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# LOST

Battle over LOST coming – first priority for Congress during the lame duck – Obama will push

Dan **Joling**, August 17th, 2012, **8/17** (writer, Juneau Empire, “Murkowski hopeful on passing the Law of the Sea treaty,” <http://juneauempire.com/dan-joling/2012-08-17/murkowski-hopeful-passing-law-sea-treaty#.UEGIEdYia3F> >:)

ANCHORAGE — Melting summer sea ice is opening up the Arctic Ocean to commercial opportunities but the United States could miss them if it doesn’t sign the Law of the Sea treaty, according to U.S. Sen. Lisa Murkowski. The Alaska Republican hopes the Senate will vote to sign the treaty during the lame duck session following the November election. The treaty sets up a system for resolving disputes in international waters. It has been around since the Reagan administration, and 162 countries have signed on. “This is a treaty that I believe very strongly will contribute not only to our national security, but will allow us a level of certainly in accessing our resources in the north,” Murkowski said Wednesday. The Constitution requires two-thirds of the Senate — 67 votes — to ratify a treaty. The treaty recognizes sovereign rights over a country’s “exclusive economic zone” — the area covering its continental shelf out to 200 nautical miles. It recognizes rights beyond that zone if the country can provide evidence to substantiate its claims. That’s exactly what could happen off Alaska’s northern shore, Murkowski said. Outer continental shelf mapping indicates the United States could claim an area the size of California, she said. “I don’t want us, as an Arctic nation, to abandon those opportunities, and we would be doing that if we fail to ratify the Law of the Sea treaty,” Murkowski said. The treaty has support from the president, most Senate Democrats, the U.S. Chamber of Commerce, and the military. “Anybody with a star on their shoulder has sat before the Foreign Relations Committee and testified about why it’s so important, so critical, to this nation,” she said. She has worked with Sen. John Kerry, D-Mass., to educate fellow senators on the pact’s importance. Proponents faced a setback in June, she said, when Sens. Rob Portman, R-Ohio, and Kelly Ayotte, R-N.H., said they had concerns about the breadth and ambiguity of the treaty and that it was not in the national interest at that time. Their decision meant opponents had [have] enough votes to block ratification unless some senators change their minds. In the upcoming months, Murkowski said, representatives from shipping, telecommunications, petroleum and even tourism interests will make the case for the treaty. She said opponents are not worried U.S. interests could be exposed to international litigation. Instead, she said, they see a loss of U.S sovereignty if the United Nations is involved. “There are some colleagues — if the United Nations is in the title of any treaty, it’s an automatic no,” Murkowski said. “But the reality is the treaty has been amended or adapted from the time President Reagan was in office, and had concerns about it, to address some of the issues that have been raised.” The chance of treaty approval in November or December, she said, will depend on whether special interests such as the U.S. Chamber will push the measure as a priority over other legislation such as automatic deficit reduction or tax cut extension. “The concern is, we have these advocates, but they’re going have to prioritize what they’re going to be pushing for hardest,” Murkowski said.

Congress doesn’t like NextGen

**Salam 12**, Sakib bin Salam, Policy Intern at Eno Center for Transportation, “NextGen: Aligning Costs, Benefits, and Political Leadership,” April 2012.

Third, the airlines and general aviation users have been hesi­tant to bear equipage costs due to low profitability, econom­ic turmoil, and a lack of clear incentives to justify investing in NextGen. Operators are unlikely to invest until, at a minimum, the FAA is ready to deliver the promised benefits. This leads to a stalemate: operators are uncertain whether investing in NextGen is worthwhile, when the infrastructure is not yet fully in place, and without equipage the infrastruc­ture by itself is ineffective. The FAA has mandated equi­page of Automated Dependent Surveillance-Broadcast Out (ADS-B) that allows the equipped aircraft to send transmis­sion to other equipped aircraft ADS-B ground stations for all operators by 2020. However, there is uncertainty over when other NextGen on-board equipment will be required, particularly ADS-B In which allows the equipped aircraft to receive transmission from other ADS-B ground stations and other aircraft. Fourth, NextGen faces funding issues that pose some very difficult policy decisions. Work on the ground infrastruc­ture aspect of NextGen is currently funded by the Facilities and Equipment account of the AATF and some progress, albeit slow, has been made on this project. However, recent reports by the Congressional Budget Office and the Gov­ernment Accountability Office show that current AATF revenues are inadequate to fund NextGen.2 Despite recent resolution over the long overdue FAA reauthorization bill, little progress has been regarding securing a full-fledged modernization funding plan. The current bill authorizes a flat amount of $2.731 billion over four years for Next­Gen and funding is still subject to annual appropriation. A project that is already endangered by uncertainties regarding its worth would benefit from a stable and adequate funding source.

Obama push key – convinces stray Republicans

**Bloomberg**, 20**12** (some… company, I guess, “Watch These Global Hotspots for 2012: View,” <http://www.bloomberg.com/news/2012-01-02/after-tumult-of-2011-here-are-some-global-hotspots-to-watch-in-2012-view.html> >:)

The Arctic: This is not so much a hotspot as a cold spot, but it’s getting warmer. And as the planet’s northern icecap melts, it is becoming a cockpit of international competition. Tussles over newly accessible oil, other resources and suddenly navigable waterways may bring out the testiness even in such perennially agreeable countries as Denmark and Canada. Arctic states other than the U.S. are preparing their claims as signatories to the United Nations Convention on the Law of the Sea, which determines who has the right to benefit from the riches of any ocean. Die-hard conservatives in Congress have blocked U.S. approval of the law, falsely claiming that it would constrain the military -- arguments that the military, among others, rejects. A push by President Barack Obama, could probably win approval for the law in the Senate, thereby helping to safeguard the U.S. stake in the Arctic race and its role in keeping the peace there.

Ratification by 2012 is necessary for Arctic seabed mining

Josh **Rogin**, May 23rd, 20**12** (writer, Foreign Policy, “Clinton: Ratify Law of the Sea treaty this year,” <http://thecable.foreignpolicy.com/posts/2012/05/23/clinton_ratify_law_of_the_sea_treaty_this_year> >:)

The U.S. Senate should ratify the Law of the Sea Treaty before the end of the year because it is in Amerca's economic and national security interests, Secretary of State Hillary Clinton will testify today. [card continues – ot available on req] She will argue that the United States benefits from the treaty's maritime freedom of navigation provisions and she will maintain that American business will benefit from the treaty's provisions governing mining rights along U.S. coastlines. "Off the north shore of Alaska, our continental shelf could extend 600 miles into the Arctic," she will say. Clinton will argue that U.S. companies are ready to participate in deep seabed mining but that the United States needs to be a party to the treaty so that American businesses can take advantage of mining opportunities outside the country's exclusive economic zone.

