joint Contingency Plan for environmental response.

In addition, the United States Coast Guard engages with the Russian Federation in multiple multilateral forums, including the newly formulated Arctic Coast Guard Forum, the North Pacific and North Atlantic Coast Guard Forums, and the Emergency Prevention, Preparedness and Response Working Group of the Arctic Council.

CONCLUSION

The Coast Guard has been conducting mobile and seasonal operations and targeted capability assessments in the Arctic. The challenges posed by this unique operating environment demand specialized capabilities and personnel trained and equipped to operate in extreme climates. As human activity gradually increases, the Coast Guard's regional mission profile will continue to evolve.

Operating in ice-impacted waters is challenging, requiring specialized infrastructure and equipment, plus well-trained personnel, to achieve successful outcomes. The Coast Guard will continue to tailor operations and prioritize future collaborative efforts to match risk trends, maximize stewardship of resources, and assess out-year needs to ensure it can serve the nation's interest in the Arctic. This strategy is consistent with our Service's approach to performing its maritime safety, security, and stewardship missions.

While there are many challenges, the changing ice conditions in the Arctic Ocean also present unique opportunities. We look forward to working with the Congress to address how the Coast Guard can continue to support our national Arctic objectives, protect its fragile environment, and remain *Semper Paratus*—Always Ready—in this emerging frontier.

Thank you for the opportunity to testify today. I look forward to your questions.

Mr. DUNCAN. Thank you, Commandant.
The Chair will now recognize Admiral Gallaudet.

**STATEMENT OF REAR ADMIRAL TIMOTHY C. GALLAUDET,
USN, OCEANOGRAPHER AND NAVIGATOR, U.S. DEPARTMENT
OF DEFENSE**

Admiral GALLAUDET. Good afternoon, Chairman Rohrabacher, Chairman Duncan, Ranking Member Meeks, and Ranking Member Sires, and other members of the subcommittee. Thank you for the opportunity to discuss the Navy's ongoing future activities in the Arctic. I have submitted my full statement to the committee, which I ask be made part of the hearing record. I will now give a brief opening statement.

As a global force, the U.S. Navy must be ready to operate in all the world's oceans, including the Arctic, as we have done for many decades. The risk of conflict in the Arctic region is currently low, and as such, the Navy's current posture in the region is appropriate to address existing defense requirements, primarily through the use of undersea and air assets. However, in the event that these requirements change, we must be ready to operate in this challenging and changing environment.

In support of the U.S. National Strategy for the Arctic Region and the Department of Defense Arctic Strategy, the Navy has identified four strategic objectives: Ensure U.S. Arctic sovereignty; provide ready Naval forces; preserve freedom of the seas; and promote partnerships. The recently revised cooperative strategy for 21st century seapower builds on the heritage and complementary capabilities of the Navy, Marine and Coast Guard team to advance the prosperity and guarantee the security of our Nation.

The sea services will continue to evaluate Arctic access and presence requirements, improve maritime domain awareness, and pursue cooperation with Arctic partners to enhance maritime safety and security of the region.

The Arctic is a major driver of global climate and weather. This region is experiencing change at an accelerated rate compared to the rest of the world. The diminishing sea ice is gradually opening the region to the potential for increased economic activity and tourism, including in commercial shipping, fishing, oil and mineral extraction, and tourism. These changes will necessitate more accurate and long-range forecasts to ensure safe transit in the region.

The U.S. drew the Arctic roadmap for 2014 to 2030, which aligns with the National Arctic Strategy, includes a plan that directs the development of Arctic capabilities and capacity in step with the changing environmental conditions.

The Navy will continue to develop our strong cooperative partnership with the Coast Guard, in addition to other interagency and international Arctic region stakeholders, to address the emerging opportunities and challenges caused by the seasonal opening of the Arctic Ocean waters.

The Navy will continue to take deliberate steps to develop Arctic expertise through exercises, scientific missions, and personnel exchanges that provide sailors with opportunities to learn best practices. The Navy will limit surface ship operations in periods of projected—pardon me—to periods of projected peak activity associated

with open water conditions. Even during open water conditions, weather and ocean factors, including sea ice, must be considered when conducting operational risk assessments.

The Navy will emphasize low cost, long lead time activities to match capability and capacity to future demands, and will continue to study and make informed decisions on operating requirements and procedures for personnel, ships, aircraft, with interagency partners and allies.

Through ongoing exercises, such as the Navy's biennial ice exercise, or ICEX, and the associated scientific ice expeditions, as well as research in transits through the region by Navy submarines, aircraft and surface vessels, the Navy will continue to learn more about the evolving operating environment.

The Office of Oceanographer of the Navy and the Office of Naval Research are leading efforts to better understand the complex polar environment, and, more accurately, predict the operational environment in support of safe navigation, including research on sea ice dynamics, acoustic propagation, Arctic waves and swell, and ocean stratification.

Our Marginal Ice Zone Research Initiative is an example of the types of programs designed to develop new observing technologies and gather observations using a mix of autonomous sensors and platforms, allowing Navy funded scientists to investigate ice ocean atmosphere dynamics and characterize the physical processes that govern seasonal evolution of ice cover. These observations are critical to enabling improvements in numerical predictions of the polar operational environment. Understanding the importance of partnerships and addressing common concerns, the Navy is partnering with Defense Research and Development, Canada on an acoustic propagation project to better understand surface losses due to interactions with ice cover, and acoustic fluctuations in ambient noise in open water during the summer in the marginal ice zone.

