ICEBREAKERS

\*\*\*1AC\*\*\* 3

\*\*\*Status Quo\*\*\* 29

Squo= no new ships 30

Squo= Terminal inaction 31

Squo won’t solve, Icebreakers key to laundry list 32

Not enough Icebreakers now 33

No funding now 34

\*\*\*Oil Advantage\*\*\* 35

Squo = more spills 36

Lots of Arctic oil 37

Arctic Drilling Good 38

Oil dependency kills the economy 39

Spills coming, squo not prepared 40

Spills uniquely likely in Arctic 41

Icebreakers k2 spill response 42

Oil spills kill biodiversity 43

Migratory Species 44

Oil kills U.S. econ and heg 45

Loss of Oceanic Biodiversity= Extinction 46

\*\*\*Shipping Advantage\*\*\* 47

Arctic shiping coming now 48

Arctic commerce increasing now 49

Shipping low now 50

Shipping in trouble now 51

Need safe routes 52

More Icebreakers k2 shipping 53

Icebreakers k2 New England ports 54

Plan k2 new financial markets 55

Shipping = 90% of global trade 56

Shipping k2 sustained economic growth 57

Arctic shipping is cheaper 58

Shipping k2 global trade 59

Arctic shipping stimulates economy 60

Globalized trade solves war 61

Gloabalization= no military actions 62

US Economy solves war 63

\*\*\*Russia Advantage\*\*\* 64

Leadership/Russia Uniqueness, Now Key 65

Russia beating U.S. now, Icebreakers key 66

Russia dominating arctic now, multiple ways 67

Icebreakers key to China 68

Plan k2 check Russia (competitiveness) 69

Heg solves china war 70

Perception of heg decline independently cause wars 71

Heg solves Russia 72

Russia War Good 73

China Scenario 77

\*\*\*Solvency\*\*\* 79

General Solvency, Laundry List 80

Now Key, multiple reasons 81

Now key, Arctic Council 82

Arctic k2 future resources, no action now, now key 83

Icebreakers k2 all other arctic policies 84

\*\*\*Add On’s and A2’s\*\*\* 85

Antarctic Research Add On 86

New icebreakers k2 antartic research 86

K2 antartic research 87

Collapse of Antarctic Treaty 88

Treaty cred k2 Antarctic science 89

Research k2 biodiversity 90

Antarctica= Keystone Species 91

Biodiversity loss = Extinction 92

Antarctic research k2 Scientific Diplomacy 93

Science diplomacy solves prolif 95

Science diplomacy solves warming 97

Melting ice increases needs for icebreakers 98

No link to politics 99

Aff= GOP win 100

Aff= bipartisan 101

Plan popular 102

Private companies can’t solve 103

Inuits say no 104

A2: ship wrecks 105

A2: Environment Disad 106

Non-military = not soldiers 107

Non-military can still improve security 108

\*\*\*Negative\*\*\* 109

Squo solves security concerns 110

Coop now, and key to arctic 111

No U.S. sovereignty 112

Oil extraction-> Bad for Inuits 113

Oil Extraction Bad, Gulf of Mexico Proves 114

Oil extraction will kill arctic life 115

Species loss good 116

No Russian aggression over Arctic 117

Hegemony Bad (China) 118

Heg Bad (Iran) 120

Coast Guard =/= Non-military 121

Repeal Jones act CP 122

Consult Inuit Council 123

Saudi Oil Disad 1NC 124

2NC Ext. 128

High oil prices key to the Saudi economy/stability 128

Oil prices k2 Saudi growth 129

High oil prices k2 investor confidence 130

Saudi instability kills world economy 131

Growth k2 Saudi stability 132

Russia Disad 1NC 133

2NC Ext. 136

US-Russia Arctic coop good 136

# \*\*\*1AC\*\*\*

First the status quo

No support for new icebreakers now and the most recent efforts to allocate funding failed

Fairbanks Daily News 14

The race for the arctic oceans: Alaska can’t afford delays in evolving shipping lanes off its north coast Posted: Wednesday, May 21, 2014 12:28 am

Fairbanks Daily News-Miner editorial http://www.newsminer.com/opinion/editorials/the-race-for-the-arctic-oceans-alaska-can-t-afford/article\_e53cd404-e0c1-11e3-b6fb-001a4bcf6878.html

Change is coming to the arctic, and we owe it to ourselves to be ready. We’re not talking about climate change specifically, although the residents of Kivalina and other coastal villages are already having to adapt to eroding shores and melting permafrost. Developments in Alaska and across the circumpolar arctic — some related to climate change and some not — could profoundly alter the way our state works. One change that will be particularly significant is the potential for shipping on Alaska’s north coast as sea ice recedes toward the North Pole. During the past 60 years, temperatures in the Arctic have risen twice as fast as in the rest of the world, leading to reduced ice pack off the North Slope as well as around Greenland and Canada’s northern islands. In summer months, this ice reduction has the potential to open up shipping lanes that would be shorter and more cost-effective than the bottleneck of the Panama Canal. But for Alaska to benefit from shipping gains, the state will need a deepwater port or ports in the northern half of the state. An Army Corps of Engineers study on such a port is due in a few months, but even given optimistic timetables the quickest estimate for completion is in the neighborhood of 2020, with 2025 or 2030 more realistic possibilities. Efforts by Senators Mark Begich and Lisa Murkowski to drum up interest in Washington, D.C., have met with little success, as legislators from the Lower 48 have yet to be convinced of the value of investing in arctic infrastructure. The delegation’s efforts to bring more icebreaking capacity online has similarly failed to move, with a proposed bipartisan budget amendment by Sen. Begich and Sen. Murkowski failing to get a vote late last year.

Thus the plan:

The United States Federal Government should immediately fund, build, and deploy a new coast guard Icebreaker fleet consisting of 4 heavy duty and 2 medium duty icebreaking ships.

Advantage 1 is Oil

**Arctic resource extraction is inevitable but the status quo leaves the U.S. without a credible response to accidents**

Slayton 14

“Using New Ocean Technologies: Promoting Efficient Maritime Transportation and Improving Maritime Domain Awareness and Response Capability” David M. Slayton Research Fellow, Hoover Institution, Stanford University Co-Chair and Executive Director, Arctic Security Initiative Written Statement for the Record to the United States House of Representatives Transport, Transportation and Infrastructure Committee, Coast Guard and Maritime Transportation Sub-Committee 21 May 2014: http://transportation.house.gov/uploadedfiles/2014-05-21-slayton.pdf

When people talk about the resources in the Arctic, it is very easy to visualize drilling rigs, and all of the activity that goes with it to extract energy from the earth, whether it is oil or gas. Nevertheless, there is a lot more in the way of resources in the Arctic. The largest zinc mine in the world is in Alaska, the Red Dog Mine. In Siberia, there are large nickel and copper mines. In Canada, a huge iron-ore mine on Baffin Island. And in southwest Greenland, there's estimated to be one billion tons of iron ore. And this is not just speculation, because the Chinese have seen fit to invest $2.3 billion in southwest Greenland to go after that ore. So when we talk about resources, those are significant, remembering that doesn't account for the resources that are on the sea beds. That too will be of value to individuals, organizations and world populations. And then when we look at the estimates on the undiscovered energy resources, 30% of the undiscovered gas is estimated to be in the Arctic, and 13% of the world's undiscovered oil is in the Arctic. That leads us to the environmental issues once you move away from the resources, because people will be coming for the resources. They already are. What are some of the environmental issues that come into play? As we know - it is still a very, very harsh place. As mentioned, we recently experienced the stormiest year in recorded history. That, coupled with the fact it is dark most of the time. The capacity and capability to move and respond to events in the Arctic, the infrastructure quite frankly is not there, and our Coast Guard has led some exercises there to test and to try to determine how the United States will respond to events that take place in the high North. Another impacted area, the shoreline. Because of the climate change taking place, the shoreline in Alaska is changing dramatically. The ice is breaking off from the shore. In some cases, the ice is crushing into the shore as it moves around. The permafrost is melting and heaving up the earth, so the structures that are already there, are being damaged and in some cases destroyed. In addition, as that permafrost is melting, there are large quantities of methane gas being released into the air. There will be, as the warming trend continues, a movement north of vegetation, migration of wildlife and insects and what will that do with regard to disease factors that may be carried by those insects?So there are many environmental considerations that are going to come into play, how do we respond? What's the best way to respond to them? When we look at indigenous populations in the Arctic, their way of life may be ending, a way of life that for millennia they have lived as subsistence culture of hunting, sealing, fishing, and whaling. Their communities will no longer be in positions to be able to do those activities as before. An estimated four million people live in the Arctic, and that four million is beginning to migrate a bit. In addition to this migration, the resource extraction industries that are being further developed in the Arctic, are bringing non-Arctic populations to the high North. Large numbers of people from Central Asia, Poland, there is even a large Thai community up in the high North areas working on the energy and resource development sites. And it's that population that also distinguishes the Arctic from the Antarctic. Four million people live above the Arctic Circle. No indigenous peoples live or have ever lived in the Antarctic. A lot of penguins, but no people.When we look at the security requirements, the US and other Arctic Nations need the capacity and capability to support, respond and react to the events that are taking place. Moreover, when we look at security - as we have said, it is about safety, adequate and able response for environmental or other accidents that might take place in the high North, and it is there that our Coast Guard is going to be on the front lines of anything that happens in the Arctic. So what we're doing is looking at what's the most thoughtful, what's the best and most responsible way to move forward, because the Arctic is changing quickly, and the United States is an Arctic nation. If you go to the state of Alaska, you come away knowing the United States is an Arctic nation. If you go to other places in the US, I am not sure that you come away with that same sense. Nonetheless, we are at a period of time, with these changes are taking place, that the United States needs to start making some strategic decisions, we have to start making some significant investments.**And, now is key to stake out energy extraction claims**

McCormick 14

Oil is the new gold in Arctic ‘cold rush’ by Ty McCormick, Ty McCormick is an associated editor with Foreign Policy magazine. May 20 2014 http://www.therecord.com/opinion-story/4527886-oil-is-the-new-gold-in-arctic-cold-rush-/

It's been called the new "Great Game," but the 21st-century "cold rush" to the Arctic actually began more than 100 years ago. Ever since the first explorers trudged north in search of the Earth's axis, coastal nations have held designs on the region. The race has heated up in recent years, though, keeping pace with a litany of jaw-dropping oil and gas discoveries. The area is now thought to hold some 13 per cent of the world's untapped oil reserves and up to 30 per cent of its undiscovered natural gas. Unlike the Antarctic, which belongs to no one and is governed by international treaty, the Arctic is up for grabs, and the eight countries that ring the region — Canada, Russia, Finland, Sweden, Norway, Iceland, Denmark and the United States — have grown increasingly assertive, holding military exercises and even reopening nearby Cold War-era bases.

**New icebreakers are necessary for the U.S. to fully capitalize on new energy resources, otherwise there will be environmental push back that slows down new drilling**

Berwyn 12

Bob, Expedition2010org Writer. “Report: More safeguards needed for Arctic oil drilling BEFORE DRILLING” Febuary 4, 2012 http://expedition2010org.blogspot.com/2012/02/report-more-safeguards-needed-for.html

With oil drilling activities in the American Arctic on the horizon, concerns are mounting about the lack emergency response capabilities, as well as information about environmental conditions in the area. A new report by the Center for American Progress highlights some of those concerns, pointing out that several federal agencies have called for more studies of baseline environmental conditions. Oil spill cleanup experts also say more resources are needed for the U.S. Coast Guard to fulfill its mission in the region. The report also explains that even the well-developed infrastructure and abundance of trained personnel in the Gulf of Mexico couldn’t prevent the Deepwater Horizon tragedy — and the country’s Arctic response capabilities pale by comparison. Drilling for oil in the Arctic should not be pursued without adequate safeguards in place. If the Deepwater Horizon disaster had any lessons to offer, it’s that the importance of preparedness cannot be overstated. That’s why the report strongly recommend specific actions be taken by the federal government, by Congress, and by Shell and other companies before beginning exploratory drilling in the Arctic. Recommendations in the report include: Ensure adequate response capabilities are in place before drilling operations commence Require and oversee oil spill response drills in the Arctic that prove the assertions made in company drilling plans prior to plan approval Engage other Arctic nations in developing an international oil spill response agreement that includes an Arctic Ocean drilling management plan Appropriate adequate funds for the Coast Guard to carry out its mission in the Arctic, including increasing our icebreaking capability Significantly increase the liability cap (currently $75 million) for oil companies in violation of drilling safety rules**And, icebreakers are the key missing link to accident response**

Dlouhy 12

Jennifer, <http://www.chron.com/business/article/Coast-Guard-girds-for-heavier-traffic-in-the-3657039.php>, Chron.com, Posted 6/24/12, “Coast Guard girds for heavier traffic in the Arctic”

The Coast Guard is bolstering its armada of ships, planes and people in Alaska in anticipation of Shell's planned oil drilling this summer and a surge of other commercial traffic. But the service is combating a dearth of resources, including vessels capable of plowing through multiyear ice in the region. The Coast Guard has only one icebreaker in service, and that ship will spend its summer far from Shell's planned oil exploration on a scientific research mission. And though the Coast Guard is bringing its 36-year-old Polar Star heavy icebreaker back into operation, that won't happen until 2013. "We've got zero capability to respond in the Arctic right now," Coast Guard Commandant Adm.Robert Papp warned Congress a year ago. "An oil spill, a collision, a ship sinking in the Arctic keeps me awake at night because we have nothing to respond or, if we respond, it's going to take us weeks to get there."

And, Accidents are inevitable and will kill keystone species without a response capability

Greenpeace 11

“Risks and potential impacts of oil exploration in the Arctic” Briefing, http://www.greenpeace.org/international/Global/international/publications/climate/2011/FinalArcticBriefing2011.pdf

The United States Geological Survey estimates that 90 billion barrels of technically recoverable oil lies in offshore reservoirs in the Arctic. That’s about a third of the size of Saudi Arabia’s reserves. A blowout in a scenario where a relief well cannot be completed in the same drilling season could lead to oil gushing unchecked for two years, with split oil becoming trapped under sheets of thick ice. The environmental consequences of a spill in the Arctic environment would be far more serious than in warmer seas such as the Gulf of Mexico. Serious impacts of the Exxon Valdez spill in Alaska are still being felt 20 years later. Baffin Bay is home to 80 to 90% of the world’s Narwhals. The region is also home to blue whales, polar bears, seals, sharks, cormorants, kittiwakes and numerous other migratory birds. According to a senior official at a Canadian firm that specializes in oil-spill response, “there is really no solution or method today that we’re aware of that can actually recover oil from the Arctic. Freezing temperatures, severe weather and a highly remote location pose unprecedented challenges to any spill response. The U.S. Minerals Management Service estimated a one in five chance of a major spill occurring over the lifetime of activity in just one block of leases in the Arctic Ocean near Alaska.

And, unchecked biodiversity loss runs the risk of extinction

Diner 94

Diner JD, ‘94(Diner, David N. B.S. Recipient. Ohio State University. J.D. Recipient. College of Law. Ohio State University. LL.M. The Judge Advocate General’s School.United States Army. Judge Advocate’s General’s Corps.United States Army. “The Army and the Endangered Species Act: Who’s Endangering Whom?” Military Law Review.143 Mil. L. Rev. 161. Winter, 1994. Lexis-Nexis.)

No species has ever dominated its fellow species as man has. In most cases, people have assumed the God-like power of life and death -- extinction or survival -- over the plants and animals of the world. For most of history, mankind pursued this domination with a singleminded determination to master the world, tame the wilderness, and exploit nature for the maximum benefit of the human race. n67 In past mass extinction episodes, as many as ninety percent of the existing species perished, and yet the world moved forward, and new species replaced the old. So why should the world be concerned now? The prime reason is the world's survival. Like all animal life, **humans live off of other species**. At some point, **the number of species could decline to the point at which the ecosystem fails, and then humans**also **would become extinct**. No one knows how many [\*171] species the world needs to support human life, and to find out -- by allowing certain species to become extinct -- would not be sound policy. In addition to food, species offer many direct and indirect benefits to mankind. n68 2. Ecological Value. -- Ecological value is the value that species have in maintaining the environment. Pest, n69 erosion, and flood control are prime benefits certain species provide to man. Plants and animals also provide additional ecological services -- pollution control, n70 oxygen production, sewage treatment, and biodegradation. n71 3. Scientific and Utilitarian Value. -- Scientific value is the use of species for research into the physical processes of the world. n72 Without plants and animals, a large portion of basic scientific research would be impossible. Utilitarian value is the direct utility humans draw from plants and animals. n73 Only a fraction of the [\*172] earth's species have been examined, and mankind may someday desperately need the species that it is exterminating today. To accept that the snail darter, harelip sucker, or Dismal Swamp southeastern shrew n74 could save mankind may be difficult for some. Many, if not most, species are useless to man in a direct utilitarian sense. Nonetheless, they may be critical in an indirect role, because their extirpations could affect a directly useful species negatively.**In a closely interconnected ecosystem, the loss of a species affects other species dependent on it**. n75 Moreover, as the number of species decline, the effect of each new extinction on the remaining species increases dramatically. n76 4. Biological Diversity. -- The main premise of species preservation is that diversity is better than simplicity. n77 As the current mass extinction has progressed, the world's biological diversity generally has decreased. This trend occurs within ecosystems by reducing the number of species, and within species by reducing the number of individuals. Both trends carry serious future implications.Biologically diverse ecosystems are characterized by a large number of specialist species, filling narrow ecological niches. These ecosystems inherently are more stable than less diverse systems. "The more complex the ecosystem, the more successfully it can resist a stress. . . .[l]ike a net, in which each knot is connected to others by several strands, such a fabric can resist collapse better than a simple, unbranched circle of threads -- which if cut anywhere breaks down as a whole." n79 By causing widespread extinctions, humans have artificially simplified many ecosystems. As biologic simplicity increases, so does the risk of ecosystem failure. The spreading Sahara Desert in Africa, and the dustbowl conditions of the 1930s in the United States are relatively mild examples of what might be expected if this trend continues. Theoretically,**each new animal or plant extinction**, with all its dimly perceived and intertwined affects, **could cause total ecosystem collapse and human extinction. Each new extinction increases the risk of disaster**. Like a mechanic removing, one by one, the rivets from an aircraft's wings, [**hu]mankind may be edging closer to the abyss**

And, the U.S. staking a claim to Arctic oil is key to checking back foreign dependency

Treadwell 12

Mead, Alaska Dispatch, 6.24.12, “Tapping Alaska’s Arctic oil is a must for America”, <http://www.alaskadispatch.com/article/tapping-alaskas-arctic-oil-must-america>

America needs to say “yes” to new Arctic oil. In election-year debates, facts and sound science are often left behind. This is what’s now happening in conversations about offshore resource development in northern Alaska. Some would like us to believe it’s too risky to safely explore the 21 billion barrels of potential oil in these seas. They argue we should forget about resources that are nearly a quarter of our known, technically recoverable, outer continental shelf resources. Instead, they argue, we should remain dependent on imported oil. But people who pay attention to science and experience are confident of this: The Beaufort and Chukchi seas can be safely explored. Every Arctic Ocean coastal state, six including Iceland, has come to the same conclusion. The oil industry has already invested hundreds of millions of dollars in emergency planning. Myriad measures recommended by the National Oil Spill Commission are being put in place, including state-of-the-art capping stacks, 24-hour icebreaker support and a recessed wellhead resilient to cold water challenges. In addition to these on-site measures, redundant operations and around-the-clock support from the private sector and federal government agencies will be available for any emergency situation. Arctic nations are also negotiating a mutual aid pact. Alaska, too, has been hard at work making safety preparations. We’re investing in research and science, working specifically with the U.S. Arctic Research Commission. We’re also seeking to form international agreements on preparation and response through the Arctic Council. Detractors ignore these plans. They disregard objective scientific analysis and improved technological capabilities. They accentuate remote risk. They deny the evidence of Alaska’s knowledge and skill in resource development — achievements that can lead to great reward for the rest of the nation. While some are busy fear-mongering, others are taking note of the extensive safety preparation that has gone into plans for offshore development. Coast Guard Commandant Adm. Robert Papp has stated his belief that both the industry and the Coast Guard are ready for the task. “[Shell] truly did their homework, I believe,” Papp said, “and I think they are going to be well prepared.” Papp, in his 2012 State of the Coast Guard address, noted the arsenal of aircraft, marine vessels and highly proficient crew that will be at the ready in the Arctic. In addition, the Bureau of Ocean Energy Management has “found no evidence that the proposed action would significantly affect the quality of the human environment.” Coastal communities will be protected, while the whole nation benefits. Alaska Gov. Sean Parnell last year joined a coalition of coastal state governors seeking to work more effectively with the federal government on offshore exploration and resource development. An alliance of public and private officials, representing a majority of Alaska’s 340,000 workers, has urged President Barack Obama to move ahead with outer continental shelf development. The issue is vital for Alaska and the United States. If Alaskan resources aren’t developed, the trans-Alaska pipeline system, one of our nation’s most important energy infrastructure assets, may be forced to close because of cold-weather challenges brought by low throughput. The pipeline is now running at less than one-third capacity. The stakes couldn’t be higher for our economy, our national security and our citizens. The good news is that by harnessing American ingenuity and technical skill, and by relying on solid science and experience, we can overcome challenges and reap a promising future. Now we just need federal leadership to act — for America’s economy, our energy and our national security. Alaska could return to being the nation’s top oil producer. While I’ll fill my North Dakotan colleague’s dinner plate with salmon this time, let’s make sure we refill the Alaska pipeline for America’s future.

**And, Foreign oil dependence causes terrorism, economic collapse and kills U.S. leadership**

Schmitt 11

Harrison, Former Senator Schmitt Advocates a National Energy Plan as Constitutionally Mandated “ ENERGY AND THE CONSTITUTION” http://americasuncommonsense.com/blog/2011/02/17/energy-and-the-constitution

Dependence on imported oil removes the defensive and foreign policy leverage needed to prevent attacks by terrorist states. Imports subsidize the financial supporters of terrorism. Dependence has the further effect of giving the United States no influence over the price it pays for oil. If the price of oil came under the direct economic influence of the United States, for example, Iran would have great difficulty affording the development of nuclear weapons and their delivery systems. Dependence on oil and gasoline imports also gives China further means to intimidate our national leaders into acquiescence to its continuing ambition for international dominance. China’s rapidly growing economy has a major influence on world energy supply and cost, competing directly with our needs. Cold War II has begun; however, it is being fought on an economic and energy front as well as on a military deterrence front. On this point, China’s rapidly developing space capabilities and its expressed interest in lunar helium-3 energy resources cannot be ignored.

Advantage 2 is Shipping

Increases in Arctic shipping are inevitable but the U.S. won’t be able to capitalize without new Icebreakers

Slayton 14

“Using New Ocean Technologies: Promoting Efficient Maritime Transportation and Improving Maritime Domain Awareness and Response Capability” David M. Slayton Research Fellow, Hoover Institution, Stanford University Co-Chair and Executive Director, Arctic Security Initiative Written Statement for the Record to the United States House of Representatives Transport, Transportation and Infrastructure Committee, Coast Guard and Maritime Transportation Sub-Committee 21 May 2014: http://transportation.house.gov/uploadedfiles/2014-05-21-slayton.pdf

The other area that will come into play in the Arctic is shipping. Globalization and climate change are affecting Arctic shipping in extraordinary ways. The Arctic is being increasingly linked to future global markets by the development of offshore and onshore natural resources. These developments require Arctic marine transportation systems that are safe and reliable, and, importantly, a host of marine infrastructure improvements are needed to ensure safety and efficiency. Hydrocarbon exploration in offshore Arctic areas of Norway, Russia, Greenland, and the United States have required extensive summer marine operations using small fleets of support ships, including icebreakers. Russia's Northern Sea Route, a set of Arctic waterways across the north of Eurasia from Kara Gate in the west to Bering Strait in the east, has experienced an increase in tanker and bulk-carrier traffic during recent, summer navigation seasons. Most of the central Arctic Ocean is being explored in summer by icebreakers and research ships in support of the delimitation of the outer continental shelf by the five Arctic Ocean coastal states. Simultaneous to the notable increases in marine traffic driven by economic interests, Arctic sea ice has been undergoing profound changes in thickness, extent, and character in the current era.As new sea routes open they will connect the world in different ways than we have seen before. Without question, there has been a significant change in the percentage of shipping, but I would also say that we have to be mindful that is due to the law of small numbers, those numbers will continue to increase. Arctic tourism has taken off in recent years and the US Coast Guard's most recent Arctic strategy is forecasting over a million tourists in the Arctic in the next year. Large cruise ships and specialized expeditionary (tourist) vessels have been operating during summer in eastern Canada, along both west and east Greenland coasts, and around Svalbard in increasing numbers. With this in mind, let's recall Costa Concordia, lying on its side off the coast of Italy, where most people could just jump off into the water and swim ashore. What's going to happen in the Arctic, where we don't have the infrastructure to go after them? And that's just one reason why the infrastructure piece is so important in my mind, to be able effect search and rescue on that scale, Humanitarian Assistance and Disaster Relief. I think the challenges of extraction and natural resource development and the shipping that supports those efforts demand the same level of support and response. When Shell was working off the coast of Alaska, they had a number of ships up there that I think any Coast Guard or Navy would be envious to have in their service. Bottom line, these activities will require a significant amount of shipping and maritime support in the Arctic.

And, federal investment in Arctic infrastructure now is key to multiple economic gains in the region

Slayton 14

“Using New Ocean Technologies: Promoting Efficient Maritime Transportation and Improving Maritime Domain Awareness and Response Capability” David M. Slayton Research Fellow, Hoover Institution, Stanford University Co-Chair and Executive Director, Arctic Security Initiative Written Statement for the Record to the United States House of Representatives Transport, Transportation and Infrastructure Committee, Coast Guard and Maritime Transportation Sub-Committee 21 May 2014: http://transportation.house.gov/uploadedfiles/2014-05-21-slayton.pdf

Economic opportunities to develop the region abound as visibly evidenced by federal leases of offshore areas for hydrocarbon exploration. Future opportunities exist that require development of the maritime infrastructure necessary to facilitate shipping Alaska's Arctic natural resources, both onshore and offshore, to global markets. From an environmental security perspective, the United States is especially challenged to provide a robust safety net to protect Alaska's coastal communities its world class Bering Sea fishery, and the Arctic marine environment in an era of expanding Arctic marine use. The range of necessary policy responses and long-term investments confronting the U.S. maritime Arctic is significant, perhaps daunting. Above all it is critical for the United States to ratify UNCLOS at the earliest opportunity. With regard to Arctic shipping, the United States should continue to be proactive at the IMO in support of a mandatory polar code that must include all commercial ships operating in polar waters. The United States also should propose future IMO measures that focus on specific Arctic regulations, as well as developing port state control agreements with the Arctic states to enhance polar code enforcement. Timely application of a new IMO Polar Code to the U.S. maritime Arctic will require expedited regulatory implementation by the Coast Guard. The United States, as one of the lead countries (along with Finland and Canada), should use the Arctic Council's Arctic Marine Shipping Assessment (AMSA) as a strategic guide and policy framework to protect the region's Arctic communities and the marine environment, and to enhance regional marine safety. Increased funding of NOAA for Arctic hydrographic surveying and charting is paramount if a safe maritime operating environment is to be secured, and coastal economic development can be initiated. A comprehensive environmental observing system, a deep-draft port, and improved Search and Rescue and environmental response capacity and capability are among the critical infrastructure needs for the future of Arctic Alaska. Public - private partnerships must be conceived and fostered to ensure that adequate funding is available for large, maritime infrastructure projects such as a major port during a time of austere federal budgets. Nevertheless, strategic investments in Arctic infrastructure by the federal government will be required to enhance public safety and security, and advance economic opportunity in new partnerships. The U.S. federal government must better execute its legal responsibilities and implement its promise of using an integrated Arctic management approach in the region. These challenges will necessarily require close federal-state of Alaska cooperation and greater stakeholder engagement. The future of Alaska and the future of the United States as an Arctic nation depend on sound strategic planning at the outset of new national initiatives. Thus, the timely Implementation Plan of the National Strategy for the Arctic Region (2014) as a framework for federal process is essential. Executed in a comprehensive and integrated manner, these actions can enhance America's National Security, Economic strength and Environmental interests in its large maritime Arctic.

**And, Icebreakers are key to arctic shipping**

Keil 12

Kathrin, Research Associate- Arctic security, cooperation, and institution, “The Arctic Institute”, 4/27, 12, http://www.thearcticinstitute.org/2012/04/arctic-shipping-routes-forecasts-and.html, Canada in the Arctic - Arctic Shipping: Routes, Forecasts, and Politics

According to the above-mentioned report, the routes that will benefit the most from these changes are Hudson Bay and the Beaufort Sea because they show a very different ice regime in comparison to the rest of the Canadian Arctic, and are thus likely to see an increasing number of transits by large ships. A longer summer shipping season is expected to encourage shipping through the port of Churchill in Hudson Bay, and in the Beaufort Sea longer summer shipping seasons will increase the appeal of offshore hydrocarbon development as well as transport of oil and gas through the Bering Strait. Although ships on these routes will see generally easier navigating conditions, processes of climate change also change the nature and severity of many risks to marine traffic. For example, rather than being confronted with an extensive ice pack that necessitates icebreaker escort, ships will be confronted will multi-year ice in low concentration that is difficult to detect, and extreme variability of conditions from one year to the next. The paradoxical situation may arise that despite decreased ice extent and ice thickness there will be a continued if not even an increasing demand for icebreaking and other navigational support for shipping activities in the north, also because of the increased traffic on some routes. In general, the increase in marine traffic on some Arctic routes together with more frequent and more intense hazards like more mobile ice and increased winds, waves and surges will increase the demand for marine services in the north. This includes for example updated navigational charts, up to date weather forecasts, ice reconnaissance and forecasting, icebreaking support, search-and-rescue capabilities, marine traffic surveillance, control and enforcement, ports for fuelling and cargo loading, ice-class vessels and specialised crews. Canadian Shipping Policy The Statement on Canada's Arctic Foreign Policy says that “Arctic shipping is another key area of focus” in order to achieve the second aim of the Northern Strategy, which is promoting social and economic development in the North. The 2009 Strategy reads that “[i]n 2007, satellite imaging verified that the Northwest Passage had less than 10 percent ice coverage, making it, by definition, “fully navigable” for several weeks. This was well ahead of most recent forecasts [and] in the near future, reduced ice coverage and longer periods of navigability may result in an increased number of ships undertaking destination travel for tourism, natural resource exploration or development”.**And, new Arctic sea lanes are key to the shipping industry**

ISN 11

International Relations and Security Network (ISN) is one of the world’s leading open access information services for international relations (IR) and security professionals.8 December 2011, <http://www.isn.ethz.ch/isn/DigitalLibrary/SpecialFeature/Detail?lng=en&id=134822&contextid774=134822&contextid775=134823&tabid=1451532519>

The main driver of all this is the 'great melt.' Under what used to be dense, hard “perennial” ice is, according to the US Geological Survey, “as much as one-quarter of the world’s remaining undiscovered oil and gas deposits.” While it is estimated that the Alaskan Arctic could contain up to 27 billion barrels of oil, the most significant deposits would most likely be claimed by Russia. In all, the Russian Ministry of National Resources estimates that the Arctic territory it claims may contain up to 586 billion barrels of oil– more than twice the current proven reserves of Saudi Arabia. But an even bigger deal than all that oil, or so Borgerson argues, would be the opening of new sea lanes. The once-fabled Northwest Passage above North America would cut thousands of miles off journeys from Europe to the West Coast of the United States. Moreover, the corresponding route above Eurasia would cut shipping distances from Europe to China and Japan in half. Besides saving the shipping industry billions of dollars a year, Arctic routes would also allow commercial and military vessels to avoid sailing through “politically unstable Middle Eastern waters and the pirate-infested South China Sea.” In an era of trans-Arctic shipping, current chokepoints such as the Suez and Panama canals and the Strait of Malacca would no longer dictate global shipping patterns and would decline dramatically in geopolitical significance. So important is the melting of Arctic ice, in other words, that it could change the geopolitics of the entire planet. To this day, however, the Arctic is not governed by an overarching political or legal structure. The Arctic Council, an intergovernmental forum created for this very purpose in 1996, has proven unable to perform the function. Indeed, the Council was “emasculated” (in Borgerson’s words) by US insistence that it not discuss security-related matters. As a result, the constellation of new shipping routes, trillions of dollars in possible oil and gas resources, and poorly defined ideas of ‘ownership’ makes, in Borgerson’s words, for “a toxic brew.” With no historical precedents to serve as a guide, avoiding conflict in the Arctic may require an imaginative institutional solution. Until one is found, however, the Arctic countries are likely to grab as much territory as possible and exert sovereign control over opening sea-lanes wherever they can.

**And, Federal support for shipping is key to the economy**

Coble and Larsen 11

Representatives in the U.S. House (Federal News Service 5/24. “HEARING OF THE COAST GUARD AND MARITIME TRANSPORTATION SUBCOMMITTEE OF THE HOUSE TRANSPORTATION AND INFRASTRUCTURE COMMITTEE; SUBJECT: "CREATING U.S. MARITIME INDUSTRY JOBS BY REDUCING REGULATORY BURDENS"; CHAIRED BY: REPRESENTATIVE HOWARD COBLE -Search using: Biographies Plus News News, Most Recent 60 Days (R-NC); WITNESSES: REAR ADMIRAL KEVIN COOK, DIRECTOR OF PREVENTION POLICY, U.S. COAST GUARD; COAST GUARD DEPUTY JUDGE ADVOCATE GENERAL CALVIN LEDERER; LOCATION: 2167 RAYBURN HOUSE OFFICE BUILDING, WASHINGTON, D.C.”, URL: <http://0-www.lexisnexis.com.wizard.umd.umich.edu/hottopics/lnacademic/?verb=sr&csi=297373>

The subcommittee is meeting today to review the Coast Guard's regulatory program and examine ways to improve the service's rulemaking process. We're also interested in the status of various pending rules and the impact they will have on maritime safety and commerce. The Coast Guard has broad authority to regulate maritime commerce, including establishing and enforcing rules to ensure mariner safety and vessel and facility safety and security, and the protection of the environment. With such vast authority comes great responsibility to regulate industry in a fair and reasonable way. This hearing will focus on ensuring that Coast Guard rulemaking is just that, fair and reasonable. It's important to remember that the United States economy is fueled by maritime commerce. While regulations must address concerns related to safety, security and stewardship, they must also balance the importance of maintaining the free flow of maritime commerce. Domestic shipping alone is responsible for over 500,000 American jobs and $100 billion in annual economic output. Additionally, 90 percent of all global trade and over 25 percent of our gross domestic product moves via sea. With the water treatment systems aboard -- strike that. With the economy still in a fragile state and unemployment at record levels, it is imperative that federal government can foster an atmosphere where our maritime industry can compete and expand. To that end, I'm concerned about the cost and impact of several forthcoming Coast Guard rulemakings, specifically rules requiring fishing vessel examinations. The purchase of automatic identification systems for small vessels and the installation of ballast water treatment systems aboard vessels could have tremendous impacts on the economy. If these and other rules are not done on a commonsense manner, I'm concerned that they could drastically increase operating costs for businesses, hamper growth and kill jobs at a time when our nation can ill afford economic setbacks. Finally, just as we're facing tough decisions on how to cut the deficit, these and other pending regulations will require additional personnel and funding for the Coast Guard. I look forward to hearing from our witnesses how the Coast Guard intends to fund the -- to find the resources to pay for the expansion of its regulatory mission, as well as what steps it is taking to ensure rules are put forth in an efficient and commonsense manner. I thank you all for appearing today. And I'm now pleased to recognize the distinguish gentleman from Washington for his opening statement. REPRESENTATIVE RICK LARSEN (D-WA): Thank you, Mr. Chairman. Good morning and thank you for convening today's hearing to examine the status of major rulemaking activities by the U.S. Coast Guard, and their impact on job creation in our domestic maritime industries and the overall economy. Revitalizing and growing our maritime economy is a high priority for me, and I want to thank you for taking interest in this matter this morning, Mr. Chairman. REP. COBLE: You're welcome. REP. LARSEN: The Coast Guard is a multi-mission maritime military service of the United States. It is the principal federal agency responsible for ensuring marine safety, preserving maritime and port security, enhancing maritime commerce and protecting the marine environment.