Arctic seabed drilling and mining solves methane release through methane hydrate extraction

Malcolm **Light**, May 27th, 20**12** (Ph.D @ UCL, “A Proposal for the Prevention of Arctic Methane Induced Catastrophic Global Climate Change by Extraction of Methane from beneath the Permafrost/ Arctic Methane Hydrates and its Storage and Sale as a Subsidized "Green Gas" Energy Source,” <http://arctic-news.blogspot.com/2012/05/proposal-to-extract-store-and-sell.html> >:)

After 2015, when the Arctic Ocean becomes navigable (Figure 5 above, Carana 2012b) it will be possible to set up a whole series of drilling platforms adjacent to, but at least 1 km away from the high volume methane eruption zones and to directionally drill inclined wells down to intersect the free methane below the sealing methane hydrate permafrost cap within the underlying fault network (Figure 18 above). High volume methane extraction from below the subsea methane hydrates using directional drilling from platforms situated in the stable areas between the talik/fault zones will reverse the methane and seawater flow in the taliks and shut down the uncontrolled methane sea water eruptions (Figure18 above). The controlled access of globally warmed sea water drawn down through the taliks to the base of the methane hydrate - permafrost cap will gradually destabilize the underlying methane hydrate and allows complete extraction of all the gas from the methane hydrate reserve (Figure18 above). The methane extraction boreholes can be progressively opened at shallower and shallower levels as the subterranean methane hydrate decomposes allowing the complete extraction of the sub permafrost reserve (Figure18 above). The methane and seawater will be produced to the surface where the separated methane will be processed in Floating Liquefied Natural Gas (FLNG) facilities and stored in LNG tankers for sale to customers as a subsidised green alternative to coal and oil for power generation, air and ground transport, for home heating and cooking and the manufacture of hydrogen, fertilizers, fabrics, glass, steel, plastics, paint and other products. Where the trapped methane is sufficiently geopressured within the fault system network underlying the Arctic subsea permafrost and is partially dissolved in the water (Light, 1985; Tyler, Light and Ewing, 1984; Ewing, Light and Tyler, 1984) it may be possible to coproduce it with the seawater which would then be disposed of after the methane had be separated from it for storage (Jackson, Light and Ayers, 1987; Anderson et al., 1984; Randolph and Rogers, 1984; Chesney et al., 1982). Many methane eruption zones occur along the narrow fault bound channels separating the complex island archipelago of Arctic Canada (Figure 6 and 9). In these regions drilling rigs could be located on shore or offshore and drill inclined wells to intersect the free methane zones at depth beneath the methane hydrates, while the atmospheric methane clouds could be partly eliminated by using a beamed interfering radio transmission system (Lucy Project) (Light 2011a). A similar set of onshore drilling rigs could tap subpermafrost methane along the east coast of Novaya Zemlya (Figure 6 below and 9 above).

Extinction – outweighs global nuclear war

**Ryskin ‘3** (Gregory Ryskin, Department of Chemical Engineering, Northwestern University, “Methane-driven oceanic eruptions and mass extinctions,” Geology, 31(9), September 2003, <http://pangea.stanford.edu/research/Oceans/GES205/methaneGeology.pdf>)

METASTABILITY AND ERUPTION A liquid subject to gravity and completely or partially saturated with dissolved gas is, thermodynamically, in a metastable state. Consider for clarity the case when the concentration of the dissolved gas is only slightly below saturation throughout, and thus increases downward in accordance with Henry’s law. Then locally there is no tendency for the dissolved gas to exsolve (to form bubbles), in spite of the fact that nuclei are abundant in seawater. (Exsolution would lead to a slight increase in free energy: below saturation, the chemical potential of the gas species is lower in solution than in the free gas phase.) At the same time, the free energy of the system as a whole would be greatly reduced if most of the dissolved gas were to somehow escape from solution and collect above the liquid. (This free energy reduction is due to the fast decrease of the chemical potential of gas with a drop in pressure.) Thus, the system is in a metastable state, albeit an unusual one. Strictly speaking, this state is not an equilibrium one even locally: the increase of the solute concentration with depth causes a diffusion flux directed upward, which, given sufficient time, could bring the system into the above state of minimum free energy. However, the continuous supply of methane by the rising bubbles from the seafloor ensures that the concentration profile will remain nonuniform, slowly approaching the saturation one. Even if that supply were to cease, the diffusion time scales are so long that this path toward the global energy minimum can be ignored. A very fast transition from this metastable state can be triggered by disturbances that displace fluid a finite distance in the vertical direction. Such disturbances may result from an earthquake, a seafloor volcano, convection currents due to geothermal heating, or an internal gravity wave. Consider a parcel of fluid that is displaced upward, and is now subject to lower hydrostatic pressure, to which corresponds a lower solubility value. As a result, the fluid in the parcel is now supersaturated with the dissolved gas, which must begin to exsolve, forming tiny gas bubbles. (If the fluid in its original position was only partially saturated, exsolution will begin after the parcel has risen through some significant distance, so in this case the initial disturbance must be sufficiently large.) The volume of the ascending parcel of fluid increases due to the formation of bubbles, making it more buoyant and accelerating its rise; this leads to further reduction in the ambient pressure, further exsolution of gas, and further increase in the volume of the parcel. This self-accelerating motion entrains the surrounding fluid; exsolution of the gas in the latter reinforces the motion. The result is a violent eruption (Kling et al., 1987; Zhang, 1996). From the initial eruption site, hydrodynamic disturbances propagate in all directions (via turbulent entrainment and/or internal gravity waves), triggering eruptions at other sites. Similarly to transitions from other metastable states (e.g., boiling of a superheated liquid), the eruption should spread quickly throughout the region of the ocean where the water column is saturated, or partially saturated, with gas. In spite of the low solubility of methane in seawater, the total possible increase in the buoyancy of the parcel can be large. Consider a parcel that started its rise at 4 km depth, where solubility of methane is ;4.3 3 1023. Then, if the parcel had a volume of 18 cm3 (1 mol of water) and was saturated with methane, it contained 4.3 3 1023 mol of dissolved methane. By the time this parcel has risen to the surface, essentially all the methane in the parcel has exsolved (solubility is ;2 3 1025 at the surface). At the surface conditions (T ø 25 8C, P 5 1 bar), 1 mol of any gas occupies 25 3 103 cm3, so the total volume of methane in the parcel is ;108 cm3, and the volume of the parcel, which now contains a mist of water droplets in gaseous methane, is 126 cm3. That is, the volume of the parcel has increased by a factor of seven. Concurrent exsolution of other dissolved gases (e.g., carbon dioxide CO2, hydrogen sulfide H2S) will add to the effect. A rather similar process is responsible for the most violent, explosive volcanic eruptions (called Plinian), such as eruptions of Mount Vesuvius in A.D. 79 or Mount St. Helens in 1980. These eruptions are driven by exsolution of gases (primarily water vapor) dissolved in the liquid magma. In Lake Nyos (Cameroon), CO2 of magmatic origin enters the water column from the bottom, at a depth of ;200 m. In 1986, the lake erupted, creating a gas-water fountain ;120 m in height (Zhang, 1996), and releasing a lethal cloud of CO2. A water surge washed up the shore to a height of ;25 m. The eruption continued for several hours (Kling et al., 1987). OCEANIC ERUPTION AS A CAUSE OF MASS EXTINCTION The consequences of a methane-driven oceanic eruption for marine and terrestrial life are likely to be catastrophic. Figuratively speaking, the erupting region ‘‘boils over,’’ ejecting a large amount of methane and other gases (e.g., CO2, H2S) into the atmosphere, and flooding large areas of land. Whereas pure methane is lighter than air, methane loaded with water droplets is much heavier, and thus spreads over the land, mixing with air in the process (and losing water as rain). The air-methane mixture is explosive at methane concentrations between 5% and 15%; as such mixtures form in different locations near the ground and are ignited by lightning, explosions 2 and conflagrations destroy most of the terrestrial life, and also produce great amounts of smoke and of carbon dioxide. Firestorms carry smoke and dust into the upper atmosphere, where they may remain for several years (Turco et al., 1991); the resulting darkness and global cooling may provide an additional kill mechanism. Conversely, carbon dioxide and the remaining methane create the greenhouse effect, which may lead to global warming. The outcome of the competition between the cooling and the warming tendencies is difficult to predict (Turco et al., 1991; Pierrehumbert, 2002). Upon release of a significant portion of the dissolved methane, the ocean settles down, and the entire sequence of events (i.e., development of anoxia, accumulation of dissolved methane, the metastable state, eruption) begins anew. No external cause is required to bring about a methane-driven eruption—its mechanism is self-contained, and implies that eruptions are likely to occur repeatedly at the same location. Because methane is isotopically light, its fast release must result in a negative carbon isotope excursion in the geological record. Knowing the magnitude of the excursion, one can estimate the amount of methane that could have produced it. Such calculations (prompted by the methane-hydrate-dissociation model, but equally applicable here) have been performed for several global events in the geological record; the results range from ;1018 to 1019 g of released methane (e.g., Katz et al., 1999; Kennedy et al., 2001; de Wit et al., 2002). These are very large amounts: the total carbon content of today’s terrestrial biomass is ;2 3 1018 g. Nevertheless, relatively small regions of the deep ocean could contain such amounts of dissolved methane; e.g., the Black Sea alone (volume ;0.4 3 1023 of the ocean total; maximum depth only 2.2 km) could hold, at saturation, ;0.5 3 1018 g. A similar region of the deep ocean could contain much more (the amount grows quadratically with depth3). Released in a geological instant (weeks, perhaps), 1018 to 1019 g of methane could destroy the terrestrial life almost entirely. Combustion and explosion of 0.75 3 1019 g of methane would liberate energy equivalent to 108 Mt of TNT,; 10,000 times greater than the world’s stockpile of nuclear weapons, implicated in the nuclear winter scenario (Turco