The Navy will continue working to solve the difficult problems that arise from Arctic operations to ensure our force can operate safely in the Arctic when needed.

The Navy will likely be called upon to support the U.S. Coast Guard and other government agencies by providing marine data collection, sea ice forecasting and predictions, and the forecasting of hazardous weather and ocean conditions.

With the Coast Guard, through the implementation of the national fleet plan and our respective Arctic strategies, the Navy and Coast Guard are identifying opportunities to increase commonality and interoperability. While balancing all our global defense responsibilities, the Navy will continually assess its preparedness in response to changes in the Arctic environment and changes in the security environment. Maritime security and international naval cooperation have always been critical components of U.S. Arctic policy. The Navy's approach underscores the need to strengthen our cooperative partnership with interagency partners, especially the Coast Guard and the Arctic stakeholders.

The key will be to balance potential investments with other service priorities and leverage interagency and international partnerships. By taking a proactive flexible approach, the Navy can keep

pace with the evolving Arctic region while continuing to safeguard our global national security interests.

Again, thank you, Chairman Rohrabacher, Chairman Duncan, Ranking Member Meeks, Ranking Member Sires, and other members of the subcommittees for the opportunity to appear before you today. This concludes my statement, and I look forward to answering your questions.

[The prepared statement of Admiral Gallaudet follows:]

**NOT FOR PUBLICATION
UNTIL RELEASED
BY THE COMMITTEE**

Department of the Navy and the Arctic

Statement By

**Rear Admiral Timothy C. Gallaudet
Oceanographer and Navigator of the Navy,
Commander, Naval Meteorology and Oceanography Command
Director, Navy's Task Force Climate Change**

on

CHARTING THE ARCTIC: SECURITY, ECONOMIC, AND RESOURCE OPPORTUNITIES

Submitted To The

**JOINT SUBCOMMITTEE HEARING
COMMITTEE ON FOREIGN AFFAIRS,
U.S. HOUSE OF REPRESENTATIVES
Subcommittee on Europe, Eurasia, and Emerging Threats and
Subcommittee on the Western Hemisphere**

November 17, 2015

**NOT FOR PUBLICATION
UNTIL RELEASED
BY THE COMMITTEE**

Good afternoon Chairman Rohrabacher, Chairman Duncan, Ranking Member Meeks, Ranking Member Sires, and other members of the Subcommittees. Thank you for the opportunity to discuss the Navy's ongoing and future activities in the Arctic.

As a global force, the U.S. Navy must be ready to operate in all the world's oceans, including the Arctic, as we have done for many decades. The risk of conflict in the Arctic region is currently low. As such, the Navy's current posture in the region is appropriate to address existing defense requirements, primarily through the use of undersea and air assets. However, in the event that the requirements change, we must be ready to operate in this challenging and changing environment.

In support of the *U.S. National Strategy for the Arctic Region* and the *Department of Defense Arctic Strategy*, the Navy has identified four strategic objectives:

- Ensure U.S Arctic Sovereignty;
- Provide ready naval forces;
- Preserve freedom of the seas; and
- Promote partnerships

The recently revised *Cooperative Strategy for 21st Century Seapower* builds on the heritage and complementary capabilities of the Navy-Marine Corps-Coast Guard team to advance the prosperity and guarantee the security of our Nation. The Sea Services will continually evaluate Arctic access and presence requirements, improve maritime domain awareness, and pursue cooperation with Arctic partners to enhance the maritime safety and security of the region.

The Arctic is a major driver of global climate and weather. This region is experiencing climate change at an accelerated rate compared to the rest of the world. The diminishing sea ice is gradually opening the region to the potential for increased economic activity including commercial shipping, fishing, oil and mineral extraction, and tourism. These changes will necessitate more accurate, long range forecasts to ensure safe transit in the region.

The *U.S. Navy Arctic Roadmap 2014-2030*, which aligns with the *National Arctic Strategy*, includes a plan that directs the development of Arctic capabilities and capacity in step with changing environmental conditions. The Navy will continue to develop our strong, cooperative partnerships with the Coast Guard, in addition to other interagency and international Arctic

Region stakeholders, to address the emerging opportunities and challenges caused by the seasonal opening of the Arctic Ocean waters.

The Navy will continue to take deliberate steps to develop Arctic expertise through exercises, scientific missions, and personnel exchanges that provide sailors with opportunities to learn best practices. The Navy will limit surface ship operations to periods of projected peak activity associated with open water conditions. Even during open water operations, weather and ocean factors, including sea ice, must be considered when conducting operational risk assessments. The Navy will emphasize low-cost, long-lead time activities to match capability and capacity to future demands and will continue to study and make informed decisions on operating requirements and procedures for personnel, ships, and aircraft with interagency partners and allies. Through ongoing exercises, such as the Navy's biennial Ice Exercise, or ICEX, and associated Scientific Ice Expeditions, as well as research and transits through the region by Navy submarines, aircraft and surface vessels, the Navy will continue to learn more about the evolving operating environment.