**And, economic growth now is key to preventing war**

**Duncan 12** Duncan, chief economist Blackhorse Asset Management former IMF consultant and financial sector specialist for the World Bank, 12 [Richard, The New Depression: The Breakdown of the Paper Money Economy, 2012, ebook]bg

The political battle over America’s future would be bitter, and quite possibly bloody. It cannot be guaranteed that the U.S. Constitution would survive. Foreign affairs would also confront the United States with enormous challenges. During the Great Depression, the United States did not have a global empire. Now it does. The United States maintains hundreds of military bases across dozens of countries around the world. Added to this is a fleet of 11 aircraft carriers and 18 nuclear-armed submarines. The country spends more than $650 billion a year on its military. **If the U.S. economy collapses into a New Great Depression, the United States could not afford to maintain its worldwide military presence or to continue in its role as global peacekeeper**. Or, at least, it could not finance its military in the same way it does at present. Therefore, either the United States would have to find an alternative funding method for its global military presence or else it would have to radically scale it back. Historically, empires were financed with plunder and territorial expropriation. The estates of the vanquished ruling classes were given to the conquering generals, while the rest of the population was forced to pay imperial taxes. **The U.S. model of empire has been unique. It has financed its global military presence by issuing government debt, thereby taxing future generations of Americans to pay for this generation’s global supremacy. That would no longer be possible if the economy collapsed. Cost–benefit analysis would quickly reveal that much of America’s global presence was simply no longer affordable.** Many—or even most—of the outposts that did not pay for themselves would have to be abandoned. Priority would be given to those places that were of vital economic interests to the United States. The Middle East oil fields would be at the top of that list. The United States would have to maintain control over them whatever the price. In this global depression scenario, **the price of oil could collapse** to $3 per barrel. Oil consumption would fall by half and there would be no speculators left to manipulate prices higher. Oil at **that** level **would impoverish the oil-producing nations, with extremely destabilizing political consequences.** Maintaining control over the Middle East oil fields would become much more difficult for the United States. It would require a much larger military presence than it does now. On the one hand, it might become necessary for the United States to reinstate the draft (which would possibly meet with violent resistance from draftees, as it did during the Vietnam War). On the other hand, America’s all-volunteer army might find it had more than enough volunteers with the national unemployment rate in excess of 20 percent. The army might have to be employed to keep order at home, given that mass unemployment would inevitably lead to a sharp spike in crime. Only after the Middle East oil was secured would the country know how much more of its global military presence it could afford to maintain. If international trade had broken down, would there be any reason for the United States to keep a military presence in Asia when there was no obvious way to finance that presence? In a global depression, the United States’ allies in Asia would most likely be unwilling or unable to finance America’s military bases there or to pay for the upkeep of the U.S. Pacific fleet. Nor would the United States have the strength to force them to pay for U.S. protection. Retreat from Asia might become unavoidable. And Europe? What would a cost–benefit analysis conclude about the wisdom of the United States maintaining military bases there? What valued added does Europe provide to the United States? Necessity may mean Europe will have to defend itself. Should a New Great Depression put an end to the Pax Americana, **the world would become a much more dangerous place. When the Great Depression began, Japan was the rising industrial power in Asia. It invaded Manchuria in 1931 and conquered much of the rest of Asia in the early 1940s. Would China, Asia’s new rising power, behave the same way in the event of a new global economic collapse? Possibly.** China is the only nuclear power in Asia east of India (other than North Korea, which is largely a Chinese satellite state). However, in this disaster scenario, it is not certain that China would survive in its current configuration. Its economy would be in ruins. Most of its factories and banks would be closed. Unemployment could exceed 30 percent. There would most likely be starvation both in the cities and in the countryside. The Communist Party could lose its grip on power, in which case the country could break apart, as it has numerous times in the past. It was less than 100 years ago that China’s provinces, ruled by warlords, were at war with one another. United or divided, China’s nuclear arsenal would make it Asia’s undisputed superpower if the United States were to withdraw from the region. From Korea and Japan in the North to New Zealand in the South to Burma in the West, all of Asia would be at China’s mercy. And hunger among China’s population of 1.3 billion people could necessitate territorial expansion into Southeast Asia. In fact, the central government might not be able to prevent mass migration southward, even if it wanted to. In Europe, severe economic hardship would revive the centuries-old struggle between the left and the right. During the 1930s, the Fascists movement arose and imposed a police state on most of Western Europe. In the East, the Soviet Union had become a communist police state even earlier. The far right and the far left of the political spectrum converge in totalitarianism. It is difficult to judge whether Europe’s democratic institutions would hold up better this time that they did last time. England had an empire during the Great Depression. Now it only has banks. In a severe worldwide depression, the country—or, at least London—could become ungovernable. Frustration over poverty and a lack of jobs would erupt into anti-immigration riots not only in the United Kingdom but also across most of Europe. The extent to which Russia would menace its European neighbors is unclear. On the one hand, Russia would be impoverished by the collapse in oil prices and might be too preoccupied with internal unrest to threaten anyone. On the other hand, it could provoke a war with the goal of maintaining internal order through emergency wartime powers. Germany is very nearly demilitarized today when compared with the late 1930s. Lacking a nuclear deterrent of its own, it could be subject to Russian intimidation. While Germany could appeal for protection from England and France, who do have nuclear capabilities, it is uncertain that would buy Germany enough time to remilitarize before it became a victim of Eastern aggression. As for the rest of the world, its prospects in this disaster scenario can be summed up in only a couple of sentences. Global economic output could fall by as much as half, from $60 trillion to $30 trillion. **Not all of the world’s seven billion people would survive** in a $30 trillion global economy. **Starvation would be widespread. Food riots would provoke political upheaval and myriad big and small conflicts around the world. It would be a humanitarian catastrophe so extreme as to be unimaginable** for the current generation, who, at least in the industrialized world, has known only prosperity. **Nor would there be reason to hope that the New Great Depression would end quickly. The Great Depression was only ended by an even more calamitous global war that killed approximately 60 million people.**

**And, Arctic shipping is key to sustained globalization**

Borgerson 8

Scott G., “Arctic Meltdown” The Economic and Security, Implications of Global Warming, April, <http://library.arcticportal.org/1570/1/BorgersonForeignAffairsarticle.pdf>

Arctic shipping could also dramatically affect global trade patterns. In 1969, oil companies sent the S.S. Manhattan through the Northwest Passage to test whether it was a viable route for moving Arctic oil to the Eastern Seaboard. The Manhattan completed the voyage with the help of accompanying icebreakers, but oil companies soon deemed the route impractical and prohibitively expensive and opted instead for an Alaskan pipeline. But today such voyages are fast becoming economically feasible. As soon as marine insurers recalculate the risks involved in these voyages, trans-Arctic shipping will become commercially viable and begin on a large scale. In an age of just-in-time delivery, and with increasing fuel costs eating into the proﬁts of shipping companies, reducing long-haul sailing distances by as much as 40 percent could usher in a new phase of globalization. Arctic routes would force further competition between the Panama and Suez Canals, thereby reducing current canal tolls; shipping chokepoints such as the Strait of Malacca would no longer dictate global shipping patterns; and Arctic seaways would allow for greater international economic integration. When the ice recedes enough, likely within this decade, a marine highway directly over the North Pole will materialize. Such a route, which would most likely run between Iceland and Alaska’s Dutch Harbor, would connect shipping megaports in the North Atlantic with those in the North Paciﬁc and radiate outward to other ports in a hub-andspoke system. A fast lane is now under development between the Arctic port of Murmansk, in Russia, and the Hudson Bay port of Churchill, in Canada, which is connected to the North American rail network.

**And, Globalization solves war**

Griswold 5

Daniel- Director of Center for Trade @ Cato Institute, Free Trade, 12.29.5, [http://www.freetrade.org/node/282](http://www.freetrade.org/node/282%22%20%5Ct%20%22_blank)

Many causes lie behind the good news -- the end of the Cold War and the spread of democracy, among them -- but expanding trade and globalization appear to be playing a major role. Far from stoking a "World on Fire," as one misguided American author has argued, growing commercial ties between nations have had a dampening effect on armed conflict and war, for three main reasons. First, trade and globalization have reinforced the trend toward democracy, and democracies don't pick fights with each other. Freedom to trade nurtures democracy by expanding the middle class in globalizing countries and equipping people with tools of communication such as cell phones, satellite TV, and the Internet. With trade comes more travel, more contact with people in other countries, and more exposure to new ideas. Thanks in part to globalization, almost two thirds of the world's countries today are democracies -- a record high. Second, as national economies become more integrated with each other, those nations have more to lose should war break out. War in a globalized world not only means human casualties and bigger government, but also ruptured trade and investment ties that impose lasting damage on the economy. In short, globalization has dramatically raised the economic cost of war. Third, globalization allows nations to acquire wealth through production and trade rather than conquest of territory and resources. Increasingly, wealth is measured in terms of intellectual property, financial assets, and human capital. Those are assets that cannot be seized by armies. If people need resources outside their national borders, say oil or timber or farm products, they can acquire them peacefully by trading away what they can produce best at home. Of course, free trade and globalization do not guarantee peace. Hot-blooded nationalism and ideological fervor can overwhelm cold economic calculations. But deep trade and investment ties among nations make war less attractive. Trade wars in the 1930s deepened the economic depression, exacerbated global tensions, and helped to usher in a world war. Out of the ashes of that experience, the United States urged Germany, France and other Western European nations to form a common market that has become the European Union. In large part because of their intertwined economies, a general war in Europe is now unthinkable. In East Asia, the extensive and growing economic ties among  Mainland China, Japan, South Korea, and Taiwan is helping to keep the peace. China's communist rulers may yet decide to go to war over its "renegade province," but the economic cost to their economy would be staggering and could provoke a backlash among its citizens. In contrast, poor and isolated North Korea is all the more dangerous because it has nothing to lose economically should it provoke a war. In Central America, countries that were racked by guerrilla wars and death squads two decades ago have turned not only to democracy but to expanding trade, culminating in the Central American Free Trade Agreement with the United States. As the Stockholm institute reports in its 2005 Yearbook, "Since the 1980s, the introduction of a more open economic model in most states of the Latin American and Caribbean region has been accompanied by the growth of new regional structures, the dying out of interstate conflicts and a reduction in intra-state conflicts." Much of the political violence that remains in the world today is concentrated in the Middle East and Sub-Saharan Africa -- the two regions of the world that are the least integrated into the global economy. Efforts to bring peace to those regions must include lowering their high barriers to trade, foreign investment, and domestic entrepreneurship. Advocates of free trade and globalization have long argued that trade expansion means more efficiency, higher incomes, and reduced poverty. The welcome decline of armed conflicts in the past few decades indicates that free trade also comes with its own peace dividend.

Advantage 3 is Russia

**The United States is losing the race for the Arctic to Russia now, Ice Breakers are key to perception**

Thorsson 14

“Washington’s folly” in the Arctic Journal May 20, 2014 - 11:37am - By Elías Thórsson, journalist: http://arcticjournal.com/politics/619/washingtons-folly

Last April, Vladimir Putin, Russia’s president, announced his country’s intention to construct a series of naval bases along its Arctic coast, as well as the construction of state-of-the-art icebreakers that could protect the country’s economic and security interests in the region. Norway, too, is ramping up its naval capacity to prepare for an Arctic conflict, in part by planning to build a $125 million port facility that would make it possible to move Nato personnel in and out of the region.Canada, after a decade that saw its military focus more on the rocks of Afghanistan than the snow of the North, has shifted its gaze to the homefront, stepping up Arctic fighting skills and rethinking its materiel needs. But among all the Arctic posturing – which also includes countries as far flung as Singapore – there is one Arctic state that has been conspicuously absent. America, the global superpower, seems be stumbling to find its footing in the new Arctic landscape. The loudest critics of US Arctic policy point out that its armed forces are ill-prepared for any potential conflict in the region, and last month in an interview with The Arctic Journal, Mead Treadwell, the lieutenant governor of Alaska, described the country as lacking a sense of purpose in the region. This criticism is shared by Rob Huebert, an associate professor at the University of Calgary’s political science department, and who has written extensively about Arctic security and regional stability. “There have been plenty of people pointing out that the US needs to do more and be more focused in regards to the Arctic, including Treadwell and George Markowsy at the University of Maine,” says Huebert.Washington has released policy statements and roadmaps, he admits. “But it is all talk and talk is cheap. The real question is whether they are building the infrastructure. And, the answer to that is no, we are not really seeing anything in regards to that.”With Russia planning a widespread revamp of its Arctic forces, Huebert warns that the US, and in broader terms Nato, needs to face up to the harsh reality that it is falling behind. “No question, the infrastructure is just not being put into place.”

And, an increased Arctic presence is key to perceptions of U.S. Leadership

Belinson 12

“Why the U.S. Must Build More Icebreakers Now” in Popular Mechanics By Jerry Beilinson, science journalist, February 17, 2012 12:30 PM: http://www.popularmechanics.com/technology/engineering/infrastructure/why-the-us-must-build-more-icebreakers-now-6693195

The U.S. is falling behind. China, a country with no Arctic coast, is building icebreakers—and that should get America’s attention. It’s one thing for Russia, with the world’s longest Arctic coastline, to operate a couple dozen of the ships. (Fortunately, they’re available for leasing, at a price.) It’s understandable, maybe, for Finland, Sweden, and Canada to surpass the United States in this area. But why is China constructing an 8000-ton vessel capable of breaking through 4.5 ft of ice at a steady clip, to join the XueLong, its existing ice-class vessel? In fact, China’s interest is unsurprising given its role as a world economic power. Commercial ships are already traversing the Northern Sea Route above Russia, carrying goods between Europe and East Asia. Often, icebreakers go along as insurance against bad conditions. And soon, ships will start carrying liquefied natural gas from Norway along the route. Traffic through the Northwest Passage above Canada is building more slowly, and talk of the Arctic sea routes competing with the Suez Canal is overblown. Nevertheless, the Bering Strait between Alaska and Russia is already getting crowded. According to Rear Adm. Thomas P. Ostebo, who commands the U.S. Coast Guard in Alaska, about 1000 vessel transits take place in the Strait each summer. That’s America’s backyard.

And, the plan is key to sending a message to Russia that the U.S. is serious about challenging in the Arctic

Barnes 14

Arctic Passage Opens Challenges for U.S. Military Thinning Polar Ice Expected to Give Way to New Commercial Waterways and Resource-Rich Frontier By JULIAN E. BARNES Jan. 12, 2014 10:34 p.m. ET Wall Street Journal: http://online.wsj.com/news/articles/SB10001424052702303330204579250522717106330

Even though the anticipated change is years away, Navy and Coast Guard officials say the U.S. needs to prepare now to patrol and defend the new waterways—designing ice-resistant ships and expanding Arctic naval exercises—when military scientists predict a new expanse of water freed of ice. A new Navy strategy, set for release in coming weeks, says increased commercial traffic, oil and gas exploration and tourism will create new demands in the Arctic. The paper, a draft of which was reviewed by The Wall Street Journal, notes the Navy lacks "operational experience" and ships properly outfitted for the extreme weather. It must also address poor satellite coverage. Pentagon budget cuts, however, make plans for the new Arctic frontier difficult. "This is not a good time to be putting a lot of bills on the table," said Army Gen. Charles Jacoby, the top officer at Northern Command, the military headquarters that oversees the Arctic Ocean. While the Pentagon budget remains large, military spending is falling faster than any time since the end of the Korean War. The Pentagon faces $31 billion in spending cuts this year and $42 billion next year. In November, Defense Secretary Chuck Hagel said the department must prepare to exercise U.S. sovereignty in the Arctic, despite budget cuts, and extend protection of the seas there. For now, the defense of Arctic waters belongs to the Polar Star, the Coast Guard's single heavy icebreaker, and the service's medium icebreaker, the Healy. "You can hear the ice continually scraping down the side of the hull. It drives some people nuts. But to us it is a very melodious sound," said Coast Guard Capt. George Pellissier, the commanding officer. However melodious, barreling through the ice cap is tough on an aging ship. Constant shaking taxes the piping system, keeping the 145-person crew on alert for leaks, the captain said. The balky equipment includes computers to forecast weather; part of the ship's transmission was salvaged from a retired vessel. With little money for new ships, the Polar Star is assigned double duty: working the Arctic in the summer and the Antarctic in winter. Earlier this month, the Coast Guard ordered the Polar Star, which was headed to Antarctica to resupply a research station, to help rescue a Russian research vessel stuck in the southern ice. The ship broke free before the Polar Star arrived. Such rigorous demands may prove difficult for the old ship, Coast Guard officers said. Some military officials would like to see 10% or more of new Navy ships ice-hardened for the expected expansion of Arctic operations. Now, it has none. Hardening a Navy warship for Arctic seas could cost as much as $300 million, officials said. Russia, by contrast, has 25 icebreakers, including six that are nuclear powered, according to the Center for Strategic and International Studies, a nonpartisan Washington think tank. Russian President Vladimir Putin recently promised to reopen old Arctic bases, a sign of Moscow's investment in the far north. Some in the Navy and Coast Guard contend the U.S. will need as many as 10 icebreakers—at an estimated cost of $784 million per ship—to keep shipping lanes free of ice, as well as aid search and rescue missions and ensure safe travel for vessels. Military scientists steer clear of saying why the ice is melting and any public references to global warming. But the military views the retreat of Arctic ice as fact. "Climate change has had a visible and direct impact on the Arctic region," concludes the forthcoming Navy strategy paper. In 2012, ice coverage was more than a million square miles less than the historical average—a reduction equal to about four times the size of Texas, according to government and university scientists. The amount of ice was significantly greater in 2013, but the coverage was still sixth lowest in recorded history, according to federal officials. "I don't have the luxury of having a political opinion on this," Gen. Jacoby said. "It has happened. And it needs to be accounted for." While Antarctica is a rocky continent covered in ice, the North Pole is mostly a 13-foot ice cap over ocean. The ice grows in the winter, and melts in the summer. While there is variation from year to year, the summer melt is growing more extensive, according to military officers. The five nations bordering the Arctic Ocean all have economic exclusion zones extending 230 miles from land, and the Law of the Sea Treaty, which the U.S. hasn't ratified, allows nations to claim even more of the continental shelf and undersea energy resources. The long coast of Alaska gives the U.S. claim to a large economic zone in the Arctic. Just as the U.S. Army cavalry protected railroads in the American West, Gen. Jacoby sees a military responsibility in these emerging waters. For the Navy, that means protecting new shipping lanes and making waters safe for energy and mineral companies. For the Coast Guard, it means responsibility for rescues aboard foundering ships or endangered oil platforms. Shipping companies say they are in no rush to use the Arctic; some parts are too shallow for container ships. A spokeswoman for A.P. Moller-Maersk said the shipping company doesn't believe the route will be economically viable over the next 20 years. Others are more bullish and believe the military needs to invest soon. "We aren't prepared," said Heather Conley, a defense analyst who has written on Arctic issues for CSIS, the Washington think tank. "We have to make some hard resource choices. We keep trying to avoid making a decision. That is going to come back to haunt us."

And, checking back Russian expansion is key to the international order

Coyne 14

Andrew Coyne: Russia enabled by West’s foreign policies of vacillation, uncertainty Andrew Coyne, columnist, The National Post, March 3, 2014: http://fullcomment.nationalpost.com/2014/03/03/andrew-coyne-russia-enabled-by-wests-foreign-policies-of-vacillation-uncertainty/

Now Russia has unilaterally invaded and annexed a part of Ukraine, a nascent democracy whose sole offence was to have tossed out its kleptocratic, Moscow-backed president, though not before the killing of dozens of protesters in Kyiv’s central square. And the response from Western peace activists? Crickets. Well, that’s not fair. A leading British anti-war organization, Stop The War, issued a release that not only refrained from criticizing Russian President Vladimir Putin’s decision to invade Ukraine, but blamed the whole crisis squarely on the West. It was the U.S. and Europe, it said, which “ever since the end of the Cold War … have been intent on surrounding Russia with military bases and puppet regimes sympathetic to the West.” A scholar of Russian history, Stephen Cohen, went on TV to argue forcefully that “Putin had no choice.” Online, arguments that a civilized world cannot permit countries simply to carve off bits of each other at will were met with the usual hail of false equivalencies — what about the invasion of Iraq, then? What about the 1999 NATO bombing campaign in Kosovo? What about Israel’s “occupation” of the West Bank? George Orwell argued pacifists are the objective allies of tyrants. He probably never imagined they would become their PR reps. This same ritual is enacted whenever and wherever a hostile dictatorship embarks upon some lawless escapade. The anti-West left either looks the other way or jumps to its defence. Legions of academics emerge to urge understanding of the other’s “perspective” — understanding, not with a view to repelling its advance, but to acquiescing in it. And the leaders of the West mostly wring their hands. And so it is today. It is interesting to reflect on Russia’s long historic and emotional ties to Ukraine, as it is useful to bear in mind its strategic interests in the naval base at Sevastopol. But it is not actually germane. Whatever its motivations or explanations, the issue at the heart of the invasion remains: it is wrong, and it must be stopped. If it is not possible to eject Russia from Crimea, then certainly it must be deterred from expanding its reach further. That’s not only a matter of defending the right of Ukrainians to decide their own future. It isn’t even about Russia, in the long run. It’s about the whole structure of international relations. Certainly Russia’s other neighbours must be concerned about where Putin’s dreams of a new Russian empire will lead him next. But there are other powers with similarly aggressive inclinations; there are other disputed pieces of territory whose fates could be resolved by the same kinds of interventions; and there are other ethnic diasporas whom some neighbouring power could decide are in need of their “protection.” Just as the consequences of Crimea cannot be viewed in isolation, neither can its causes. Every situation is different — Ukraine is not Iraq or Kosovo or the West Bank or the Sudetenland; Putin is not Hitler or Stalin — but some principles of human affairs are immutable: namely, that opportunism preys on weakness. This is not macho posturing, but logic, informed by history: as it was said in Roman times, Si vis pacem, para bellum (If you want peace, prepare for war). Statecraft is inevitably a test of wills, and every act of a state is a signal either of its will or the lack of it. So while it is too simple to blame the crisis on the Obama administration, neither can it be divorced from the string of similar foreign policy debacles going back a decade or more — Georgia, Syria, the abandonment of Afghanistan and Iraq, the acquisition of nuclear weapons by North Korea, with Iran almost certain to follow, all of which have sent a signal of vacillation and uncertainty. Add to this the weakened fiscal position of the United States and the divisions among the Western powers, and it is scarcely surprising (though no less indefensible) that Putin should have acted as he did. Who or what was to stop him? It’s too late to use military force in Crimea. The point of deterrence is to prevent war, not to provoke it: there is no use in drawing a line that Putin has already crossed. The time, rather, to have drawn such lines was in 2008, at the NATO summit in Bucharest, when Ukraine and Georgia applied for membership. They were put off, largely out of concern for Russian sensitivities, since which time Russia has invaded both. So that ought to settle that argument. Yes, we should try diplomatic and economic sanctions, escalating or de-escalating depending on how far Russia cooperates or fails to do so. But the likelihood of these having much effect must be doubted: Russia may well believe it can ride out international opprobrium over Crimea, and on the evidence of past atrocities — Tiananmen, anyone? — it is probably right. It can, however, be deterred from further such adventures. At a minimum, we should immediately bulk up forces in NATO member states in the region; and, as soon as possible, admit Ukraine and Georgia as members. The trip wires must be laid out in plain sight, so that there can be no doubt as to the consequences if Russia crosses them. If nothing else, then, this week may have answered that age-old thumb-sucker, beloved of generations of columnists in need of a subject: Whither NATO? East, east.

**And, strong U.S. leadership checks back all scenarios**

Thayer 06

Thayer 2006 [Bradley A., Assistant Professor of Political Science at the University of Minnesota, Duluth, The National Interest, November -December, “In Defense of Primacy”, lexis]

 U.S. primacy--and the bandwagoning effect--has also given us extensive influence in international politics, allowing the United States to shape the behavior of states and international institutions. Such influence comes in many forms, one of which is America's ability to create coalitions of like-minded states to free Kosovo, stabilize Afghanistan, invade Iraq or to stop proliferation through the Proliferation Security Initiative (PSI). Doing so allows the United States to operate with allies outside of the UN, where it can be stymied by opponents. American-led wars in Kosovo, Afghanistan and Iraq stand in contrast to the UN's inability to save the people of Darfur or even to conduct any military campaign to realize the goals of its charter. The quiet effectiveness of the PSI in dismantling Libya's WMD programs and unraveling the A. Q. Khan proliferation network are in sharp relief to the typically toothless attempts by the UN to halt proliferation. You can count with one hand countries opposed to the United States. They are the "Gang of Five": China, Cuba, Iran, North Korea and Venezuela. Of course, countries like India, for example, do not agree with all policy choices made by the United States, such as toward Iran, but New Delhi is friendly to Washington. Only the "Gang of Five" may be expected to consistently resist the agenda and actions of the United States. China is clearly the most important of these states because it is a rising great power. But even Beijing is intimidated by the United States and refrains from openly challenging U.S. power. China proclaims that it will, if necessary, resort to other mechanisms of challenging the United States, including asymmetric strategies such as targeting communication and intelligence satellites upon which the United States depends. But China may not be confident those strategies would work, and so it is likely to refrain from testing the United States directly for the foreseeable future because China's power benefits, as we shall see, from the international order U.S. primacy creates. The other states are far weaker than China. For three of the "Gang of Five" cases--Venezuela, Iran, Cuba--it is an anti-U.S. regime that is the source of the problem; the country itself is not intrinsically anti-American. Indeed, a change of regime in Caracas, Tehran or Havana could very well reorient relations. THROUGHOUT HISTORY, peace and stability have been great benefits of an era where there was a dominant power--Rome, Britain or the United States today. Scholars and statesmen have long recognized the irenic effect of power on the anarchic world of international politics. Everything we think of when we consider the current international order--free trade, a robust monetary regime, increasing respect for human rights, growing democratization--is directly linked to U.S. power. Retrenchment proponents seem to think that the current system can be maintained without the current amount of U.S. power behind it. In that they are dead wrong and need to be reminded of one of history's most significant lessons: Appalling things happen when international orders collapse. The Dark Ages followed Rome's collapse. Hitler succeeded the order established at Versailles. Without U.S. power, the liberal order created by the United States will end just as assuredly. As country and western great Ral Donner sang: "You don't know what you've got (until you lose it)." Consequently, it is important to note what those good things are. In addition to ensuring the security of the United States and its allies, American primacy within the international system causes many positive outcomes for Washington and the world. The first has been a more peaceful world. During the Cold War, U.S. leadership reduced friction among many states that were historical antagonists, most notably France and West Germany. Today, American primacy helps keep a number of complicated relationships aligned--between Greece and Turkey, Israel and Egypt, South Korea and Japan, India and Pakistan, Indonesia and Australia. This is not to say it fulfills Woodrow Wilson's vision of ending all war. Wars still occur where Washington's interests are not seriously threatened, such as in Darfur, but a Pax Americana does **reduce** war's likelihood, particularly war's worst form: great power wars. Second, American power gives the United States the ability to spread democracy and other elements of its ideology of liberalism. Doing so is a source of much good for the countries concerned as well as the United States because, as John Owen noted on these pages in the Spring 2006 issue, liberal democracies are more likely to align with the United States and be sympathetic to the American worldview.3 So, spreading democracy helps maintain U.S. primacy. In addition, once states are governed democratically, the likelihood of any type of conflict is significantly reduced. This is not because democracies do not have clashing interests. Indeed they do. Rather, it is because they are more open, more transparent and more likely to want to resolve things amicably in concurrence with U.S. leadership. And so, in general, democratic states are good for their citizens as well as for advancing the interests of the United States. Critics have faulted the Bush Administration for attempting to spread democracy in the Middle East, labeling such an effort a modern form of tilting at windmills. It is the obligation of Bush's critics to explain why democracy is good enough for Western states but not for the rest, and, one gathers from the argument, should not even be attempted. Of course, whether democracy in the Middle East will have a peaceful or stabilizing influence on America's interests in the short run is open to question. Perhaps democratic Arab states would be more opposed to Israel, but nonetheless, their people would be better off. The United States has brought democracy to Afghanistan, where 8.5 million Afghans, 40 percent of them women, voted in a critical October 2004 election, even though remnant Taliban forces threatened them. The first free elections were held in Iraq in January 2005. It was the military power of the United States that put Iraq on the path to democracy. Washington fostered democratic governments in Europe, Latin America, Asia and the Caucasus. Now even the Middle East is increasingly democratic. They may not yet look like Western-style democracies, but democratic progress has been made in Algeria, Morocco, Lebanon, Iraq, Kuwait, the Palestinian Authority and Egypt. By all accounts, the march of democracy has been impressive. Third, along with the growth in the number of democratic states around the world has been the growth of the global economy. With its allies, the United States has labored to create an economically liberal worldwide network characterized by free trade and commerce, respect for international property rights, and mobility of capital and labor markets. The economic stability and prosperity that stems from this economic order is a global public good from which all states benefit, particularly the poorest states in the Third World. The United States created this network not out of altruism but for the benefit and the economic well-being of America. This economic order forces American industries to be competitive, maximizes efficiencies and growth, and benefits defense as well because the size of the economy makes the defense burden manageable. Economic spin-offs foster the development of military technology, helping to ensure military prowess. Perhaps the greatest testament to the benefits of the economic network comes from Deepak Lal, a former Indian foreign service diplomat and researcher at the World Bank, who started his career confident in the socialist ideology of post-independence India. Abandoning the positions of his youth, Lal now recognizes that the only way to bring relief to desperately poor countries of the Third World is through the adoption of free market economic policies and globalization, which are facilitated through American primacy.4 As a witness to the failed alternative economic systems, Lal is one of the strongest academic proponents of American primacy due to the economic prosperity it provides. Fourth and finally, the United States, in seeking primacy, has been willing to use its power not only to advance its interests but to promote the welfare of people all over the globe. The United States is the earth's leading source of positive externalities for the world. The U.S. military has participated in over fifty operations since the end of the Cold War--and most of those missions have been humanitarian in nature. Indeed, the U.S. military is the earth's "911 force"--it serves, de facto, as the world's police, the global paramedic and the planet's fire department. Whenever there is a natural disaster, earthquake, flood, drought, volcanic eruption, typhoon or tsunami, the United States assists the countries in need. On the day after Christmas in 2004, a tremendous earthquake and tsunami occurred in the Indian Ocean near Sumatra, killing some 300,000 people. The United States was the first to respond with aid. Washington followed up with a large contribution of aid and deployed the U.S. military to South and Southeast Asia for many months to help with the aftermath of the disaster. About 20,000 U.S. soldiers, sailors, airmen and marines responded by providing water, food, medical aid, disease treatment and prevention as well as forensic assistance to help identify the bodies of those killed. Only the U.S. military could have accomplished this Herculean effort. No other force possesses the communications capabilities or global logistical reach of the U.S. military. In fact, UN peacekeeping operations depend on the United States to supply UN forces. American generosity has done more to help the United States fight the War on Terror than almost any other measure. Before the tsunami, 80 percent of Indonesian public opinion was opposed to the United States; after it, 80 percent had a favorable opinion of America. Two years after the disaster, and in poll after poll, Indonesians still have overwhelmingly positive views of the United States. In October 2005, an enormous earthquake struck Kashmir, killing about 74,000 people and leaving three million homeless. The U.S. military responded immediately, diverting helicopters fighting the War on Terror in nearby Afghanistan to bring relief as soon as possible. To help those in need, the United States also provided financial aid to Pakistan; and, as one might expect from those witnessing the munificence of the United States, it left a lasting impression about America. For the first time since 9/11, polls of Pakistani opinion have found that more people are favorable toward the United States than unfavorable, while support for Al-Qaeda dropped to its lowest level. Whether in Indonesia or Kashmir, the money was well-spent because it helped people in the wake of disasters, but it also had a real impact on the War on Terror. When people in the Muslim world witness the U.S. military conducting a humanitarian mission, there is a clearly positive impact on Muslim opinion of the United States. As the War on Terror is a war of ideas and opinion as much as military action, for the United States humanitarian missions are the equivalent of a blitzkrieg. THERE IS no other state, group of states or international organization that can provide these global benefits. None even comes close. The United Nations cannot because it is riven with conflicts and major cleavages that divide the international body time and again on matters great and trivial. Thus it lacks the ability to speak with one voice on salient issues and to act as a unified force once a decision is reached. The EU has similar problems. Does anyone expect Russia or China to take up these responsibilities? They may have the desire, but they do not have the capabilities. Let's face it: for the time being, American primacy remains humanity's only practical hope of solving the world's ills.

Solvency

Six new Icebreakers solves

Belinson 12

“Why the U.S. Must Build More Icebreakers Now” in Popular Mechanics By Jerry Beilinson, science journalist, February 17, 2012 12:30 PM: http://www.popularmechanics.com/technology/engineering/infrastructure/why-the-us-must-build-more-icebreakers-now-6693195

Icebreakers are expensive, but we don’t need a lot of them. The defense budget is shrinking, and previous studies have pegged the price of a high-powered icebreaker at $800 million to $1 billion. However, the Coast Guard’s wish list for icebreakers is a small one, including up to four heavy-duty and two or three medium-duty ships. Even just one additional heavy-duty icebreaker would make a big difference, which is why it’s important for the project envisioned in the White House’s budget proposal to get rolling. The Pentagon saved several billion dollars last year by canceling the Marine’s Expeditionary Fighting Vehicle, an amphibious assault technology. Investing a fraction of the savings in an icebreaker program could double or triple U.S. capabilities. Similarly, the Navy plans to build dozens of littoral combat ships for operations relatively close to shore: That’s an important program. But as Lawson Brigham, a University of Alaska professor and former icebreaker captain, has pointed out, sacrificing just one or two of those ships could provide the money to roughly double the Coast Guard’s icebreaking muscle. The Arctic will become steadily more important politically and economically as the 21st century progresses, and the United States is fortunate to be an Arctic nation. It’s time for the country to rebuild its northern seafaring capabilities.