# CP

[CP TEXT: United States federal government should invest in a network of multifunction phased-array radars for air traffic control using a risk-reduction implementation strategy. The United States federal government should increase energy collaboration with the European Union and cooperate with the European Union to design a successor treaty to Kyoto. The United States federal government should eliminate tactical nuclear weapons and renew the Nuclear Nonproliferation Treaty. The United States federal government should develop and deploy sufficient space sunshades.]

We’ll clarify.

CP solves best by improving ground-based radar systems – our evidence is comparative

Tracy Wallace, August 3rd, 2012 (GTRI researcher, “Radar Renewal: Phased Array Technology Could Improve Reliability, Capabilities of Air Traffic Control System,” http://www.gtri.gatech.edu/casestudy/gtri-radar-renewal-phased-array-MPAR-technology >:)

Aircraft operating in U.S. airspace rely on several different types of ground-based radars to help them fly safely. Yet these radars, based on older technologies that use many mechanical components, require frequent repairs as well as costly periodic maintenance programs.A research team from the Georgia Tech Research Institute (GTRI) is working with the Federal Aviation Administration (FAA) and National Oceanic and Atmospheric Administration (NOAA) to investigate alternative approaches to the radars that currently support the nation's air traffic control and weather monitoring systems. The multi-year study is examining the feasibility of replacing that group of radars with a single system based on phased-array technology, an advanced design that uses solid-state electronics in place of many mechanical components. As part of the NextGen Surveillance and Weather Radar capability program, one of the alternative approaches specifically being considered by the FAA is called multifunction phased-array radar (MPAR). MPAR has the capability to surpass current technologies in both reliability and ease of maintenance, said Tracy Wallace, a researcher who is leading GTRI's participation in the study. A single MPAR installation at an airport could potentially replace all the conventional radars typically found in several locations around major airports today. Moreover, MPAR technology could enhance the capabilities of the nation's air traffic control and weather monitoring systems. "The central question is whether converting to a phased-array system would be practical from a cost perspective," Wallace said. "Currently we're advising the government on the feasibility – including the expenditure, technical and scheduling issues – of developing an MPAR program. We're also preparing to support the investigation with modeling studies of prospective MPAR designs." The FAA utilizes multiple surveillance platforms to maintain control of air traffic within the National Airspace System. There are several different radars in service to support the related tasks of tracking aircraft and monitoring weather conditions, including: •Airport surveillance radar (ASR), which are moderate-range systems used to follow aircraft within 60 nautical miles of an airport; •Air route surveillance radar (ARSR), which are long-range systems used to track aircraft as they fly between airports and as they approach U.S. borders; •Terminal Doppler weather radar (TDWR), used near airports primarily to monitor wind-shear conditions. Also important to air traffic control are NEXRAD radars, which are maintained and operated by NOAA, in conjunction with the National Weather Service (NWS). These long-range, pulse Doppler radars supply valuable weather information. They are used to monitor weather conditions faced by aircraft, and they are often seen on media reports, particularly during severe weather events such as tornadoes. "It is conceivable," said Wallace, "that a single MPAR radar could encompass the functionality of both the FAA radars and the NEXRAD radars, which would further the cost advantages of the newer technology." Solid-State Advantages These conventional air traffic and weather monitoring radars utilize a traditional rotating dish antenna, which mechanically changes the direction of its signal beams. The antenna moves physically among set positions, transmitting and receiving radar signals at each position. Because rotating antennas can only update tracking information once per revolution, they offer slower and less-effective performance than phased-array technology. They're also prone to mechanical problems that can result in sudden and complete failure to function. By contrast, phased-array radars are fully solid state; they don’t rotate and have no mechanical moving parts. Instead, they typically employ a grid made up of hundreds or thousands of fixed antenna elements, each of which transmits and receives a signal beam. Using a technique called phase-shifting, each element can steer its signal beam electronically, enabling it to move continuously from one position to the next. At the same time, the array design lets the elements work together. The result is an aggregation of radar beams – each individually computer guided – able to scan large areas and track acquired targets without interruption. The phased-array design also offers built-in redundancy – it continues to operate even if some individual antenna elements fail. The consequence of individual element failures is usually only a slight degradation of sensitivity, and non-working elements can typically be replaced with limited downtime. Increased Capability Another important MPAR advantage involves its ability to steer multiple signal beams to an area of special interest, such as a weather cell, a potential wind shear condition, or a specific aircraft target of interest. That capability can result in a major increase in the volume of data available about a specific target or volume of space in which severe weather might be forming. "Unlike today's technology, an MPAR installation would have the capability to track aircraft while simultaneously offering greatly improved weather sensing," Wallace said. "The hope in the weather community is that it will offer much faster forecasts of extreme weather conditions such as tornadoes, because users could devote more signal-beam energy to a particular weather spot and measure changes over time at a faster update rate." GTRI, which began this MPAR feasibility work in 2009, is collaborating on the study with the Lincoln Laboratory of the Massachusetts Institute of Technology, as well as a number of other contractors and government organizations. A final FAA decision on whether to develop and deploy MPAR technology will likely not be made until 2017 or later. Because that final decision will hinge on affordability, costs must be greatly reduced compared to current phased-array systems such as those used by the military, Wallace said. Such cost reductions will require both novel approaches to MPAR design and more-efficient manufacturing techniques. "So far, cost estimates for converting to MPAR technology look promising," Wallace said. "But we will have to be certain that the savings from lower repair and maintenance costs and decreased downtime will outweigh the initial replacement investment." The large volume of data produced by an MPAR system means that computing-related tasks such as signal processing are certain to increase greatly, he added. The GTRI team is investigating these high-performance processing requirements, along with software that can analyze data from many incoming signal beams and determine where to steer each beam next. Antenna cost and effectiveness are likely to be key considerations, Wallace said, and industry is expected to offer numerous antenna designs aimed at providing an optimal solution. It's likely that competing MPAR antenna designs will have to be compared, in a common simulation environment, as part of the feasibility study. "We anticipate using our internally developed GTRI antenna-modeling tools to make apples-to-apples comparisons among a number of designs," Wallace said. "That kind of data will help shed light on a critical question -- whether future MPAR systems can be both affordable and effective."