The Office of the Oceanographer of the Navy and Office of Naval Research are leading efforts to better understand the complex polar environment, and more accurately predict its operational environment in support of safe navigation, including research on: sea ice dynamics, acoustic propagation, Arctic waves and swell, and ocean stratification. Our Marginal Ice Zone Research Initiative is an example of the types of programs designed to develop new observing technologies and gather observations using a mix of autonomous sensors and platforms, allowing Navy-funded scientists to investigate ice-ocean-atmosphere dynamics and characterize the physical processes that govern season evolution in ice cover. These observations are critical to enabling improvements in numerical predictions of polar operational environments. Understanding the importance of partnerships and addressing common concerns, the Navy is partnering with the Defence Research and Development Canada on an acoustic propagation project to better understand surface losses due to interactions with ice cover, acoustic fluctuations, and ambient noise in open water during summer in the marginal ice zone. The Navy will continue working to solve the difficult problems that arise from Arctic operations to ensure our force can operate safely in the Arctic when needed.

The Navy will likely be called upon to support the U.S. Coast Guard and other U.S. Government agencies by providing marine data collection, sea ice forecasting and predictions, and the forecasting of hazardous weather and ocean conditions. The Navy may also be called upon to support the Coast Guard in search and rescue or disaster response missions, or to ensure freedom of navigation in Arctic waters. Through the implementation of the *National Fleet Plan* and our respective Arctic strategies, Navy and Coast Guard are identifying opportunities to increase commonality and interoperability to better enable the two components to operate together in support of mutual homeland security and national defense missions.

While balancing all of our global defense responsibilities, the Navy will continually assess our preparedness in response to changes in the Arctic environment or changes in the security environment. Based on informed requirements, the Navy may transition its periodic presence in the Arctic Ocean to operating deliberately in the region for longer sustained periods in order to meet national security priorities, as we do in other parts of the world.

Maritime security and international naval cooperation have always been critical components of U.S. Arctic policy. With indigenous populations spread over a vast expanse, the severe climate and rich natural resources of the Arctic are both a challenge and opportunity. The Navy's approach underscores the need to strengthen our cooperative partnerships with interagency partners, especially the U.S. Coast Guard and international Arctic stakeholders. It acknowledges that changes in the environment must be continuously examined and taken into account. The key will be to balance potential investments with other Service priorities and leverage interagency and international partnerships. By taking a proactive, flexible approach the Navy can keep pace with an evolving Arctic Region while continuing to safeguard our global national security interests.

Again, thank you Chairman Rohrabacher, Chairman Duncan, Ranking Member Meeks, Ranking Member Sires, and other members of the Subcommittees for the opportunity to appear before you today. I look forward to answering your questions.

Mr. DUNCAN. Well, I thank all of our panelists. And Chairman Rohrabacher will be back in just a minute, but I will go ahead and recognize myself for some questions.

This is a question for all of you. I am fascinated with technology and the ability for unmanned technologies, drones or underwater vehicles, and is there a possibility to use those in the Arctic for exploration, for whatever we are looking for, whether it is minerals, whether it is the determination of sea ice thickness? I would love to hear your thoughts about using technology in that environment and some of the challenges that maybe that environment presents to the use of technology. So, Admiral.

Admiral GALLAUDET. Thank you, Congressman Duncan. Yes, sir, we have the Naval Oceanography program that has significant experience in concert with the Office of Naval Research in operating unmanned systems across the world to better characterize the ocean in support of our warfighting requirements, and we have conducted experiments and exercises in the Arctic region with autonomous systems and remotely—pardon me—autonomous sensing systems, including unmanned underwater vehicles and drifting floats and profilers, and actually we will demonstrate another example of these technologies during this ice exercise I alluded to in my opening statement.

There are challenges in operating in this difficult environment due to the nature of sea ice and the hazardous conditions it imposes on sensors, but as we continue to practice and experiment, we are learning how to address those challenges. But in my opinion, if you look at the nature of and the need for unmanned systems to address the dull, dirty, and dangerous type of work they are best suited for, the Arctic is an environment perfectly suited for those kind of technologies.

Mr. DUNCAN. We are seeing this international space station and a lot of satellite data being used looking at the Arctic for changes. Do you trust being able to measure sea ice thickness or temperature from space?

Admiral GALLAUDET. Yes, Congressman, we do, actually. We are actively employing a Canadian synthetic aperture radar sensor on one of their satellites as part of the mission of our Naval and National Ice Center, which provides operational predictions of ice movement, sea ice movement for operating forces in the region. This is an international collaborative effort with the Coast Guard and their Canadian allies. And, again, that center will be used in a prominent way for this ice exercise in March 2016 to best locate the ice camp where our two submarines will surface and conduct the exercise.

Mr. DUNCAN. Yeah. Is there any margin of error there? Have you noticed any differences between measurements taken from space and what you may find actually on the surface?

Admiral GALLAUDET. Yes, sir. There is a fair amount—there is uncertainty. I couldn't characterize the exact amount, and I would like to take that for the record, but we have a strong confidence in our satellite-sensing capabilities. But as in any region, the best use is sort of a suite of capabilities that include in situ sensors as well as remote sensors from satellite, for example, or radar, and those work in a complementary way to best characterize a given

physical environment. So that applies in the Western Pacific as it does in the Arctic.

Mr. DUNCAN. All right. Thank you. I am going to shift gears here, Admiral Papp. We see China's incursions into the South China Sea, specifically the Spratlies. These are atolls, underwater shallow reefs that have been built upon. So as they continue to violate what I think the international law in the South China Sea, has the administration considered moving to revoke some of the privileges we have granted China in the international community, such as their observer status in the Arctic Council?