And, the plan has to come first, all other Arctic policies fail without new Icebreakers

Slayton 14

“Using New Ocean Technologies: Promoting Efficient Maritime Transportation and Improving Maritime Domain Awareness and Response Capability” David M. Slayton Research Fellow, Hoover Institution, Stanford University Co-Chair and Executive Director, Arctic Security Initiative Written Statement for the Record to the United States House of Representatives Transport, Transportation and Infrastructure Committee, Coast Guard and Maritime Transportation Sub-Committee 21 May 2014: http://transportation.house.gov/uploadedfiles/2014-05-21-slayton.pdf

We need to decide and then "act" on how we want to posture ourselves in the Arctic, and we are having to do it at a time when we do not have a lot in the way of budgetary flexibility. Last February, the Navy released the U.S. Navy Arctic Roadmap for 2014 to 2030, a document outlining a naval planning framework for the region. The document lays out various necessities for Naval capabilities in the Arctic, from new satellite communications equipment to cold-weather training exercises. The Navy's road map followed the Department of Defense's "Arctic Strategy" report of November 2013 and the White House'sMay 2013 "National Security Strategy for the Arctic Region." The documents together make up a nascent Arctic strategy. Recognizing that more needed to be done, in January of this year, President Obama released the US Implementation Plan for the National Strategy for the Arctic Region in an effort to better direct and coordinate all of the aforementioned strategies. The President's plan aims to provide guidance to a host of federal departments and agencies. In part, the plan can be viewed as the initiation of an "integrated Arctic management" process with a clear objective to engage with the state of Alaska, Alaska natives, and key stakeholders and actors from industry, academia, and nongovernmental organizations. For the maritime domain, the plan presents a ten-year horizon that will be used to prioritize federal infrastructure in the U.S. maritime Arctic. The plan also calls for a ten-year projection of Arctic maritime activity to be completed by the end of 2014. This will be a very challenging task given the great number of economic, environmental, and geopolitical uncertainties influencing Arctic marine operations. Determining accurate ranges of quantitative information on the levels of Arctic traffic has proved to be elusive given the volatility of global commodities markets and the dynamic nature of the global shipping enterprise, among other key factors. It is not surprising that within the section on the maritime domain the plan calls for recommendations for federal public-private partnerships to support the prioritized marine infrastructure elements that are to be developed by the federal agencies. This may prove to be an early indication that, without investment partnerships with the private sector, new initiatives such as U.S. Arctic economic development may be constrained or limited by the federal budget process. The plan recognizes a number of key requirements that relate to a changing U.S. maritime Arctic and its future. Included are major initiatives on developing telecommunications services, enhancing domain awareness, sustaining federal capability to conduct maritime operations in ice-covered waters, protecting the Arctic environment and identifying sensitive areas in the U.S. maritime Arctic, increasing charting in the region and improving geospatial referencing, improving oil and other hazardous materials prevention, containment, and response, and supporting a circumpolar Arctic observing system. This is just a subset of the many tasks presented in the plan but it is clear that the maritime domain requires special and timely attention using integrated approaches that can respond to a broad array of security challenges. Recently at the Chicago Council on Global Affairs, US Secretary of Defense Chuck Hagel stated: - "We also must adjust our capabilities to meet new global realities, including environmental changes. Just today, the nation's top scientists released a National Climate Assessment that warns in very stark terms that the effects of climate change are already becoming quite apparent. One area where we see this is in the Arctic. The melting of gigantic ice caps presents possibilities for the opening of new sea lanes and the exploration for natural resources, energy, and commerce, and also the dangerous potential for conflict in the Arctic. The Defense Department is bolstering its engagement in the Arctic and looking at what capabilities we need to operate there in the future - as described in DoD's first-ever Arctic Strategy that was introduced at the Halifax International Security Forum last November." The US can ably and well develop strategies and discuss plans - as the saying goes, talk is cheap. Nevertheless, a strategy or a policy in my mind, without a budget, is nothing more than a wish, it's almost nothing. Therefore, our goal remains to inform and further motivate some of the thinking of the US Government to act, fund and fully resource a serious Arctic strategy and policy. The areas that we are looking at in a disciplined manner at Hoover are, for example, the infrastructure piece. How do we put in place the airfields? The Ports, The bases? The staging of equipment that may be required to respond to some of the challenges, to the recently formed Search and Rescue agreements and spill response? We only have one deep-water port in the Arctic, Dutch Harbor, Alaska and it's about as far from the Arctic as you can get in Alaska. But it's still considered to be an Arctic port, and it truly is. Another issue that we face is that even though it appears at times most of the ice was flushed out of the Arctic Ocean, the fact of the matter remains that ice, like politics, is local. We expect to find for some time to come areas where the ice has closed harbors, or closed shipping routes. And so how do we clear that? And one of the challenges that we as a nation have and more specifically, the Coast Guard has, is our icebreaking fleet. And even though it may look as though the ice is all gone, icebreakers will be required to get in and out of places that are going to be important to us and others economically. Icebreakers will be required to respond to events, whether it is a search and rescue operation or an environmental problem. And let me just give you a sense of the Arctic nations' icebreaking capability. Russia has 43. Sweden has nine. Finland has nine. Canada has 13. And the United State has two. And one is around 40 years old, a great ship...Forty years. And so how do we think our way through that, and what's the best way to reconstitute that Icebreaking capability that will be required? US Navy and Coast Guard Ships that operate in the oceans today aren't equipped, aren't hardened, don't have the systems on board that will allow them to operate in that harsh, cold, and at times rough Arctic climate, so those too are some of the investments that will have to be made.

# \*\*\*Status Quo\*\*\*

## Squo= no new ships

AP 12

Anchorage Daily News, “Reprieve for Seattle-based icebreaker Polar Sea, <http://www.adn.com/2012/06/15/2506330/reprieve-for-seattle-based-icebreaker.html>

The Coast Guard has postponed plans to scrap the Seattle-based icebreaker Polar Sea this year. Coast Guard Commandant Admiral Robert Papp made the decision Thursday after meeting with Sens. Maria Cantwell of Washington and Mark Begich and Lisa Murkowski of Alaska, the senators said Friday. "The Polar Sea's hull is still in sound condition," Cantwell said. "Postponing its scrapping allows the administration and Congress more time to consider all options for fulfilling the nation's critical icebreaking missions." The United States needs more icebreakers in the Arctic, the Alaska senators said. "While this may only be a six-month respite for the Polar Sea, I will use this period to work through my role on the Appropriations Committee to make America's icebreaking capacity a top priority," Murkowski said. The 399-foot Polar Sea is 35 years old and has been out of service since an engine failure in 2010. It had been scheduled to be dry-docked Monday for the first steps in demolition. Its 36-year-old sister ship, the Polar Star, has been on caretaker status since 2006 and undergoing a $57 million upgrade. The rehabbed Polar Star is expected to return to service next year. The United States currently has only one working icebreaker, the Healy. It was used last winter to escort a Russian tanker to Nome to make an emergency delivery after a fuel barge failed to arrive before the Bering Sea froze. The Healy is a medium-duty icebreaker designed to crush ice about 5 feet thick. The Polar Sea is designed to break through ice up to 21 feet thick. One Coast Guard study said the agency and the Navy need six heavy duty icebreakers and four medium icebreakers, the senators said. The reduction in Arctic ice has created more opportunities for Northwest Passage trade, fishing and oil exploration, as well as more environmental and security concerns. The icebreakers also travel to Antarctica to resupply McMurdo Station. The hull is the costliest part of an icebreaker to build, said Brian Baird, a former Washington congressman who is now vice president of Vigor Industrial, formerly Todd Shipyards, which repairs the icebreakers. Building a new icebreaker could take 10 years and cost more than $800 million, Baird told The Seattle Times.

## Squo= Terminal inaction

Thorsson 14

“Washington’s folly” in the Arctic Journal May 20, 2014 - 11:37am - By Elías Thórsson, journalist: http://arcticjournal.com/politics/619/washingtons-folly

Huebert, however, dismisses those claims, arguing that US armed forces are not well situated in the region, and that, in fact, only their submarines seem to be up to standard in terms of regional preparedness. With Russia, already the region’s leading power, moving ahead with massive investments, he believes America’s commitment to region has become more imperative than ever. “The West should do all it can to build up regional co-operation, but don’t let that blind you to the necessity of having your own defence capabilities.” The US, according to Huebert, currently finds itself in the difficult situation of navigating a situation far more treacherous than Arctic waters – domestic politics. “Ever since the 2008 mortgage crisis and the advent of the Tea Party, which has broken the traditional political consensus, the US has been lacking a serious purpose on all fronts,” Huebert says. “You saw this in the ratification of the Law of the Sea, which every president since Reagan has tried to implement, yet the extreme Republicans are opposed to it, and the reasons they are against it are mythical.” According to Huebert, Washington gridlock and the internal conflict within the Republican party are standing in way of US interests and resulting in a situation where politics trump national security. Together with the country’s two recent wars, this has led to a situation in which the America finds itself lacking both a strategy and necessary investment.

## Squo won’t solve, Icebreakers key to laundry list

Klimas 12

Jacqueline, “Coast Guard asks to buy new Arctic icebreaker”, 3.24.12, <http://www.navytimes.com/news/2012/03/navy-coast-guard-arctic-ice-breaker-032412w/>

The Defense Department will help bolster the Coast Guard’s presence in the Arctic, the commander of U.S. Northern Command told the Senate Armed Services Committee. Army Gen. Charles Jacoby and Coast Guard Commandant Adm. Bob Papp signed a white paper March 13 that addresses capability gaps in infrastructure, communications, domain awareness and presence in the Arctic. “Traffic has already increased over 61 percent in the Arctic since 2008,” Jacoby said at the March 13 hearing. “Security interests follow closely behind economic interests, and we will be participating in a number of venues to help lead that for the Department of Defense.” Rising global temperatures and melting sea ice are opening the Arctic as a new frontier for research, travel and oil drilling — and creating more area for the Coast Guard to patrol. To keep up, the Coast Guard is asking for $8 million in the fiscal 2013 budget to begin procurement of a new large icebreaker. Such a ship could cost $1 billion. Neither of the U.S.’s two heavy-duty Polar-class icebreakers is in service. The Polar Star is awaiting a $57 million upgrade set to be finished in December. Its sister ship, Polar Sea, has been docked in Seattle since 2010 with engine issues. The medium-duty polar icebreaker Healy is designed for research and cannot cut through the thickest ice. As countries like Russia and even China grow their icebreaker fleet, Sen. Mark Begich, D-Alaska, emphasized how critical it is for the U.S. to keep up. “We have to be a part of that,” he said. “It’s important that we not be under-asseted, and have enough equipment to do the work,” which could include oil and gas exploration. Simon Stephenson, the division director of Arctic sciences at the National Science Foundation, emphasized that Arctic research is important to the everyday life of people worldwide, not just in scientific circles. Researchers in the Arctic are looking at melting sea ice and changes in ocean circulation — things that can affect pressure systems and the entire global weather cycle. “By affecting pressure systems, you can affect the upper air circulation which drives our weather — in Europe, in the mid-Atlantic states, in China. All of these areas have seen changes in their weather patterns,” Stephenson said.

## Not enough Icebreakers now

O’Rourke 12

Specialist in Naval Affairs, Congressional Research Service, “Coast Guard Polar Icebreaker Modernization: Background and Issues for Congress,” [http://digital.library.unt.edu/ark:/67531/metadc85474/](http://digital.library.unt.edu/ark%3A/67531/metadc85474/)

The Coast Guard’s proposed FY2013 budget includes $8 million in acquisition funding to initiate survey and design activities for a new polar icebreaker. The Coast Guard’s Five Year Capital Investment Plan includes an additional $852 million in FY2014-FY2017 for acquiring the ship. The Coast Guard anticipates awarding a construction contract for the ship “within the next five years” and taking delivery on the ship “within a decade.” The project to design and build a polar icebreaker is a new acquisition project initiated in the FY2013 budget.

## No funding now

O’Rourke 12

Specialist in Naval Affairs, Congressional Research Service, Quote from July 2010 Coast Guard High Latitude Study,“Coast Guard Polar Icebreaker Modernization: Background and Issues for Congress,” [http://digital.library.unt.edu/ark:/67531/metadc85474/](http://digital.library.unt.edu/ark%3A/67531/metadc85474/)

Regarding the third factor above, a January 17, 2011, press report stated that while the current Commandant of the Coast Guard, Admiral Robert Papp, remained committed to funding the procurement of eight National Security Cutters (NSCs),45 “the admiral was less optimistic about the prospects of replacing the Coast Guard’s heavy polar icebreakers, both of which are currently in port for restoration or repairs. He estimated that replacing them would cost $800 million each, and he does not see a national will to provide that kind of funding right now.” The article stated: “There is no room in the Coast Guard budget to do that,” [Papp] said. “Nor is there a national will or consensus at this point about what we should be doing in the Arctic, who should be doing it, how we do it and how we resource it, so we’re continuing to make the case that in order to project our sovereignty in the Arctic, and with the evolving activities that are going on up there, there’s a need for a whole range of Coast Guard operational capability up there.”46

# \*\*\*Oil Advantage\*\*\*

## Squo = more spills

Nuka Research and Planning Group LLC 10

November, “Oil Spill Prevention and Response in the U.S. Arctic Ocean: Unexamined Risks, Unacceptable Consequences,”: http://www.pewtrusts.org/uploadedFiles/wwwpewtrustsorg/Reports/Protecting\_ocean\_life/PEW-1010\_ARTIC\_Report.pdf

This remote, extreme northern portion of the OCS has a harsh environment with high winds, extended periods of heavy fog, seasonal darkness, subzero temperatures and weeklong storms. As a result, the risks, difficulties and unknowns of oil exploration in the Arctic OCS are far greater than in any other area of the OCS. Seasonal sea ice, lack of infrastructure, and distances from major population centers present challenges that may heighten the risks of a spill occurring while also limiting the potential effectiveness of spill cleanup technologies. The prospect of mounting a response to a catastrophic spill in the Arctic OCS is daunting, and the consequences of a major spill in this region could be dire. Scientific knowledge of Arctic ecology is based on incomplete information about marine mammals, fisheries and the marine ecosystem, and there are no computer models that can predict how an oil spill in the Arctic OCS would interact with that dynamic sea ice regime. Arctic regions are already under considerable strain from climate change, and Arctic species and ecosystems are highly sensitive to pollutants and much slower to recover from damage.

## Lots of Arctic oil

King 12

Hobart King, Geology.com, April 2012, <http://geology.com/articles/arctic-oil-and-gas/>, “Oil and Natural Gas Resources of the Arctic”, 7/2/12

The area above the Arctic Circle is underlain by sedimentary basins and continental shelves that hold enormous oil and natural gas resources. Most of this area is poorly explored for oil and natural gas, however, the United States Geological Survey estimates that the Arctic contains approximately 13 percent of the world's undiscovered conventional oil resources and about 30 percent of its undiscovered conventional natural gas resources. This makes the Arctic an incredibly rich area. It is about the same geographic size as the African continent - about 6% of Earth's surface area - yet it holds an estimated 22 percent of Earth's oil and natural gas resource. [3] Most of the exploration in the Arctic to-date has taken place on land. This work has resulted in the Prudhoe Bay Oil Field in Alaska, the Tazovskoye Field in Russia and hundreds of smaller fields, many of which are on Alaska's North Slope. Land accounts for about 1/3 of the Arctic's area and is thought to hold about 16% of the Arctic's remaining undiscovered oil and gas resource. [4] About 1/3 of the Arctic area is continental shelves which have been very lightly explored. The Arctic continental shelves are the largest geographic area on Earth with enormous probable resources that remains virtually unexplored. The remaining 1/3 of the Arctic is deep ocean waters over 500 meters deep and this area is unexplored. [4] The United States Geological Survey has estimated the undiscovered technically recoverable, conventional oil, natural gas and natural gas liquids resources north of the Arctic Circle to be approximately 412 billion barrels oil equivalent. Their estimates place over 87% of the resource (360 billion barrels oil equivalent) into seven Arctic basin provinces: Amerasia Basin, Arctic Alaska Basin, East Barents Basin, East Greenland Basin, West Greenland East Canada Basin, East Greenland Rift Basin, West Siberian Basin and the Yenisey-Khatang Basin. These seven Arctic basin provinces are shown on the map at the top of this page and their resource distributions are presented as Table 1 below. [4] It is clear from this data that most of the Arctic area resource is natural gas and that the Asian side of the Arctic area has the highest proportion of natural gas and natural gas liquids. Portions of eight countries are situated above the Arctic Circle: Canada, Denmark (via Greenland), Finland, Iceland, Norway, Russia, Sweden and the United States. Six of them border the Arctic Ocean and thus have a jurisdictional claim to portions of the Arctic seafloor: Canada, Denmark (via Greenland), Iceland, Norway, Russia and the United States. Their claims to oil and gas beneath the Arctic Ocean seafloor have historically been determined by unilateral decrees, however the Law of the Sea Convention provides each country an exclusive economic zone extending 200 miles out from its shoreline. Under certain conditions the exclusive economic zone can be extended out to 350 miles if a nation can demonstrate that its continental margin extends more than 200 miles beyond its shore. Russia, Canada and the United States are currently working to define the extent of their continental margin. This provision has led to some overlapping territorial disputes and disagreements over how the edge of the continental margin is defined and mapped. For example, Russia claims that their continental margin follows the Lomonosov Ridge all the way to the North Pole. In another, both the United States and Canada claim a portion of the Beaufort Sea in an area that is thought to contain significant oil and natural gas resources.. The Arctic's vast oil resource and the high price of oil are what currently attract attention to the Arctic area. Where ice-free water is available, oil can be produced from a well, placed on a ship and transported to refineries.

## Arctic Drilling Good

Baker 1

Dean, September 4th 2001)( HOT AIR OVER THE ARCTIC? AN ASSESSMENT OF THE WEFA STUDY OF THE ECONOMIC IMPACT OF OIL DRILLING IN THE ARCTIC NATIONAL WILDLIFE REFUGE, http://www.cepr.net/documents/publications/anwr\_2001\_09.pdf

With these estimates of supply and demand elasticity and updated estimates of the potential production in the Arctic Refuge, it is possible to estimate the reduction in oil prices that will result from opening the Refuge to oil production. As noted earlier, the most recent estimates from the EIA imply that the oil from the Refuge will increase world supply by 1.15 percent at its peak production level in 2015. Using the supply and demand elasticities discussed above, this would imply a decline in world oil prices of approximately 2.7 percent. This price impact is slightly more than one fourth the 10.5 percent price decline estimated in WEFA’s base high production scenario, and just less than half the 5.6 percent price decline estimated in the base low production scenario.

## Oil dependency kills the economy

Lovaas 5

Deron is the Vehicles Campaign Director at the Natural Resources Defense Council. THE BUSINESS CASE FOR REDUCED OIL DEPENDENCE, In Business. May-June 2005 Vol 27 No. 3 p. 30

The real price of oil is reflected in all sectors of our economy and is much costlier when we take into account the military, environmental, job loss, and other expenses associated with our intense dependence on oil. In 2004 alone, Americans spent roughly $270 billion to feed our oil appetite, nearly half of last year's trade deficit according to government statistics. The National Defense Council Foundation finds that the total economic penalty of our oil dependence, including loss of jobs, output, and tax revenue is estimated to be $297 to $305 billion annually.

## Spills coming, squo not prepared

Nuka Research and Planning Group 7

October, World Wildlife Foundation, “Oil Spill Response Challenges in Arctic Waters”,: <http://www.worldwildlife.org/what/wherewework/arctic/WWFBinaryitem24363.pdf>

A response gap analysis was conducted for two points on the Prince William Sound tanker transit route in Alaska. Datasets on wind, sea state, temperature and visibility were built using buoy observations from the previous five years. The operating limits of the open-water mechanical response system described in the tanker owners’ oil spill contingency plans were estimated based on literature, manufacturer ratings and best professional judgement. These limits were applied to the historical datasets in three categories – response possible, response impaired, and response impossible. Limiting factors were considered both in terms of independent and cumulative impacts. When two or more factors existed to make a response ‘impaired,’ then response was considered ‘impossible’ for that time period. The Prince William Sound response gap analysis found that a response gap – during which no oil spill response activities would be safe or feasible due to one of the four environmental factors considered – existed for 38% of the time on average. During the winter season, the response gap existed 65% of the time. This analysis did not consider ice conditions, which could exacerbate the response gap in areas where sea ice may be present.

## Spills uniquely likely in Arctic

Nuka Research and Planning Group 07

October, World Wildlife Foundation, “Oil Spill Response Challenges in Arctic Waters”, <http://www.worldwildlife.org/what/wherewework/arctic/WWFBinaryitem24363.pdf>

Arctic conditions, such as dynamic ice cover, low temperatures, reduced visibility or complete darkness, high winds, and extreme storms add to the probability of an accident or error that might cause a spill to occur (Anderson and Talley, 1995). There are several characteristics of the arctic environment and arctic wildlife species that exacerbate the potentially negative consequence of an oil spill to arctic waters. Oil persists longer in arctic conditions because it evaporates more slowly or may be trapped in or under ice and is thus less accessible to bacterial degradation. Population recovery after an incident may be slowed because many species have relatively long life spans and slower generational turnover (AMAP 1998). Recent research published in the U.S. suggests that long-term consequences of oil spills to temperate and sub-arctic coastal environments may persist well beyond initial projections. Compared to the world’s temperate oceans, arctic marine waters have lower temperatures and lower salinity profiles. Typical winter conditions include cold temperatures, the formation and movement of sea ice, extreme and unpredictable weather conditions, and long periods of darkness. Any of these conditions may increase the risks of a significant accidental oil spill while limiting the potential effectiveness of cleanup options.

##  Icebreakers k2 spill response

Rufe 12

Roger T., 5.27.12, The Portland Press Herald, “Oil Spill in Arctic Ocean would tax our capabilities”, <http://www.pressherald.com/opinion/oil-spill-in-arctic-ocean-would-tax-our-capabilities_2012-05-27.html>

The second anniversary of the Deepwater Horizon disaster passed with little fanfare last month. But with our government on the brink of allowing the oil industry to explore in America's remote Arctic Ocean this summer, it is worth revisiting some of the lessons learned from the biggest oil spill in the nation's history. Stopping that spill took three months, even though it occurred in the relatively calm waters of the Gulf of Mexico near Coast Guard stations, cleanup equipment and abundant shoreside support. Subsequently, I was asked to chair a panel of federal, state, industry and environmental experts to review our nation's response. Our recommendations are especially important for the Arctic. The Arctic Ocean has one of the harshest climates on Earth. Even in the summer, conditions are volatile, with sudden, violent storms and shifting sea ice. The shoreline is sparsely populated, with no roads connecting the eight main villages to each other or to the rest of Alaska. The nearest major seaport is 1,300 nautical miles away; the nearest Coast Guard air station is 950 air miles. A spill cleanup effort could take weeks to mount and then could suffer endless delays because of foul weather. Although preventing and containing an oil spill in these extreme conditions is the priority, we must also have a plan for response. After the Gulf, we witnessed firsthand that the middle of an emergency is not the time to come up with one. Fully developed and detailed procedures, agreed to in advance, are essential to an effective response. These must address the impact of a spill on environmentally sensitive areas and species, as well as on local economies. This requires a great deal of scientific research along with full and early consultation with indigenous peoples. After all, it is their livelihoods that are at risk. Even then, response plans are only as good as the men and women who will implement them. So it is critical that they provide for an adequate number of trained personnel and proper equipment to deal with a worst-case scenario. If this was a problem in the early going of the Gulf spill, imagine what a challenge it could be in the Arctic. Finally, such contingency planning must be tested in real-life conditions. Although we learned from the Gulf disaster what is needed for an effective spill response plan, we are on the brink of drilling in a much more remote and extreme location without these hard-won lessons in place. Important habitat and key subsistence areas in the U.S. Arctic Ocean have yet to be set off-limits. The U.S. Coast Guard's two heavy-duty icebreakers -- needed for search-and-rescue missions and to support oil spill response and recovery -- have outlived their original life span; the only remaining ice-capable vessel was built for scientific research and is not adequate for heavy icebreaking.

## Oil spills kill biodiversity

Nuka Research and Planning Group 7

October, World Wildlife Foundation, “Oil Spill Response Challenges in Arctic Waters”,: <http://www.worldwildlife.org/what/wherewework/arctic/WWFBinaryitem24363.pdf>

Lingering oil from the 1989 Exxon Valdez oil spill (EVOS) in Prince William Sound, Alaska has persisted far beyond initial forecasts (Peterson et al., 2003). In 2005, EVOS oil was found only slightly weathered under beaches across the spill impact area. The lingering oil remains toxic and biologically available, and scientists predict that this subsurface oil may persist for decades to come (Short et al., 2003). The lingering effects of oil spills have also been documented in Cape Cod, Massachusetts, where recent studies published by the Woods Hole Oceanographic Institution found that oil remains in the sediment layer of some coastal marshes from a 1969 oil spill. The lingering oil continues to impact on the behaviour of burrowing fiddler crabs, which have been observed to actively avoid digging burrows into this oiled sediment layer. The crabs have also been observed to show signs of toxic impacts from the 38-year-old oil (Culbertson, et al., 2007).

### Migratory Species

UNEP 10

United Natins Environment Program, Johnsen, K. Alfthan, B. Hislop, L. Skaalvik, J. F. (Editors), “Protecting Arctic Biodiversity: Limitations and Strengths of Environental Agreements” UNEP Grid Arendal, 2010

The Arctic contribution to global biodiversity is significant. Although the Arctic has relatively few species compared to areas such as the tropics, the region is recognised for its genetic diversity, reflecting the many ways in which species have adapted to extreme environment2. Hundreds of migrating species (including 279 species of birds, and the grey and humpback whales) travel long distances each year in order to take advantage of the short but productive Arctic summers.

## Oil kills U.S. econ and heg

Heinberg 5

Richard Heinberg, Senior Fellow at the Post Carbon Institute, ‘5

(The Party's Over : Oil, War and the Fate of Industrial Societies, p. 218-219) [Bozman]

Regional rivalries and long-term strategy: Even without competition for energy resources, the world is full of conflict and animosity. For the most part, it is in the United States? interest to prevent open confrontation between regional rivals, such as India and Pakistan, Israel and Syria, and North and South Korea. However, resource competition will only worsen existing enmities. As the petroleum production peak approaches, the US will likely make efforts to take more direct control of energy resources in Saudi Arabia, Iran, the Caspian Sea, Africa and South America ? efforts that may incite other nations to form alliances to curb US ambitions. Within only a few years, OPEC countries will have control over virtually all of the exportable surplus oil in the world (with the exception of Russia?s petroleum, the production of which may reach a second peak in 2010, following an initial peak that precipitated the collapse of the USSR). The US whose global hegemony has seemed so complete for the past dozen years ? will suffer an increasing decline in global influence, which no amount of saber rattling or bombing of ?terrorist? countries will be able to reverse. Awash in debt, dependent on imports, mired in corruption, its military increasingly overextended, the US is well into its imperial twilight years

## Loss of Oceanic Biodiversity= Extinction

NOAA 98

National Oceanic and Atmospheric Administration, 1998 (Year of the Ocean Report, http://www.yoto98.noaa.gov/yoto/meeting/mar\_env\_316.html)

<The ocean plays a critical role in sustaining the life of this planet. Every activity, whether natural or anthropogenic, has far reaching impacts on the world at large. For example, excessive emissions of greenhouse gases may contribute to an increase the sea level, and cause potential flooding or an increase in storm frequency; this flooding can reduce wetland acreage and increase sediment and nutrient flows into the Gulf of Mexico, causing adverse impacts on water quality and reducing habitat for commercial fisheries. This in turn drives up the cost of fish at local markets nationwide. The environment and the economic health of marine and coastal waters are linked at the individual, community, state, regional, national and international levels. The interdependence of the economy and the environment are widely recognized. The United States has moved beyond viewing health, safety, and pollution control as additional costs of doing business to an understanding of broader stewardship, recognizing that economic and social prosperity would be useless if the coastal and marine environments are compromised or destroyed in the process of development (President's Council on Sustainable Development, 1996). Much about the ocean, its processes, and the interrelationship between land and sea is unknown. Many harvested marine resources depend upon a healthy marine environment to exist. Continued research is needed so that sound management decisions can be made when conflicts among users of ocean resources arise. Although much progress has been made over the past 30 years to enhance marine environmental quality and ocean resources, much work remains. The challenge is to maintain and continue to improve marine water quality as more people move to the coasts and the pressures of urbanization increase. Through education, partnerships, technological advances, research, and personal responsibility, marine environmental quality should continue to improve, sustaining resources for generations to come."It does not matter where on Earth you live, everyone is utterly dependent on the existence of that lovely, living saltwater soup. There's plenty of water in the universe without life, but nowhere is there life without water. The living ocean drives planetary chemistry, governs climate and weather, and otherwise provides the cornerstone of the life-support system for all creatures on our planet, from deep-sea starfish to desert sagebrush. That's why the ocean matters. If the sea is sick, we'll feel it. If it dies, we die. Our future and the state of the oceans are one."

# \*\*\*Shipping Advantage\*\*\*

## Arctic shiping coming now

Barnes 14

Arctic Passage Opens Challenges for U.S. Military Thinning Polar Ice Expected to Give Way to New Commercial Waterways and Resource-Rich Frontier By JULIAN E. BARNES Jan. 12, 2014 10:34 p.m. ET Wall Street Journal: http://online.wsj.com/news/articles/SB10001424052702303330204579250522717106330

Adm. Greenert said the Navy needed to "get in tune" with the industry before any big spending decisions. Coast Guard officials say traffic in the Arctic Ocean is expanding. The service tracked 240 ships operating off northern Alaska last year, compared with 190 in 2011. A ship from China last year used an Arctic sea route above Russia to shave two weeks off the time needed to reach Europe. "Maritime commerce is happening at a much faster rate than people realize," said Rear Adm. Thomas Ostebo, who commands the Coast Guard's Alaska district. "All this activity gives opportunity for calamity."

The Navy began its Arctic operations during the Cold War. American nuclear-armed subs cruised under the Arctic ice in a cat-and-mouse game with the former Soviet Union. Ships supplied U.S. and Canadian early warning stations that watched for Soviet missile or bomber attacks. The Coast Guard polar icebreaking fleet near the height of the Cold War included seven smaller Wind-class ships and one Glacier-class vessel. But as the fleet of World War II era ships aged, they were retired, replaced in the 1970s by the Polar Star and its sister ship, the Polar Sea, which is now used only for spare parts. Military officers said despite growing tensions with Russia elsewhere in the world, there is no re-emerging Cold War in the Arctic, beyond what are viewed as routine military exercises by Russia in the Bering Strait, the passage close to Alaska that separates Asia and North America. The U.S. Naval War College in Newport, R.I., has run a series of war games to find new ideas for defending the emerging waterways. The Navy predicts that by 2025, commercial traffic will be able to navigate swaths of the Arctic Ocean for several months a year. By 2040, it estimated that waterways will be navigable much of the year, requiring "sustained operations in the region." To meet these goals, according to the draft strategy, the Navy is developing expanded Arctic training plans and improved weather forecasting and communications equipment. Growth in Arctic shipping traffic prompted the Coast Guard to spend $90 million on the Polar Star for system upgrades and to rebuild the engines, an overhaul expected to give the icebreaker at least seven more years of life, said the Congressional Research Service, a nonpartisan arm of Congress. The Polar Star was originally supposed to be in service for 30 years. Its age and a lack of funding had prompted the Coast Guard to put the ship into semiretirement: afloat but not operational. This summer, on its first voyage to the Arctic since 2001, veterans on the crew found a very different ocean. "Back in the day there were a lot more challenges, more multiyear ice, you had to pick your spots through it," said Coast Guard Cmdr. Kenneth Boda, the ship's executive officer. "This summer we set a course and go…We were teaching our young officers to drive around the thicker stuff but we could have gone right through." The changing conditions make the Arctic particularly unpredictable. Lt. j.g. Paul Garcia, on his first icebreaking mission this summer, steered the Polar Star into what the Coast Guard calls a "blind alley." In the Arctic, moving ice floes can bunch up to form mountainous ridges of ice. When three or four floes ram together, the ice can be so thick that even the Polar Star—capable of 75,000 horsepower—can't smash through, creating a blind alley. "He picked an area to go where four floes had come together, forming a parking garage of pressure ridges," said Capt. Pellissier, who has served many of his 27 years in the Coast Guard on ice-breaking missions, including three tours on the Polar Star since 1999. "It is easy to get your icebreaker stuck." "It was a learning experience," Lt. Garcia said, who had to "wiggle" and ram the icebreaker back out. The Arctic trip was also a test of the Polar Star, to ensure the ship was able to break through the ice as well as it did in the old days. "The ship still runs great," Lt. Garcia said. But ice isn't as challenging. In the late 1970s, the ship broke ice 25-feet thick, Cmdr. Boda said. The thickest ice the crew saw this summer—outside the blind alleys—was 16 feet thick. The real challenge is no longer ice but aging equipment. On its summer voyage, the ship's weather computers failed to start up, prompting the crew to rely on forecasts emailed from the Navy, according to crew members.

The system connecting with weather satellites was installed in the early 2000s, before the Polar Star went into semiretirement. It had a busted antenna, now replaced, and obsolete software still awaiting an upgrade. "It just needs a good bit of TLC," said Marine Science Technician First Class Brian Carr. Military analysts say the question facing the Pentagon is whether the ice will melt before the military spending freeze thaws. "The ice," said Rear Adm. Jonathan White, the Navy's oceanographer, "is moving pretty fast."

## Arctic commerce increasing now

Slayton 14

“Using New Ocean Technologies: Promoting Efficient Maritime Transportation and Improving Maritime Domain Awareness and Response Capability” David M. Slayton Research Fellow, Hoover Institution, Stanford University Co-Chair and Executive Director, Arctic Security Initiative Written Statement for the Record to the United States House of Representatives Transport, Transportation and Infrastructure Committee, Coast Guard and Maritime Transportation Sub-Committee 21 May 2014: http://transportation.house.gov/uploadedfiles/2014-05-21-slayton.pdf

We recognize the increasing accessibility of the Arctic Ocean is leading to greater commercial activity in that part of the world. In addition, non-Arctic states are beginning to take interest in the potential advantages the Arctic may afford them. The United States finds itself in a position where it does not have the proper government assets to operate beyond a very minimal capacity in that part of the world. In order to make informed investment decisions, a comprehensive survey of the decision environment is required. To date, no such review appears to have been accomplished. Our team at the Arctic Security Initiative works to inform the country and the US government that the United States "IS" one of eight Arctic nations, that we will face directly the changes, challenges, opportunities and responsibilities of the Arctic evolving as a strategic territory.