The counterplan is critical to maintaining strong US-EU relations

Hockenos ‘9

(Paul, Winter 2008/9, Berlin-based journalist and author who has written about South Eastern Europe, Joined ESI as a Berlin-based analyst, “Rethinking US-Europe Relations,” <http://www.ip-global.org/archiv/2009/spring2009/rethinking-us-europe-relations.html>)

There are a number of security-related fields where Europeans have something to offer the United States in a new transatlantic alliance. The first is climate policy, which the Europeans place firmly in the category of geosecurity. The European Union has proactively taken the world lead in efforts to curb global warming, and the Obama administration must catch up with and join the Europeans in accepting drastic and mandatory cuts in emissions. The EU targets include a 20 percent reduction in European greenhouse gas emissions by 2020, compared with 1990 levels, or a 30 percent reduction if other developed nations (like the United States) agree to take similar action. European objectives also include increasing the use of renewable energy to 20 percent of all energy consumed. If the United States throws in its lot with the Europeans, the partners would have that much more leverage to convince the world’s other leading polluters, the “dirty dozen” who account for 80 percent of the world’s carbon emissions, to do the same. The United States could work hand-in-glove with the European Union to design a successor treaty to Kyoto, which expires in 2012. Energy security is another domain where the United States could partner effectively with Europe. The United States and Europe together account for 40 percent of worldwide energy consumption and have already pledged better coordination to manage energy sources. Europe has set an ambitious goal to reduce its overall energy use by 20 percent by the year 2020. EU Commission president José Manuel Barroso has called for a Strategic Energy Dialogue between Europe and America. He has underlined the potential for increased EU-US energy collaboration across the globe, including development of hydrocarbon resources in the Caspian and Central Asian regions, and cooperation to improve energy efficiency. A third place where the new Obama administration should seek transatlantic cooperation is in arms control and nuclear disarmament. The goal of eliminating all nuclear weapons is etched in the Nuclear Nonproliferation Treaty (NPT) and has recently been pushed by an unlikely group of former US defense and state department officials including Henry Kissinger, George Shultz, William Perry, and Sam Nunn. They have urged the United States to lead the world toward nuclear disarmament by ratifying the Comprehensive Test Ban Treaty (CTBT), which would halt all testing of nuclear weapons, render nuclear forces less ready to launch on short notice, and eliminate tactical nuclear weapons, including US bombs stationed in Europe. The European Union would be the perfect interlocutor to engage Russia in this process, a country to whom this idea would be a particularly hard sell. Progress on scrapping nuclear arms—or at least making deep cuts in global stockpiles—would also give the ongoing EU-US negotiations with Iran additional leverage to convince Tehran to halt its nuclear program. A first step would be to rejuvenate the NPT, one of the arms control mechanisms lamed by the Bush administration. This, together with the ratification of the CTBT might encourage India and Pakistan to step back from their nuclear arms race. There will have to be a new agreement to extend or replace START I (the Strategic Arms Reduction Treaty) which runs out in December 2009. Although much of the original pact mandating cuts in United States and Russian nuclear arms is now outdated or redundant, a new accord could institutionalize strict verification requirements and impose other weapon limits. Also, if the Europeans move forward with a substantial new European security project, it should include both Russia and the United States. A proposal of the Brussels-based Center for European Policy Studies is to involve the European Union more actively in the OSCE and finally give the successor institution to the Helsinki Process a central role in security from the Atlantic to the Urals, perhaps even investing it with a permanent European Security Council consisting of prominent members, including the European Union, Russia, the United States, Turkey, and Ukraine, as well as non-permanent members, including the Central Asian states. Whatever shape the European security architecture takes, it will be counterproductive unless Russia is part of it. This goes for missile defense as well. The Russians have floated ideas for a European Security Treaty that would address arms control, drug trafficking, organized crime, terrorism, and irregular migration. Sarkozy was the first European leader to support it publicly. In the post-Cold War years the Western victors dictated its plans to Russia without heed of its sensibilities. That strategy has backfired disastrously. As problematic as Russia is, the Atlantic allies have to take it seriously and include it in security plans. The truth is that NATO is just one of the post-World War II institutions that no longer meets the needs of today’s world. The last decade has witnessed a striking displacement of power, away from the United States but also away from the West as a whole. The current implosion of the western-led financial system has only expedited this shift. When the new global powers begin to assert themselves, as indeed they are increasingly doing now, the United States and the Europeans will realize how much they still have in common. They will thus have to think innovatively about questions like security in a way that they failed to do in the immediate aftermath of the Cold War. If the Euro-Atlantic relationship is going to continue to be a special one, then it has to be on the basis of a partnership of equals, with the United States making important concessions to the Europeans and the Europeans finally stepping up to take care of their own security requirements. One thing is certain: Given the daunting challenges of the 21st century, the United States and Europe are going to need one another more than ever.

That solves global warming at the source, even if we’re past the tipping point

**TGO ‘9**

(The Green Optimistic, “Reducing Global Warming,” http://www.greenoptimistic.com/2009/03/02/reducing-global-warming-with-a-huge-space-mounted-mirror-shade/)

Humans have always wanted to feel themselves in control of everything until things got out of control. The current global warming issue is the most serious problem we have ever faced, and this is because our greed for energy got out of our sense and control, even if there were important economic yields that could have stopped or slowed it down. / Now, as scientists say we are on a point of no return with global warming, they are also giving us solutions that could patch the problem and bring us to the pre-industrial climate. / Dr. Roger Angel, from the University of Arizona, theoretically demonstrated that if we threw some trillions of mirrors (better said refracting lenses) in outer space, within a 100,000 square miles area, just one million miles above the Earth, between us and the Sun, the global warming would lower significantly and all current problems will be solved.

# CCW

Chinese cyberattacks on US satellites coming now

Coleman ’10

(Kevin Coleman a senior fellow at the Technolytics Institute, former chief strategist at Netscape and an adviser on cyber warfare and security., 9/22/10, “Satellites could come under cyber siege”)

Our nation’s defense and critical infrastructure have become more reliant on satellite systems. That increased use and dependence comes with a downside. Because satellite systems are integrated into our national security systems and emergency response systems and are critical components to a modern military, they have become an attractive target of cyberattacks. As the reliance grows, so does the threats of cyberattacks from criminals, terrorists and nations. Business, government, emergency responders and the military continue to expand their use of space-based assets for communications and real-time remote sensing. Global revenues for the satellite industry have grown at more than double-digit percentages since 2004 and totaled $160 billion in 2009. Euroconsult, a global consulting and analysis firm that specializes in the satellite sector, estimated last year that 1,185 satellites will be built and launched from 2009-2018, an increase of about 50 percent compared to the previous decade. So what is driving the growth? The market is expanding into new services that provide advanced communications capabilities. Several of those capabilities have combined to drive what has been described as an insatiable appetite for satellite capabilities. First is the ever-increasing demand for broadband capabilities driven by increased IP voice, data and imagery capabilities. The second significant driver for additional satellite capacity is mobile broadband or communications-on-the-move capabilities. Communications on the move has become increasingly more critical for mobile command and control capabilities, specifically during operations in remote or mountainous areas that do not have traditional communications infrastructure. Next is the military's program to move from commercial satellite services to self-owned assets with open capacity. The open capacity will undoubtedly lower prices, which will drive satellite use by private-sector businesses, state and local government, and first responders. Growth will further be driven by new technology. One major segment of new technology will be nanosatellites. Nanosatellites are about the size of a soccer ball, weigh less than 50 pounds, are covered with solar cells and are said to be the smartest satellites ever launched. To support the new class of satellite, the Army announced the development of a multipurpose nanomissile system. This system has the smallest orbital launch vehicles ever created and whose sole purpose is launching nanosatellites for various classified missions. Most of the satellites in orbit were designed and built before the realization that cyberattacks would become so prevalent across all electronic communications platforms. For that reason, it is easy to assess just how exposed these systems are. In 1999, a group of hackers reportedly seized control of a British Defence Ministry communications satellite, triggering a security advisory and immediate response from British intelligence and defense organizations. A few years later, hackers broke into a restricted federal computer system and stole proprietary code for controlling U.S. satellite systems. In 2006, the Bush administration warned of threats by terrorist groups and other nations against U.S. commercial and military satellites. Lately, reports of sophisticated cyberattacks on satellites have surfaced. It is commonly believed that Chinese military planners have determined the greatest weakness the U.S. military has is its reliance on computer and satellite systems. There are allegations that the Chinese sabotaged U.S. military satellites and the Russian space station. The threat is not in the future. *Cyberattacks against satellites are* already here. Cyberattackers prey on those who don't protect themselves, and our aging fleet of satellites is now a prime target. This requires immediate action. The increased demand that is driving the increase in satellite systems and capabilities gives us the ability to build cybersecurity into new satellite systems rather than trying to bolt on security after the fact.