Admiral PAPP. Well, sir, part of the response has been in that particular area of the world, work between the State Department, the Department of Defense, freedom of navigation exercises demonstrating U.S. will and commitment to stand against those—those illegal proclamations of waters in the South China Sea, but it is isolated. Much like we have isolated the sanctions on Russia in response to their incursions into Ukraine and Crimea, yet we are still able to work within the Arctic, we are hopeful that we can use the Arctic as a place where we can continue to have communications, primarily through the Arctic Council where China is an observer state.

So at this juncture, we are not under consideration—or not considering revoking their status as an observer, but certainly that is one of the options we could look at in the future.

Mr. DUNCAN. Okay. Thank you for that.

Admiral Gallaudet, this—while the Arctic is a low threat environment and likely will remain so, I think our Navy needs to be ready to serve anywhere anytime. Does the Navy have the gear and infrastructure to operate in the high north if needed? Just help educate us, and what some of the challenges and the type gear that you see the need for or are utilizing today?

Admiral GALLAUDET. Yes, Chairman Duncan. The short answer is yes for the current requirements. And the combatant commanders that operate in the Arctic region, the U.S. Northern Command and U.S. European Command and U.S. Pacific Command, they have not stated a requirement for continuous presence by Navy surface vessels. However, our submarine force is well equipped to operate in the region and has been doing so since 1958 with the first under-ice deployment of the USS *Nautilus*. And in fact, just this year, the USS *Sea Wolf* just returned from a very successful operational deployment across the Arctic. So—and we—the primary requirements we see today are through maritime domain awareness, or Arctic domain awareness, and we have aviation assets as well as remote sensing capabilities that can fulfill that mission as well as the undersea requirements that our submarine force is well suited for.

As I mentioned in my opening statement, our Arctic roadmap is designed to look at future requirements in concert with the demands that the combatant commanders may levy upon the U.S. Navy to ensure that we build that capability and capacity for increased surface presence or any other kind of operations.

Mr. DUNCAN. Thank you. My time has expired. Except for Mr. Meeks, most of the equipment you use may be foreign to most

members of the committee, but apparently, he was able to survive with that, so I am going to turn to him for his line of questioning.

Mr. MEEKS. Thank you, Chairman Duncan.

Let me ask you quickly, first, a few, I guess, environmental questions in that the U.S. Geological Survey reports that 50 percent of the U.S. coastline is at a high or very high risk of sea level rise impact due to global warming-induced ice melting, threatening many of the 16.4 million Americans that live in the coastal flood plain. So my first question is, what are the options that are available or that are being drafted for those populations in case of imminent danger for their lives and their livelihood? Mr. Papp?

Admiral PAPP. Well, Mr. Meeks, the—first and foremost, we already have people who are in danger. We have villages along the Alaska coastline, Shishmaref, Kivalina, and others that are literally falling into the sea now because they are not protected by the fast ice along the shore, permafrost melting—or permafrost thawing, rather, and their villages being overrun sometimes by the waves, by the surf, by the storms.

From all that I have seen, they probably will have to be relocated to higher ground. It is going to be tremendously expensive. That is not a State Department issue per se, it is not even an Arctic Council issue per se, but I know that discussions are going on. President Obama himself flew over Shishmaref during his 3 days in Alaska this August to be able to see firsthand, and he also landed and spoke to some of the Alaska natives and residents in the area up there, and has a better appreciation of what is going on. And I know the interagency is looking at the potential for how do we pay for moving the villages or doing other remediation up there.

Mr. MEEKS. So the same thing, environmental concern, you know, with these fisheries that I am hearing about, that the future of the Arctic, and specifically of its ecosystem is of great concern, and I think that is of interest to anyone who is interested, as I talked about earlier, in our planet, regardless, I think, if you believe in climate change or not. The United States and four other nations that border the Arctic Ocean plans to prohibit commercial fishing, for example, in the international waters of the Arctic until more scientific research can be done on how warming seas and melting ice are affecting fish stocks.

So my question is, what are the greatest concerns of the administration regarding the Arctic's ecosystem, and are their effects reversible? And two, how badly are the fish stocks damaged? And are other nations' fishing practices affecting the stock of fish regardless of the ban?

Admiral PAPP. Well, sir, the declaration concerning the prevention of unregulated high seas fishing in the central Arctic Ocean was a great step forward. Ambassador David Balton, who also sits as chair of the senior Arctic officials for us during our chairmanship, negotiated that with what we called the Arctic 5, as you recognized, and it was a good first step toward coming to some meaningful action in terms of, first and foremost, taking a pause, which we have done in U.S. waters, to develop the science to determine what is happening with migration of species up toward the Arctic. So we are at work with that.

The other concern, though, is that there is a large portion of the central Arctic Ocean that is international waters. Other countries can use innocent passage transit through our exclusive economic zones and then fish in the Arctic in the foreseeable future when there is, at least during the summertime, no Arctic ice in the Arctic Ocean.

So what we hope to do now is take the next step of bringing in those other countries, the major fishing countries, like China, Korea, Japan, and others and bring them in and start working toward an agreement as well on what the future is.

And it is primarily focused on taking the time to gather the science. We have regional fisheries committees all around the country, and the world, that look at fish stocks and regulate the species so that they will be sustainable. We hope to be able to gather the science with this migration of species for the Arctic Ocean as well and then in future years, come to some regulated process for the fisheries.