## Shipping low now

Deb-as-hak-tuni and Kennedy 12

Sai S. Dev­ab­hak­tuni, and Gre­gory Kennedy (Mr. Devabhaktuni is anexecutive vice president in the Newport Beach office and head of corporate distressed portfolio management. Mr. Kennedy is a vice president and distressed credit analyst in the Newport Beach office.)  May 21st, 2012

<http://advisoranalyst.com/glablog/tag/bloomberg/>

The global shipping industry is in the midst of its worst cycle since the 1980s. A recent Bloomberg arti­cle high­lighted that “the combined mar­ket value of the world’s 80 biggest publicly traded shipping companies plunged by $101.7 billion in the four years to March 23, 2012.” What caused so much value destruc­tion? The combination of an excess supply of new vessels that were financed at the peak of the market and a global recession from which there has been an uneven recovery has led to persistently low charter rates and plummeting ship values. In its wake is nearly $500 bil­lion of debt, the over­whelm­ing major­ity of which is held by Euro­pean banks. Over 90% of world trade activ­ity depends on the ship­ping industry’s global fleet of 58,000 ships, accord­ing to Clark­sons and J.P. Mor­gan. The fleet includes tankers, dry bulk ships, con­tainer ships, chem­i­cal tankers, liq­ue­fied nat­ural gas (LNG) tankers and other cargo ships across what is a highly frag­mented indus­try. As the global econ­omy expanded and inter­na­tional trade increased after the end of the Cold War, world seaborne trade increased by nearly 50% from 1990 to 2000, from about four bil­lion tonnes to six bil­lion tonnes annu­ally, which helped the ship­ping indus­try recover from the ves­sel over­sup­ply it faced in the 1980s (see Fig­ure 1). The global ship­ping indus­try has long cycles and was his­tor­i­cally dri­ven by demand and GDP growth in devel­oped economies. But by 2003, demand from emerg­ing economies like China began accel­er­at­ing, which pushed global seaborne trade to over eight bil­lion tonnes by 2008. China’s demand for coal and iron increased nearly 20% per year from 2004 to 2011, and the coun­try is now a net importer rather than exporter of coal. This insa­tiable emerg­ing mar­ket demand, com­bined with increased pros­per­ity due in part to the credit bub­ble in devel­oped mar­kets, led to a ves­sel short­age, dri­ving ship­ping rates to new highs (see Fig­ure 2). The ship­ping indus­try responded to these his­tor­i­cally high ship­ping rates by order­ing what turned out to be an exces­sive num­ber of ves­sels. From 2003 to 2008, over $800 bil­lion of new ships were ordered, with half of the orders placed in 2007–2008, when ves­sel prices were at their peak, accord­ing to Clark­sons. Dur­ing these boom years, bank lend­ing was widely avail­able for new ships, as banks offered financ­ing of up to 80% loan-to-value (LTV) for new ves­sels (ver­sus 50% to 60% today), leav­ing lit­tle mar­gin for error in ves­sel val­ues. Most of those ves­sels were sched­uled for deliv­ery in the years imme­di­ately fol­low­ing the finan­cial cri­sis of 2008–2009, com­pound­ing the over­sup­ply issue.

## Shipping in trouble now

Harjani 12

Ansuya Harjani Assistant Producer, CNBC Mar 2012 : <http://www.cnbc.com/id/46598543/For_Shippers_2012_Is_a_Year_of_Crisis_Dry_Bulk_Operator>

Lack of funding, oversupply and poor freight rates are going make 2012 a “crisis” year for the shipping industry, says Andrew Broomhead, CFO of Hong Kong's largest operator of dry-bulk vessels Pacific Basin. “We've got yet again a lot of ships being delivered into the market. (But) funding is very, very dry, so for many companies it's going to be a very tough year. We are calling this a crisis for 2012,” Broomhead told CNBC on Friday. “In dry bulk, we've got probably about 20 percent of the world's fleet, which is going to be delivered in the course of 2012. That’s going to represent a huge amount of supply increase,” he added. The industry is facing overcapacity as a result of an excess of orders that took place following the “boom years” in 2006-2007, he said. With banks reluctant to provide financing, Broomhead says this is placing shipping firms in a difficult position. This week, Indonesia’s largest oil and gas shipping group, Berlian Laju Tanker, defaulted on its $2 billion debt, while Reuters reported Thursday that Denmark’s bulk and tanker firm Torm has asked for an extension for the repayment of its $1.87 billion debt. Broomhead adds that freight rates will also remain under pressure this year, as the market struggles to absorb a continued influx of new deliveries at a time of global economic uncertainty. The Baltic Dry Index, a measure of costs to ship dry-bulk commodities, has already fallen over 55 percent this year. While, Pacific Basin reported a 69 percent drop in 2011 annual profit to $32 million, Broomhead says the company is relatively well positioned compared to its peers, with over $600 million in cash reserves and an 11 percent gearing ratio. “We've managed our exposure to ship ownership throughout the cycle reasonably well, we're sitting here with a large amount of cash on our balance sheet,” he said, adding that the company is looking to expand its fleet through purchases in the second hand market. “We are patiently awaiting for opportunities for the right ships for the right price, we're price specific on the types of ships we want to acquire.” This year, Pacific Basin [2343.HK 3.10 0.04 (+1.31%) ] plans to expand its presence in the U.S. and South Africa through opening two new offices in Durban and Connecticut — part of the company’s efforts to grow its presence in the Atlantic. “Over the last 12-18 months, Atlantic rates have generally been premium to Pacific rates, which is a reflection of the fact that all the new builds are coming into the Pacific market, so strengthening our presence there makes a lot of sense,” he said.

## Need safe routes

Wilkinson 11

Dr Angela Smith School of Enterprise and the Environment University of Oxford, November, http://www.smithschool.ox.ac.uk/wp-content/uploads/2011/03/SSEE-Arctic-Forecasting-Study-November-2011.pdf

Historically, transiting northerly routes over Europe, Asia, and North America has been difficult due to seasonal ice growth and the movement of ice through these routes during the short open season. Although historically focussed on securing trans-Arctic travel routes, Arctic voyages have been overwhelmingly destinational and mainly for community re-supply, marine tourism, and the movement of natural resources out of the Arctic. There are three different shipping fleet types that navigate the Arctic Ocean: Logistics and transport ships, industry services and locational ships, and fishing fleets. There were approximately 3,000 vessels in the Arctic in 2004. Of these, some 1,600 were fishing vessels that reported their activity and did not venture far into the Arctic Ocean [2]. The remaining 1,400 trips include short haul trips to various ports for resupply and resource extraction. Operations have been primarily in areas that are ice-free, either seasonally or yearround. In the past decade shipping has increased throughout the Arctic and in recent years icebreaking ships have frequently navigated the central Arctic Ocean in the summer. Alternative routes which link Europe and Asia through the north could be navigable for longer periods of the year (Figure 2). These are The Northwest Passage, a sea route through the Arctic Ocean linking Europe to Asia north of Canada, and the Northern Sea Route, a passage north of Europe and Asia. While an extended open season and receding multi-year ice are predicted, this in the short term results in weakening blockages or ‘ice bridges’ that flush or move ice through channels and straits. Thus polar shipping, though more accessible, is becoming more complex than is commonly assumed, especially in the Northwest Passage where navigation is increasingly hazardous. It was not until very recently that reliable voyages have been possible, and even those voyages occurred in a narrow window of opportunity (Appendix: Table 1). Thus while the reduction in sea ice may make the northern sea routes attractive to merchant mariners wishing to reduce voyage times, paradoxically in the short term hazards may be increased. Due to climate change the nature and extent of the hazards may be difficult to ascertain, at least in the near future.

## More Icebreakers k2 shipping

Konovalov 12

Alexei, Candidate of Sciences, head of the World’s Ocean Center at the State Research Institution “Council for the Study of the Productive Forces” (SOPS), Ministry of Economic Development of the Russian Federation and Russian Academy of Sciences, and the Section for Public–Private Partnership

Issues at the Science-Expert Council of the Government’s Marine Board. May 1, 2012, “The Arctic”http://www.institutenorth.org/assets/images/uploads/articles/The\_issues\_and\_prospects\_of\_an\_expanded\_arctic\_transportation\_network.pdf

A number of key problems hinder the Northern Sea Route’s full incorporation into the system of international transportation corridors. First of all, this approach implies the all-out degradation of coastal infrastructure, which is absolutely unprepared for the possible consequences of global climate change, and a specialized fleet. Such degradation has been sharply aggravated during the post-Soviet period. Of the ports in the Russian Arctic zone’s eastern sector, only Dudinka is in a satisfactory condition. The rudimentary and sometimes completely non-existent transportation and logistics infrastructure creates a discrepancy between the significance of tapping the natural-resource potential of Russia’s Arctic zone and the Arctic continental shelf and the requirements of facilitating national security and Russia’s impaired global competitiveness. Moreover, there are increasingly fewer chances for avoiding the onset of an “icebreaker pause” in 2016, due to the decommissioning of the operational icebreaker fleet, even if the keels of several versatile, multi-role and variable-draft nuclear-powered icebreakers are promptly laid. But demand for icebreakers will not diminish even with global warming, or it will decrease less intensively than other operational parameters of marine transportation and its support elements. It appears that small ice-resistant transport vessels will be replaced with larger and lighter vessels at a snail’s pace. There are several explana-tions for this. First, Arctic navigation is becoming increasingly longer. Consequently, the line icebreaker fleet comprising nuclear-powered and diesel vessels, as well as combined icebreakers/transport vessels, should expand considerably in order to facili-tate uninterrupted shipping. Second, all climatology forecasts usually mention sev-eral-year-old pack ice formations. At the same time, 12-month pack ice floes had been formed in the past and continue to form now not only in the shallow Arctic with its severe winters but also in the Caspian, Yellow and other seas located thousands of kilometers to the south. Third, the full-scale exploitation of hydrocarbon deposits on the continental shelf is inexorably drawing nearer. Consequently, demand for ice-breaker-assisted petroleum transshipment in freezing seas, such as the Baltic Sea, the White Sea and the Sea of Okhotsk, will increase. Fourth, highseas ice formations will become thinner and smaller. Quite possibly, such ice formations will become more dynamic in numerous regions where fast shore ice had previously formed, and where relatively stable navigation conditions had existed. This will require better ser-vice support, including icebreaker escorts, as well as more accurate ice-floe forecasts and improved technology for mapping ice migration. Fifth, the involvement of for-eign operators in the NSR will require more stringent ice-navigation standards for Arctic vessels as compared to other blue-water vessels. Sixth, navigation may be complicated by more mobile ice formations along narrow shipping lanes. Various hypothetical global climate-change scenarios notwithstanding, sea-going transporta-tion in the northern latitudes of the Arctic and sub-Arctic zones is beginning to facili-tate shipments, regardless of the political situation, as well as a certain flexibility in theThe issues and prospects of an expanded arctic transportation geography of Russian fuel and energy exports. Less importantly, it is becoming the most cost-effective means for delivering equipment and production machinery, food and the other materials required to support the life of the regional population and the operation of local territorial-production complexes.

## Icebreakers k2 New England ports

Morgan 11

Spring, LT Benjamin Morgan has served in the U.S. Coast Guard for nine years, including tours aboard domestic and polar icebreakers and in waterways management, “Domestic Icebreaking Operations,” http://www.uscg.mil/proceedings/Spring2011/articles/39\_Morgan.pdf

Under typical winter conditions, icebreaking may only be needed in the freshwater or brackish rivers and tributaries. However, during more severe conditions, coastal waterways leading to Boston, New York, Portland, the Cape Cod Canal, and isolated communities dependent on ferry services such as Nantucket may also require substantial icebreaking efforts. These efforts also benefit commercial fishing fleets by providing access in and out of port.

## Plan k2 new financial markets

Mayer 7

[Chris, The Daily Reckoning,](http://www.dailyreckoning.com.au/northwest-passage/2007/10/10/) October 10th, 2007, <http://www.dailyreckoning.com.au/northwest-passage/2007/10/10/>, “Northwest Passage Reopens Shipping Routes With Global Economic Impact,”

More than 90% of all goods in the world, measured by tonnage, make their way by sea. And as I’ve noted in the past, the rapid surge in trade with China and India is putting a lot of strain on ports around the world. In recent years, the volume of container shipments has grown 5-7% annually - basically, doubling every 10-15 years. The ships carrying those containers are getting bigger, and the old canals can’t hold these new seafaring beasts of burden as they once did. The Suez Canal can still handle the largest current container ships, but not the next generation. The Panama Canal is even smaller. It’s too small for ships that are now common on longer shipping routes. Panama plans to deepen its channels and make them wider. But even so, the new Panama Canal won’t be able to service the next generation of ships. So it looks like the world will have a new navigable ocean with the Northwest Passage. The effects on trade could be immense. Much shorter shipping distances and quicker shipping times will lower the cost of doing business. It could lead to big increases in trade and, certainly, a major shift in sea lanes. A freer-flowing Arctic Ocean would also bring fish stocks north - with fishing fleets not far behind. It could mean a new boom in fishing for salmon, cod, herring and smelt. It could also mean that sleepy old ports could become important new hubs in international trade. As the Financial Times recently wrote, “Leading world powers have an unprecedented chance to win navigation rights and ownership of resources in the Arctic seabed untouched since its emergence during the twilight of the dinosaurs.” The U.S. alone could lay claim to more than 200,000 square miles of additional undersea territory. The specific investment implications of this are still too early to say. But the cracking open of new trade routes or reopening of old ones - and their impact on global trade - always has ripple effects across financial markets. As for the Arctic, the Northwest Passage has got to be one of the most important new developments on that front in a long time.

## Shipping = 90% of global trade

Conathan 11

Michael Conathan, Director of Ocean Policy at the Center for American Progress, former staff member on the Senate Committee on Commerce, Science, and Transportation’s Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard, holds an M.A. in Marine Affairs from the University of Rhode Island, 2011 (“A Forecast for Disaster: Stormy Conditions Await if NOAA Funding Is Cut,” Center for American Progress, February 18th, Available Online at: http://www.americanprogress.org/issues/2011/02/noaa\_funding.html

Consider the following numbers: \* The $700 billion maritime commerce industry moves more than 90 percent of all global trade, with arrival and departure of quarter-mile long container ships timed to the minute to maximize revenue and efficiency. Shipping companies rely on accurate forecasts to set their manifests and itineraries. \* Forecasting capabilities are particularly strained at high latitudes and shippers have estimated that the loss of satellite monitoring capabilities could cost them more than half a billion dollars per year in lost cargo and damage to vessels from unanticipated heavy weather.

## Shipping k2 sustained economic growth

US Commission on Ocean Policy 4

“SUPPORTING MARINE COMMERCE AND TRANSPORTATION” 2004; <http://www.oceancommission.gov/documents/prepub_report/chapter13.pdf>

The U.S. marine transportation system is the nation’s link to global commerce and an essential and growing component of the national economy. The movement of manufacturing jobs from the United States to overseas, the nation’s dependence on raw materials from other countries, global competition to provide high quality goods at competitive prices, and consumer demand have combined to increase the nation’s dependence on the import of foreign materials and goods. At the same time, increasing affluence in foreign nations, coupled with worldwide population growth, has stimulated international demand for U.S. agricultural and manufactured products. The world’s oceans and inland waterways are the highways of choice for the global movement of this vast international trade. As the world’s largest trading nation, the United States imports and exports more merchandise than any other country and has one of the most extensive marine transportation systems in the world (Table 13.1).1 U.S. marine import-export trade accounts for nearly 7 percent of the nation’s gross domestic product.2 Domestically, coastal and inland marine trade amounts to roughly one billion tons of cargo, worth more than $220 billion a year.3 The U.S. marine transportation system is a complex public–private partnership with many participants. It consists of state, territorial, local, and privately-owned facilities managed, financed, and operated by federal, state, territorial, and local governments. The system is a highly complex and interconnected mix of waterways, ports and terminals, water- and land-based intermodal connections, vessels, vehicles, equipment, personnel, support service industries, and users. This system provides a number of services, including: supporting the waterborne movement of foreign and domestic cargo; moving passengers and vehicles through numerous ferry systems; serving recreational boating, commercial fishing vessels, and cruise liners; and generating millions of jobs for Americans and for the nation’s international trading partners. The U.S. marine transportation system also plays an important national security role as a point of entry for foreign shipment and a conduit for the movement of military equipment, supplies, and personnel to and from overseas locations.

## Arctic shipping is cheaper

Scarpati 12

Kevin Scarpati, 10/5/12 “Melting Polar Ice Opens New Arctic Shipping Routes” <http://www.supplychaindigital.com/global_logistics/melting-polar-ice-opens-new-arctic-shipping-routes>

Whether you believe in global warming or not, ice levels in the Arctic Sea reached the second-lowest point in recorded history, according to data released by NASA and the National Snow and Ice Data Center at the University of Colorado. While that’s potentially bad news for our environment, it’s great news for shippers in the Northern Hemisphere. This year’s record low opened up shipping passages through the Northwest Passage and Northern Sea for brief periods last month. Danish shipping company Nordic Bulk Carriers took full advantage of the new routes, and claimed to save one third of its usual shipping costs by taking shorter shipping routes to China through the Arctic. Less ice also meant for quicker trade for Nordic Bulk Carriers, who made the journey to China in nearly half the time. “We saved 1,000 tons of bunker fuel – nearly 3,000 tons of CO2 – on one journey between Murmansk [Russia] and north China,” Nordic Bulk Carriers Director Christian Bonfils told the Guardian. “The window for sailing the route is four months now, but the Russians say it is seven. When we can save 22 days on transportation, it is very good business for us.”

## Shipping k2 global trade

Lautenbacher 6

Conrad C. Lautenbacher, Jr., USN (Ret.) Under Secretary of Commerce for Oceans and Atmosphere NOAA Administrator “World Maritime Technology Conference” 🡨 spoken March 6, 2006; [www.pco.noaa.gov/PPTs/IMarEST.ppt](http://www.pco.noaa.gov/PPTs/IMarEST.ppt)

The Marine Transportation System was critical to the start of the United States as a nation and remains today the backbone of the country’s commerce Our Nation’s ports support nearly $2 trillion dollars in U.S. waterborne foreign trade. (Source: American Association of Port Authorities) Our Nation’s ports and waterways support the annual movement of more than 2.5 billion tons of domestic and international commerce. (Source – Maritime Administration) Our Nation’s coastal and inland waterways support our commerce, our recreation, and our national security. U.S. water carriers annually generate a gross output of $32 billion, purchase $24 billion in goods and services from other industries, and employ more than 57,000 workers. Public ports generate significant local and regional economic growth, directly creating jobs for more than 1 million Americans, and indirectly creating jobs for another 3.8 million. Waterborne commerce also generates more than $16 billion in federal, state, and local taxes. (Source: IMO) An example of how observations are affecting management decision today, we only have to look to the Coastal Ocean Observation System, a future component of GEOSS. In addition to providing Hurricane Forecast Models and Warnings prior to the Hurricanes landing, NOAA also worked to assist in the disaster relief and facilitated the reopening of the area’s Marine Transportation System. Hurricanes Katrina and Rita recently put NOAA to the test in using all of our technological and human knowledge to reopen the Gulf Coast area for international commerce. With the Mississippi River mouth closed to international traffic, grain from the Midwest could not be shipped out to Africa and Europe. Chiquita Bananas had to reroute shipment of bananas and other fresh produce to other areas. 25% of its imports went through Gulfport Mississippi. Half of the Folger’s Brand of coffee comes out of New Orleans The offshore oil and gas transportation infrastructure at Port Fourchon, including pipelines, processing facilities and tanker traffic were all shut in causing severe spikes in gasoline prices. Just one Trucking Company, Yellow Roadway lost a million dollars a day with no shipments coming in or out of New Orleans. NOAA deployed its resources, including response teams, hydrographic survey vessels, and state-of-the-art technologies, as part of a large scale federally-coordinated response effort. NOAA Navigation Response Teams directly contributed to relief efforts and the resumption of maritime commerce. NOAA NRTs provided critical information, supporting Coast Guard efforts to rapidly assess and reopen waterways, which allowed maritime-based relief efforts into impacted communities. The field teams conduct hazardous obstructions surveys and mapping support through out the Atlantic Seaboard, Pacific Coast, Great Lakes and the Gulf of Mexico. The field units operate in a 365 day a year environment to support NOAA's mission of promoting safe maritime navigation. The NRTs stand ready to respond to natural and manmade incidents in our waterways; their surveys enable authorities to reopen ports and channels to navigation after accidents and weather events. NOAA conducted damage assessment flights, collecting over 8300 images, covering 1600 miles of linear flight lines. The images captured include the coastal areas of Alabama, Mississippi, and Louisiana, including the ports of Mobile, Pascagoula, Gulfport, New Orleans, and Port Fourchon. Thirty-two tide stations operated by NOAA’s National Water Level Observation Network along the Gulf Coast disseminated storm tide conditions in real and near real-time as Hurricanes Katrina and Rita approached and made landfall. These stations were supplemented by thirty-one partner stations operated to NWLON standards, doubling the storm tide observing capacity in the Gulf, and demonstrating the value of an Integrated Ocean Observing System. The Houston/Galveston PORTS® provided important navigational information following Rita required by ship masters and pilots to avoid collisions and groundings. NOAA’s Continuously Operating Reference Stations (CORS) were operating in the area affected by Katrina, and collected data to support remote sensing missions and other GPS applications such as surveying and mapping activities associated with the post-hurricane recovery work. In the wake of Hurricane Katrina, NOAA is continuing providing invaluable scientific support to the our Coast Guard and Environmental Protection Agency and the States of Louisiana, Mississippi, and Alabama in their response efforts. NOAA Restoration Teams are working with state and federal partners to assess the impacts to natural resources and to plan for restoration, within the context of the broader recovery efforts. NOAA expertise is critical to mitigate harm, provide critical information for allocation of response assets, restore adverse effects on natural resources, aid planning and response decision-making, and document damages. We continue to monitor the ecosystem in the area. We are monitoring water quality and tissue samples from fish and bivalves. In an area known for being a dead zone, where we thought that due to the massive pollution associated with hazardous spills, we were finding some good news. We were able to open up the fisheries and that is another step in rebuilding the gulf coast economy. PHOTO Bottom Left: NCCOS Biologist is using a net tow to test for toxic phytoplankton (HAB). PHOTO Bottom Right: Bert and Emily of NRT 4 at Port Allen Nowhere is the interconnections of our globe more evident than in marine commerce and transportations. We are bridging the gap between economic development and those who use oceans to transport goods to the global economy. These are global concerns as we expand our economic integration and need to observe and connect systems to provide information from multiple data sources.

## Arctic shipping stimulates economy

Blunden 12

Margaret Independent research professional for the Royal Institute of International Affairs, 2012: <http://www.chathamhouse.org/sites/default/files/public/International%20Affairs/2012/88_1/88_1blunden.pdf>, “Geopolitics and the Northern Sea Route,” pg 120

Shifts in economic geography are also favouring the development of the NSR as a potential transit route linking Asia to the consumer markets of Europe. Distance is an important factor in the balance of advantage between trade routes. Hong Kong is equidistant from Rotterdam and other ports in northern Europe via either the NSR or the Suez Canal. The NSR is therefore shorter for all ports north-east of Hong Kong, and longer for those south of it. It is significant, in this context, that the economic centre of gravity in both Europe and Asia is moving northwards, in Europe from the west to the north-east, with the development of Central and Eastern Europe and the German economic boom, and in Asia from the south-east to the north, with the growth of China. 19 It is said that Asian mother ships, that is ships providing facilities and supplies for smaller vessels, are gradually abandoning South-East Asia for northern China. 20 Shifts of this kind in economic centres of gravity favour development of the NSR, and regular use of this route would further stimulate the economic growth of the northern European and Asian areas, in a self-sustaining feedback loop. Whatever the obstacles for regular intercontinental commercial transit of the NSR, its mere possibility appears to be affecting the calculations of the major exporters of northern Europe and the EU, particularly Germany, and of northern Asia, particularly China. German policy analysts are predicting hard struggles for influence in the far north—a new ‘great game’. 21

## Globalized trade solves war

Mandelbaum 99

Michael, Christian A. Herter Professor of American Foreign Policy, The Paul H. Nitze School of Advanced International Studies, Johns Hopkins University; Director, Project on East-West Relations, Council on Foreign Relations “Is Major War Obsolete?” February 25, 1999

Why is this so? Most simply, the costs have risen and the benefits of major war have shriveled. The costs of fighting such a war are extremely high because of the advent in the middle of this century of nuclear weapons, but they would have been high even had mankind never split the atom. As for the benefits, these now seem, at least from the point of view of the major powers, modest to non-existent. The traditional motives for warfare are in retreat, if not extinct. War is no longer regarded by anyone, probably not even Saddam Hussein after his unhappy experience, as a paying proposition. And as for the ideas on behalf of which major wars have been waged in the past, these are in steep decline. Here the collapse of communism was an important milestone, for that ideology was inherently bellicose. This is not to say that the world has reached the end of ideology; quite the contrary. But the ideology that is now in the ascendant, our own, liberalism, tends to be pacific. Moreover, I would argue that three post-Cold War developments have made major war even less likely than it was after 1945. One of these is the rise of democracy, for democracies, I believe, tend to be peaceful. Now carried to its most extreme conclusion, this eventuates in an argument made by some prominent political scientists that democracies never go to war with one another. I wouldn’t go that far. I don’t believe that this is a law of history, like a law of nature, because I believe there are no such laws of history. But I do believe there is something in it. I believe there is a peaceful tendency inherent in democracy. Now it’s true that one important cause of war has not changed with the end of the Cold War. That is the structure of the international system, which is anarchic. And realists, to whom Fareed has referred and of whom John Mearsheimer and our guest Ken Waltz are perhaps the two most leading exponents in this country and the world at the moment, argue that that structure determines international activity, for it leads sovereign states to have to prepare to defend themselves, and those preparations sooner or later issue in war. I argue, however, that a post-Cold War innovation counteracts the effects of anarchy. This is what I have called in my 1996 book, The Dawn of Peace in Europe, common security. By common security I mean a regime of negotiated arms limits that reduce the insecurity that anarchy inevitably produces by transparency-every state can know what weapons every other state has and what it is doing with them-and through the principle of defense dominance, the reconfiguration through negotiations of military forces to make them more suitable for defense and less for attack. Some caveats are, indeed, in order where common security is concerned. It’s not universal. It exists only in Europe. And there it is certainly not irreversible. And I should add that what I have called common security is not a cause, but a consequence, of the major forces that have made war less likely. States enter into common security arrangements when they have already, for other reasons, decided that they do not wish to go to war. Well, the third feature of the post-Cold War international system that seems to me to lend itself to warlessness is the novel distinction between the periphery and the core, between the powerful states and the less powerful ones. This was previously a cause of conflict and now is far less important. To quote from the article again, “ While for much of recorded history local conflicts were absorbed into great-power conflicts, in the wake of the Cold War, with the industrial democracies debellicised and Russia and China preoccupied with internal affairs, there is no great-power conflict into which the many local conflicts that have erupted can be absorbed. The great chess game of international politics is finished, or at least suspended. A pawn is now just a pawn, not a sentry standing guard against an attack on a king.”

## Gloabalization= no military actions

Gholz 2007

Eugene, Globalization, Systems Integration and the Future of Great Power World, Security Studies, Vol 16 Issue 4

This different type of globalization might resurrect Angell's argument for a commercial peace. According to Brooks, the new more intense globalization, characterized by complex multinational management and product development strategies, might undermine the gains from conquest more than previous episodes of globalization. So perhaps the contemporary globalization will truly change the incentives of great power leaders who might otherwise have considered military aggression. The argument that the globalization of production undermines the possibility of gains from conquest and therefore undermines the incentive for conquest readily links to liberal international relations theory. Rather than building a case for a particular paradigmatic approach, Brooks reminds us that globalization can also change states' military capabilities, thereby connecting his argument about contemporary globalization to realist theory.8 In particular, he argues that development and production of leading-edge military equipment now depends on global sourcing of components. These links would be vulnerable during a war, perhaps especially during a war of aggression, and without confidence in the reliability of its mobilization base, no great power is likely to risk launching a major war against another.9 The bottom line of Brooks' book is that foreign direct investment changes relationships among great powers in several ways, all of which point to a more peaceful future of great power politics.

## US Economy solves war

Khalilzad 11

Zalmay, February 8, “The Economy and National Security” National Review, <http://www.nationalreview.com/articles/259024/economy-and-national-security-zalmay-khalilzad>

Today, economic and fiscal trends pose the most severe long-term threat to the United States’ position as global leader. While the United States suffers from fiscal imbalances and low economic growth, the economies of rival powers are developing rapidly. The continuation of these two trends could lead to a shift from American primacy toward a multi-polar global system, leading in turn to increased geopolitical rivalry and even war among the great powers. The current recession is the result of a deep financial crisis, not a mere fluctuation in the business cycle. Recovery is likely to be protracted. The crisis was preceded by the buildup over two decades of enormous amounts of debt throughout the U.S. economy — ultimately totaling almost 350 percent of GDP — and the development of credit-fueled asset bubbles, particularly in the housing sector. When the bubbles burst, huge amounts of wealth were destroyed, and unemployment rose to over 10 percent. The decline of tax revenues and massive countercyclical spending put the U.S. government on an unsustainable fiscal path. Publicly held national debt rose from 38 to over 60 percent of GDP in three years. Without faster economic growth and actions to reduce deficits, publicly held national debt is projected to reach dangerous proportions. If interest rates were to rise significantly, annual interest payments — which already are larger than the defense budget — would crowd out other spending or require substantial tax increases that would undercut economic growth. Even worse, if unanticipated events trigger what economists call a “sudden stop” in credit markets for U.S. debt, the United States would be unable to roll over its outstanding obligations, precipitating a sovereign-debt crisis that would almost certainly compel a radical retrenchment of the United States internationally. Such scenarios would reshape the international order. It was the economic devastation of Britain and France during World War II, as well as the rise of other powers, that led both countries to relinquish their empires. In the late 1960s, British leaders concluded that they lacked the economic capacity to maintain a presence “east of Suez.” Soviet economic weakness, which crystallized under Gorbachev, contributed to their decisions to withdraw from Afghanistan, abandon Communist regimes in Eastern Europe, and allow the Soviet Union to fragment. If the U.S. debt problem goes critical, the United States would be compelled to retrench, reducing its military spending and shedding international commitments. We face this domestic challenge while other major powers are experiencing rapid economic growth. Even though countries such as China, India, and Brazil have profound political, social, demographic, and economic problems, their economies are growing faster than ours, and this could alter the global distribution of power. These trends could in the long term produce a multi-polar world. If U.S. policymakers fail to act and other powers continue to grow, it is not a question of whether but when a new international order will emerge. The closing of the gap between the United States and its rivals could intensify geopolitical competition among major powers, increase incentives for local powers to play major powers against one another, and undercut our will to preclude or respond to international crises because of the higher risk of escalation. The stakes are high. In modern history, the longest period of peace among the great powers has been the era of U.S. leadership. By contrast, multi-polar systems have been unstable, with their competitive dynamics resulting in frequent crises and major wars among the great powers. Failures of multi-polar international systems produced both world wars. American retrenchment could have devastating consequences. Without an American security blanket, regional powers could rearm in an attempt to balance against emerging threats. Under this scenario, there would be a heightened possibility of arms races, miscalculation, or other crises spiraling into all-out conflict. Alternatively, in seeking to accommodate the stronger powers, weaker powers may shift their geopolitical posture away from the United States. Either way, hostile states would be emboldened to make aggressive moves in their regions. As rival powers rise, Asia in particular is likely to emerge as a zone of great-power competition. Beijing’s economic rise has enabled a dramatic military buildup focused on acquisitions of naval, cruise, and ballistic missiles, long-range stealth aircraft, and anti-satellite capabilities. China’s strategic modernization is aimed, ultimately, at denying the United States access to the seas around China. Even as cooperative economic ties in the region have grown, China’s expansive territorial claims — and provocative statements and actions following crises in Korea and incidents at sea — have roiled its relations with South Korea, Japan, India, and Southeast Asian states. Still, the United States is the most significant barrier facing Chinese hegemony and aggression. Given the risks, the United States must focus on restoring its economic and fiscal condition while checking and managing the rise of potential adversarial regional powers such as China.

# \*\*\*Russia Advantage\*\*\*

## Leadership/Russia Uniqueness, Now Key

Fairbanks Daily News 14

The race for the arctic oceans: Alaska can’t afford delays in evolving shipping lanes off its north coast Posted: Wednesday, May 21, 2014 12:28 am

Fairbanks Daily News-Miner editorial http://www.newsminer.com/opinion/editorials/the-race-for-the-arctic-oceans-alaska-can-t-afford/article\_e53cd404-e0c1-11e3-b6fb-001a4bcf6878.html

Unfortunately for America, other arctic nations like Canada and Russia aren’t sitting on their hands in the same manner. In addition to its more well-publicized pushes into Ukraine, Russia has for the past several years been aggressive in asserting its territorial rights in arctic waters. In addition to expanded military patrols and the symbolic act of planting a Russian flag on the sea floor at the North Pole, the Kremlin has recently surveyed the country’s continental shelf to aid in defense of its claims. Last year, 71 ships moved 1.3 million pounds of cargo in the waters off Russia’s north coast, amply demonstrating the country’s commitment to northern shipping. Coast Guard capacity tells a similar story — Russia operates more than 30 icebreakers, while Canada has six. Depending on their states of repair, the United States has either two or one in service, with no plans to build more. Even if new icebreakers were funded tomorrow, the timetable for their construction is about eight years, roughly the same as construction of a deepwater port would take if permitting, design and construction proceeded efficiently. America is well behind in a race that so far it has given little indication it knows it’s even running. With the U.S. slated to take a leadership role as chair of the Arctic Council next year, Alaska — and the rest of the country — can’t afford to waste any more time.