Status quo radars are resistant to jamming and spoofing, but NextGen technology is uniquely vulnerable – attacks cause miscalc which escalates – independently turns case

Andy Greenberg, July 25th, 2012 (Forbes Staff, “Next-Gen Air Traffic Control Vulnerable to Hackers Spoofing Planes Out of Thin Air,” http://www.forbes.com/sites/andygreenberg/2012/07/25/next-gen-air-traffic-control-vulnerable-to-hackers-spoofing-planes-out-of-thin-air/ >:)

A hacker attack that leads to planes dropping from the sky is the stuff of every cyberwar doomsday prophesy. But some security researchers imagine a less sensational, if equally troubling possibility: Hundreds or thousands of aircraft radioing their approach to an air traffic control tower, and no way to sort through which are real and which are ghost plane signals crafted by a malicious hacker. At the Black Hat and Defcon security conference this week in Las Vegas, two security researchers plan to give separate talks on the same troubling issue: By 2020, a new system known as Automated Dependent Surveillance-Broadcast or ADS-B will be required as the primary mode of aircraft tracking and control for commercial aircraft in the U.S.–earlier in other countries such as Australia. And both researchers say that ADS-B lacks both the encryption necessary to keep those communications private and the authentication necessary to prevent spoofed communications from mixing with real ones, potentially allowing hackers to fabricate messages and even entire aircraft with radio tools that are cheaper and more accessible than ever before. “Anyone can technically transmit these messages,” says Andrei Costin, a Ph.D. candidate at the French security institute Eurecom who plans to give a talk called “Ghosts In The Air (Traffic)” at Black Hat. “It’s practically possible for a medium-technical savvy person to mount an attack and impersonate a plane that’s not there.” ADS-B promises to make air traffic control easier, cheaper and in many ways safer by allowing planes to transmit their locations by radio frequency instead of depending on towers to use radar to track and coordinate them. But without encryption or authentication, ADS-B both exposes flyers to more potential tracking and fails to provide a trusted authority for planes’ location to the same degree as radar, says Costin. Anyone with a radio tuned to the system’s 1090 megaherz frequency can listen in and track planes. That’s a notion that may disturb some privacy-conscious flyers, but it’s hardly a new phenomenon—sites and apps like FlightAware and PlaneTracker already make that data available from the FAA’s databases. More troubling is the ability to fabricate fake signals that are indistinguishable from real ones. Using a software-defined radio, a PC-based receiver and transmitter that’s far more versatile than the average consumer radio, anyone from a prankster to a determined attacker could create a message alerting a tower or a plane to an oncoming jet that doesn’t exist. “This is the most important problem,” says Costin. “You can put out a method that looks valid in the ether, and they can’t verify whether it’s real or malicious.” Pilots and air traffic controllers wouldn’t be entirely helpless against that kind of spoofing attack; They could still check the purported messages against radar signals and against their database of flight plans. But the trick could be scaled up to hundreds or thousands of fake signals, much like a denial-of-service attack that uses thousands of computers to choke a website with a flood of fraudulent requests for information, Costin says. “Imagine 100,000 fake airplanes targeted at a specific air control tower, and it has to manually check them. It’s almost impossible to do,” says Costin. In some cases, the spoofed signals could trigger a so-called ”short term conflict alert” that forces air traffic controllers to attempt space out the non-existent planes at regulated intervals, causing mayhem in the control room and potentially in the sky. I reached out to the FAA for comment, and a spokesperson responded in a statement that “The FAA has a thorough process in place to identify and mitigate possible risks to ADS-B, such as intentional jamming, ” and “ conducts ongoing assessments of ADS-B signal vulnerabilities. The contract for the ADS-B ground station network requires continual independent validation of the accuracy and reliability of ADS-B and aircraft avionics signals. An FAA ADS-B security action plan identified and mitigated risks and monitors the progress of corrective action. These risks are security sensitive and are not publicly available.” Perhaps the most comforting part of the FAA’s response was its assurance of ”redundancies to ensure safe operations.” The agency says it plans to maintain half its current network of radar systems “as a backup to ADS-B in the unlikely event it is needed.” While it’s unlikely the spoofing attack could cause a collision–as the FAA says, the planes could be checked against radar or visual cues–it it might cause momentary panic for pilots or air traffic controllers and even scare them into rash, unpredictable actions, says Dustin Hoffman, a pilot and security who plans to give a talk on air traffic control privacy at the hacker conference Defcon following Black Hat. “If a pilot sees a plane suddenly coming at him from half a mile away, he might yank the hell out of the yoke before looking out the window. Or he could cause the plane to dive erratically and without warning,” says Hoffman. “It’s illegal. But how would you track down the transmtter? The possibility for chaos is substantial…I’m surprised no one has done it yet.”

The impact is nuclear retaliation

Sean Lawson, Ph.D. in Information Warfare and Assistant Professor of Communication @ the University of Utah, 2009, “Cross-Domain Response to Cyber Attacks and the Threat of Conflict Escalation”

So, from a theoretical standpoint, I think his concerns are well founded. But the current state of U.S. policy may be cause for even greater concern. It’s not just worrisome that a hypothetical blinding attack via cyberspace could send a signal of imminent attack and therefore trigger an irrational response from the adversary. What is also cause for concern is that current U.S. policy indicates that “kinetic attacks” (i.e. physical use of force) are seen as potentially legitimate responses to cyber attacks. Most worrisome is that current U.S. policy implies that a nuclear response is possible, something that policy makers have not denied in recent press reports. / The reason, in part, is that the U.S. defense community has increasingly come to see cyberspace as a “domain of warfare” equivalent to air, land, sea, and space. The definition of cyberspace as its own domain of warfare helps in its own right to blur the online/offline, physical-space/cyberspace boundary. But thinking logically about the potential consequences of this framing leads to some disconcerting conclusions. / If cyberspace is a domain of warfare, then it becomes possible to define “cyber attacks” (whatever those may be said to entail) as acts of war. But what happens if the U.S. is attacked in any of the other domains? It retaliates. But it usually does not respond only within the domain in which it was attacked. Rather, responses are typically “cross-domain responses”–i.e. a massive bombing on U.S. soil or vital U.S. interests abroad (e.g. think 9/11 or Pearl Harbor) might lead to air strikes against the attacker. Even more likely given a U.S. military “way of warfare” that emphasizes multidimensional, “joint” operations is a massive conventional (i.e. non-nuclear) response against the attacker in all domains (air, land, sea, space), simultaneously. / The possibility of “kinetic action” in response to cyber attack, or as part of offensive U.S. cyber operations, is part of the current (2006) National Military Strategy for Cyberspace Operations [5]: / Of course, the possibility that a cyber attack on the U.S. could lead to a U.S. nuclear reply constitutes possibly the ultimate in “cross-domain response.” And while this may seem far fetched, it has not been ruled out by U.S. defense policy makers and is, in fact, implied in current U.S. defense policy documents. From the National Military Strategy of the United States (2004): / The term WMD/E relates to a broad range of adversary capabilities that pose potentially devastating impacts. WMD/E includes chemical, biological, radiological, nuclear, and enhanced high explosive weapons as well as other, more asymmetrical ‘weapons’. They may rely more on disruptive impact than destructive kinetic effects. For example, cyber attacks on US commercial information systems or attacks against transportation networks may have a greater economic or psychological effect than a relatively small release of a lethal agent.” [6] / The authors of a 2009 National Academies of Science report on cyberwarfare respond to this by saying, / “Coupled with the declaratory policy on nuclear weapons described earlier, this statement implies that the United States will regard certain kinds of cyberattacks against the United States as being in the same category as nuclear, biological, and chemical weapons, and thus that a nuclear response to certain kinds of cyberattacks (namely, cyberattacks with devastating impacts) may be possible. It also sets a relevant scale–a cyberattack that has an impact larger than that associated with a relatively small release of a lethal agent is regarded with the same or greater seriousness.” [7]