Mr. MEEKS. Thank you. Very good point, in my estimation. Let me just check one other thing, and I guess I will ask this to either—either to the Admiral or to the Vice Commandant. That is, the Arctic Council is an excellent area to promote cooperation, that is what I am all about, between nations and Arctic territories. Nevertheless, there seems to be a push to militarize the region. So my question is, are we concerned over the military nature of the Arctic development? I think Mr. Papp would be the best one to answer that question.

Admiral PAPP. Well, it is definitely a concern, Mr. Meeks. And we spent an awful lot of time watching this. I get the intelligence briefings within the State Department nearly weekly, and I have gone to other three-letter agencies around the city as well to make sure that we are monitoring things properly. And what I see, and I think we are focused primarily on Russia, is a country that is concerned about the security of a developing waterway, that is re-establishing facilities, air fields and bases along a coastline which encompasses almost half the Arctic, and I don't see that as militarization. I think you can pick certain aspects of what they are doing and trumpet them as militarizing the Arctic. But I have had a chance to watch this, and what I think they are doing are, in most cases, some reasonable things in terms of being prepared for providing security along a sea route that is increasing in traffic right now. Some of the things the Russians are doing I wish that we were doing along the north slope of Alaska right now in terms of preparing infrastructure for future human activity.

Mr. MEEKS. Thank you very much. I am out of time.

Mr. DUNCAN. Yeah. I thank the ranking member.

I now turn to the gentleman from Alaska for 5 minutes.

Mr. YOUNG. I thank the witnesses. I would like to have each one of you, without talking to one another, give me a view of where Alaska is, where it should be even regardless of Admiral Papp's position. What do you see and how are you putting it together collectively? I am not happy with the administration. I try to keep from getting involved politically, but when they shut down all the leases for 2 years without any consultation, lack of communication with the Corps of Engineers, where they were going to study for a port,

they are not doing it. Private investment in the local communities was disregarded. And I want to know where is the—and who is going to be—should it be Congress setting up where Alaska is going to be 10 years from now, 20 years from now, 50 years from now, because I see it, I read it, I see it, the constant harping on climate change. That doesn't change the fact if it is occurring and if man is doing it, how are we going to adapt to it?

We are the only people I know of in this whole chain who is not trying to adapt. We are trying to keep things stable. I know the Admiral is thinking militarily, Coast Guard is thinking about icebreakers, which he is not going to get until finally listens to me; Admiral Papp has got a position.

I don't think there is any correlation with the local people, State of Alaska or anybody else. So I need a report from you where you think we are going to be, so we can make some decisions. Are we going to be an Arctic nation? Or are we going to be still playing Mumblety-peg, probably none of you ever played Mumblety-peg. It is with a knife—and I am very good with that, by the way—and you try to see how close you can come to your opponent's toe without hitting it. Not much agreement to one another.

So I am just saying, I want to hear that later on. This is part of your role, because I can tell you, other than myself, and I have a sketchy view, no one really knows the Arctic. And if you don't help us get together where there is going to be a plan, then we are not going to be able to achieve it, we will sit around and run around the mulberry bush all the time.

So that is your job, not just Admiral Papp's position, but where is the military going to be in this? The Corps of Engineers, got out of a study for a port. We going to need a port. Might have it later on, but right now.

Thank you, and I yield back.

Mr. DUNCAN. Well, I will turn the gavel back over to Mr. Rohrabacher.

Mr. YOUNG. Mr. Chairman, not because you are coming back, I am just leaving. It is not because of you. Thank you.

Mr. ROHRABACHER. [presiding.] Congressman Sires.

Mr. SIRES. Admiral Papp, you know, I was happy to hear that we are monitoring what is going on there in terms of the Russians, but can you tell me, they have 30 icebreakers, we have two. That is a whole fleet to me. Why do they need 30 and we can only deal with two? I mean, something—I mean, the Russians are not there to go fishing. Why do they need 30? Are they trying to establish, I guess, ownership by working in these different areas, and then when we raise our voice, they will say, well, we have had 30 icebreakers there for years and it was never an issue.

Admiral PAPP. Well, yes, sir. The—I would have to say that the Russians are much more connected to their Arctic than the people of the United States are. Culturally, the Arctic is a part of Russia, and they have been involved there much longer, and they now have an opening sea route which is directing their attention to it even more. And they have half the coastline in the Arctic. The Arctic—if you look at a polar projection down on the North Pole—

Mr. SIRES. I am looking at it right—is that the same map you have got up there?

Admiral PAPP. It is. So the predominant feature, if you put approximately 66 north latitude, a circle on there, which I don't see on there, but encompassed by the Arctic Circle, it is mostly an ocean. So it is a maritime environment, and Russia has half the coastline around the Arctic Ocean. So it is understandable, when they have larger populations than us, that the waterway is open more than ours has been for centuries, that they are going to have more activity up there.

So they are doing legitimate things they do that they should be doing as an Arctic nation and preparing for increased human activity. I don't begrudge them having the icebreakers. We should be doing the same thing. Our Arctic is opening up, there is much more human activity, and the United States Coast Guard needs to provide assured access for security issues, and the only way you can do that, guaranteed year round, is by having icebreakers.

So it is woeful that we have gotten to the point where we only have two icebreakers. During World War II, we built eight icebreakers and, in fact, were loaning icebreakers to the Russians until after World War II. So we have declined quite a bit, and we need to be about the business of correcting that.