## Russia beating U.S. now, Icebreakers key

Panin 14

Nuclear Icebreakers Clear the Way for Arctic Oil By [Alexander Panin](http://www.themoscowtimes.com/sitemap/authors/477792.html), journalist for the Moscow Times Apr. 27 2014: http://www.themoscowtimes.com/business/article/nuclear-icebreakers-clear-the-way-for-arctic-oil/498968.html

The importance of icebreakers’ work leading ships to safety through the freezing waters of the Northern Sea Route rises even more as, despite the dangers, the exploration work on hydrocarbons in Russia’s northern coastal shelf gathers pace. In April, state-owned Gazprom shipped the first 70,000 tons of oil from the Prirazlomnaya oil field in the Pechora Sea. And within the next three years there are plans to start shipping liquefied natural gas from the Yamal Peninsula under an international project called Yamal LNG. Ice is a major threat to vessels shipping out hydrocarbons or those bringing in supplies. It is also a barrier to commercial transit navigation from China to Europe. The Frozen Seaway The Northern Sea Route stretches from the Kara Sea to the South Siberian Sea, and links with the Bering Strait between Asia and North America. When connected with the ice-free waters to the south, it becomes the shortest seaway between European ports and China. Because of harsh conditions, navigation in these waters is possible for only half of the year. And even then ships may not be safe without an icebreaker escort. To make year-round navigation possible, more ice-class ships are needed as conditions do not seem to be improving drastically. Despite talk of global warming, the polar ice seems to be showing signs of coming back in strength. European satellite Cryosat surveys of the Arctic Rim revealed that over last year the ice-covered area grew by 50 percent from 2012. The satellite, launched in 2010 to study the Arctic ice, had since then been reporting receding ice coverage in the region. Just a few years ago scientists predicted all of the Arctic ice would melt before the end of 2013. Now they are postponing their forecasts for another decade. Ice is a hazard for shipping not only on the Northern Sea Route, but in the neighboring Baltic Sea waters, which are considered milder in terms of ice coverage. Two years ago the nuclear-powered icebreaker Vaigach set a record rescuing 250 ships from the ice in the Baltic over a period of 1 1/2 months. Built For A Purpose Ships have to be specially designed and equipped to sail through ice. A conventional icebreaker uses the energy from its engines to slide over the ice and crush it with its own weight.

An icebreaker has to combine three characteristics to be successful and survive in inhospitable waters. First, a reinforced body prevents the ship from being gripped and crushed by ice from the sides. Second, a specially designed hull lets it roll over thick ice. And third, it needs a hugely powerful engine to keep it going in even the worst of conditions. “Today, the most powerful thrust is achieved only with the use of nuclear energy,” said Vyacheslav Ruksha, the head of Atomflot, a subsidiary of state-owned nuclear energy corporation Rosatom that manages nuclear icebreakers. Russia, with the biggest icebreaker fleet in the world, has an advantage no other country possesses. It has more than 30 icebreakers of different classes, six of which run on nuclear power and are strong enough to move through ice more than 2 meters thick — which they have to navigate when escorting ships in the Kara Sea. Another advantage of nuclear power is that these ships have a very high level of autonomy. In the Arctic, where there may be no ports for hundreds of nautical miles around and no means to refuel, this is crucial. “Even the most advanced diesel-powered icebreakers consume 350 to 400 tons of fuel a day,” Ruksha said. “If you want such a ship to sail autonomously for two months, for instance, you can calculate how much fuel would first have to be stored somewhere and then blown as exhaust into the sea.” Russia’s newest nuclear icebreaker — the 50 Let Pobedy, or 50 Years of Victory — is currently the biggest and most powerful in the world. Almost 160 meters long and 30 meters wide, its two nuclear-powered engines are capable of jointly producing 55 megawatts of power — enough to cover the electricity needs of a small city. The only existing icebreaker of a similar class in the world is the U.S. diesel-electric and gas-powered Polar Star, built in 1976. New Generation of Ice Warriors However, while Russia’s fleet is impressive, it is aging. Most of its most powerful ships were built during the Soviet era and they are now more than 20 years old, and many of the oldest have had their service lives extended. If not for new shipbuilding projects, the "50 Let Pobedy," built in 2007, would be the only Russian nuclear icebreaker by 2021. Knowing this, Atomflot has in recent years launched a multi-billion dollar program to build new — and even more powerful — icebreakers. In November 2013, United Shipbuilding Company, or USC, a state-owned ship building giant, began work on what is to become the biggest and most powerful icebreaker in the world. Called Project 22220 and named Arctica, it will be as tall as an 18-story apartment building and 173 meters long. With its nuclear engines giving out 60 megawatts of power, it will be able to tackle ice up to three meters thick. The ship is scheduled to sail in 2017. Atomflot plans to order two more ships of this class, but has not yet agreed on a price with the USC. The estimated cost of building three nuclear powered icebreakers is about $3 billion, Ruksha said. In 2011, USC also started building a smaller diesel-electric icebreaker, slated for completion in 2015. Finland has also been actively purchasing icebreakers.

At the beginning of this year, a joint venture between USC and Arctech Helsinki Shipyard, a Finnish affiliate of South Korean heavy equipment holding company STX, won a tender to build an icebreaker for Finnish Transport Agency. The vessel, capable of passing through ice up to 1.6 meters thick, is planned to be delivered by the end of 2016. Canada, the U.S., Germany and Norway also have plans to build new icebreakers but no concrete dates for starting construction.

## Russia dominating arctic now, multiple ways

Bodner 14

“Russian Navy is Planning Summer Expeditions to Contested Arctic Region” By [Matthew Bodner](http://www.themoscowtimes.com/sitemap/authors/488945.html), journalist for the Moscow Times May. 21 2014: http://www.themoscowtimes.com/business/article/russian-navy-is-planning-summer-expeditions-to-contested-arctic-region/500642.html

The Russian Navy is planning a number of expeditions in the Arctic this summer as the country looks to strengthen its position in the increasingly contested region, which is home to the world's largest untapped oil reserves. The expeditions will see ships being sent to Franz Josef Land, Severnaya Zemlya, the Novosibirsk Islands archipelago and Wrangel Island, Northern Fleet Admiral Andrei Korablev said Wednesday during talks on Russia's interests in the Arctic.Russia is also planning to install military infrastructure on almost all of the islands and archipelagos of the Arctic Ocean to create a unified system of monitoring air, surface and subsurface conditions, Korablev said, RIA Novosti reported.Last month President Vladimir Putin called for the establishment of a unified command structure for Russian surface and submarine vessels operating in the Arctic, and the creation of a new public authority to govern the region.Russia began shipping the first oil extracted from the Arctic shelf that month.The Russian military began beefing up its presence in the Arctic last year with reopening of a military base in the Novosibirsk Islands archipelago, which was abandoned 20 years ago. The base has been reinforced with 10 warships and four nuclear-powered icebreakers.

Korablev also said that Russia will continue scientific research and navigation in the Arctic,  which he says serve the country's military and commercial maritime interests. Control over the region is being contested by Russia, the U.S., Denmark, Norway, Canada and, more recently, China, which has expressed interest in the Northern Sea Route.

## Icebreakers key to China

Panin 14

Nuclear Icebreakers Clear the Way for Arctic Oil By [Alexander Panin](http://www.themoscowtimes.com/sitemap/authors/477792.html), journalist for the Moscow Times Apr. 27 2014: http://www.themoscowtimes.com/business/article/nuclear-icebreakers-clear-the-way-for-arctic-oil/498968.html

China also has an icebreaker building program. One of its new ships, the White Dragon, was recently deployed on ice patrol in the Antarctic. Icy Water Logistics The Northern Sea Route cuts about half the distance off the conventional route from Asian ports to Europe through the Suez Canal. One of the countries most interested in the seaway is China, which has seen its import and export volumes boom in recent decades. Last summer, Russian icebreakers led the first Chinese commercial ship through the Northern Sea Route on its way to the Dutch port of Rotterdam. It made its destination even faster than planned, and almost two weeks earlier than it would have if it had gone via the traditional route through the Suez Canal. According to the American Bureau of Shipping, 71 ships sailed through the Northern Sea Route in 2013, 54 percent more than in 2012.

But even though the transit potential of the seaway is growing, it will still be nowhere near the volumes that go through the Suez Canal, shipping experts said. The Suez handled about 900 million tons of cargo in 2013, and only 5 million to 10 million tons of transit shipping volumes are expected to come to the northern route in the coming years. “Cargo volumes do not originate close enough to the route,” said Henrik Falck, chairman of the board of Norwegian Tschudi Shipping Company. Most trans-continental container routes pass between the ports of China, Australia, North and South America, he said, which is too far south of the Northern Sea Route. Instead, cargo for the Northern route should originate in the north — in Europe and in Russia itself, he said. And the existing potential of this region means icebreakers will not remain idle in the dockyard. Atomflot’s Ruksha agreed. The Arctic-class vessels were originally built to pave way for caravans shipping supplies for Norilsk Nickel and to export its products, as the mining giant has no other means of transportation, he said. “Now our task is to help Yamal LNG vessels go safe through the ice-covered waters,” he said, adding that when fully developed the project will increase annual cargo volumes in the Northern Sea Route by over 17 million tons.

## Plan k2 check Russia (competitiveness)

Bryanski 11

Gleb, Sep 22, <http://www.reuters.com/article/2011/09/22/us-russia-arctic-idUSTRE78L5TC20110922>

Russian plans to revive the Soviet-era shipping lane as polar ice cover receded to near record lows this summer could speed energy deliveries to China and boost business for cargo suppliers such as state-owned Sovkomflot. Officials at the Arctic Forum in the White Sea port city of Arkhangelsk said Russia must develop infrastructure to guard against oil spills, revamp ports and build more icebreakers to realize Putin's vision of year-round shipments. "The shortest route between Europe's largest markets and the Asia-Pacific region lie across the Arctic. This route is almost a third shorter than the traditional southern one," Putin told participants, who included Iceland President Olafur Grimsson. High energy prices fueled by demand from China and other emerging economies are helping spur interest in the Northern Sea Route, which trims 4,000 nautical miles off the southern alternative via the Suez Canal. "I want to stress the importance of the Northern Sea Route as an international transport artery that will rival traditional trade lanes in service fees, security and quality," Putin said. "States and private companies who chose the Arctic trade routes will undoubtedly reap economic advantages."

## Heg solves china war

Thayer 06

Bradley A., Assistant Professor of Political Science at the University of Minnesota, Duluth, The National Interest, November -December, “In Defense of Primacy”, lexis]

They are the "Gang of Five": China, Cuba, Iran, North Korea and Venezuela. Of course, countries like India, for example, do not agree with all policy choices made by the United States, such as toward Iran, but New Delhi is friendly to Washington. Only the "Gang of Five" may be expected to consistently resist the agenda and actions of the United States. China is clearly the most important of these states because it is a rising great power. But even Beijing is intimidated by the United States and refrains from openly challenging U.S. power. China proclaims that it will, if necessary, resort to other mechanisms of challenging the United States, including asymmetric strategies such as targeting communication and intelligence satellites upon which the United States depends. But China may not be confident those strategies would work, and so it is likely to refrain from testing the United States directly for the foreseeable future because China's power benefits, as we shall see, from the international order U.S. primacy creates.

## Perception of heg decline independently cause wars

Goldstein 7

Goldstein 7 Professor of Global Politics and International Relations @ University of Pennsylvania “Power transitions, institutions, and China's rise in East Asia: Theoretical expectations and evidence,” Journal of Strategic Studies, Volume 30, Issue 4 & 5 August 2007, pages 639 – 682

Two closely related, though distinct, theoretical arguments focus explicitly on the consequences for international politics of a shift in power between a dominant state and a rising power. In War and Change in World Politics, Robert Gilpin suggested that peace prevails when a dominant state’s capabilities enable it to ‘govern’ an international order that it has shaped. Over time, however, as economic and technological diffusion proceeds during eras of peace and development, other states are empowered. Moreover, the burdens of international governance drain and distract the reigning hegemon, and challengers eventually emerge who seek to rewrite the rules of governance. As the power advantage of the erstwhile hegemon ebbs, it may become desperate enough to resort to the ultima ratio of international politics, force, to forestall the increasingly urgent demands of a rising challenger. Or as the power of the challenger rises, it may be tempted to press its case with threats to use force. It is the rise and fall of the great powers that creates the circumstances under which major wars, what Gilpin labels ‘hegemonic wars’, break out.13 Gilpin’s argument logically encourages pessimism about the implications of a rising China. It leads to the expectation that international trade, investment, and technology transfer will result in a steady diffusion of American economic power, benefiting the rapidly developing states of the world, including China. As the US simultaneously scurries to put out the many brushfires that threaten its far-flung global interests (i.e., the classic problem of overextension), it will be unable to devote sufficient resources to maintain or restore its former advantage over emerging competitors like China. While the erosion of the once clear American advantage plays itself out, the US will find it ever more difficult to preserve the order in Asia that it created during its era of preponderance. The expectation is an increase in the likelihood for the use of force – either by a Chinese challenger able to field a stronger military in support of its demands for greater influence over international arrangements in Asia, or by a besieged American hegemon desperate to head off further decline. Among the trends that alarm those who would look at Asia through the lens of Gilpin’s theory are China’s expanding share of world trade and wealth (much of it resulting from the gains made possible by the international economic order a dominant US established); its acquisition of technology in key sectors that have both civilian and military applications (e.g., information, communications, and electronics linked with to forestall, and the challenger becomes increasingly determined to realize the transition to a new international order whose contours it will define. the ‘revolution in military affairs’); and an expanding military burden for the US (as it copes with the challenges of its global war on terrorism and especially its struggle in Iraq) that limits the resources it can devote to preserving its interests in East Asia.14 Although similar to Gilpin’s work insofar as it emphasizes the importance of shifts in the capabilities of a dominant state and a rising challenger, the power-transition theory A. F. K. Organski and Jacek Kugler present in The War Ledger focuses more closely on the allegedly dangerous phenomenon of ‘crossover’– the point at which a dissatisfied challenger is about to overtake the established leading state.15 In such cases, when the power gap narrows, the dominant state becomes increasingly desperate. Though suggesting why a rising China may ultimately present grave dangers for international peace when its capabilities make it a peer competitor of America, Organski and Kugler’s power-transition theory is less clear about the dangers while a potential challenger still lags far behind and faces a difficult struggle to catch up. This clarification is important in thinking about the theory’s relevance to interpreting China’s rise because a broad consensus prevails among analysts that Chinese military capabilities are at a minimum two decades from putting it in a league with the US in Asia.16 Their theory, then, points with alarm to trends in China’s growing wealth and power relative to the United States, but especially looks ahead to what it sees as the period of maximum danger – that time when a dissatisfied China could be in a position to overtake the US on dimensions believed crucial for assessing power. Reports beginning in the mid-1990s that offered extrapolations suggesting China’s growth would give it the world’s largest gross domestic product (GDP aggregate, not per capita) sometime in the first few decades of the twentieth century fed these sorts of concerns about a potentially dangerous challenge to American leadership in Asia.17 The huge gap between Chinese and American military capabilities (especially in terms of technological sophistication) has so far discouraged prediction of comparably disquieting trends on this dimension, but inklings of similar concerns may be reflected in occasionally alarmist reports about purchases of advanced Russian air and naval equipment, as well as concern that Chinese espionage may have undermined the American advantage in nuclear and missile technology, and speculation about the potential military purposes of China’s manned space program.18 Moreover, because a dominant state may react to the prospect of a crossover and believe that it is wiser to embrace the logic of preventive war and act early to delay a transition while the task is more manageable, Organski and Kugler’s power-transition theory also provides grounds for concern about the period prior to the possible crossover.19 pg. 647-650

## **Heg solves Russia**

Brezinski 12

Zbigniew Kazimierz Brzezinski is a Polish American political scientist, geostrategist, and statesman who served as United States National Security Advisor to President Jimmy Carter from 1977 to 1981. Jan/ Feb, “8 Geopolitically Endangered Species,” http://www.foreignpolicy.com/articles/2012/01/03/8\_geopolitically\_endangered\_species?page=0,7)

Kiev's relationship with Moscow has been as prone to tension as its relationship with the West has been prone to indecision. In 2005, 2007, and 2009, Russia either threatened to or did stop oil and natural gas from flowing to Ukraine. More recently, President Viktor Yanukovych was pressured to extend Russia's lease of a naval base at the Ukrainian Black Sea port of Sevastopol for another 25 years in exchange for preferential pricing of Russian energy deliveries to Ukraine. The Kremlin continues to press Ukraine to join a "common economic space" with Russia, while gradually stripping Ukraine of direct control over its major industrial assets through mergers and takeovers by Russian firms. With America in decline, Europe would be less willing and able to reach out and incorporate Ukraine into an expanding Western community, leaving Ukraine more vulnerable to Russian designs. At stake: The renewal of Russian imperial ambitions.

## Russia War Good

1. A war with Russia is inevitable—winning is essential for US dominance

Telegraph, 07

Adrian Blomfield, Telegraph's Moscow correspondent, Analyst for Middle East, Russia, and Georgia, “Retired generals predict US-Russia war”] 7/17/07, http://www.telegraph.co.uk/news/worldnews/1557726/Retired-generals-predict-US-Russia-war.html

Capitalising on the increasingly bellicose rhetoric in Moscow, a group of influential retired generals yesterday said the United States was preparing to invade Russia within a decade. Interviewed by Komsomolskaya Pravda, Russia's biggest circulation newspaper, the four senior generals - who now direct influential military think tanks - said the United States had hatched a secret plan to seize the country's vast energy resources by force. "The US is both laying the ground and preparing its military potential for a war with Russia," said Gen Leonid Ivashov, a former joint chief of staff. "Anti-Russian sentiment is being fostered in the public opinion. The US is desperate to implement its century-old dream of world hegemony and the elimination of Russia as its principal obstacle to the full control of Eurasia." The generals said the conflict would inevitably spark a third world war, but predicted it would be fought only with conventional weapons or "low impact" nuclear missiles. Dismissed by some critics as the Cold War nostalgia of a handful of Soviet dinosaurs, such opinions nevertheless reflect a growing mood of nationalism both within the Kremlin and among many ordinary Russians wistful for lost superpower status. Engaged in a bitter dispute with Washington over its plans to erect a missile defence shield in central Europe, Vladimir Putin has increasingly used the kind of anti-American rhetoric many assumed had disappeared with the Cold War. Once more casting the United States as Russia's main threat, the Russian president, a former KGB spy, has accused Washington of "diktat" and "imperialism" - even going so far as to liken America to the Third Reich.

2. U.S. hegemony is key to prevent global nuke war

Khalilzad 95

Zalmay Khalilzad (Senior Policy analyst at the RAND Institute) 1995 "Losing the Moment? The United States and the World After the Cold War", Spring Washington Quarterly

Under the third option, the United States would seek to retain global leadership and to preclude the rise of a global rival or a return to multipolarity for the indefinite future. On balance, this is the best long-term guiding principle and vision. Such a vision is desirable not as an end in itself, but because a world in which the United States exercises leadership would have tremendous advantages. First, the global environment would be more open and more receptive to American values -- democracy, free markets, and the rule of law. Second, such a world would have a better chance of dealing cooperatively with the world's major problems, such as nuclear proliferation, threats of regional hegemony by renegade states, and low-level conflicts. Finally, U.S. leadership would help preclude the rise of another hostile global rival, enabling the United States and the world to avoid another global cold or hot war and all the attendant dangers, including a global nuclear exchange. U.S. leadership would therefore be more conducive to global stability than a bipolar or a multipolar balance of power system.

3. US has first-strike capacity for now

Artyukov and Trukhachev 06

Oleg and Vadim, Centre for Research on Globalization, “US Capable Of Wiping Out Russia’s Nuclear Capacity In A Single Strike”] 3/23/06, <http://www.globalresearch.ca/index.php?context=va&aid=2154>

For the first time in the last 50 years the USA is on the verge of attaining ultimate domination with regard to nuclear weapons. This means that Russia is no longer able to keep up with the United States. If a conflict were to break out, the USA would be able to quickly and with impunity attack Russian territory, and Russia would have no means to mount a response. This is roughly the message of an article published in the latest edition of the American journal Foreign Affairs. Its authors calculated that in comparison with the USSR, the amount of strategic bombers at Russia’s disposal has fallen by 39%, intercontinental ballistic missiles by 58% and the number of submarines with ballistic missiles by 80%. “However the true scale of the collapse of the Russian arsenal is much greater than can be judged from these figures,” they write. “The strategic nuclear forces now at Russia's disposal are barely fit to be used in battle.” Russian radar is now incapable of detecting the launch of American missiles from submarines located in some regions of the Pacific Ocean. Russian anti-air defense systems might not manage to intercept B-2 stealth bombers in time, which could easily mean that they are able to inflict a strike with impunity on Russian nuclear forces. If Russian missile forces continue to decrease at the current rate, then in about 10 years only isolated missiles, which the American anti-missile defense is capable of intercepting, will be able to deliver a retaliatory blow. “It will probably soon be possible for the USA to destroy the strategic nuclear potential of Russia and China with a single strike,” says the article. The article’s authors come to the conclusion that all this may stabilize the worldwide hegemony of the USA and sustain the foreign policy course of the USA, which aims to prevent the appearance of another power centre in the world of equal strength, and to exclude the possibility of weaker nations undermining American positions in key regions around the world, such as the in Persian Gulf. Russian experts reacted extremely guardedly to the article in the American journal. It is obvious that Russian strategic nuclear forces are experiencing difficult times. Modernization is being carried out, but at a very slow rate. In the 1990s the Russian submarine fleet was almost totally destroyed. And it hardly seems possible to revive it in the coming years, as this would require colossal funds. But it also obvious that it is completely unjust to talk of the USA’s domination with regard to nuclear weapons. This aim is unattainable within the next decade. “At least until 2015 it is unlikely that Russia’s nuclear containment capacity will noticeably diminish, as there are still some launch systems among the strategic missile forces that Russia can still rely on for a considerable length of time, capable of delivering an effective retaliatory strike,” senior academic at the RAN Institute of World Economics and International Relations Vladimir Dvorkin told Interfax. He has previously headed four research institutes in the Russian Ministry of Defense, devoted to problems of strategic weapons. However, the main message of the article in the American journal is not that Russian nuclear forces are rapidly falling into decay and do not represent a significant threat to the USA. It is just that in Washington ever more vehement arguments can be heard that Russia is of no particular value to the USA as a political partner. We should take into account that this journal Foreign Affairs is published by the Council on Foreign Relations. As recently as the 6th March it published a report entitled “Russia’s incorrect course”, the main idea of which was that Russia’s opinion is now only important to the USA on certain questions and that the paths of the two countries are significantly diverging. Therefore the article on the forthcoming “nuclear domination” of the United States is no more than an attempt to “scientifically” expound the theory that Russia is of absolutely no use as a partner. Therefore it could be that we will not have to wait long to find out something new about our own country. That prospect is no less gripping… Comments from experts: Aleksey Arbatov, Director for the Centre of International Security IMEMO RAN: At the current time there is no cause for concern. But in the next 10-15 years Russia will have to improve the ground-based component of its nuclear forces – for example, its ground-based radar system and warning system for a missile attack. If it does not do that, then many systems will go out of date, nuclear parity will be lost, and the USA will gain a definite advantage.

4. But, Russia is rapidly modernizing their military capacity—this makes a future war unwinnable

McDermott 09

Roger, Honorary Senior Research Fellow, Department of Politics and International Relations, University of Kent at Canterbury (UK) and Senior Fellow in Eurasian Military Studies, Jamestown Foundation, Washington, DC., on the Editorial Board of Central Asia and the Caucasus, Scientific Board of the Journal of Power Institutions in Post-Soviet Societies, Editor of Central Asia, Graduate of the University of Oxford, Radio Free Europe, “Russia’s Armed Forces Undergoing 'Unparalleled' Transformation”

In the aftermath of the Russia-Georgia war of August 2008, Russia's political and military elites embarked on a highly ambitious program to reform and modernize the armed forces by 2020. That program envisages abandoning the mass-mobilization principle in favor of forming mobile, permanent-readiness forces, capable of reacting to the order to deploy within "one hour." In April 2009, U.S. Director of National Intelligence Denis Blair said in unclassified written answers to the Senate Intelligence Committee that the ongoing reshaping of Russia's ground forces will enable it to "militarily dominate" most of its neighbors. Russian Defense Minister Anatoly Serdyukov has been castigated by some domestic opponents who argue that his reform will destroy the Russian Army. Yet, dramatically downsizing its oversized officer corps to maximize efficiency, switching from a division-based to a brigade-based table of organization, and reforming the General Staff Academy and the system of military education pale in comparison with the huge challenges involved in modernizing its aging equipment and weapons inventory. Many aspects of the reform agenda are so radical, far-reaching, and multifaceted that Western and Russian commentators have failed to identify the key elements. One widespread misconception is related to the affordability of the plan to downsize the officer corps by 205,000 by 2012. Since doing so will undoubtedly be very costly, especially in light of the current economic crisis, many dismissed this as another failed bid to reform the structures. In fact, Western interpretations of these reforms have consistently underestimated key aspects of the program, assessing it primarily in terms of Russian economic potential and stressing the officer downsizing. Many aspects of the present agenda, currently far advanced, are thus missed, ignored, or simply ridiculed as signs of impending failure. They include the speed of transferring to brigade structures; overhauling the system of military education; radically changing the General Staff Academy; introducing a civilian chaplaincy; rewriting the manuals on combat training; and focusing on noncommissioned-officer (NCO) training and testing the new structures. 'New Look' By June 2009, the mass mobilization, division-based system had already largely disappeared. In its place, more than half the required brigades were already formed and exercises and training were geared to testing and developing these new structures. The Russian media coined the phrase "new look" to describe these monumental changes. However, there appears to be something more going on than simply concentrating on appearance; this is no public-relations campaign. Indeed, it is impossible to understand the ongoing transformation of the Russian armed forces by measuring it in terms of Western paradigms, such as its inability to conduct noncontact warfare, or by emphasizing the armed forces' lack of sophisticated modern weaponry. The Russian military is changing fast; few are able to perceive the sheer breathtaking scale of these changes, and the familiar methods of assessing its conventional capabilities are passing into history. Analysts, commentators, and decision makers on all sides are unable to fit the "new look" Russian military into a familiar pattern. One thing is clear: By the end of this year, the Russian Army will be unrecognizable. While the main focus of the reform campaign is to produce mobile, permanent-readiness formations capable of intervention within a relatively short period, which some might perceive as a Western paradigm, in reality any improvement to Russia's conventional forces will have implications for the country's foreign and defense policies. While it is very likely that the structures that emerge will still compare unfavorably with Western militaries, they will nonetheless meet the needs of a modern and potentially resurgent Russia, enhancing its capability to project power within its "near abroad." What must be stressed is that the current condition of these forces is so decrepit and desperately in need of modernizing that the reform agenda will not contribute to improving "interoperability" with NATO forces for future peace support operations. Such a benevolent strategy would require both political will and intensive supporting programs agreed between Moscow and NATO. Both are unrealistic given the shift in the geopolitical landscape after the Georgia war and the ongoing opposition in Moscow towards any future eastward expansion of the alliance. Moreover, without these programs, the lives of allied personnel could be potentially jeopardized by any ill-conceived plan to create interoperability. Indeed, analyses of the Russian military in the wake of the Georgia conflict, which exposed many of its conventional failings, concentrated on its future military requirements in precisely this context. For instance, although one key feature of the large-scale military exercises Kavkaz 2009 in late June was to test the new brigade structures under an "antiterrorist" guise, those exercises appeared to rehearse an improved version of intervention in Georgia. Unrecognizable Much of the reform program also appears hurried, such as introducing widespread changes within the manning system before a revised military doctrine (expected in late 2009) is published. On August 10, President Dmitry Medvedev sent a bill to the Duma that constitutes the legal basis for future intervention by the Russian military abroad in protection of its citizens or its national interests. Until the reforms are completed, it is difficult to extrapolate policy implications, but one thing is clear: By the end of this year, the Russian Army will be unrecognizable.

## China Scenario

China’s rise causes war

Mearsheimer 05

John Mearsheimer, January 2005. Professor of political science at the University of Chicago, Foreign Policy, <http://www.foreignpolicy.com/story/cms.php?story_id=2740>.

China cannot rise peacefully, and if it continues its dramatic economic growth over the next few decades, the United States and China are likely to engage in an intense security competition with considerable potential for war. Most of China’s neighbors, including India, Japan, Singapore, South Korea, Russia, and Vietnam, will likely join with the United States to contain China’s power. To predict the future in Asia, one needs a theory that explains how rising powers are likely to act and how other states will react to them. My theory of international politics says that the mightiest states attempt to establish hegemony in their own region while making sure that no rival great power dominates another region. The ultimate goal of every great power is to maximize its share of world power and eventually dominate the system. The international system has several defining characteristics. The main actors are states that operate in anarchy—which simply means that there is no higher authority above them. All great powers have some offensive military capability, which means that they can hurt each other. Finally, no state can know the future intentions of other states with certainty. The best way to survive in such a system is to be as powerful as possible, relative to potential rivals. The mightier a state is, the less likely it is that another state will attack it. The great powers do not merely strive to be the strongest great power, although that is a welcome outcome. Their ultimate aim is to be the hegemon—the only great power in the system. But it is almost impossible for any state to achieve global hegemony in the modern world, because it is too hard to project and sustain power around the globe. Even the United States is a regional but not a global hegemon. The best outcome that a state can hope for is to dominate its own backyard. States that gain regional hegemony have a further aim: to prevent other geographical areas from being dominated by other great powers. Regional hegemons, in other words, do not want peer competitors. Instead, they want to keep other regions divided among several great powers so that these states will compete with each other. In 1991, shortly after the Cold War ended, the first Bush administration boldly stated that the United States was now the most powerful state in the world and planned to remain so. That same message appeared in the famous National Security Strategy issued by the second Bush administration in September 2002. This document’s stance on preemptive war generated harsh criticism, but hardly a word of protest greeted the assertion that the United States should check rising powers and maintain its commanding position in the global balance of power. China is likely to try to dominate Asia the way the United States dominates the Western Hemisphere. Specifically, China will strive to maximize the power gap between itself and its neighbors, especially Japan and Russia, and to ensure that no state in Asia can threaten it. It is unlikely that China will go on a rampage and conquer other Asian countries. Instead, China will want to dictate the boundaries of acceptable behavior to neighboring countries, much the way the United States does in the Americas. An increasingly powerful China is also likely to try to push the United States out of Asia, much the way the United States pushed the European great powers out of the Western Hemisphere. Not incidentally, gaining regional hegemony is probably the only way that China will get back Taiwan. Why should we expect China to act differently than the United States? U.S. policymakers, after all, react harshly when other great powers send military forces into the Western Hemisphere. These foreign forces are invariably seen as a potential threat to American security. Are the Chinese more principled, more ethical, less nationalistic, or less concerned about their survival than Westerners? They are none of these things, which is why China is likely to imitate the United States and attempt to become a regional hegemon. China’s leadership and people remember what happened in the last century, when Japan was powerful and China was weak. In the anarchic world of international politics, it is better to be Godzilla than Bambi. It is clear from the historical record how American policymakers will react if China attempts to dominate Asia. The United States does not tolerate peer competitors. As it demonstrated in the 20th century, it is determined to remain the world’s only regional hegemon. Therefore, the United States will seek to contain China and ultimately weaken it to the point where it is no longer capable of dominating Asia. In essence, the United States is likely to behave toward China much the way it behaved toward the Soviet Union during the Cold War.

Heg solves china war

Thayer 06

Bradley A., Assistant Professor of Political Science at the University of Minnesota, Duluth, The National Interest, November -December, “In Defense of Primacy”, lexis]

They are the "Gang of Five": China, Cuba, Iran, North Korea and Venezuela. Of course, countries like India, for example, do not agree with all policy choices made by the United States, such as toward Iran, but New Delhi is friendly to Washington. Only the "Gang of Five" may be expected to consistently resist the agenda and actions of the United States. China is clearly the most important of these states because it is a rising great power. But even Beijing is intimidated by the United States and refrains from openly challenging U.S. power. China proclaims that it will, if necessary, resort to other mechanisms of challenging the United States, including asymmetric strategies such as targeting communication and intelligence satellites upon which the United States depends. But China may not be confident those strategies would work, and so it is likely to refrain from testing the United States directly for the foreseeable future because China's power benefits, as we shall see, from the international order U.S. primacy creates.

# \*\*\*Solvency\*\*\*

## General Solvency, Laundry List

Belinson 12

“Why the U.S. Must Build More Icebreakers Now” in Popular Mechanics By Jerry Beilinson, science journalist, February 17, 2012 12:30 PM: http://www.popularmechanics.com/technology/engineering/infrastructure/why-the-us-must-build-more-icebreakers-now-6693195

The United States is the world’s colossus when it comes to every other kind of military hardware, yet it has just one functioning icebreaker: the medium-strength USCGC Healy, which is primarily used for research. The ship made headlines recently for [breaking open a route to the Alaskan town of Nome](http://www.popularmechanics.com/science/environment/almost-nome-u-s-icebreaker-about-to-reach-cut-off-alaska-town) to aid in the delivery of much-needed fuel. It was a great mission, but it may have left an overly upbeat impression of American capabilities. The country also owns two heavy-duty icebreakers: One of the aging vessels is being decommissioned, and the other is being refurbished after years of disuse. That’s not good enough. While it’s encouraging to finally see some progress being made in the current budget proposal, the problem is far from solved—and the United States has national interests in icy waters. Here are three things to know about America’s icebreaking capabilities. 1. America’s huge northern coast is barely patrolled.Coast Guard cutters are stationed in the Bering Sea, and C-130s take infrequent flights over American waters beyond the North Slope. However, the United States does not have what you’d call a persistent maritime presence in the Arctic, a region with increasing geopolitical importance. Most of the time, there are no patrol ships or planes up there at all. It’s ironic, but the warming Arctic has actually increased demand for icebreakers. The Coast Guard needs more of the ships to prepare for search-and-rescue missions, oil-spill response (offshore drilling by Shell could commence in the Beaufort and Chukchi Seas this summer), law enforcement, and plain old flag-waving in northern waters.

## Now Key, multiple reasons

Slayton 14

“Using New Ocean Technologies: Promoting Efficient Maritime Transportation and Improving Maritime Domain Awareness and Response Capability” David M. Slayton Research Fellow, Hoover Institution, Stanford University Co-Chair and Executive Director, Arctic Security Initiative Written Statement for the Record to the United States House of Representatives Transport, Transportation and Infrastructure Committee, Coast Guard and Maritime Transportation Sub-Committee 21 May 2014: http://transportation.house.gov/uploadedfiles/2014-05-21-slayton.pdf

While access will increase, the region will remain a challenging place. The past few years have seen the least amount of ice coverage in recorded history but the stormiest one on record. This coupled with the fact only a small percentage of the Arctic has been surveyed to enable safe navigation; and navigation and communications systems, commonplace in other regions of the world, are absent or degraded in the high north. The physical infrastructure to support resource extraction, commerce, environmental response and inevitable search and rescue operations is scarce. Our Coast Guard and Navy, stretched thin by other global obligations and significant budget constraints, must now add the high north to their areas of operations. Legal schemes for the new maritime transit routes are evolving and the basis for addressing resource claims and disagreements will be the UN Convention on the Law of the Sea, an agreement to which the United States regrettably is not party. Next year, the United States will follow Canada as the Chair of the Arctic Council, the forum that addresses issues faced by the Arctic governments and indigenous people.