Extinction

Straits Times 2K

(6-25-2000, “No One Gains in War Over Taiwan,” p L/N, NJ)

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 [if] 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.

# K

****The logic of economic competitiveness is deployed to maintain the myth of American exceptionalism and hegemony – this is inevitably wielded to justify genocide and imperial violence -- the alternative is to reject the affirmative as a refusal of competitiveness logic****

**Whyte 7** – PHD and reader in Sociology at the University of Liverpool School of Sociology and Social policy

(Dave Whyte, “Market Patriotism and the "War on Terror"”, in Social Justice, vol 34 iss 3/4, Proquest, IWren)

It is doubtful whether neoconservatism represents a break from neoliberalism that is significant enough to distinguish the two perspectives within the power bloc. An intrinsic incompatibility is not expressed if, for example, the ideal of the (laissez-faire) state is conceptualized differently in Chicago School economic theory (in which the state's proper role is reduced to maintaining a rudimentary system of rules that can guarantee access to "free" markets) and Straussian political philosophy (which stresses the requirement of a nationally cohesive authoritarian state-led by a beneficial tyranny-that must establish a solid moral order and ensure the defense of Western civilization). The relationship between the two positions is revealing in that the chief intellectuals identified with the neocons (e.g., Francis Fukuyama, Samuel P. Huntington, Robert Kagan, and William Kristol), though they frequently disagree in public on matters of philosophy and policy, are united by their enthusiasm for neoliberal economics. **Giving continuity to the U.S. ruling class is a belief in a neoliberal market standard of civilization and in the leading role of the U.S. in securing this standard of civilization**, by force if necessary. The more brutal and coercive form of capitalist rule that is currently being reconfigured, then, is less concerned with liberal tropes of prosperity, representation, and freedom than with asserting a universal (neoliberal) market standard of civilization. Since the birth of the U.S. state, the central legitimating myth has been the assumption that **the U.S. had adopted the mantle of the guardian of Western civilization.** The genocides of indigenous populations that enabled European colonization of the Americas, particularly in North America, were committed with reference to a "chosen people" mythology derived from the Christian Bible. Central to this mythology is the idea that the U.S. inherited from the Europeans the guardianship of Western civilization. As Amin (2004: 63) notes, "thereafter, the United States extended to the whole planet its project of realizing the work that 'God' had commanded it to carry out." The chosen-people myth formed the basis of the Manifest Destiny doctrine; it was particularly influential in the post-World War II period, especially in George Kennan's writings. Recent neocon texts express this view, by contrasting the willingness with which the U.S. defends Western civilization with the spinelessness of "old" Europe (see Kagan, 2003). The core legitimating narrative for U.S. imperialism, then, is the claim that the U.S. is uniquely placed to guarantee peace and stability, and to provide leadership for the weak, backward, wayward rest of the world; this "chosen people" myth allows the U.S. to stake claims to global economic leadership and American exceptionalism (Said, 1993: 343-349). The program first set out by the neocon pressure group-the Project for the New American Century-has now been fully realized in Afghanistan and Iraq and has taken American exceptionalism to new heights. seeking to use a full complement of diplomatic, political, and military efforts to preserve and extend "an international order friendly to our security, our prosperity, and our principles,"2 the program represents a profoundly nationalist stance that expresses U.S. preemptive strategy in terms derived from a "chosen people" myth. Legitimacy for U.S. global hegemony at this juncture is based upon a patriotism that reasserts the U.S. as the guardian of Western civilization. Two features of hegemonic rule, the economy and nationhood, characterize the political moment at the heart of the Imperium that is often "blamed" upon a neocon cabal. It is the neoliberal economic doctrine, wedded to a strengthening of patriotic allegiances to the United States. **This moment of political leadership in the U.S. invokes loyalty to the nation-state as an explicit means of strengthening a particular form of market capitalism and uses the market to strengthen allegiance to particularly violent and authoritarian forms of state power.** It seeks a commitment to supporting the coercive responses of national states and the uninterrupted progress of the global market as twin bulwarks against terrorism.

# Data Comm

Relations can’t solve global problems – their authors expect too much

Shasha, 7/15/10

(Deng, Editor for Xinhua News, “Barroso warns EU-U.S. relations not fulfilling potential: report,” Xinue News, http://news.xinhuanet.com/english2010/world/2010-07/15/c\_111958715.htm

European Commission President Jose Manuel Barroso is worried the EU-U.S. relationship is not fulfilling its potential, according to a report in The Times Thursday. In an interview, Barroso told the paper the new era at the White House was in danger of becoming a "missed opportunity" for Europe. The president said: "The transatlantic relationship is not living up to its potential. I think we should do much more together. We have conditions like we have never had before and it would be a pity if we missed the opportunity." The criticism follows a series of fundamental disagreements at the G20 summit on how to deal with the economic crisis, climate change and trade reform. British Prime Minister David Cameron is expected to visit the United States on July 20. Downing Street said the relationship between Europe and America had always been built on dialogue and cooperation. "If Mr Barroso thinks that we should see more of that, we'd agree," Downing Street sources said. Barroso said: "Of course, it is a question of how the Americans are going to reach out to us as well because the relationship should be perceived as mutual." However, the United States defended itself forcefully against claims that it had neglected Europe. The view from Washington is that communication with Europe on a range of crucial issues is difficult because the EU still lacks "a clear foreign policy apparatus." The Times quoted a senior U.S. figure as saying: "Expectations were probably so high that they could not have been met when you looked at the European response to the election."

And, fights inevitable

Ahearn et al, 7

(Foreign Affairs, Defense, and Trade Division, Raymond Ahearn, Kristin Archick, Paul Belkin “U.S.-European Union Relations and the 2007 Summit” may 14, 2007 http://ftp.fas.org/sgp/crs/row/RS22645.pdf/)

The U.S. Congress and successive U.S. administrations have supported the EU project since its inception as a way to foster a stable Europe, democratic states, and strong trading partners. The United States has welcomed EU efforts since the end of the Cold War to expand the political and economic benefits of membership to central and eastern Europe, and supports the EU aspirations of Turkey and the western Balkan states. The United States and the EU share a huge and mutually beneficial economic relationship. Two-way flows of goods, services, and foreign investment now exceed $1.0 trillion on an annual basis, and the total stock of two-way direct investment is over $1.9 trillion. Nevertheless, the U.S.-EU relationship has been challenged in recent years as numerous trade and foreign policy conflicts have emerged. The 2003 crisis over Iraq, which bitterly divided the EU and severely strained U.S.-EU relations, is most notable, but the list of disagreements has been wide and varied. Although Europeans are not monolithic in their views, many EU member states have objected to at least some elements of U.S. policy on issues ranging from the Israeli-Palestinian conflict to U.S. treatment of terrorist detainees to climate change and aircraft subsidies. Since 2003, however, both sides have made efforts to improve relations, and successive U.S.-EU summits have sought to emphasize areas of cooperation and partnership. At the same time, challenges and some tensions remain in the U.S.-EU relationship.