Admiral MICHEL. Yeah. If I can add in here. I agree with everything Admiral Papp said. You know, the Russians understand that in order to have governance, and in order to enforce sovereignty, you have got to have presence. And if you are talking about ice-covered waters of this caliber, you need heavy icebreaking capability.

When I came in the Coast Guard, we had five heavy icebreakers. When my commandant came into the Coast Guard, we had seven heavy icebreakers. We have allowed that to atrophy all the way down to one heavy icebreaker that is over 40 years old that has been refurbished for another 5 to 8 years of use, and one medium icebreaker. That is a long history as to why we find ourselves where we do, but I can tell you as a Coast Guardsman, right now, I cannot guarantee the United States of America global year-round access to all the ice covered areas where we have sovereign interests, and that is where we are today, sir.

Mr. SIRES. You want—would you like to add something and then—

Admiral PAPP. Well, yes, sir. What I would say, though, is, you know, finally, and I used to be working with Admiral Michel, and I would say not only did I start my career in Alaska 40 years ago, but over the last decade, I have spent a lot of time focused on the Arctic and trying to advance the issue of building icebreakers.

You know, the President has committed now, he has committed to speeding up the construction of the first icebreaker, and he is now talking plural in terms of icebreakers, and I have—I am assured that we are moving in that direction. But we got it, we got that commitment because we finally got him to Alaska. I mean, there are a lot of other issues that our President, our administration, our Congress is focused on, and there has been a lot of discussion about, well, it is only about climate change. Well, yes, that is a legacy issue for this President, and it is what brought him to Alaska. And I for one, having responsibility for Arctic activities, am

glad that he came up there for any reason, I don't care what reason, but he finally got up there.

And coming back from Alaska now, these are now top priorities for the administration. And I have been over to the White House, to the national security staff, and there are commitments now to start moving these things forward. So while it may not be moving fast enough for some people, I am grateful that now we have progress on these issues.

Mr. SIRES. I just find the disparity being so large, how can anybody be comfortable with security? I mean, you—what were you going to say before?

Admiral GALLAUDET. Yes, sir. I can give you the Navy and the Department of Defense perspective on that. With respect to Russia, in general, in the Arctic, we do have concerns, and we are watching the Greenland, Iceland, U.K. gap very closely, but we also see that Russia has not made any attempts to violate our territorial seas. We have agreed since 1990 on the Bering Strait maritime boundary with Russia, and they are fully complying with that.

And in addition, I must concur with Admiral Papp's comments by personal observation. I was in Saint Petersburg, Russia 2 weeks ago. The Russian's navy chaired shared the Arctic Region Hydrographic Commission, and this is under the International Hydrographic Organization, which governs all standards and cooperation for hydrographic activities and making sea-floor maps. And the Russians were very, very open about their intentions in the Arctic. And that was exactly what Admiral Papp had said. They intend to develop it economically. Their security, their growth, and their military is designed primarily for that, to provide the security for that economic growth of the northern sea route. And we were quite amazed that they would be so forthright and open in sharing hydrographic data with us, encouraging cooperation. They basically view the Arctic as the one region the rest of the world might work with them on in view of their aggression in Crimea.

Mr. SIRES. Thank you very much. Thank you, Mr. Chairman.

Mr. ROHRABACHER. Thank you very much. And I will reserve the final area of questions. I did watch some of your testimony from the side room before I had to go into that conference call.

Mr. Yoho, would you like to move forward?

Mr. YOHO. Thank you, Mr. Chairman. Gentlemen, I appreciate you being here. I am glad it is a bipartisan group that you let the Navy sit with you, too. And, you know, when I look at this, I want to ask this question, and I want this question directed at us, because it obviously is. But I want to hear from you guys so that hopefully people will listen to this in their offices.

How detrimental has it been for Congress' failure to complete our budget, get away from CRs, on your planning, your procurement, and your mission in your—in what you guys do? I mean, how detrimental has that been over the last, say, 5, 10 years?

This is your chance, Admiral Papp.

Admiral PAPP. Sir, as a former service chief who had to go through sequestration, and all kinds of other activities, it almost doubles your workload because you have to plan. You have to take your already limited staff and plan for multiple contingencies. You know, whether it is a government shutdown, whether it is an in-

ability to award a contract to build a ship, and then going through processes to begin an orderly shutdown of the government by issuing notices to all of your civilian employees and others, and telling your military people that they still have to work, but they may not get paid.

I mean, it is just tremendously frustrating for people, particularly people in uniform that are out there doing their job and they understand they have to continue to do their job, and not seeing the most simplest aspect of a government approving a budget come through in a timely manner so that they can work more effectively and keep things going.

We have had to cancel conferences. We have had Arctic Council meetings where we have had to cancel at the last minute because we approached 1 October, and the budget hasn't been passed and, you know, things like that. So, I mean, it is almost now contingency planning in everything that you do, because even though you know that, okay, they are going to come through with a continuing resolution at the last moment, you still got to go through the process of preparing for a shutdown, or canceling conferences, and other things. So it is just tremendously inefficient.

Mr. YOHO. In your opinion, is this one of the things that led down to the scale-down of the amount of icebreakers that we have? Commandant Michel?

Admiral MICHEL. I don't think that was the main issue on the icebreakers was sort of from another genesis, but I echo what Admiral Papp said. I mean, the lack of certainty that you have in buying capital assets doesn't help the process, very detrimental to personnel, and I can tell you, it degrades morale within the organization.