## Now key, Arctic Council

Trauthwein 14

GAO: U.S. Can Do Better on Arctic Policy Posted by Greg Trauthwein (independent journalist, citing a GAO official report) Monday, May 19, 2014: http://www.marinelink.com/news/better-arctic-policy369384.aspx

The U.S. needs a better strategy to coordinate and prioritize its policies related to the Arctic region, according to a Government Accountability Office (GAO) study out today that was released by Reps. Rick Larsen (WA-02), Tim Bishop (NY-01), John Garamendi (CA-03) and Senator Lisa Murkowski (AK). The GAO study focused on U.S. participation in the Arctic Council, a voluntary body started in 1996 that includes the eight Arctic nations—Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the U.S., as well as indigenous groups and other stakeholders. The State Department leads participation for the U.S. The U.S. has not prioritized its commitments to the Arctic Council and is limited in its ability to respond to emergencies in the Arctic region, the report found. As sea ice melts, making way for increased commercial activity, the report recommends a stronger strategy for U.S. participation in the Arctic Council and better process to track progress toward achieving Council goals. Larsen introduced a bill with Rep. Jim Sensenbrenner (R-Wis) last month to establish a U.S. Ambassador at Large for Arctic Affairs and has strongly supported additional investments in icebreakers. “The Arctic is the Northwest Passage of the 21st century, but today’s GAO report is another sign that the U.S. is falling behind in Arctic policy. With next year’s chairmanship of the Arctic Council, it’s time we appointed an ambassador to this important body. We also need to make investments in infrastructure like icebreakers to maintain a strong presence in this increasingly important region. Our country has major commercial, environmental and security interests in the region and we should start prioritizing them,” Congressman Larsen said. “If the United States hopes to maintain its presence in the Arctic, it is time to get serious about the region. The GAO report clearly points out that there is much more we could be doing to protect our interests, both economic and security-related.  I look forward to continuing to work with my colleagues to explore how we can better prioritize our Arctic policies,” Congressman Bishop said.

 “A warming climate that is opening up the Arctic to commercial shipping, the intense global competition for energy resources, and the absence of a comprehensive and binding international Arctic management regime are threatening to turn this emerging region into the Wild West. It is imperative that we avoid that scenario. Accordingly, the United States should demonstrate purposeful leadership within the Arctic Council to advance U.S. interests and obligations. We should also ensure that federal agencies involved in the Arctic, especially the United States Coast Guard, have a coordinated game plan and sufficient resources to meet these challenges,” Congressman Garamendi said.  “This GAO report underlines and highlights the core threat to America’s future as an Arctic nation: we’re late in carrying out a needed path ahead and we need our agencies to work together as we move forward. This is one of the reasons we need an Arctic Ambassador with the authority to make decisions, and coordinate and oversee projects as we’re at this crucial juncture. The United States will be chairing the Arctic Council starting next year, which will either be an opportunity to highlight our leadership, or undermine it depending on our government’s approach,” Senator Murkowski said.

## Arctic k2 future resources, no action now, now key

Slayton 14

“Using New Ocean Technologies: Promoting Efficient Maritime Transportation and Improving Maritime Domain Awareness and Response Capability” David M. Slayton Research Fellow, Hoover Institution, Stanford University Co-Chair and Executive Director, Arctic Security Initiative Written Statement for the Record to the United States House of Representatives Transport, Transportation and Infrastructure Committee, Coast Guard and Maritime Transportation Sub-Committee 21 May 2014: http://transportation.house.gov/uploadedfiles/2014-05-21-slayton.pdf

All of us here know we are experiencing the most significant physical event on our planet since the end of the ice age, it is taking place today - the opening of the Arctic. Activity in the high north will continue to increase. Fish stocks and pursuing fishing fleets will migrate and move farther north. Access to staggering amounts of resources will expand. New maritime shipping routes have the potential to reduce shipping times, cut costs and accelerate ties among commercial centers. Indigenous populations will be affected profoundly and rapidly. As recent events in Russia coupled with ongoing climate change have highlighted, the Arctic has reemerged as a significant policy issue, in part due to the region's abundant energy, mineral and natural resources. As climate change makes the Arctic more accessible, new potential maritime routes promise to reduce shipping times, costs, and accelerate ties between major commercial centers. However, the increased activity suggests that the region is likely to become the subject of intensive negotiations, possible friction and confrontation. We in the United States need to be prepared, presently - we are not.While the issues are many and not without challenge on many levels, the interaction and cooperative tone among the Arctic states afford opportunities to open the Arctic in a safe, secure, prosperous and responsible manner. Now is the time to approach our Arctic interests and responsibilities urgently and as a national strategic priority. The Arctic Security Initiative at the Hoover Institution is addressing that strategic priority by bringing together experts in maritime law, energy, oceanography, technology, communications and shipping.

## Icebreakers k2 all other arctic policies

O’Rourke 12

Ronald, Specialist in Naval Affairs, Congressional Research Service, “Coast Guard Polar Icebreaker Modernization: Background and Issues for Congress,” [http://digital.library.unt.edu/ark:/67531/metadc85474/](http://digital.library.unt.edu/ark%3A/67531/metadc85474/)

In July 2011, the Coast Guard provided to Congress a study on the Coast Guard’s missions and capabilities for operations in high-latitude (i.e., polar) areas. The study, commonly known as the High Latitude Study, is dated July 2010 on its cover.17 The High Latitude Study concluded the following: [The study] concludes that future capability and capacity gaps will significantly impact four [Coast Guard] mission areas in the Arctic: Defense Readiness, Ice Operations, Marine Environmental Protection, and Ports, Waterways, and Coastal Security. These mission areas address the protection of important national interests in a geographic area where other nations are actively pursuing their own national goals.... The common and dominant contributor to these significant mission impacts is the gap in polar icebreaking capability. The increasing obsolescence of the Coast Guard’s icebreaker fleet will further exacerbate mission performance gaps in the coming years.... The gap in polar icebreaking capacity has resulted in a lack of at-sea time for crews and senior personnel and a corresponding gap in training and leadership. In addition to providing multi-mission capability and intrinsic mobility, a helicopter-capable surface unit would eliminate the need for acquiring an expensive shore-based infrastructure that may only be needed on a seasonal or occasional basis. The most capable surface unit would be a polar icebreaker. Polar icebreakers can transit safely in a variety of ice conditions and have the endurance to operate far from logistics bases. The Coast Guard’s polar icebreakers have conducted a wide range of planned and unscheduled Coast Guard missions in the past. Polar icebreakers possess the ability to carry large numbers of passengers, cargo, boats, and helicopters. Polar icebreakers also have substantial command, control, and communications capabilities. The flexibility and mobility of polar icebreakers would assist the Coast Guard in closing future mission performance gaps effectively.... Existing capability and capacity gaps are expected to significantly impact future Coast Guard performance in two Antarctic mission areas: Defense Readiness and Ice Operations. Future gaps may involve an inability to carry out probable and easily projected mission requirements, such as the McMurdo resupply, or readiness to respond to less-predictable events. By their nature, contingencies requiring the use of military capabilities often occur quickly. As is the case in the Arctic, the deterioration of the Coast Guard’s icebreaker fleet is the primary driver for this significant mission impact. This will further widen mission performance gaps in the coming years. The recently issued Naval Operations Concept 2010 requires a surface presence in both the Arctic and Antarctic. This further exacerbates the capability gap left by the deterioration of the icebreaker fleet.... The significant deterioration of the Coast Guard icebreaker fleet and the emerging mission demands to meet future functional requirements in the high latitude regions dictate that the Coast Guard acquire material solutions to close the capability gaps.... To meet the Coast Guard mission functional requirement, the Coast Guard icebreaking fleet must be capable of supporting the following missions: • Arctic North Patrol. Continuous multimission icebreaker presence in the Arctic. • Arctic West Science. Spring and summer science support in the Arctic. • Antarctic, McMurdo Station resupply. Planned deployment for break-in, supply ship escort, and science support. This mission, conducted in the Antarctic summer, also requires standby icebreaker support for backup in the event the primary vessel cannot complete the mission. • Thule Air Base Resupply and Polar Region Freedom of Navigation Transits. Provide vessel escort operations in support of the Military Sealift Command’s Operation Pacer Goose; then complete any Freedom of Navigation exercises in the region.

# \*\*\*Add On’s and A2’s\*\*\*

## Antarctic Research Add On

### New icebreakers k2 antartic research

Morello 11

Lauren, “US Polar Research May Slow for Lack of an Icebreaker”, <http://www.scientificamerican.com/article.cfm?id=us-polar-research-may-slow-lack-icebreaker>, 7.28.11

Have a spare polar icebreaker lying around? The National Science Foundation would like to hear from you. The agency is scrambling to secure a ship to lead its annual resupply convoy to McMurdo Station, the largest of the three U.S. research stations in Antarctica. For the past five years, NSF has relied on a Swedish ship, the Oden, to break a channel in the ice for ships carrying fuel and cargo to McMurdo. But the Swedish Maritime Administration, which owns the Oden, declined to renew its contract with NSF this year. The Swedes want to keep their icebreaker closer to home after heavy ice in the Baltic Sea stranded ships and scrambled cargo traffic there last winter. If the NSF can't find a replacement icebreaker to lead the journey -- scheduled to begin in early December and reach McMurdo in late January -- this year's Antarctic research season could be cut short. "We are trying to work really diligently to identify alternatives," said NSF spokeswoman Debbie Wing. "It could impact the research season if we can't resupply for researchers to head down there." McMurdo was once serviced by U.S. icebreakers, but the country's fleet has dwindled to just one operational vessel, the research ship Healy. It's in the middle of a seven-month science cruise in the Arctic Ocean. NSF has asked the Coast Guard, which operates the Healy, to send the ship south to Antarctica this winter, Coast Guard Commandant Adm. Robert Papp Jr. told a Senate committee yesterday. "We've gotten an inquiry at the staff level about the possibility of breaking out McMurdo," Papp said. "Sweden has decided that their national interests need [the Oden], so that ship is not available." Slim chance of response from aging U.S. fleet Now the Coast Guard must decide whether it can spare the Healy, which would mean going without a U.S. icebreaker in the Arctic for several months. A second U.S. icebreaker, the Polar Star, is being repaired in Seattle, but Papp said there's no chance it would be seaworthy in time to service Antarctica or provide coverage in the Arctic if the Healy heads south. A third icebreaker, the Polar Sea, is sitting in dry dock, and the Coast Guard plans to decommission it later this year. "We're in what we call a strenuous chase right now trying to catch up," Papp told lawmakers, describing the aging U.S. icebreaking fleet. Meanwhile, NSF spokeswoman Wing said it's not clear how the Antarctic's summer research season -- which runs from November to February -- would be affected if her agency can't find a replacement for the Oden. An email from the contractor that operates NSF's three Antarctic stations suggests that the biggest challenge would be finding a way to transport fuel to McMurdo. The station, whose population swells from about 150 in winter to 1,000 each summer, is also a supply hub for the U.S. base at the South Pole, Amundsen-Scott. (A third U.S. research base, Palmer Station, is serviced by an ice-strengthened research vessel, the Lawrence M. Gould.) "If an icebreaker is not available to clear a channel in the sea ice, fuel and cargo resupply ships may not be able to reach McMurdo Station," reads the email from Raytheon Polar Services. "We could possibly airlift enough cargo to maintain most operations, but fuel is another story. Fuel is critical for the McMurdo and South Pole station power and water plants, flight operations, field camps, and even support of other national programs. We will need to plan in order to reserve enough fuel to last until late January 2013, which could be the earliest that we could re-supply fuel, if there is not an icebreaker this season."

### K2 antartic research

Belinson 12

“Why the U.S. Must Build More Icebreakers Now” in Popular Mechanics By Jerry Beilinson, science journalist, February 17, 2012 12:30 PM: http://www.popularmechanics.com/technology/engineering/infrastructure/why-the-us-must-build-more-icebreakers-now-6693195

These ships are also needed for science. The United States is a leader in oceanography, climate investigations, and all kinds of polar studies, thanks partly to the National Science Foundation’s first-rate support of research. (In fact, the NSF has overseen the budget for maintaining icebreakers since 2006; the proposed budget properly puts that responsibility back with the military.) But with just one or two working icebreakers, there’s no way the NSF and Coast Guard can accomplish all they need to. When the Healy churned its way to Alaska to help deliver fuel, its maintenance schedule was thrown off. As a result, scientific projects may have to be delayed this summer. To deliver supplies to America’s McMurdo Station in Antarctica each year, the NSF has been relying on foreign-flagged vessels. As PM reported last July, Sweden’s move to pull its icebreaker Oden off the McMurdo job [put the entire 2011–2012 research season in jeopardy](http://www.popularmechanics.com/science/environment/climate-change/antarctic-research-season-in-jeopardy). NSF scrambled and eventually was able to commission a Russian vessel. This feels a lot like the situation in space: With the retirement of the space shuttle, the United States can’t fly astronauts to the International Space Station without a lift from Russian rockets. Now, it appears, the country can’t supply its main Antarctic base without Russian help, either. Building up America’s fleet of icebreakers will resolve such situations while allowing the Coast Guard to react to a changing world.

### Collapse of Antarctic Treaty

TNAP 7

The National Academies Press, National Advisers in Science, “Polar Icebreakers in a Changing World: An Assessment of U.S. Needs” 2007

Until recently, the two Polar class icebreakers (sometimes together and sometimes separately depending on ice conditions) were used to break open a channel for resupply.[4](http://www.nap.edu/openbook.php?record_id=11753&page=23#p2001196a8960023001) However, more challenging ice conditions and the deteriorating status of the Polar class ships now adds uncertainty and risk of failure to the operation. The National Science Foundation (NSF) is concerned that the lack of reliable icebreaking support may make it increasingly difficult to maintain the permanent stations and associated science programs. Investigations of alternate logistics plans by NSF (discussed in [chapter 8](http://www.nap.edu/openbook.php?record_id=11753&page=75#p2001196a9970075001)) have reaffirmed that icebreaker support is necessary to the Antarctic resupply chain for now and in the foreseeable future. According to a representative of the Department of State assigned to Antarctic issues, if resupply of South Pole Station is not successful and the station were abandoned, this would jeopardize, and probably reduce, the influence of the United States in Antarctic governance. There would be significant consequences because abandonment of that key site would create a vacuum in leadership and likely result in a scramble for control. Abandoning it would be detrimental to the U.S. position as well as to the stability of the treaty system. To preserve the U.S. presence in Antarctica and hence its influential role in the Antarctic Treaty, it is paramount to maintain the three permanent research stations and their associated active research programs throughout the Antarctic continent. Icebreaker operations are critical to the continued existence of these stations and their associated outlying field sites.

### Treaty cred k2 Antarctic science

Dastidar and Persson 5

Prabir G. Dastidar, Department of Ocean Development in New Delhi, and Olle Persson, Umea University Department of Sociology, “Mapping the global structure of Antarctic research vis-à-vis Antarctic Treaty System” IAS, Current Science Volume 89 Number 9, 11-10-2005

ANTARCTICA is a continent of science and peace, a common heritage of mankind. This fifth largest continent is governed by a set of guiding principles, the Antarctica Treaty System (ATS) 1 . The ATS is the basic instrument for managing the activities in this icy continent. Conducting science is occupying a central place in ATS. Currently, there are 45 treaty member nations: 28 consultative (voting) and 17 acceding states. This icy, coldest and windiest continent is covered with a sheet of ice with more than 2 km average thickness (4.7 km at its thickest point). Locked up in thick ice sheet is a record of past climate for the last 500,000 years. Antarctica provides an ideal setting for conducting frontier science (Figure 1). It has a scanty flora, but a rich fauna, including many species of fish, birds and mammals. It has no permanent human population. Today, there are 37 year-round research stations, run by 20 nations, operating in the continent. Belgium, The Netherlands, Ecuador, etc. (Consultavive Parties) do not have any permanent bases, but instead use the infrastructure of other nations in collaborative efforts. In this paper we have attempted to visualize the structure of science that is being pursued by the countries in the framework of the ATS. Materials and methods Title search on ‘Antarc\*’ retrieved 10,287 papers from SCI database (CD-Rom), published in 934 journals during the last 24 years (1980 through 2003). These papers formed the basis of our analysis. To bring uniformity in country names, Fed Rep Ger and Ger Dem Rep were merged into Germany, while the USSR was merged into Russia. Bibexcel algorithm 2 was used to derive citations between countries and joint authorship papers. Most productive 35 countries were considered for constructing the network map. Multidimensional scaling technique was used to map the collaboration structure among the countries. The size of the circles is proportional to the size of productivity, while lines between the countries indicate collaboration links and widths indicate size of the frequency. Bonacich power centrality 3 is used to indicate the position of the countries in the network. Results The interest about Antarctica is on the rise, as evident from the increasing number of articles published in the peer-reviewed journals; fishing and tourism in this continent is getting popular. There is a distinct upward trend in the number of publications over the years; the year 2002 saw a rise to 735 papers against a meagre 169 in 1980. 60% (fraction count) output in Antarctic science is generated by four countries, viz. USA, UK, Australia and Germany. USA accounts for a third of the papers. The international papers are also on the rise, signifying increasing number of multinational projects in the field (Figure 2). The new Concordia station, jointly managed by Italy and France is a unique collaborative venture. It appears that the location of the station is ideal for making accurate astronomical observations. Their research endeavour is aimed to contribute to space exploration in the future. This collaboration trend will add a new dimension to the annals of ATS and Antarctic science. The network map of countries, occupying a central position in Antarctic science. Top 20 countries except Canada are consultative parties. Non-consultative parties like Canada, Denmark, Switzerland, Austria, Hungary and the Czech Republic showed their substantial interest in Antarctic science as evident through their productivity. Although countries like Ireland, Israel, Taiwan, etc., have not ratified ATS, they have continuously exercised their interest in Antarctic science and producing noticeable outputs. On the other hand, consultative parties like Ecuador, Peru and Uruguay did not show much evidence of scientific activity. Citation behaviour of the countries To map the preferences of the countries in citing other countries, a country-to-country citation matrix was created; from that matrix the sum of citations given and received was calculated (Table 1). Interestingly enough, we see that there is no clear cut Matthew effect 4 at work here, since small producers like Norway and Denmark appear among the winners in this citing game by receiving more citations than they give. However, time is at work here, and the winners appear to have been longer in the game. Conclusion The present analysis throws light on the research structure of Antarctic science that is being practised by the nations under the ATS. Bibliometric analysis of Antarctic science on a regular basis will help visualize the functioning of the ATS, where science is occupying a central place

### Research k2 biodiversity

Floren 1

David W. Floren, Associate Attorney @ Robert B. Jacobs Attorney Firm, Former J.D. candidate, Class of 2002, University of Oregon School of Law; B.A., Political Science, 1992, University of California, San Diego, “Antarctic Mining Regimes: An Appreciation of the Attainable” 2001 University of Oregon Journal of Environmental Law and Litigation, Fall 2001, 16 J. Envtl. L. & Litig. 467

Harm to the quality of scientific research is another major source of concern. Scientists generally agree that the presence of rigs and drilling equipment, with storage facilities and all of the necessary logistical equipment, would damage the quality of the water, ice, and small strips of land on which so much life depends. [n73](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n73) The sheer scale of productive mining operations, assuming no accidents whatsoever, would be an annoying distraction for most scientists trying to do their fieldwork. The persistence of other forms of pollution (e.g., simple garbage, the most manageable pollutant) is remarkable. Old rubbish stays on the ice. [n74](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n74) As one observer put it, "What is the purpose of regulating waste disposal at a small scientific base if the shore installations for mining are to have an impact many times greater?" [n75](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n75) Waste disposal and waste management in Antarctica are now somewhat successfully governed by Annex III to the Madrid Protocol. [n76](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n76) The science of paleometeorology uses Antarctic ice cores for the [\*479] measurement of air quality of ages past. [n77](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n77) Any undue melting of the ice sheet could result in the irretrievable loss of vital data for entire blocks of global time. A third most-commonly voiced concern is the impact on Antarctic fauna and flora. Mining operations would cause severe damage along the sliver of shoreline where so much of Antarctic life gathers. Again, the vast scale of mineral operations, the logistics, the spread of infrastructure, bulk transport, and the like would have, at the very least, lasting and local impacts. [n78](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n78) Mobile oil rigs would depend on aircraft for support. Aircraft have been shown to cause disruptions of wildlife, thus minimum flight altitudes have been suggested. [n79](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n79) The impacts of mining activities in cold climates have been shown to be more significant than most corporate information officers are willing to suggest. [n80](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n80) Some scholars are less worried about the seriousness of these consequences. Joseph Ward focuses on the issue of oil spills. "Oil contamination of Antarctic waters currently occurs infrequently." [n81](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n81)Aside from the problem of bilge dumping from icebreakers, the relative purity of the Antarctic waters is a product of the fact that no oil production activity is happening. Ward suggests that oil pollution is not as bad as other forms of ocean pollution. He goes on to conclude that some animals are benefited by the presence of oil slicks in the water. [n82](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n82) "Small spills are unlikely to permanently impact overall populations." [n83](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n83) In [\*480] Ward's defense he does mention how the problem of well blowouts becomes magnified by the unique features of the Antarctic environment. A blowout occurs when oil erupts from a well site in an uncontrolled and continuous fashion, resulting from miscalculation or equipment failure. Because of the thickness of the icecap, were a blowout to occur during the winter months, it would be virtually impossible to close or "to drill relief wells for as long as six months." [n84](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n84) The major petroleum corporations are undaunted by these challenges. Some, like British Petroleum, have "gone green" by integrating the latest environmental protection measures in the mining process.[n85](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n85) This is largely due to the incentives and coercive force of public interest legislation. This drama is currently being played out in the Arctic regions. [n86](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n86) Lessons for Antarctica will surely be drawn from the impending exploitation of Arctic and Alaskan natural gas. [n87](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n87) Our human fallibility ensures mishaps. In the dark, cold, and usually miserable environs of Antarctica, mistakes are made more easily. "Long periods without sunlight are known to cause cabin fever and severe depression, as well as alcohol and drug abuse." [n88](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n88)

### Antarctica= Keystone Species

Floren 1

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The waters inside the Antarctic Confluence are extraordinarily rich in sealife, but a recent surge in the discovery of new species has redefined the area as an evolutionary cauldron. [n262](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n262) Extreme conditions seem to have produced an array of niche species, such as albino fish which have evolved to survive in the frigid conditions by going without red blood cells. [n263](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n263) Very recently, biologists have discovered "what appears to be an evolutionary explosion that has generated an impressive array of cold fish." [n264](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n264) Many of these fish have developed an "antifreeze" protein without which they would turn into blocks of ice within minutes in the near-freezing water. [n265](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n265) Biodiversity is thought to be essential to all species survival, but the relationship between diversity and ecological processes such as productivity is far from simplistic. [n266](http://www.lexisnexis.com.ezproxy.baylor.edu/lnacui2api/frame.do?reloadEntirePage=true&rand=1313460896789&returnToKey=20_T12536095386&parent=docview&target=results_DocumentContent&tokenKey=rsh-20.410991.5442629779" \l "n266) The consequences of single species depletion or extinction are not fully known.

### Biodiversity loss = Extinction

Takacs 96

Environmental Humanities Prof @ CSU Monteray Bay, 1996 (David, “The Idea of Biodiversity: Philosophies of Paradise” pg. 200-201)

So biodiversity keeps the world running. It has value and of itself, as well as for us. Raven, Erwin, and Wilson oblige us to think about the value of biodiversity for our own lives. The Ehrlichs’ rivet-popper trope makes this same point; by eliminating rivets, we play Russian roulette with global ecology and human futures: “It is likely that destruction of the rich complex of species in the Amazon basin could trigger rapid changes in global climate patterns.  Agriculture remains heavily dependent on stable climate, and human beings remain heavily dependent on food. By the end of the century the extinction of perhaps a million species in the Amazon basin could have entrained famines in which a billion human beings perished. And if our species is very unlucky, the famines could lead to a thermonuclear war, which could extinguish civilization.” 13 Elsewhere Ehrlich uses different particulars with no less drama: What then will happen if the current decimation of organic diversity continues? Crop yields will be more difficult to maintain in the face of climatic change, soil erosion, loss of dependable water supplies, decline of pollinators, and ever more serious assaults by pests. Conversion of productive land to wasteland will accelerate; deserts will continue their seemingly inexorable expansion. Air pollution will increase, and local climates will become harsher. Humanity will have to forgo many of the direct economic benefits it might have withdrawn from Earth's well­stocked genetic library. It might, for example, miss out on a cure for cancer; but that will make little difference. As ecosystem services falter, mortality from respiratory and epidemic disease, natural disasters, and especially famine will lower life expectancies to the point where can­cer (largely a disease of the elderly) will be unimportant. Humanity will bring upon itself consequences depressingly similar to those expected from a nuclear winter. Barring a nuclear conflict, it appears that civili­zation will disappear some time before the end of the next century - not with a bang but a whimper.14

### Antarctic research k2 Scientific Diplomacy

Erb 10

Karl A., Director of the Office of Polar Programs, “International Collaboration in the Antarctic for Global Science”, pg. 1-6

The Antarctic Treaty did not invent international science, but its provisions have fostered international science in powerful ways. During the Cold War in the 1950s and later, the United States and the Soviet Union exchanged scientists in the Antarctic. At first they simply traded personnel. But international projects now involve detailed planning, shared logistics, and interactive science. In 1981 the Soviet icebreaker Mikhail Somov was the research platform for 13 Soviet scientists and 13 U.S. scientists. The ship went far into ice-infested regions of the Weddell Sea, the first deep penetration since Shackleton’s famous voyage on Endurance in 1915–1916. The result was the first comprehensive data set obtained in winter sea ice. A decade later, the Russian icebreaker Akademik Federov and the U.S. icebreaker Nathaniel B. Palmer collaborated in the same region to establish a drifting camp on the sea ice. Seventeen American and 15 Russian scientists collected data for four months regarding the Weddell Gyre, which is a key constituent of the global climate system, sending cold, dense Antarctic waters throughout the world’s ocean. The Soviet Union transformed itself into the Russian Federation while the ship was deployed, but the Antarctic research was completed as planned. Experience and the ever-present Antarctic Treaty gave its member nations the confidence to do complex international projects like these, requiring the full commitment of each partner for project success. The achievements for science are irrefutable. As the number of Treaty Consultative Parties roughly doubled from the original 12 to 28 nations, Dastidar and Ramachandran (2008) showed that published international Antarctic papers with coauthors from two or more nations increased from 15 papers in 1980 to 190 international papers in 2004 (Figure 1). This accomplishment is significantly greater than for world science as a whole. The bibliographic record also shows that other scientists cite the international papers more than they cite the single-nation papers, proof that international cooperation increases the progress of science and enables research that otherwise would be expensive or infeasible. INTERNATIONAL POLAR YEAR PROGRESS In the years since 2004, my counterparts heading Antarctic programs in the other treaty nations will likely agree that the recently concluded field phase of the International Polar Year of 2007–2008 is resulting in dramatic advances in understanding this important part of the world. The rise in polar climate papers has been particularly steep. Countries are working together to describe current and potential future events impacting the Antarctic ice sheet. Only through such a broad effort involving China, the United Kingdom, France, the United States, and other countries can we hope to reduce uncertainties in the Intergovernmental Panel on Climate Change (IPCC) estimates of long-term global sea level rise. The goal is to determine the rates of loss of ice from the main drainage basins (Figure 2) and how the rates depend on bed lubrication, topography, and ocean temperature. The Antarctica’s Gamburtsev Province (AGAP) project is an IPY effort involving the United States, the United Kingdom, Russia, Germany, China, and Australia that discovered river valleys in the Gamburtsev Mountains under the Antarctic ice sheet. This is the location of the first Antarctic ice sheet (~34 mya) and thus represents potentially very old ice and a tectonic enigma. The effort gave us a first detailed look at what that part of the continent, as big as the Alps, might have been like before it was covered in ice. This project involved close international collaboration in science, technology, and logistics. An IPY signature project, the Larsen Ice Shelf System, Antarctica (LARISSA; Figure 3), is a collaboration by Argentina, Belgium, South Korea, Ukraine, and the United States to study a regional problem with global change implications. The abrupt environmental change in Antarctica’s Larsen Ice Shelf system was investigated using marine and Quaternary geosciences, cryosphere and ocean studies, and research into marine ecosystems. In an example of IPY’s education and legacy roles, a two-week course in the United States in July 2010 under the auspices of the Australia-based International Antarctic Institute used recently acquired marine data, sediment cores, and imagery. Twenty-eight countries are collaborating in the Polar Earth Observing Network (POLENET) to map uplift of the Antarctic crust resulting from a decreased mass of the FIGURE 2. covering ice sheet. Data from new GPS and seismic stations spanning much of the Antarctic and Greenland ice sheets are used to model how much ice was lost over the 10,000 years since the last major ice age. These data, taken with information gathered by satellites, help in determining where, and at what rate, the ice sheets are changing in response to recent climate change. The measurements are critical in refining estimates of future global sea level rise. The collaborations have led to new technology for continuous measurement at autonomous observatories operating in polar conditions and have provided a legacy framework for ongoing international geophysical observations. Thirteen countries are participating in the International Trans-Antarctic Scientific Expedition (ITASE), which is collecting ice core samples that provide signatures of how constituents of the atmosphere have changed since the beginning of the industrial revolution. The ITASE is an existing project (begun in 1990) that matches IPY goals and that flourished during the IPY period. Like the ice sheet drainage collaborations shown in Figure 2, ITASE has tended to distribute its goals geographically among the involved nations. A workshop identified tasks for national participants, and the Scientific Committee on Antarctic Research (SCAR) Global Change Program provides coordination. Germany, Italy, New Zealand, the United Kingdom, and the United States contributed to the Antarctic Geological Drilling Program (ANDRILL) and obtained deep sediment cores from the sea bed that show Earth’s climate 15–30 mya. These paleoclimate perspectives increase confidence in the ability to predict future change. Using the McMurdo Ice Shelf as a drilling platform, the project found new evidence that even a slight rise in atmospheric carbon dioxide affects the stability of the West Antarctic Ice Sheet. France and the United States combined their capabilities in the Concordiasi project to develop a new way of measuring the constituents of the atmosphere, layer by layer, from top to bottom with new instruments that are dropped from long-duration stratospheric superpressure balloons deployed from McMurdo. Their data are coupled with surface observations at a number of Antarctic locations. This Concordiasi project is intended to reduce uncertainties in aspects of climate change that could change the mass balance of the Antarctic ice sheet. Figure 4 shows an instrument (dropsonde) launched on demand under a parachute to measure atmospheric parameters on the way down over Antarctica. In biology a major impetus has been provided to marine scientists by the Census of Antarctic Marine Life (CAML). The Southern Ocean is around 10% of the world’s oceans, and together with the Arctic Ocean, it is the least studied. It is a major carbon sink, and one of the globe’s major ecosystems. This five-year CAML program involved 27 cruises on research vessels from the United States, United Kingdom, Australia, New Zealand, France, Russia, Belgium, Germany, Spain, Italy, Brazil, Chile, Uruguay, Peru, and Japan searching both the seafloor and the water column for new species, of which hundreds have already been identified. These multinational research programs are conceived through a variety of mechanisms that include scientific workshops, meetings convened under science and technology agreements between and among nations, and, increasingly, electronic access to data of common interest. For over 50 years SCAR has provided a broadly international forum for identifying and building on common interests among scientists and building collaborations and plans for achieving them. Its major new programs on Antarctic climate evolution, biodiversity, subglacial lakes, and solar-terrestrial physics now involve more than 30 nations. INFRASTRUCTURE AND LOGISTICS Implementing these multinational projects is possible only because nations share access to their national infrastructures and logistics in Antarctica. The Council of Managers of National Antarctic Programs (COMNAP), which brings operational expertise to bear in all aspects of Antarctic support, is of particular importance in facilitating the range of logistic support needed in Antarctica to carry out these studies in a safe and environmentally responsible manner. The COMNAP members work closely with each other, with other governmental agencies in their nations, and with SCAR to match international logistic infrastructure to the needs of these international science collaborations. The following are just a few examples of shared infrastructure: • the French-Italian station at Dome C that hosts, among many other projects, a significant portion of the Concordiasi project; • the Airbus A319 that is operated by the Australian Antarctic Program as an important component of the logistics pool, as are the wheeled and ski-equipped C-130s that New Zealand and the United States operate; and • the Swedish icebreaker Oden that hosts joint U.S.-Swedish research in the Southern Ocean and opens the channel through the sea ice that enables annual resupply of the U.S. research stations at McMurdo and the South Pole. The flags of the 12 nations that brought the Antarctic Treaty into being are proudly arranged in front of the new Amundsen-Scott South Pole Station of the U.S. Antarctic Program that was dedicated in 2009 (Figure 5). This station hosts researchers from around the world in the tradition of partnership that so characterizes Antarctica. Clearly, Antarctica, with its unique treaty and its long heritage of scientific research, remains a model of international cooperation, one with lessons for international science everywhere. SUMMARY Research at the frontier of science certainly can be performed and organized solely by individual scientists in two or more nations. But when complicated logistics partnerships are required, as are needed in supporting research in the huge and distant Antarctic, the legal framework provided by the Antarctic Treaty and the intellectual framework provided by the International Polar Year enable partnerships to develop and flourish over the several years required for planning, fieldwork, and follow-through in laboratories back home. The scientific value of the Antarctic will continue to increase as its role in Earth system science is more fully realized, and it is only through international collaboration that many of these pressing questions will be answered.