But, relations won’t collapse

Galegly, 2

(Elton, Congressional Rep. from CA, http://commdocs.house.gov/committees/intlrel/hfa78204.000/hfa78204\_0.HTM)

Europe's response to the terrorist attack on the U.S., from London, Paris, Berlin, Moscow, Sofia, Vilnius, Athens, Ankara and all points in between was both gratifying and appreciated. Since then, the cooperation, whether in military matters or police activities, has been nothing less than excellent. Nevertheless, despite the cooperation and good relations, there are problems and challenges. All relationships have their rough moments, and the transatlantic alliance is no different. Recent European criticisms of the Administration's policy approaches have resurrected comments that the relationship is strained, fraying or even falling apart. / As I have said before, our policy interests and objectives may not always be in perfect harmony with those of our European alliesAs sovereign nations, we understand that there will always be differences. As friends, we deal with them, even if at times we do not handle them as well as we could. Yet, in the overall relationship, these are not the kinds of differences which should lead some to suggest that the alliance is breaking apart.

# Air Traffic Control

Downswings don’t cause war – 93 empirical examples

Miller 2K

(Morris Miller, economist, adjunct professor in the University of Ottawa’s Faculty of Administration, consultant on international development issues, former Executive Director and Senior Economist at the World Bank, Winter 2000, Interdisciplinary Science Reviews, Vol. 25, Iss. 4, “Poverty as a cause of wars?” p. Proquest)

The question may be reformulated. Do wars spring from a popular reaction to a sudden economic crisis that exacerbates poverty and growing disparities in wealth and incomes? Perhaps one could argue, as some scholars do, that it is some dramatic event or sequence of such events leading to the exacerbation of poverty that, in turn, leads to this deplorable denouement. This exogenous factor might act as a catalyst for a violent reaction on the part of the people or on the part of the political leadership who would then possibly be tempted to seek a diversion by finding or, if need be, fabricating an enemy and setting in train the process leading to war. According to a study undertaken by Minxin Pei and Ariel Adesnik of the Carnegie Endowment for International Peace, there would not appear to be any merit in this hypothesis. After studying ninety-three episodes of economic crisis in twenty-two countries in Latin America and Asia in the years since the Second World War they concluded that:19 Much of the conventional wisdom about the political impact of economic crises may be wrong ... The severity of economic crisis - as measured in terms of inflation and negative growth - bore no relationship to the collapse of regimes ... (or, in democratic states, rarely) to an outbreak of violence ... In the cases of dictatorships and semidemocracies, the ruling elites responded to crises by increasing repression (thereby using one form of violence to abort another).

Status quo disproves – not one economist thinks we’re not currently in a recession. Their impact should have already happened

Downswing stops war – ends rivalries and forces domestic focus

Bennett & Nordstrom 2K

(Department of Political Science, Penn State, “Foreign Policy Substitutability and Internal Economic Problems,” Journal of Conflict Resolution p. 33-61)

If the goal is diversion, leaders will want to divert attention without provoking an actual (and expensive) war. Over the course of many confrontations, rival states may learn to anticipate response patterns, leading to safer disputes or at least to leaders believing that they can control the risks of conflict when they initiate a new confrontation. In sum, rivals provide good targets for domestically challenged political leaders. This leads to our first hypothesis, which is as follows: Hypothesis 1: Poor economic conditions lead to diversionary actions against the rival. Conflict settlement is also a distinct route to dealing with internal problems that leaders in rivalries may pursue when faced with internal problems. Military competition between states requires large amounts of resources, and rivals require even more attention. Leaders may choose to negotiate a settlement that ends a rivalry to free up important resources that may be reallocated to the domestic economy. In a “guns versus butter” world of economic trade-offs, when a state can no longer afford to pay the expenses associated with competition in a rivalry, it is quite rational for leaders to reduce costs by ending a rivalry. This gain (a peace dividend) could be achieved at any time by ending a rivalry. However, such a gain is likely to be most important and attractive to leaders when internal conditions are bad and the leader is seeking ways to alleviate active problems. Support for policy change away from continued rivalry is more likely to develop when the economic situation sours and elites and masses are looking for ways to improve a worsening situation. It is at these times that the pressure to cut military investment will be greatest and that state leaders will be forced to recognize the difficulty of continuing to pay for a rivalry. Among other things, this argument also encompasses the view that the cold war ended because the Union of Soviet Socialist Republics could no longer compete economically with the United States. Hypothesis 2: Poor economic conditions increase the probability of rivalry termination.

Congestion is structurally inevitable

Anthony **Downs**, October 1st, 20**04** (Senior Fellow @ Brookings, scholar in public policy and public administration, “Why Traffic Congestion Is Here to Stay… and Will Get Worse,” <http://www.uctc.net/access/25/Access%2025%20-%2004%20-%20Traffic%20Congestion%20is%20Here%20to%20Stay.pdf> >:)

EVERYONE HATES TRAFFIC CONGESTION. But despite all attempted remedies, it keeps getting worse. Why don’t they do something about it? The answer: because rising traffic congestion is an inescapable condition in all large and growing metropolitan areas across the world, from Los Angeles to Tokyo, from Cairo to São Paulo. Peak-hour traffic congestion is a result of the way modern societies operate, and of residents’ habits that cause them to overload roads and transit systems every day. Traffic congestion is not essentially a problem. It’s the solution to our basic mobility problem, which is that too many people want to move at the same times each day. Efficient operation of the economy and our school systems requires that people go to work, go to school, and run errands during about the same hours so they can interact with each other. We cannot alter that basic requirement without crippling our economy and society. This problem marks every major metropolitan area in the world. In the United States, the vast majority of people wanting to move during rush hours use private vehicles, for two reasons. One is that most Americans reside in low-density settlements that public transit cannot serve effectively. Second, for most people private vehicles are more comfortable, faster, more private, more convenient in trip timing, and more flexible than public transit. Therefore, around the world, as household incomes rise, more and more people shift from less expensive public modes to privately owned cars and trucks. With 87.9 percent of America’s daily commuters using private vehicles, and millions wanting to move at the same times of day, our basic mobility problem is this: the road system does not have enough capacity to handle peak-hour loads without forcing people to wait in line for limited road space. “Waiting in line” is the definition of congestion.