Mr. YOHO. Absolutely.

Admiral MICHEL. People don't feel like they are valued, and they are being sent home. We have had reductions in operating hours and a whole bunch of other things, sir, that impacts us. The only reason I say on the icebreakers is, you know, we have had—the recapitalization challenges are of a much broader nature and they deal with sort of the responsibilities within the executive branch on recapitalization of the icebreaking fleet. And it is at such kind of a nascent stage during these latest cycles of sequestration, and so on and so forth, that I don't think that has been the primary driver for why we are where we are with the heavy icebreaking capability.

Mr. YOHO. All right, I appreciate that. And of course, obviously, one of the things that does is that it winds up increasing the costs down the road, and you know, we are trying to save money. But in the end, the result, you know, we wind up costing us so much more money. So I just wanted to hear that because we knew that, but I want more people to hear that so that we get our act together up here. So I gave you some freedom there. Are you guys at the liberty to speak about the posturing of other countries, primarily Russia, and/or China, and what we can expect in the future up there? I mean, hopefully the goal is to keep it demilitarized, but as people get up there, territories and stakes get claimed. What are your thoughts on that? We will start with you, Admiral.

Admiral GALLAUDET. Yeah, thank you, Congressman Yoho. In regards to the posturing of Russia and China, I spoke previously

about Russia in our opinion that their intention is primarily economic development and we feel no threat in the Arctic by the Russians.

However, in addition, the Chinese and their work in the Arctic has been limited to either research with their icebreaker, the Snow Dragon, or just recently, you probably know that some of their surface ships conducted an innocent passage in our Arctic waters. They announced it well in advance. They followed international law, and in fact, it made a very good case for us to point to what they are doing in the South China Sea, and show that that was inconsistent and not following the rule of law.

Mr. YOHO. Thank you.

Admiral MICHEL. Sir, we actually have pretty good working relationships with our counterparts in both China and Russia. So for example, the Russians were just in New London, Connecticut, our Coast Guard Academy, to actually formally sign the agreement for their participation in the Arctic Coast Guard Forum, and that is going to be an operationally-focused agency that will run exercises on topics like search and rescue, or environmental protection reasons. And we actually have quite a good working relationship, daily working relationship with the Russian Border Guard, who is our counterpart and we work on fisheries issues and search and rescue, and a whole bunch of things.

As far as China goes, ours has all been cooperative with them as well, whether it is the Xue Long, or whether it is the China Coast Guard who participates in the North Pacific Coast Guard Forum which deals with Bering Sea issues or high-seas drift and enforcement, and a whole range of different issues.

So from a Coast Guard wheelhouse, our relationships are surprisingly good, and they are beneficial for both countries, and we try to work very hard at those, sir.

Mr. YOHO. Thank you. I appreciate your time and my time is up. But I appreciate your service. I appreciate what you do. And I hope Russia and China and we all work together and keep it, you know, on the table, above the table.

Mr. ROHRABACHER. Thanks very much. We have about—well, I have got 6 minutes left. And let me just note that as we have heard through this questioning and your testimony that budget issues, more than weather issues, are determining what policies we take that will deal with the Arctic. So with that said and with that understanding that the budget challenges that we have, we are borrowing money, talking about China's role, how about the fact that they buy our debt, and that one out of every \$5 we spend, is borrowed money?

So with that said, we need to focus on the economic element of the plan. And let me suggest that perhaps whatever cost is needed to maximize the benefit, the American people, and the people of the world, will have from the Arctic has to be not just a signing of checks by the Federal Government and passing them on, but instead, perhaps different ways of approaching a very costly program and project, which is utilizing the Arctic for its best uses to benefit mankind and benefit the United States.

Contracting out rather than buying icebreakers, we hear that icebreakers are the ultimate, right now, capital asset that is nec-

essary to ensure that this—we get the value out of the Arctic. There is no reason to have to buy them, is there? I mean, SpaceX, I think, has actually, or gone into, how about private sector-public sector partnerships? How about allowing buying a cheaper, or buying the same ship in from Finnish shipyards? These are all things that could impact on the economic decision as to what we should move forward with.

And I am sure that you agree that these things should be at least explored to see how much potential we can get out of contracting out, having somebody else build the ships, perhaps public partnerships. And again, which you have demonstrated which is music to my ears, which is cooperation, international cooperation to make sure that we are—others are picking up a large portion, or at least a portion of the cost that will benefit everybody.

But lastly, how about if there is going to be a harvesting of fish, or an extraction of minerals, or oil, and gas, would it be possible for us to have a user fee, or a tax on those specifically, that wealth coming from there, that because after all, if it is dependent on our resources to keep that avenue open, that wouldn't be necessarily a tax. That would be a user fee for those businesses that are involved in Arctic enterprise. Is that a possibility?

Admiral MICHEL. Sir, we have been dealing with user fees in the past, and that has always required legislative authority. The Coast Guard does not have organic authority to impose user fees, for example, for search and rescue services and things like that, and we traditionally don't do that.

Mr. ROHRABACHER. Right.

Admiral MICHEL. If Congress were to direct it by legislation, then I assume that Congress can—

Mr. ROHRABACHER. Maybe there could be certain areas that are designated as high risk areas that will depend on government assets to achieve an end, and thus, if you are going to be making a profit from that area, there is a payment that would be required for the government providing that service. Just a thought.