### Science diplomacy solves prolif

Dickson 10

David, Director, SciDev.Net, 7 May 2010, “Nuclear disarmament is top priority for science diplomacy”, http://www.scidev.net/en/editorials/nuclear-disarmament-is-top-priority-for-science-diplomacy.html

The political climate is ripe for a new push to eliminate nuclear weapons; scientists can boost its chance of success. Earlier this year, US satellites detected the first plume of steam from a nuclear reactor in Pakistan that has been built to produce fuel for nuclear bombs, confirming the country's desire to strengthen its status as a nuclear power. The observation — coming shortly before this month's review conference in New York of the Nuclear Non-Proliferation Treaty (NPT) — is further evidence that the unregulated spread of nuclear technology remains closely linked to the dangers of nuclear conflict. The good news is that US President Barack Obama seems determined to make eliminating nuclear weapons a top priority. Indeed, last month he invited 47 heads of state to an unprecedented summit in Washington to promote disarmament and agree strategies to prevent nuclear terrorism and safeguard nuclear material. But the news from Pakistan, together with continued disagreement on how best to tackle other emerging nuclear states such as Iran and North Korea, illustrates how far there is to go — and the political hurdles that must still be scaled — before this goal is achieved. New hope Still, there is a sense of optimism for this year's review conference that was missing from the last meeting in 2005. Then, the aggressive stance taken by the Bush administration — describing North Korea as part of an "axis of evil", for example — doomed the discussions to stalemate. This time round, the prospects for agreement are significantly higher. Not only has Obama adopted a more moderate attitude towards international affairs in general, but he has already made significant achievements on the nuclear front. Last month, for example, Russia and the United States announced an arms control agreement under which both will significantly reduce their nuclear arsenals. And since then, Obama has revised his nuclear policy to state, for the first time, that non-nuclear states that have signed the NPT will never be targets of US nuclear weapons. Both agreements could have gone further. Some in Obama's administration wanted him to take the further step of banning the use of nuclear weapons against any non-nuclear threat or attack. And despite the new cuts, both Russia and the United States will still own enough nuclear weapons to destroy human life many times over. But the recent moves have nonetheless created a political climate in which significant agreement, at least between nuclear weapons states, looks more realistic than it did five years ago. There are even signs that the United States could eventually ratify the Comprehensive Nuclear Test Ban Treaty, the next major step towards global nuclear disarmament. Need for vigilance The reasons for optimism are not restricted to the shift in the US position. Equally influential has been a growing awareness within the developed and developing worlds of the threats of nuclear terrorism and the need to improve protection of nuclear materials. Eighteen months ago, for example, an armed group was caught breaking into a nuclear facility in South Africa in an apparent attempt to steal weapons-grade uranium that has been stored at the site since the early 1990s, under international supervision. The incident provides a stark reminder of the need for continued and effective vigilance. This need will increase as more developing countries turn towards nuclear power as a source of affordable energy — a trend that will be reinforced by international efforts to promote renewable energy as a strategy for tackling climate change. But the danger is that US-led initiatives will, with some justification, be seen as little more than attempts to defend American interests, influenced as much by political relationships as by a genuine desire for nuclear disarmament. For example, the nuclear cooperation deal between the United States and India that entered force in 2008 has been cited by the Carnegie Endowment for International Peace as an example of putting diplomatic and commercial interests ahead of non-proliferation responsibilities and was criticised for exacerbating nuclear tensions in South Asia. Scientists, diplomats or both? The only solution is for the developing world to accept that international nuclear non-proliferation is in its own interests — the only way to prevent regional conflicts escalating into nuclear exchanges. The scientific community has an important role to play in this process by explaining the threat posed by even relatively small nuclear weapons, and advising on how to develop safeguards without overly restricting the peaceful uses of nuclear energy. Scientists have already shown their worth when they kept communication channels open between the United States and the Soviet Union during the Cold War. The Pugwash Conferences on Science and World Affairs were instrumental to such 'science diplomacy' and it can be no coincidence that the approach is rapidly gaining favour in Washington, where John Holdren, who once headed Pugwash, is Obama's science and technology advisor. If such diplomacy, on the control of nuclear weapons or other scientific issues, is driven by the political and commercial interests of the developed world, it will remain suspect and doomed to fail. But if it can be truly international, the chances of success are much higher. Reaching a global agreement on the steps needed to eliminate nuclear weapons from the world would be a good place to start.

Extinction

Cohn 9

William, 09 Lecturer law, ethics and logic at the University of New York in Prague, May 19, http://www.informationclearinghouse.info/article22655.htm

More nations have acquired these weapons. Testing has continued. Black market trade in nuclear secrets and nuclear materials abound. The technology to build the bomb has spread.” Harvard political scientist Graham Allison’s Newsweek cover story (“Stopping the Ultimate Attack,” March 23, 2009) highlights the danger of nuclear terror and calls for a revitalization of the concept of deterrence. Allison, author of Nuclear Terrorism: the Ultimate Preventable Catastrophe and Nuclear Proliferation: Risk and Responsibility, surely recognizes that the best deterrence is the abolition of nuclear weapons. Nuclear theorists and strategists should heed the call of former Pentagon chief Robert McNamara, who in 2003 acknowledged “it was luck that prevented nuclear war” and catastrophe in the 1962 Cuban Missile Crisis. Luck may not save us next time. Nuclear threats now include: Al-Qaeda, the Taliban or other religious extremists getting nukes; India and Pakistan having the Bomb, with their bloody history and Kashmir dispute; a nuclear arms race in the Middle East, with numerous doomsday scenarios; more states pursuing civilian nuclear technology as a source of ‘clean energy’ (but what do we do with the radioactive waste?) leading to bomb-building; accidents like the recent collision of French and British nuclear submarines; misuse of the bloated nuclear arsenal of the former Soviet Union where poor safeguards, political instability and corruption have given rise to a booming black market trade in nuclear materials; nukes in the hands of one of many militant separatist groups; Iran’s firebrand leader running a reelection campaign on nuclear nationalism; and, North Korea led by a lunatic who, impotent to meet the needs of his people, snubs cooperation at every opportunity, and whose only political capital is playing the international pariah. The scenarios for atomic annihilation are many, and growing. The prospect of atomic annihilation increases daily as black market trade in nuclear weapons material and technology expands. Today, nuclear smuggler A.Q. Khan runs his own website from Pakistan. International Atomic Energy Agency (IAEA) Director and 2005 Nobel Peace Prize winner Mohamed ElBaradei calls Khan’s nuclear distribution network the “Wal-Mart of private-sector proliferation.”

### Science diplomacy solves warming

Hulme and Mahony 10

Mike and Martin, School of Environmental Sciences, University of East Anglia, “Climate change: what do we know about the IPCC?”, <http://mikehulme.org/wp-content/uploads/2010/01/Hulme-Mahony-PiPG.pdf>

The consequences of this ‘geography of IPCC expertise’ are significant, affecting the construction of IPCC emissions scenarios (Parikh, 1992), the framing and shaping of climate change knowledge (Shackley, 1997; Lahsen, 2007; O’Neill et al., 2010) and the legitimacy of the knowledge assessments themselves (Elzinga, 1996; Weingart, 1999; Lahsen, 2004; Grundmann, 2007; Mayer & Arndt, 2009; Beck, 2010). As Bert Bolin, the then chairmen of the IPCC remarked back in 1991: “Right now, many countries, especially developing countries, simply do not trust assessments in which their scientists and policymakers have not participated. Don’t you think credibility demands global representation?” (cited in Schneider, 1991). Subsequent evidence for such suspicions has come from many quarters (e.g. Karlsson et al., 2007) and Kandlikar and Sagar concluded their 1999 study of the North-South knowledge divide by arguing, “... it must be recognised that a fair and effective climate protection regime that requires cooperation with developing countries, will also require their participation in the underlying research, analysis and assessment” (p.137). This critique is also voiced more recently by Myanna Lahsen (2004) in her study of Brazil and the climate change regime: “Brazilian climate scientists reflect some distrust of ... the IPCC, which they describe as dominated by Northern framings of the problems and therefore biased against interpretations and interest of the South” (p.161).

## Melting ice increases needs for icebreakers

O’Rourke 12

Ronald O’Rourke June 14, 2012. Specialist in Naval Affairs. <http://www.fas.org/sgp/crs/weapons/RL34391.pdf>

Although polar ice is diminishing due to climate change, observers generally expect that this development will not eliminate the need for U.S. polar icebreakers, and in some respects might increase mission demands for them. Even with the diminishment of polar ice, there are still significant ice-covered areas in the polar regions. Diminishment of polar ice could lead in coming years to increased commercial ship, cruise ship, and naval surface ship operations, as well as increased exploration for oil and other resources, in the Arctic—activities that could require increased levels of support from polar icebreakers.2 Changing ice conditions in Antarctic waters have made the McMurdo resupply mission more challenging since 2000.3 An April 18, 2011, press report states that the Commandant of the Coast Guard, Admiral Robert Papp,

We need 6 heavy and 4 medium ice-breakers – Congress is putting investment on the backburner

## No link to politics

Belinson 12

“Why the U.S. Must Build More Icebreakers Now” in Popular Mechanics By Jerry Beilinson, science journalist, February 17, 2012 12:30 PM: http://www.popularmechanics.com/technology/engineering/infrastructure/why-the-us-must-build-more-icebreakers-now-6693195

When politicians argue over President Obama’s new 2013 budget proposal, one thing that should escape criticism is the $8 million to be spent on designing a new polar-class icebreaker for the Coast Guard. The hard part will follow: It will cost nearly $1 billion to actually build the ship, and it’s $1 billion that Congress needs to find.

## Aff= GOP win

Dickie 14

April 16, 2014 at 6:45 AM “Build icebreakers to protect U.S. interests in the Arctic” Posted by Lance Dickie, opinion writer for the Seattle Times http://blogs.seattletimes.com/opinionnw/2014/04/16/build-icebreakers-to-protect-u-s-interests-in-the-arctic/

Republicans in Congress are toting extra heavy campaign baggage as they head into the 2014 election season, and look beyond to 2016. They have virtually no legislative achievements or profile beyond being an impediment. In its desperate attempt to find bipartisan issues to help tout a constructive role, the GOP should embrace modernizing the U.S. icebreaker fleet to protect American interests in the Arctic.

## Aff= bipartisan

Dickie 14

April 16, 2014 at 6:45 AM “Build icebreakers to protect U.S. interests in the Arctic” Posted by Lance Dickie, opinion writer for the Seattle Times http://blogs.seattletimes.com/opinionnw/2014/04/16/build-icebreakers-to-protect-u-s-interests-in-the-arctic/

Conditions in the Arctic are changing, and one does not have to look too far ahead to imagine the fabled Northwest Passage becoming a reality for a portion of the year. It has to do with, you know, that climate change thing. If Republicans can get beyond that, the other reality is a time-saving shipping route that is attracting global attention. Washington Sen. Maria Cantwell and Rep. Rick Larsen, D-Everett, are working their respective chambers to sustain federal funds to refurbish the Polar Sea icebreaker, and keep the U.S. Coast Guard working on the design of a new icebreaker. Granted the topic can be pretty obscure for their land-locked colleagues, but the issues are basic for the security of the country. The Polar Sea, idled in a Seattle shipyard, was taken out of action by massive engine failures. The Coast Guard has the recently refurbished Polar Star and the Healy, a medium icebreaker and research vessel. The Coast Guard needs options and they are well-described in a March 28 report by the Congressional Research Service.Even the Polar Star is estimated to have another seven to 10 years of service, about the time the Polar Sea would be ready. That still only gives the Coast Guard two icebreakers, without construction of a new vessel. This is a basic federal investment in a basic mission to protect U.S. sovereignty, security and economic interests. And to support U.S. maritime activities and enforce U.S. laws. Nothing could be more bipartisan and worthy of support by Republicans and Democrats.

## Plan popular

Klimas 12

Jacqueline, “Coast Guard asks to buy new Arctic icebreaker”, 3.24.12, <http://www.navytimes.com/news/2012/03/navy-coast-guard-arctic-ice-breaker-032412w/>

Access to the Arctic has received broad support in Congress. While the purchase of a new icebreaker has been supported by both Alaska senators, senators including Joe Lieberman, I-Conn., and Maria Cantwell, D-Wash., say the acquisition of a new icebreaker is a national priority. “Icebreakers are of critical importance to America’s national security as well as our economic interests in the Arctic,” Cantwell said in a statement. “According to the Coast Guard’s own comprehensive analysis, we need to invest in at least six new icebreakers to fulfill our nation’s icebreaking missions.” The Coast Guard’s responsibilities in the Arctic include national security, protection of the environment, sustainable economic development of the area, cooperation with other nations with Arctic claims and involvement of the indigenous communities in decisions, according to Lt. Paul Rhynard, the service’s deputy chief of media relations. “The bottom line is that the Coast Guard has the same responsibilities in the Arctic as it does in the Gulf of Mexico or any other U.S. maritime region, yet the Arctic coast provides unique challenges, especially during the winter months, due to extreme conditions of severe weather, sea ice, extended periods of darkness and remoteness of the region,” Rhynard said in a statement. The $8 million request is less than 1 percent of the $860 million being asked for icebreaker acquisition in the Department of Homeland Security’s five-year budget projection. Begich pointed out that in the fiscal 2012 budget request, it was zero, so even this amount is an improvement. “It’s a small amount. I wish it was more, but just the fact to have it down and in their five-year plan shows their commitment to move forward,” he said.

## Private companies can’t solve

O’Rourke 12

Specialist in Naval Affairs, Congressional Research Service, Quote from July 2010 Coast Guard High Latitude Study, “Coast Guard Polar Icebreaker Modernization: Background and Issues for Congress,” [http://digital.library.unt.edu/ark:/67531/metadc85474/](http://digital.library.unt.edu/ark%3A/67531/metadc85474/)

The multi-mission nature of the Coast Guard may provide opportunities to conduct some subset of its missions with non government-owned vessels. However, serious consideration must be given to the fact that the inherently governmental missions of the Coast Guard must be performed using government-owned and operated vessels. An interpretation of the national policy is needed to determine the resource level that best supports the nation’s interests.... The existing icebreaker capacity, two inoperative heavy icebreakers and an operational medium icebreaker, does not represent a viable capability to the federal government. The time needed to augment this capability is on the order of 10 years. At that point, around 2020, the heavy icebreaking capability bridging strategy expires.18

## Inuits say no

Murphy 9

Kim Murphy. Los Angeles Times Northwest correspondent. Los Angeles Times. Published 04:00 a.m., Sunday, October 18, 2009.  http://www.sfgate.com/green/article/Melting-ice-could-transform-Alaska-economy-3214116.php Retrieved July 25, 2012.

"Our argument ... is that we're already established; our port is already here. We just need to go out a little deeper," Mayor Denise Michels said. But where will it lead, many here wonder, in a region whose villages have been among the most isolated on Earth? "There is increasing talk of Arctic shipping lanes, expanded fisheries, new tourism opportunities and other competing uses," Barrow's mayor, Edward Itta, told a panel of senior Obama administration officials who traveled to Anchorage in August to deliberate what approach the government should take to the northern seas. "In the midst of all these claims, we are trying to preserve our traditional use of our land," he said. "We are not afraid of change as Inupiat Eskimos. ... But all of us know that change involves risk, and the risk of some of these potential activities in the Arctic are substantial." Traditional whalers worry that increased shipping and offshore oil and gas operations could injure or scare away the whales that have supported residents of the Arctic slope for generations

## A2: ship wrecks

International Maritime Incorporation ‘11

Marine Environment Protection Committee, May 6th 2011, http://libcloud.s3.amazonaws.com/93/1c/9/1143/MEPC\_62-11-6\_Arctic\_shipping\_and\_cetaceans\_WWF\_FOEI\_and\_IFAW.pdf, Arctic Shipping and Cetaceans: Recommendations regarding mitigation measures and the development of the mandatory Polar Code

There are several measures that can be taken to avoid the risk of ship strikes. A 2010 joint IWC-ACCOBAMS workshop on reducing collisions between vessels and cetaceans4 recommended that wherever practical, vessels should be separated from whales using measures such as re-routing or areas/times to be avoided. The workshop agreed that re-routing should be the first option, but recommended that where separating vessels from whales is not practical, measures to reduce speed should be considered. For large whales, it has been shown that the probability of a collision being lethal is reduced at slower speeds, and the risk of a lethal collision is substantially reduced at speeds below 10 knots. Slower speeds may also improve the ability of operators of some types of vessel to take avoiding action (by increasing the amount of time available for maneuvering vessels away from whales), and may also improve the ability of cetaceans to avoid collisions.

## A2: Environment Disad

Rogers 14

”Coast Guard gears up for summer’s Arctic Operations” BY JILLIAN ROGERS, journalist for the Arctic Sounder, The Arctic Sounder May 19, 2014: http://www.adn.com/2014/05/19/3475883/coast-guard-gears-up-for-arctic.html

"The need for the proposed action is to meet the Coast Guard's mandated mission in the Arctic where, to date, except for the U.S. Coast Guard Cutter Healy, there has not been a consistent, established Coast Guard presence," read the assessment.

"The increased levels of human activity in the Arctic will result in an increase in maritime activities, particularly during the mid-March to mid-November seasonal surge."

According to the assessment, the impacts on the land and its people are small.

"No significant impacts to water quality as (best management practices) would be in place for Coast Guard activities and Incident Control Centers would be established to handle environmental emergencies," reads the assessment.

The report goes on to declare that there would be no significant, damaging impacts biologically, socioeconomically, or otherwise, but would boost the economy with the added presence. Also, it states that without the Coast Guard there, a lack of enforcement against poaching, delays in environmental cleanup, and longer waits for rescues would be imminent.

## Non-military = not soldiers

Mnemonic 13

Mnemonic Dictionary 2013 http://mnemonicdictionary.com/word/nonmilitary

Nonmilitary nonmilitary - Dictionary definition and meaning for word nonmilitary

Definition (adj) not associated with soldiers or the military

## Non-military can still improve security

Campbell and Weitz 6

Kurt M. Campbell,Senior Vice President, Henry A. Kissinger Chair in National Security, and Director of the International Security Program at the Center for Strategic and International Studies; amd Richard Weitz, Senior Fellow and Associate Director of Hudson Institute’s Center for Future Security Strategies. Non-Military Strategies For Countering Islamist Terrorism Sept 13 , 2006 <https://www.princeton.edu/~ppns/papers/counterinsurgency.pdf>

Over the past five years, the United States has struggled to develop effective approaches against terrorist threats. The National Strategy for Combating Terrorism – the main doctrine defining U.S. policy regarding the Global War on Terrorism (GWOT) – affirms the need for both military and non-military strategies in order to deal with a multifaceted and evolving threat. 1 The U.S. Department of Defense (DOD) also acknowledges that “battlefield success is only one element of our long-term, multi-faceted campaign against terrorism. The activities employed to date range from training and humanitarian efforts to major combat operations. Non-military components of this campaign include diplomacy, strategic communications, law enforcement operations, and economic sanctions.” 2 Yet these efforts have been clearly secondary to the application of American military power to the problem

# \*\*\*Negative\*\*\*

## Squo solves security concerns

Thorsson 14

“Washington’s folly” in the Arctic Journal May 20, 2014 - 11:37am - By Elías Thórsson, journalist: http://arcticjournal.com/politics/619/washingtons-folly

The criticism is not shared by the military. Navy Commander Amy Derrick-Frost, a Defence Department spokesperson, says the Pentagon’s position is that the US remains well-placed to meet its needs in the region. She points out that most US Arctic operations takes place in Alaska, the Aleutian Islands and other territorial waters, and that they tended to get overlooked. Instead of conflict, the military is interested in partnering with other Arctic power. “We work collaboratively with most Arctic countries and are supportive of their investment plans,” Derrick-Frost says. “The United States continues to monitor developments in the region to ensure our own investment plan meets our interests. We have assessed that our existing and planned capabilities and infrastructure are sufficient in the near- and mid-term.”

## Coop now, and key to arctic

Slayton 14

“Using New Ocean Technologies: Promoting Efficient Maritime Transportation and Improving Maritime Domain Awareness and Response Capability” David M. Slayton Research Fellow, Hoover Institution, Stanford University Co-Chair and Executive Director, Arctic Security Initiative Written Statement for the Record to the United States House of Representatives Transport, Transportation and Infrastructure Committee, Coast Guard and Maritime Transportation Sub-Committee 21 May 2014: http://transportation.house.gov/uploadedfiles/2014-05-21-slayton.pdf

And that brings into play the governance of that space. Right now, we often talk about the Arctic as being the most cooperative place on the planet and arguably, apart from the weather, the most benign place on the planet. The Arctic nations, the eight Arctic nations and the indigenous communities that are represented there, it really is a model of significant cooperation. We believe that it is very important, that governance model and that level of cooperation is maintained as we go into the future. We cannot allow ourselves or the world to be significantly distracted by the recent activity of Russia and its close neighbors - however, if left unmitigated - could result in a disruptive Arctic geo-political environment where there was once great cooperation. Looking ahead, Canada has the chair of the Arctic Council, and in about a year's time - in May of 2015, the United States becomes the chair of the Arctic Council. Moreover, I think we have an opportunity, working closely with our friends and allies, of being able to develop a continuum of recent initiatives, work and progress that could be very, very helpful to maintain stability and an air of cooperation in Arctic matters.

## No U.S. sovereignty

Slayton 14

“Using New Ocean Technologies: Promoting Efficient Maritime Transportation and Improving Maritime Domain Awareness and Response Capability” David M. Slayton Research Fellow, Hoover Institution, Stanford University Co-Chair and Executive Director, Arctic Security Initiative Written Statement for the Record to the United States House of Representatives Transport, Transportation and Infrastructure Committee, Coast Guard and Maritime Transportation Sub-Committee 21 May 2014: http://transportation.house.gov/uploadedfiles/2014-05-21-slayton.pdf

And then of course, there's the issue of claims in the Arctic. We have talked about the resources that are in the high North and the exclusive economic zones. Then there is the subject of the extended continental shelf, what extends beyond the exclusive economic zone. And the United States is extraordinarily fortunate to have projections of an extended continental shelf that are really quite generous and quite prosperous. However, the problem is those claims are going to be adjudicated through the Convention on the Law of the Sea, of which the United States is not a party. And the amount of area and the wealth that we are discussing is absolutely extraordinary. The estimates on the US extended continental shelf is almost twice the area of Alaska The big difference is, that we had to pay for Alaska. We don't have to pay for the extended continental shelf.That being said, gaining exclusive sovereign rights over the full potential U.S. Arctic extended continental shelf will prove difficult, however, due to the close proximity among the United States, Russia, and Canada and the potential for overlapping claims to extended continental shelves, and I think that's going to be problematic.The potential implications of this extended continental shelf regime are profound. The U.S. continental margin off the coast of Alaska alone may extend to a minimum of 600 miles from the Alaskan baseline. Alaska's extended continental shelf lies over the Arctic Alaska province, one of the many oil- and gas-rich basins in the Arctic. It is estimated that there may be almost 73 billion barrels of oil and oil-equivalent natural gas located in the Arctic Alaska province, the second highest estimated production capability of all Arctic provinces. The continental shelf within the 200-mile EEZ under the Beaufort and Chukchi Seas alone may have over 23 billion barrels of oil and 104 trillion cubic feet of natural gas.And then the other question relative to the United States accession to the Convention on the Law of the Sea is we will become the first chair of the Arctic Council that is not party to that treaty, what are the implications of that?

## Oil extraction-> Bad for Inuits

Hagopian 14

Big Oil’s Global Power Grab. Devastating Environmental and Social Consequences By [Joachim Hagopian](http://www.globalresearch.ca/author/hagopian) Global Research, May 21, 2014 Url of this article: <http://www.globalresearch.ca/big-oils-global-power-grab-devastating-environmental-and-social-consequences/5383201> (Joachim Hagopian is a West Point graduate and former Army officer. His written manuscript based on his military experience examines leadership and national security issues. After the military, Joachim earned a masters degree in psychology and became a licensed therapist working in the mental health field for more than a quarter century. He now focuses on writing.)

Once again so called progress and civilization are colliding with indigenous cultures and the last precious, unspoiled lands on earth. An examination of the native Arctic population of the Inuit Eskimos and their stake in the offshore undersea oil drilling can shed some important light on how indigenous groups in other places may not be faring so well. Estimates from the US Geological [Survey](http://nativeunity.blogspot.com/2010/05/inuit-chill-drill-on-canadian-arctic.html) maintain that the Arctic contains some 90 billion barrels of oil and 44 billion barrels of natural gas, totaling 30 percent of the world’s untapped gas reserves. The Beaufort and Chukchi Seas have the potential to produce [500,000 barrels](http://articles.latimes.com/2013/sep/25/nation/la-na-arctic-drilling-20130926) of oil each day. These are tantalizing numbers for prospective oil companies just itching to explore the vast underwater seabed reserves that promise even higher profits than their already record breaking pace in recent years.With global warming and the polar icecap meltdown, 30 percent of the Arctic sea [ice has melted](http://jcmooreonline.com/2011/08/22/bits-and-pieces-9-the-arctic-ice-and-the-inuit/) away from 1979 to 2003. This has only enticed oil companies to lust for the Arctic drilling go-ahead with even more enthusiasm and determination. Despite a campaign promise to leave the Arctic region alone for the native Inuit people who have inhabited northern Alaska, Canada and Greenland since [800 B.C.](http://catholic.org/news/national/story.php?id=48713) as the longest running human inhabitants in North America, Obama the oil-friendly president has turned his back on them and in 2012 granted licenses for big oil drilling rights in both the Beaufort and Chukchi Seas. The harsh, austere conditions in the Arctic environment pose much greater dangers than offshore drilling in much warmer waters like the Gulf of Mexico. Plus, with the nearest Coast Guard stations 1000 miles away and no ports in the Arctic, oil drilling is especially problematic throughout the entire region.

Yet just two short years after the most costly and damaging oil spill in history with BP’s Deepwater Horizon disaster in 2010 when nearly 5 million gallons of crude oil leaked into the Gulf, throwing all caution to the wind and the native Inuits he promised to protect under the bus, Obama opened up the Arctic Ocean to the greedy oil companies. With complete disregard for the native people in the Arctic, Obama knew that risking another oil spill in Alaska like the one in the Gulf would be a catastrophic death trap to the Inuits.

## Oil Extraction Bad, Gulf of Mexico Proves

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When he invited the oil companies to resume carving up the Arctic floor in 2012 after over two decades of non-activity, Obama was well aware of the fact that the Gulf is now an ecological [dead zone](http://www.motherjones.com/blue-marble/2014/05/bp-oil-spill-cleanup-still-making-people-sick) with mostly all of its marine wildlife gone. The remaining shrimp are still coated in oil, half with serious deformities. Moreover, Obama knew that the toxic chemical dispersant aerially sprayed saturating the entire Gulf coast with unprecedented amounts was a desperate attempt to simply contain the oil by literally sweeping it under the seabed rug at the ocean floor and thereby allow BP to falsely declare all is well. Neither the deceptive BP propaganda blitz nor Michelle Obama heading to the Gulf on vacation could conceal the overwhelming and devastating damage to the entire region.

Meanwhile, by 2012 Obama also knew that the combination of oil and the 2 million gallons of the chemical Corexit used in the cleanup has a synergistically toxic effect that makes the combo [52 times](http://www.treehugger.com/ocean-conservation/disperant-made-bp-deepwater-horizon-oil-spill-52-times-more-toxic.html) more poisonous and lethal than either the chemical or oil by themselves. A congressional report said as much yet the oil and chemical company lobbyists have ensured that four years later not a single change or recommendation has yet to be enacted. Even the chemical manufacturing plant that produces Corexit also located in Louisiana remains open and unchanged despite the known health hazards. In the meantime, serious skin rashes and lesions along with a plethora of extremely severe respiratory and central nervous diseases and impairments are now beginning to kill Americans living along the Gulf coast waters. This horrendous scandal is yet one more among many criminal and sinister Obama administration cover-ups piling up during his final term in office.

## Oil extraction will kill arctic life

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Big Oil’s Global Power Grab. Devastating Environmental and Social Consequences By [Joachim Hagopian](http://www.globalresearch.ca/author/hagopian) Global Research, May 21, 2014 Url of this article: <http://www.globalresearch.ca/big-oils-global-power-grab-devastating-environmental-and-social-consequences/5383201> (Joachim Hagopian is a West Point graduate and former Army officer. His written manuscript based on his military experience examines leadership and national security issues. After the military, Joachim earned a masters degree in psychology and became a licensed therapist working in the mental health field for more than a quarter century. He now focuses on writing.)

Meanwhile back at the polar Arctic icecap, with so much sea [ice already melted](http://jcmooreonline.com/2011/08/22/bits-and-pieces-9-the-arctic-ice-and-the-inuit/) and gone, the native population along the Arctic coast struggles to maintain its traditional lifestyle that includes ice fishing, now severely limited since the ocean ice is no longer thick enough in many areas for humans much less dog sleds or polar bears to traverse. Hunting walrus and seals is also much more difficult. Travel to other villages located across the bay is also made much more distant and time-consuming.

With the additional presence of offshore oil rigs drilling wells deep into the seabed, the Inuits fear both their food supply and traditional culture will be cut off and eliminated. [80 percent](http://jcmooreonline.com/2011/08/22/bits-and-pieces-9-the-arctic-ice-and-the-inuit/) of the natives’ food source is caught in their coastal waters. And with the local marine wildlife – the bowhead whale in particular – so vital to their survival, the delicate eco-system balance that has sustained them for thousands of years is perilously threatened by Big Oil interests. A steady flow of icebreaker tankers and rigging ships in and out of the area would produce a major lasting negative impact on their environment. Still another critical concern would be the short narrow window of only the three warmer months each year to respond to any serious mishap or spill if it was to occur. After the Gulf leak, time-wise the Arctic stakes would be much higher. Finally, a third of that three to four month period when conditions are viable for production, the Arctic is under the cover of [darkness](http://articles.latimes.com/2013/sep/25/nation/la-na-arctic-drilling-20130926). One of the Inuit tribes in Alaska, the Inupiat, preserves a [traditional ritual](http://catholic.org/news/national/story.php?id=48713) that illustrates the ecologically sound practice of respecting their natural environment. They are only allowed to catch 10 bowhead whales a year. The first nine boats to harpoon a whale each receive equal shares with the lead whaling crew dividing the head between them. The butchered skull is then given back to the sea in a gesture that symbolizes the ancient regenerative cycle of life and death making for life anew. Obama and the oil companies are oblivious to such foreign constructs, which explains why so much of life under their dominance and control is utterly unsustainable.

## Species loss good

**a) it’s key to evolutionary change and long-term benefit**

Boulter 02

Michael Boulter (professor of paleobiology at the University of East London) 2002 Extinction: Evolution and the End of Man, p. 170

The same trend of long-drawn-out survival of the final relicts has been further considered by Bob May’s group at Oxford, particularly Sean Nee. The Oxford group are vociferous wailers of gloom and doom: ‘Extinction episodes, such as the anthropogenic one currently under way, result in a pruned tree of life.’ But they go on to argue that the vast majority of groups survive this pruning, so that evolution goes on, albeit along a different path if the environment is changed. Indeed, the fossil record has taught us to expect a vigorous evolutionary response when the ecosystem changes significantly. This kind of research is more evidence to support the idea that evolution thrives on culling. The planet did really well from the Big Five mass-extinction events. The victims’ demise enabled new environments to develop and more diversification took place in other groups of animals and plants. Nature was the richer for it. In just the same way the planet can take advantage from the abuse we are giving it. The harder the abuse, the greater the change to the environment. But it also follows that it brings forward the extinctions of a whole selection of vulnerable organisms.

**b) biodiversity is bad—complex systems are more prone to total failure—simple ones are stable**

Heath 99

Jim Heath 1999 Orchids Australia, December, http://www.orchidsaustralia.com/whysave.htm

Some people say we can’t afford to lose any species, no matter what species they are. Everything needs everything else, they say, to make nature balance. If that were right, it might explain why the six orchid species should be saved. Alas, no. We could pour weedkiller on all the orchids in Australia and do no ecological damage to the rest of the continent’s biology. But wouldn’t the natural ecological systems then become less stable, if we start plucking out species - even those orchids? Not necessarily. Natural biological systems are hardly ever stable and balanced anyway. Everything goes along steadily for a time, then boom - the system falls apart and simplifies for no visible reason. Diverse systems are usually more unstable than the less diverse ones. Biologists agree that in some places less diversity is more stable (in the Arctic, for example). Also, monocultures - farms - can be very stable. Not to mention the timeless grass of a salt marsh. In other words, there’s no biological law that says we have to save the orchids because they add diversity, and that added diversity makes the biological world more stable.

**c) the impact is extinction**

Boulter 02

Michael Boulter (professor of paleobiology at the University of East London) 2002 Extinction: Evolution and the End of Man, p. 67

If biological evolution really is a self-organised Earth-life system there are some very important consequences. One is that life on this planet continues despite internal and external setbacks, because it is the system that recovers at the expense of some of its former parts. For example, the end of the dinosaurs enabled mammals to diversify. Otherwise if the exponential rise were to reach infinity, there would not be space or food to sustain life. It would come to a stop. Extinctions are necessary to retain life on this planet.

## No Russian aggression over Arctic

Thorsson 14

“Washington’s folly” in the Arctic Journal May 20, 2014 - 11:37am - By Elías Thórsson, journalist: http://arcticjournal.com/politics/619/washingtons-folly

Currently, the Pentagon is downplaying any Russian threat to stability in the region. Derrick-Frost, though, says the military has its eyes on the situation. “Given the long history of pragmatic co-operation among Arctic states on Arctic issues, we do not assess the Arctic to present a significant national security threat at present, but we will continue to monitor developments and respond accordingly,” she says. Huebert, too, reckons military conflict over the Arctic is unlikely. Should it come to blows it would be because conflicts elsewhere (think Ukraine) had spilled over. He also warns against ruling out the role that non-Arctic states might play. “More countries are taking an interest in the Arctic – for instance China is just starting to deal with the Arctic and they could become interested in defence in the region,” he says. “Nobody even saw them being interested in the Arctic six years ago and after being in Shanghai I can tell you that they can do whatever they want.”

## Hegemony Bad (China)

If the US bolsters it’s global hegemony, US-Chinese conflict is inevitable

Layne, 07

Christopher, Associate Professor in the Bush School of Government and Public Service at Texas A&M University and Research Fellow with the Center on Peace and Liberty at The Independent Institute, "The Case Against the American Empire," American Empire: A Debate, p. 64-65

To be sure, the United States should not ignore the potential strategic ramifications of China’s arrival on the world stage as a great power. After all, the lesson of history is that the emergence of new great powers in the international system leads to conflict, not peace. On this score, the notion—propagated by Beijing—that China’s will be a “peaceful rise” is just as fanciful as claims by American policy-makers that China has no need to build up its military capabilities because it is unthreatened by any other state. Still, this does not mean that the United States and China inevitably are on a collision course that will culminate in the next decade or two in a war. Whether Washington and Beijing actually come to blows, however, depends largely on what strategy the United States chooses to adopt toward China, because the United States has the “last clear chance” to adopt a grand strategy that will serve its interests in balancing Chinese power without running the risk of an armed clash with [end page 73] Beijing. If the United States continues to aim at upholding its current primacy, however, Sino-American conflict is virtually certain.

**The impact is Extinction**

Straits Times 2K

(“Regional Fallout: No one gains in war over Taiwan,” June 25, Lexis)

THE high-intensity scenario postulates a cross-strait war escalating into a full-scale war between the US and China. If Washington were to conclude that splitting China would better serve its national interests, then a full-scale war becomes unavoidable. Conflict on such a scale would embroil other countries far and near and -- horror of horrors -- raise the possibility of a nuclear war. Beijing has already told the US and Japan privately that it considers any country providing bases and logistics support to any US forces attacking China as belligerent parties open to its retaliation. In the region, this means South Korea, Japan, the Philippines and, to a lesser extent, Singapore. If China were to retaliate, east Asia will be set on fire. And the conflagration may not end there as opportunistic powers elsewhere may try to overturn the existing world order. With the US distracted, Russia may seek to redefine Europe's political landscape. The balance of power in the Middle East may be similarly upset by the likes of Iraq. In south Asia, hostilities between India and Pakistan, each armed with its own nuclear arsenal, could enter a new and dangerous phase. Will a full-scale Sino-US war lead to a nuclear war? According to General Matthew Ridgeway, commander of the US Eighth Army which fought against the Chinese in the Korean War, the US had at the time thought of using nuclear weapons against China to save the US from military defeat. In his book The Korean War, a personal account of the military and political aspects of the conflict and its implications on future US foreign policy, Gen Ridgeway said that US was confronted with two choices in Korea -- truce or a broadened war, which could have led to the use of nuclear weapons. If the US had to resort to nuclear weaponry to defeat China long before the latter acquired a similar capability, there is little hope of winning a war against China 50 years later, short of using nuclear weapons. The US estimates that China possesses about 20 nuclear warheads that can destroy major American cities. Beijing also seems prepared to go for the nuclear option. A Chinese military officer disclosed recently that Beijing was considering a review of its "non first use" principle regarding nuclear weapons. Major-General Pan Zhangqiang, president of the military-funded Institute for Strategic Studies, told a gathering at the Woodrow Wilson International Centre for Scholars in Washington that although the government still abided by that principle, there were strong pressures from the military to drop it. He said military leaders considered the use of nuclear weapons mandatory if the country risked dismemberment as a result of foreign intervention. Gen Ridgeway said that should that come to pass, we would see the destruction of civilisation. There would be no victors in such a war. While the prospect of a nuclear Armaggedon over Taiwan might seem inconceivable, it cannot be ruled out entirely, for China puts sovereignty above everything else.