I have 3 minutes to go and vote. I want to thank all of your for your testimony. I will read exactly what you said. I think this has been very beneficial to start this discussion. And again, a lot of the things that you have been saying has been music to my ears. Good luck to you all. This hearing is adjourned.

[Whereupon, at 3:17p.m., the subcommittees were adjourned.]

A P P E N D I X



MATERIAL SUBMITTED FOR THE RECORD

JOINT SUBCOMMITTEE HEARING NOTICE
COMMITTEE ON FOREIGN AFFAIRS
U.S. HOUSE OF REPRESENTATIVES
WASHINGTON, DC 20515-6128

Subcommittee on Europe, Eurasia and Emerging Threats
Dana Rohrabacher (R-CA), Chairman

Subcommittee on the Western Hemisphere
Jeff Duncan (R-SC), Chairman

November 10, 2015

TO: MEMBERS OF THE COMMITTEE ON FOREIGN AFFAIRS

You are respectfully requested to attend an OPEN hearing of the Committee on Foreign Affairs, to be held jointly by the Subcommittee on Europe, Eurasia and Emerging Threats and the Subcommittee on the Western Hemisphere in Room 2172 of the Rayburn House Office Building (and available live on the Committee website at <http://www.ForeignAffairs.house.gov>):

DATE: Tuesday, November 17, 2015

TIME: 2:00 p.m.

SUBJECT: Charting the Arctic: Security, Economic, and Resource Opportunities

WITNESSES: Admiral Robert Papp, Jr., USCG, Retired
U.S. Special Representative for the Arctic
U.S. Department of State

Rear Admiral Timothy C. Gallaudet, USN
Oceanographer and Navigator
U.S. Department of Defense

Vice Admiral Charles D. Michel, USCG
Vice Commandant
U.S. Department of Homeland Security

By Direction of the Chairman

The Committee on Foreign Affairs seeks to make its facilities accessible to persons with disabilities. If you are in need of special accommodations, please call 202/225-5021 at least four business days in advance of the event, whenever practicable. Questions with regard to special accommodations in general (including availability of Committee materials in alternative formats and assistive listening devices) may be directed to the Committee.

COMMITTEE ON FOREIGN AFFAIRS

MINUTES OF SUBCOMMITTEE ON Europe, Eurasia, and Emerging Threats/Western Hemisphere HEARING

Day Tuesday Date November 17, 2015 Room Rayburn 2172

Starting Time 2:07 pm Ending Time 3:17 pm

Recesses 0 (to) (to) (to) (to) (to) (to)

Presiding Member(s)

Rep. Rohrabacher and Rep. Duncan

Check all of the following that apply:

Open Session Electronically Recorded (taped)
Executive (closed) Session Stenographic Record
Televised

TITLE OF HEARING:

Charting the Arctic: Security, Economic, and Resource Opportunities

SUBCOMMITTEE MEMBERS PRESENT:

Rep. Meeks, Rep. Sires, Rep. Yoho, Rep. Young

NON-SUBCOMMITTEE MEMBERS PRESENT: (Mark with an * if they are not members of full committee.)

N/A

HEARING WITNESSES: Same as meeting notice attached? Yes No
(If "no", please list below and include title, agency, department, or organization.)

STATEMENTS FOR THE RECORD: (List any statements submitted for the record.)

Rep. Rohrabacher to Special Representative Papp:
1) In the past you've discussed the challenges that have come with an ever growing roster of observers to the Arctic Council. What are the prospects for some kind of reform being implemented during our Chairmanship or the Finnish Chairmanship to address those problems? What might those reforms look like?
2) Among the Arctic Council's achievements is creating agreements on Arctic search and rescue and oil spill cleanup. Has either of those agreements ever been tested in a full scale, real world exercise? If not, are there preparations to hold such an exercise?

Rep. Rohrabacher to Admiral Michel:
1) Is there readiness within the administration to enter into a Public-Private-Partnership to charter icebreaker capacity to quickly and economically fill the current gap?
2) Are there currently any Coast Guard cutters home ported in Alaska? And if not, isn't that a capability the Coast Guard needs?

TIME SCHEDULED TO RECONVENE _____
or
TIME ADJOURNED 3:17 pm


Subcommittee Staff Director

Questions for the Record

House Foreign Affairs Committee

Europe, Eurasia, and Emerging Threats and Western Hemisphere Subcommittees

Hearing: "Charting the Arctic: Security, Economic, and Resource Opportunities

Rep. Rohrabacher

Questions for Special Representative Papp:

- 1) In the past you've discussed the challenges that have come with an ever growing roster of observers to the Arctic Council. What are the prospects for some kind of reform being implemented during our Chairmanship or the Finnish Chairmanship to address those problems? What might those reforms look like?
- 2) Among the Arctic Council's achievements is creating agreements on Arctic search and rescue and oil spill cleanup. Has either of those agreements ever been tested in a full scale, real world exercise? If not, are there preparations to hold such an exercise?

Questions for Admiral Michel:

- 1) Is there readiness within the administration to enter into a Public-Private-Partnership to charter icebreaker capacity to quickly and economically fill the current gap?
- 2) Are there currently any Coast Guard cutters home ported in Alaska? And if not, isn't that a capability the Coast Guard needs?

Note: No responses were received to the above questions prior to the printing of the hearing transcript.