## Heg Bad (Iran)

**US attempts to remain a global hegemon lead to Iranian conflict**

Layne 07

Christopher, Associate Professor in the Bush School of Government and Public Service at Texas A&M University and Research Fellow with the Center on Peace and Liberty at The Independent Institute, "The Case Against the American Empire," American Empire: A Debate, p. 64-65

Iran Because of the strategy of primacy and empire, the United States and Iran are on course for a showdown. The main source of conflict—or at least the one that has grabbed the lion’s share of the headlines—is Tehran’s evident determination to develop a nuclear weapons program. Washington’s policy, as President George W. Bush has stated on several occasions—in language that recalls his prewar stance on Iraq—is that a nuclear-armed Iran is “intolerable.” Beyond nuclear weapons, however, there are other important issues that are driving the United States and Iran toward an armed confrontation. Chief among these is Iraq. Recently, Zalmay Khalilzad, the U.S. ambassador to Iraq, has accused Tehran of meddling in Iraqi affairs by providing arms and training to Shiite militias and by currying favor with the Shiite politicians who dominate Iraq’s recently elected government. With Iraq teetering on the brink of a sectarian civil war between Shiites and Sunnis, concerns about Iranian interference have been magnified. In a real sense, however, Iran’s nuclear program and its role in Iraq are merely the tip of the iceberg. The fundamental cause of tensions between the United States and Iran is the nature of America’s ambitions in the Middle East and Persian Gulf. These are reflected in current U.S. grand strategy—which has come to be known as the Bush Doctrine. The Bush Doctrine’s three key components are rejection of deterrence in favor of preventive/preemptive military action; determination to effectuate a radical shake-up in the politics of the Persian Gulf and Middle East; and gaining U.S. dominance over that region. In this respect, it is hardly coincidental that the administration’s policy toward Tehran bears a striking similarity to its policy [end page 76] during the run-up to the March 2003 invasion of Iraq, not only on the nuclear weapons issue but—ominously—with respect to regime change and democratization. This is because the same strategic assumptions that underlay the administration’s pre-invasion Iraq policy now are driving its Iran policy. The key question today is whether these assumptions are correct.

**The impact is Extinction**

Hirsch 06

Jorge Hirsch, Professor of Physics at the University of California--San Diego, 2006 (“Nuking Iran,” ZNet, April 10 http://www.zmag.org/content/showarticle.cfm?ItemID=10071)

Iran is likely to respond to any US attack using its considerable missile arsenal against US forces in Iraq and elsewhere in the Persian Gulf. Israel may attempt to stay out of the conflict, it is not clear whether Iran would target Israel in a retaliatory strike but it is certainly possible. If the US attack includes nuclear weapons use against Iranian facilities, as I believe is very likely, rather than deterring Iran it will cause a much more violent response. Iranian military forces and militias are likely to storm into southern Iraq and the US may be forced to use nuclear weapons against them, causing large scale casualties and inflaming the Muslim world. There could be popular uprisings in other countries in the region like Pakistan, and of course a Shiite uprising in Iraq against American occupiers. Finally I would like to discuss the grave consequences to America and the world if the US uses nuclear weapons against Iran. First, the likelihood of terrorist attacks against Americans both on American soil and abroad will be enormously enhanced after these events. And terrorist's attempts to get hold of "loose nukes" and use them against Americans will be enormously incentivized after the US used nuclear weapons against Iran. Second, it will destroy America's position as the leader of the free world. The rest of the world rightly recognizes that nuclear weapons are qualitatively different from all other weapons, and that there is no sharp distinction between small and large nuclear weapons, or between nuclear weapons targeting facilities versus those targeting armies or civilians. It will not condone the breaking of the nuclear taboo in an unprovoked war of aggression against a non-nuclear country, and the US will become a pariah state. Third, the Nuclear Non-Proliferation Treaty will cease to exist, and many of its 182 non-nuclear-weapon-country signatories will strive to acquire nuclear weapons as a deterrent to an attack by a nuclear nation. With no longer a taboo against the use of nuclear weapons, any regional conflict may go nuclear and expand into global nuclear war. Nuclear weapons are million-fold more powerful than any other weapon, and the existing nuclear arsenals can obliterate humanity many times over. In the past, global conflicts terminated when one side prevailed. In the next global conflict we will all be gone before anybody has prevailed.

## Coast Guard =/= Non-military

Powers 14

Rod Powers, retired Air Force First Sergeant with 22 years of active duty service. 2014 U.S. Military 101 The "Basics" of the United States Military

<http://usmilitary.about.com/cs/generalinfo/a/military101.htm>

Our present military organizational structure is a result of the National Security Act of 1947. This is the same act that created the United States Air Force, and restructured the "War Department" into the "Department of Defense." The Department of Defense is headed by a civilian; the Secretary of Defense, who is appointed by the President of the United States. Under the Secretary of Defense, there are three military departments: The Department of the Army, the Department of the Air Force, and the Department of the Navy. Each of these military departments are also headed up by civilians; the Secretary of the Army, the Secretary of the Air Force, and the Secretary of the Navy. These "service secretaries" are also appointed by the President. There are five military branches: The Army, Air Force, Navy, Marine Corps, and Coast Guard. The Army is commanded by a four-star general, known as the Army Chief of Staff. The Army Chief of Staff reports to the Secretary of the Army (for most matters). The top military member in the Air Force is the Air Force Chief of Staff. This four-star general reports (for most matters) to the Secretary of the Air Force. The Navy is commanded by a four-star admiral, called the Chief of Naval Operations. The Marines are commanded by a 4-star general called the Commandant of the Marine Corps. Both the Chief of Naval Operations and the Marine Corps Commandant report (for most matters) to the Secretary of the Navy. That leaves the Coast Guard. The Coast Guard does not fall under the Department of Defense. Until recently, the Coast Guard was under the Department of Transportation. Recent legislation has moved the Coast Guard to the newly created Department of Homeland Defense. However, the Coast Guard is considered a military service, because, during times of war or conflict, the President of the United States can transfer any or all assets of the Coast Guard to the Department of the Navy. In fact, this has been done in almost every single conflict that the United States have ever been involved in. The Coast Guard is commanded by a 4-star admiral, known as the Coast Guard Commandant.

## Repeal Jones act CP

Slattery et al. 14

May 22, 2014 “Sink the Jones Act: Restoring America’s Competitive Advantage in Maritime-Related Industries” a policy paper released by the Heritage Foundation By [Brian Slattery](http://www.heritage.org/about/staff/s/brian-slattery), [Bryan Riley](http://www.heritage.org/about/staff/r/bryan-riley) and Nicholas loris, research fellows at the Heritage Foundation

The U.S. Coast Guard could also benefit greatly from a repeal of the Jones Act. With the increasing interest in natural resources in the Arctic, the Coast Guard’s presence in the region will likely rise. Polar icebreaking capacity is a primary responsibility of the Coast Guard in this region, and the Jones Act hinders its ability to carry out this mission. The Coast Guard’s “High Latitude Region Mission Analysis Capstone Summary” concluded that the Coast Guard needs three heavy and three medium polar icebreakers to accomplish all of its Arctic and Antarctic missions.[8] Today, the Coast Guard fleet has one medium polar icebreaker (USCGC Healy) and one heavy polar icebreaker (USCGC Polar Star). The Healy operates primarily as a research vessel under the direction of the National Science Foundation. The Polar Star is nearly 40 years old and was inactive from 2006 to 2012, when it returned to active service after a $90 million overhaul.[9] This overhaul will extend the service life of the Polar Star for another seven to 10 years. In the meantime, the Coast Guard is trying to find funding for a new heavy polar icebreaker to begin filling its capability gap. This project could cost nearly $1 billion.[10] To commission this new icebreaker within the desired time frame, the Coast Guard would need to dedicate a large portion of its procurement budget over several years. This is virtually impossible.

Instead of allocating precious funding that could be used elsewhere, the Coast Guard should pursue leasing foreign-owned commercial polar heavy icebreakers. (The U.S. lacks a commercial heavy icebreaker fleet.) However, the Jones Act inhibits this. The U.S. military already relies on Russian icebreakers to facilitate resupply missions to McMurdo Station in Antarctica.[11] In 2011, when an ice storm prevented the last winter fuel delivery to Nome, Alaska, the U.S. Coast Guard solicited the services of a Russian vessel to reach the community.[12] This response effort required the Healy to serve where a heavy icebreaker would have been much more effective. Ultimately, a Jones Act waiver allowed the Russian tanker to operate in U.S. waters, but repealing this law would allow the Coast Guard and other government services to lease foreign-built icebreakers more easily, while diminishing U.S. reliance on Russia.

## Consult Inuit Council

Hagopian 14

Big Oil’s Global Power Grab. Devastating Environmental and Social Consequences By [Joachim Hagopian](http://www.globalresearch.ca/author/hagopian) Global Research, May 21, 2014 Url of this article: <http://www.globalresearch.ca/big-oils-global-power-grab-devastating-environmental-and-social-consequences/5383201> (Joachim Hagopian is a West Point graduate and former Army officer. His written manuscript based on his military experience examines leadership and national security issues. After the military, Joachim earned a masters degree in psychology and became a licensed therapist working in the mental health field for more than a quarter century. He now focuses on writing.)

One positive development in recent decades is the Inuit people from Alaska, Canada and Greenland have formed an alliance on a unified front called the Inuit Circumpolar Council, ([ICC](http://www.economist.com/node/18277141?story_id=18277141)), a body created in 1977. The ICC can contest and exercise some control over the wholesale extraction of natural resources from their traditional lands and seas. As a result, the estimated 160,000 in the Arctic region wield a degree of autonomous power. Inuits from Greenland as a territory of Denmark in 2009 became independent. In northern Arctic Canada the Nunavut territory was established by the Inuit population there. The indigenous people of the Arctic are not entirely opposed to development, but want to make sure that it does so under their control of protecting their living environment while receiving fair financial compensation.

## Saudi Oil Disad 1NC

Saudi Arabia is counting on likely high oil prices now

Reuters 14

LATEST STORIES IN ECONOMY, REUTERS, Fri, 2014-05-09 03:00, “Saudi Arabia crude output rises to 9.66 million bpd”: http://www.arabnews.com/news/567871

ALKHOBAR: Saudi Arabia produced 9.66 million barrels per day (bpd) of crude oil in April, up from 9.566 million bpd in March, an industry source familiar with the matter said. Saudi Arabia supplied 9.650 million bpd in April to the market, up from 9.533 million bpd in March, the source said. Supply to market may differ from production depending on the movement of barrels in and out of storage. “It is generated by customers,” the source said when asked about the reason for higher output and supply from the Kingdom.  “But an increase of 100,000 to 200,000 is not an indication of anything. It is not an indication that there is a change in the global market.” “The market is balanced. We expect the situation to remain the same for the rest of the year in terms of prices and market demand and supply, unless we see surprises,” the source added. A Reuters survey showed output from the Organization of the Petroleum Exporting Countries rose by 160,000 barrels per day (bpd) in April on increases in Saudi Arabia, Algeria, Iraq and Libya. Overall OPEC supply remains below its supply target of 30 million barrels per day (bpd). Output rose above that level in February, after four straight months below 30 million bpd, according to Reuters estimates. OPEC ministers will meet on June 11 to decide on output policy for the rest of the year. Brent oil fell below $108 a barrel on Thursday as tensions in Ukraine appeared to show signs of easing but the crisis in Libya and a jump in Chinese crude imports to a record high underpinned prices. Front-month Brent, the international benchmark, shed 59 cents at $107.54 per barrel by 1328 GMT, after settling $1.07 higher on Wednesday. US crude was 60 cents lower at $100.17 per barrel, having briefly dropped below $100 and notched its biggest daily percentage fall in a week. It had gained $1.27 in the previous session on data showing a surprise drop in US crude stocks. The price differential between WTI and Brent widened to $7.38 a barrel, after it hit $6.56 in the previous session, its narrowest in two weeks. “Things have dipped a little bit on the basis of slightly more positive signs or at least less worrying signs out of Ukraine,” Simon Wardell, an analyst at Global Insight, said. Brent also found some support from the standoff in Libya, where rebels in the east boycotted the new prime minister and said they would keep two major terminals shut. Optimism about higher Libyan exports had helped to put pressure on oil prices since the end of last month, when some oil ports shut since last year were reopened. But Libyan production remains at just over 250,000 bpd, less than a fifth of the output around 1.4 million bpd in mid-2013. “One week we think that the flows are going to come back and then they don’t come back, so it’s difficult to have a trending market when you have this uncertainty on Libya,” added Jakob. Brent had received some support earlier in the session from Chinese data showing crude oil imports rose to a record 6.78 million barrels per day (bpd) in April, after slipping below 6 million bpd in March for the first time since November 2013. The data also showed that total exports rose, against forecasts for a decline, offering some rare good news for China’s slowing economy. Oil futures rose by more than $1 on both sides of the Atlantic on Wednesday after data from the US Energy Information Administration (EIA) showed an unexpected drop in US inventories in the week ended May 2, although total stocks remained close to record high levels. Total stocks fell 1.8 million barrels last week, according to the EIA. Stocks fell 1.4 million barrels at the Cushing, Oklahoma, delivery point for the US futures contract, to their lowest since 2008.

**And, New drilling tanks oil prcies**

Connerly 13

5/01/2013, Oil Price Forecast for 2013-2014: Falling Prices by Bill Connerly: http://www.forbes.com/sites/billconerly/2013/05/01/oil-price-forecast-for-2013-2014-falling-prices/

Oil prices are headed down, and I mean down at least $20 a barrel. The key reason is that prices have been high. It’s not a paradox, but a result of the long time lags in oil production. Oil prices were fairly stable from 1986 through 2001, averaging just $20 per barrel. Then prices started rising, spiking to $134 just as the recession began. The price of oil has been above $80 for the past two and a half years. With rising prices has come a dramatic increase in exploration activity. During the era of low prices, the number of drilling rigs in operation around the world was 1,900 on average; now we are at nearly double that pace, and we have been for nearly three years. Drilling activity results in oil production, lasting for many years after the drilling is over. Take a look at the accompanying chart of drilling rigs and total production. Drilling jumped up after the oil price hikes of 1973 and 1979. By 1986, increased oil production brought prices crashing down. Oil exploration quickly followed suit. Production, however, continued to grow long after new drilling declined. When drilling was high, much of the activity was exploratory—trying to find the oil. When prices fell, the riskiest drilling made no sense. What was left was in-fill. The oil field had been identified, and further wells were needed to best utilize the resource. These wells are fairly low risk, with high rewards compared to the cost of the drilling rig. As a result, even low levels of drilling activity led to substantial increases in global production. Today we’ve had moderately strong drilling activity for several years. New fields have been identified and delineated. Now we’ll see fairly mild drilling activity but continually increasing production. In the past year production has been soft, barely growing, but that’s a reflection of weak demand. In the short run, production can be dialed back to save more oil for the future. In the long run, though, production capacity rules the roost. What of demand? Demand should grow a little slower than the global economy. Unless the world starts to boom—an unlikely scenario, given problems in Europe and the United States—production capacity will grow faster than demand, pulling prices down.

**And, Low oil prices spark Saudi civil war**

Arena Resources 07

“Why Flooding the Worldwide Market Place with Oil Will Not Stop Iran from Achieving their Nuclear Ambitions,” on January 11, 2007 from http://doktorstocks.blogspot.com/2007/01/why-flooding-worldwide-market-place.html

Iran vs. OPEC. OPEC would be badly damaged. Any price cuts would not only bring down the Iranian economy but also the economy of Saudi Arabia and all the rest of the OPEC countries. The OPEC countries are not willing to allow self inflicted wounds to their economies. Damage to the Saudi Economy would do more harm to their economy than Iran. A damaged Saudi economy could drive their citizens to revolt and a more dangerous radical regime could emerge to power in that country. FSU and Lower Prices Sharply lower oil prices could create incentive for the FSU to sell some of their nuclear warheads on the black market. Iran would be a customer. In summary, lower oil prices will not stop Iran from building a nuclear arsenal. Investors should doubt any conspiracy theories that surround Saudi Arabia opening the wellheads to flood the worldwide marketplace with oil in order to drive down prices and bankrupt Iran. Such a move would increase instability within Saudi Arabia, threaten the very existence of the Saudi monarchy and would not stop Iran from becoming a nuclear power. The only way to prevent Iran from becoming a nuclear power is the use of military force.

**Any middle eastern conflict goes nuclear**

Steinbach 02

John, Researcher for the Centre for Research on Globalisation, “Israeli Weapons of Mass Destruction: a Threat to Peace,” on March 3, 2002 from http://www.globalresearch.ca/articles/STE203A.html

Meanwhile, the existence of an arsenal of mass destruction in such an unstable region in turn has serious implications for future arms control and disarmament negotiations, and even the threat of nuclear war. Seymour Hersh warns, "Should war break out in the Middle East again,... or should any Arab nation fire missiles against Israel, as the Iraqis did, a nuclear escalation, once unthinkable except as a last resort, would now be a strong probability."(41) and Ezar Weissman, Israel's current President said "The nuclear issue is gaining momentum(and the) next war will not be conventional."(42) Russia and before it the Soviet Union has long been a major(if not the major) target of Israeli nukes. It is widely reported that the principal purpose of Jonathan Pollard's spying for Israel was to furnish satellite images of Soviet targets and other super sensitive data relating to U.S. nuclear targeting strategy. (43) (Since launching its own satellite in 1988, Israel no longer needs U.S. spy secrets.) Israeli nukes aimed at the Russian heartland seriously complicate disarmament and arms control negotiations and, at the very least, the unilateral possession of nuclear weapons by Israel is enormously destabilizing, and dramatically lowers the threshold for their actual use, if not for all out nuclear war. In the words of Mark Gaffney, "... if the familar pattern(Israel refining its weapons of mass destruction with U.S. complicity) is not reversed soon- for whatever reason- the deepening Middle East conflict could trigger a world conflagration

## 2NC Ext.

### High oil prices key to the Saudi economy/stability

Carey 11

Glen, writer and producer for Bloomberg Media/Financial Market, “Saudi Arabia’s Economy Will Expand 5.3% on Oil Prices, NCB Says,” on May 15, 2011 from <http://www.bloomberg.com/news/2011-05-15/saudi-arabia-s-economy-will-expand-5-3-on-oil-prices-ncb-says.html>

[Saudi Arabia](http://topics.bloomberg.com/saudi-arabia/)’s economy will expand 5.3 percent this year, powered by higher oil prices and more [government spending](http://topics.bloomberg.com/government-spending/) in the Arab world’s largest economy, [National Commercial Bank](http://www.alahli.com) said. The kingdom, which depends on oil for 86 percent of its revenue, announced increases in government spending in March as protests calling for more job opportunities and democracy engulfed the Middle East. The package included $67 billion on housing and funds for the military and religious groups that backed the government’s ban on domestic protests, and followed a $36 billion handout announced on Feb. 23. With higher oil prices, Saudi Arabia will record a budget surplus of 62.8 billion riyals ($16.8 billion), National Commercial said. Oil revenue this year is expected at 828.2 billion riyals, it said. The break-even oil price required to balance the budget this year will increase to $84 a barrels this year from $65 a barrel last year, the bank said. Oil prices have increased 8.8 percent this year. Crude oil for June delivery gained 68 cents to $99.65 a barrel on May 13 on the [New York Mercantile Exchange](http://topics.bloomberg.com/new-york-mercantile-exchange/).

### Oil prices k2 Saudi growth

Mitchell and Schmidt 08

John, Associate Research fellow at the Royal Institute for International Affairs, and Daniela, November 2008, “Resource Depletion, Dependence, and Development: Saudi Arabia, Chatham House, <http://www.chathamhouse.org.uk/files/13185_1108rddd_saudiarabia.pdf>

A strong boost in oil prices has been a basis for exceptional growth advances in many oil-exporting economies. Saudi Arabia’s economy has experienced annual growth rates1 averaging 15 percent 2003 - 2007. Total government revenue more than doubled between 2003 and 2007. Oil revenues accounted for 95% of the increase, since non-oil revenues increased by only 19%. This increase occurred almost entirely in 2006-7. Over the same period since 2003, expenditure increased by 80%2 so that “dependence” of expenditure on oil revenues increased from 42% in 2003 to 50% in 2007. Government expenditure, increased in response to the increase in revenues: higher salaries for the government employees and high capital expenditure. Table 1 shows the breakdown. Despite the strong rise in spending, the robust revenue increase has initially largely been saved, leading to an improvement in Saudi Arabia’s fiscal balance. The fiscal surplus increased from 5% of GDP in 2003 to 21% in 2006, but a fall in revenue (due to lower oil output) and rising expenditure reduced this to12% in 2007. Fiscal surpluses have been used to reduce debt: public sector debt was reduced by over 60% from 2003 to 2007, falling from 88% of GDP to 19%. A target of zero debt has been suspended to allow the Monetary Authority to use short-term notes and bonds as a means of controlling money supply. All of Saudi debt is and has been domestic. The remaining fiscal surpluses have been invested by the Government either through the main development agencies or through the Public Investment Fund (PIF), about which little information is publicly available. Early this year the PIF announced that it would set up a wealth fund, probably following the Norwegian model, to invest surpluses for long-term income. Foreign exchange surpluses have been managed by the Saudi Arabian Monetary Agency ((SAMA). The oil revenues also determine the external accounts of Saudi Arabia. In 2007 the country ran a current account surplus of 25 percent of GDP, up from 13% in 2003 and from deficits through most of the 1990s. Over 90% of the current account surpluses are in official capital and reserves. As in the fiscal sector, so in the external sector, imports to the non-oil economy are paid for mainly by oil exports. In 2007, non-oil exports paid for only 22% of imports of goods and services, including the repatriation of income from expatriate workers. This is up from 18% in 2003, but there was no increase since 2005. Similarly, on the external side of the non-oil economy, rising oil export revenues cover an increasing non-oil current account deficit. From 2003 to 2007, imports increased by almost two and a half times, while non-oil exports doubled. The non-oil deficit grew from 50 to 46% of the non-oil GDP Only 23% of non-oil current account requirements were covered by non-oil exports, as Table 2 shows:

### High oil prices k2 investor confidence

Kawach 11

Nadim, writer for Emirates Business, “High oil prices boost Saudi business mood,” on January 16, 2011 from: http://www.emirates247.com/business/economy-finance/high-oil-prices-boost-saudi-business-mood-2011-01-16-1.342676

Strong oil prices and expectations they will remain high through 2011 have lifted Saudi Arabia’s general business mood while banks could be encouraged to end nearly two years of curbs on lending, according to a Saudi bank. BSF said its business confidence index rose to 101.3 points in the first quarter of 2011 from 100.2 points in the fourth quarter of 2010, adding that it is far higher than the 99.4 points it scored in the first quarter of last year. “Expectations that oil prices will hold their strength in the first half of the year have encouraged a good improvement in business confidence among Saudi Arabia’s business leaders, who expect follow-on benefits in consumption patterns, revenues and stock market performance,” BSF said. In a study sent to Emirates 24/7, BSF said the survey showed firm oil prices would spur greater lending by the kingdom’s banks, which were extremely reluctant to extend credit last year despite having ample liquidity. “Confidence in equity market investments improved markedly among businesspeople, with almost 75 per cent of respondents expecting positive performance in shares in the first half of this year, up from 34.5 per cent in the fourth quarter of 2010…..petrochemical and banking shares are most likely to gain from the ripple effects of robust oil prices.” According to the study, high oil prices have enabled Saudi Arabia to replenish its foreign assets to pre-financial crisis levels of above SR1.6 trillion, giving it plenty of room to manoeuvre a budget including record expenditure projections of SR580 billion this year.

### Saudi instability kills world economy

David 1999

Steven R.; Professor of Political Science – Johns Hopkins) Foreign Affairs Jan/Feb

In a Saudi civil war, the oil fields will be a likely battle site, as belligerents seek the revenue and international recognition that come with control of petroleum. For either side to cripple oil production would not be difficult. The real risk lies not with the onshore oil wells themselves, which are spread over a 100-by-300 mile area, but in the country's dependence on only a few critical processing sites. Destruction of these facilities would paralyze production and take at least six months to repair. If unconventional weapons such as biological agents were used in the oil fields, production could be delayed for several more months until workers were convinced it was safe to return. Stanching the flow of Saudi oil would devastate the United States and much of the world community. Global demand for oil (especially in Asia) will increase in the coming decades, while non-Persian Gulf supplies are expected to diminish. A crisis in the planet's largest oil producer, with reserves estimated at 25 percent of the world's total, would have a massive and protracted impact on the price and availability of oil worldwide. As the disruptions of 1973 and 1979 showed, the mere threat of diminished oil supply can cause panic buying, national hysteria, gas lines, and infighting. Prices for oil shot up 400 percent in 1973, 150 percent in 1979, and 50 percent (in just 15 days) in 1990. The oil shocks of the 1970s threw the United States into recession, causing spiraling inflation and a decline in savings rates that plagues the U.S. economy even now. Trillions of dollars were lost worldwide. And all this occurred at a time when the United States was less dependent on foreign petroleum than it is now. Cutting the Saudi pipeline today would cause a severe worldwide recession or depression. Short of physical attack, it is the gravest threat imaginable to American interests.

### Growth k2 Saudi stability

Daltorio 11

Tony Daltorio has an MBA in the financial field at the University of Pittsburgh, writes investment articles for Oxford's Club InvestmentU website which is a subsidiary for the largest investment newsletter publisher in the world, “Why OPEC needs higher oil prices,” on April 7, 2011 from http://seekingalpha.com/article/262465-why-opec-needs-higher-oil-prices)

Its heady situation once again emphasizes oil’s importance in the global economy. And its significance will only grow as developing nations – from China to India to Brazil – demand more energy. But there are plenty of other factors at play that will keep oil prices high going forward. Why OPEC Needs Higher Oil Prices Also affecting prices, certain oil-heavy governments are turning toward populist policies to quell political unrest. Take Saudi Arabia’s King Abdullah, who is boosting public spending and handouts. That includes one-off bonuses for public sector workers and building half a million homes at affordable prices. Together, those actions cost $129 billion, equal to over half the country’s oil revenues last year. Many veteran oil watchers expect the extra spending to lift Saudi oil revenue needs to a percentage basis closer to Venezuela or Iran’s. Both countries are well-known oil price hawks, always pressing for much higher prices. In Saudi Arabia’s case, it will likely pay for its spending spree by tapping its $450 billion in reserves. But even then, prices will have to average $83 a barrel this year for it to balance its budget. Just a decade ago, it only needed $20 a barrel to achieve that same goal.Higher Oil Prices Are Here to StayUnfortunately for consumers, higher oil prices are here to stay. The Institute of International Finance notes that Saudi Arabia will only be able to balance its budget if oil prices are at $115 a barrel in the future. And it isn’t the only one that needs prices to climb further; other members of the six-nation Gulf Cooperation Council are announcing similar spending plans. Kuwait, for one, will issue a $4,000 one-off bonus per citizen and free food staples for more than a year.Such social spending will press oil prices higher still. It will also reduce available funds for state-owned oil companies to invest into adding future production capacity. And as governments in the region continue to feel under threat from social unrest, they are less and less likely to cut into public energy subsidies. Those policies have made fuel cheaper than water in many of those countries.

## Russia Disad 1NC

**US-Russian relations are tense but haven’t tipped**

AP 14

May 25, 2014 Putin: Cold War isn’t returning Associated Press: http://www.spokesman.com/stories/2014/may/25/putin-cold-war-isnt-returning/

ST. PETERSBURG, Russia – President Vladimir Putin said Saturday that he does not believe there will be a new Cold War with the United States, and Russia does not want it. But he warned that Russia’s interests must be taken seriously and accused the West of having ignored Russia’s concerns over Ukraine. He also criticized Britain’s Prince Charles’ reported recent remarks comparing him to Hitler as “unacceptable” and “not royal behavior.” “I wouldn’t like to think that this is the start of a new Cold War – we’re not interested in that and I don’t believe it will happen,” Putin said when asked about the future of U.S.-Russian relations, which are at their lowest point in the two decades since the end of the Soviet Union because of the crisis in Ukraine.

He said there have been many points of contact and cooperation between the U.S. and Russia in recent years, but “these instruments are only good when they are really used, if they are really platforms for bilateral work. These platforms are not there for us to drink tea or coffee. These are platforms for searching for compromise.” Speaking to representatives of major news agencies, including the Associated Press, Putin accused Western politicians of interfering in Ukraine without taking into account how important Russia sees its neighbor to its own security and economic interests. As an indication of how badly Putin’s relations with the West have fallen in some quarters, he was asked about Prince Charles’ reported comment in a private conversation during a visit to Canada comparing the annexation of Crimea to Adolf Hitler’s 1939 invasion of Poland. If Charles said that, the comparison was “unacceptable” and “not royal behavior,” Putin replied. “I think he understands that himself,” Putin said.

**Plan tanks Russian relations**

Thorsson 14

“Washington’s folly” in the Arctic Journal May 20, 2014 - 11:37am - By Elías Thórsson, journalist: http://arcticjournal.com/politics/619/washingtons-folly

Instead of sparking a conflict, however, Washington’s Arctic indecisiveness might actually help avoid the type of one-upmanship we saw during the Cold War. Huebert points to the enigma surrounding Putin’s goals in the region, and says increased US attention could actually be seen as aggression by Moscow. He argues that we need to be trying to decipher what Moscow’s Arctic goals are. “Is it responding in defence of what it sees as fascist thugs, such as the prospect of Sweden and Finland joining Nato, or is this the beginning of an increasingly aggressive Russia, which is planning future actions in country’s such as Moldova and Belarus? “Some argue that all this is for internal consumption, that this is just to consolidate Putin’s power in Russia. If that is the case and the West responds, it creates a very dangerous dynamic. If you get one wrong you will be making the system that much worse. Do nothing is fine, but only if he is just doing this for internal consumption.”

**US-Russian war causes extinction**

Helfand 12

Co-founder of International Physicians for the Prevention of Nuclear War (Nobel Peace Prize winning organization Ira, 12/18/12, “The Frightening Scenario of the Nuclear War,” http://www.ipsnews.net/2012/12/the-frightening-scenario-of-the-nuclear-war

A large-scale war between the U.S. and Russia would be even more catastrophic. Hundreds of millions of people would be killed directly; the indirect climate effects would be even greater. Global temperatures would drop an average of eight degrees Celsius, and more than 20 degrees Celsius in the interior of North America and Eurasia. In the Northern Hemisphere, there would be three years without a single day free of frost. Food production would stop and the vast majority of the human race would starve.¶ Since the end of the Cold War we have acted as though this kind of war simply can’t happen. But it can: the two nuclear superpowers still have nearly 20,000 nuclear warheads; more than two thousand of them are maintained on missiles that can be fired in less than 15 minutes, destroying the cities of the other power 30 minutes later.¶ As long as the U.S. and Russia maintain these vast arsenals there remains the very real danger that they will be used, either intentionally or by accident. We know of at least five occasions since 1979 when one or the other of the superpowers prepared to launch a nuclear attack on the other country in the mistaken belief that they themselves were under attack. The most recent of these events was in January 1995. The conditions that existed then, which brought us within minutes of a nuclear war, have not significantly changed today. The next time an accident takes place, we may not be so lucky.¶ Recognising this great danger, 35 nations joined in a new call for the elimination of all nuclear weapons at the United Nations this October. The International Red Cross/Red Crescent Movement has also called for the abolition of nuclear weapons. In March 2013, the Norwegian government will convene a meeting of all state parties to the Non Proliferation Treaty to discuss the humanitarian consequences of nuclear war.¶ The U.S. and Russia should embrace these initiatives and lead the way in negotiating a verifiable, enforceable treaty that eliminates nuclear weapons. These negotiations will not be easy, but the alternative is unthinkable. We cannot count on good luck as the basis of global security policy. If we do not abolish these weapons, someday our luck will run out, they will be used, and everything that we cherish will be destroyed. The stakes could not be higher.

## 2NC Ext.

### US-Russia Arctic coop good

RiaNovosti 14

[Arctic Cooperation May Ease Russia-US Tensions – Analyst](http://en.ria.ru/world/20140522/190037278/Arctic-Cooperation-May-Ease-Russia-US-Tensions--Analyst.html) from RiaNovosti 22/05/2014: http://en.ria.ru/world/20140522/190037278/Arctic-Cooperation-May-Ease-Russia-US-Tensions--Analyst.html

Leandra Bernstein – Tense relations between Russia and the US and NATO could potentially be cooled through Arctic cooperation, according to the program director at the George Washington Institute for European, Russian, and Eurasian Studies. “I think the Arctic is, today at least, one of the last places for cooperation with Russia following the Ukrainian crisis,” Marlene Laruelle said.

“US-Russia [Arctic] cooperation will probably be less directed to cooperation on security issues because of the Ukrainian crisis,” she specified, “but there are several other elements that are still open for discussion.” Since 2011 the US has increased its stake in Arctic security and development and currently holds the chairmanship for the Arctic Council. The US is planning to invest $1.5 billion focusing on the Arctic, according to former State Department official Heather Conley. However, US assets in the region are limited and they rely on dated technology and borrowed equipment from other Arctic nations. Russia is currently the only country employing nuclear-powered icebreakers. “The securitization trend we see in the Arctic from the Russian side is mostly not an issue of military aggressiveness, but it is a business issue,” Laruelle said.Concerning Russia’s delimitation of its continental shelf and control over the North Sea Pass, Laruelle said “Russia is playing by the rules.” The demarcation of national and international waterways is contested within the Arctic Council, but the first voyage of a Chinese merchant ship, Hong Xing, through the North Sea Pass last year set a precedent when the ship adhered to all Russian requirements for passage. There are hopes that increased trade will take place through Arctic routes. The route is expected to see between ten and twelve commercial trips this year. Laruelle’s remarks were part of a panel discussion at the Wilson Center on the interests of the Arctic nations, and the increasing participation in the region by non-Arctic players, particularly China, Japan, Korea, and Singapore.