# 2NC

# LOST

Their link turns are false –

No positive spin – funding for the plan will be tied to drilling, Republicans will insert minor tweaks and the tea party will reject all infrastructure investment

**Johnson ‘12**

Fawn Johnson is a correspondent for National Journal, covering a range of issues including immigration, transportation and education. Johnson is a long-time student of Washington policymaking, previously reporting for Dow Jones Newswires and the Wall Street Journal. She has an M.A. from the Annenberg School for Communication at University of Pennsylvania and a B.A. from Bates College. National Journal Daily AM – March 13, 2012 – lexis

Bipartisanship, investment, job creation: What's not to love about the two-year surface-transportation bill that the Senate is poised to pass on Wednesday? Maybe that it's not going anywhere. Despite threatening, there is no indication that House Speaker John Boehner, R-Ohio, will actually bring the Senate-passed version to the floor when the House returns next week. House GOP leaders are still hammering out a five-year bill akin to the speaker's original plan that would streamline transportation programs and tie additional highway funding to domestic oil drilling. They can't count on any Democratic votes, so Republican leaders face the task of appeasing their own caucus. House Republicans don't like the idea of passing a Senate bill. It's just not clear whether they can agree on anything else. Boehner spokesman Michael Steel said House members are "actively pursuing" a "better alternative." Another staffer called the Senate bill "a crap sandwich that we're going to have to eat" if members can't agree on a different transportation bill. This week, House leaders, Transportation and Infrastructure Chairman John Mica, R-Fla., and other committee members are doing a lot of explaining about how Mica's surface-transportation bill would affect the federal government or their districts. One member sought adjustments already contained in the bill, according to an aide. Committee Republicans also are inserting minor tweaks into the bill when they can. For example, some rural members wanted to change a provision pertaining to horse trailers. But the real persuasion game comes from beating up the White House. Some rank-and-file members worry that in passing the Senate's two-year bill, they would hand President Obama another political win, according to another aide. Two years is extremely short in terms of highway planning and construction funding, and going with a short-term measure could give Obama another crack at enacting an ambitious highway package if he's reelected. Reversing themselves now could be a dicey bit of jockeying for some of the new, hard-line House GOP members, since they protested the most about Boehner's original plan. But they may have no choice. The idea that Obama would write the next bill is likely to irk the tea party, and that's exactly whose support Boehner needs to pass his version. The Transportation Department has no problem advocating for big increases in infrastructure investment, precisely the opposite of tea party dogma. In his 2013 budget proposal, the president proposed $476 billion for a six-year surface-transportation mechanism, which is about $200 billion more than House Republicans are proposing, and at least $150 billion more than current infrastructure spending. Members also are getting pressure in their districts. With so many new members of Congress, it's hard for some freshmen to grasp the (albeit wonky) importance of a fairly unwieldy government program. On its face, the federal transportation system runs counter to their ideology. So committee members and staff have told the transportation industry to target members at home during recess and explain the need for a long-term bill.

Congressional conflicts – none of their link turns say that the plan is popular with everyone in Congress, they just say that some people in Congress like it – we only need to win that the plan’s unpopular with some Congress, since they will backlash and cause conflict within Congress – Obama would still need to waste his pol cap

Keystone XL – the GOP will attach it to the plan as a rider, causing fights

**Schor ‘12**

Elana Schor is a reporter with Greenwire and environment and energy daily. She covers budget issues – Environment and Energy Daily – January 30, 2012 – lexis

The House GOP this week will edge closer to a high-stakes, two-track confrontation with Senate Democrats and the Obama administration with a politically popular infrastructure measure serving as the battlefield. House Speaker John Boehner (R-Ohio) announced yesterday that he will seek to override the president's veto of the Keystone XL pipeline as part of a long-term transportation bill -- if the oil link is not already advanced during bicameral payroll tax-cut talks. The move adds a second volatile issue to a typically noncontroversial infrastructure package that his chamber wants to pay for in part by expanding offshore and Alaskan drilling, which is opposed by most Democrats and the White House (see related stories). "If [Keystone XL is] not enacted before we take up the American Energy and Infrastructure Jobs Act, it will be part of it," Boehner said of the pipeline in an interview with ABC's "This Week," referring to the GOP's title for its drilling-and-transportation package. Boehner's comments stand to put[s] new pressure on his Senate counterparts to go beyond the bipartisan, middle-ground approach to the infrastructure measure taken so far by their Environment and Public Works Committee. A two-year federal transportation bill passed unanimously last year by panel Chairwoman Barbara Boxer (D-Calif.) and ranking Republican James Inhofe of Oklahoma did not include language allowing new coastal oil production and in the Arctic National Wildlife Refuge (Greenwire, Nov. 9, 2011).

Keystone will get passed as a rider, destroying the Ogallala aquifer – collapses water supplies in the US and globally

**Penner & Rakestraw ‘11** (Dylan Penner, Media Officer, Council of Canadians, and Darcey Rakestraw, Communications Director, Food & Water Watch, “TransCanada admits Keystone Pipeline could be used for bulk water removals,” The Council of Canadians, 8-16-2011,<http://www.canadians.org/media/water/2011/16-Aug-11.html>)

The Council of Canadians and Food & Water Watch are sounding the alarm over TransCanada’s speculation that the Keystone Pipeline could potentially be used for bulk water removals from the Ogallala aquifer. TransCanada pipelines operations director Jim Krause testified at the Nebraska state assembly earlier this year that the proposed Keystone XL Pipeline could be used in the future to mine or transport water, potentially from the Ogallala aquifer. Krause is quoted as testifying that, if approved, the pipeline would only be decommissioned “if the pipeline is not needed for oil somewhere down the road and there is no other use for any other product to go through that pipe, let's say gasoline, or maybe by that time in the future, water” [emphasis added]. The Council of Canadians and Food & Water Watch say this adds to a growing list of concerns regarding the pipeline project, which threatens to contaminate the Ogallala – one of the world’s largest supplies of freshwater. “This revelation further confirms the need for the Keystone Pipeline to be stopped,” says Maude Barlow, chairperson of the Council of Canadians and Food & Water Watch. “TransCanada is showing us just how deeply interconnected the water and climate crises are by trying to dramatically expand the tar sands, the fastest growing source of climate change pollution in Canada, while seeking to profit from water shortages caused by climate change.” “It’s widely recognized that the Ogallala, which serves as the breadbasket of the U.S., is already in dire straits. The fact that pipeline proponents are already considering using the Keystone pipeline for water proves just how irresponsible this project is in its entirety,” says Wenonah Hauter, Executive Director of Food & Water Watch.

Pol cap’s key

**Beckmann and McGann 08** [Matthew N. Beckmann, PhD and Associate Professor, Political Science School of Social Sciences at UC Irvine; Anthony J. McGann, Assistant Professor in the Political Science School of Social Sciences at UC Irvine, “NAVIGATING THE LEGISLATIVE DIVIDE POLARIZATION, PRESIDENTS, AND POLICYMAKING IN THE UNITED STATES,” Journal of Theoretical Politics 20(2): 201–220]

Here we propose a theory that casts some early rays of light onto the policy consequences of polarization in Congress. Building from a simple theoretical model in which the president seeks to promote his preferred policies in the Senate (see Snyder, 1991; Groseclose, 1996), we assess differences in the chamber’s preference distribution – from normal to unanimous to bimodal – as well as the ‘political capital’ at the president’s disposal.2 Results show that absent the president, ideological polarization makes amassing the votes needed to beat the status quo difficult, so gridlock frequently prevails. The same is true when the president lacks political capital to spend. However, when endowed with abundant capital, facing a polarized legislature enables presidents to pass policies closer to their ideal than would have been possible in an assembly characterized by greater ideological homogeneity. Hence the familiar prediction of blanket ‘gridlock’ is overblown. Instead, comparative statics show that **the consequences of ideological polarization in Congress are conditional: they depend on** the nature of the preference distribution, **the involvement of the president, and the political capital at his disposal**.

Ratification prevents Iran from closing the Strait of Hormuz

John T. **Bennett**, May 9th, 20**12** (national security and foreign policy reporter, U.S. News & World Report, “White House calls High Seas treaty a tool against Iran, Russia,” <http://www.usnews.com/news/blogs/dotmil/2012/05/09/white-house-calls-high-seas-treaty-a-tool-against-iran-russia> >:)

The Obama administration on Wednesday used an obscure high-seas treaty to take aim at global rivals Iran, for its threat to blockade the Strait of Hormuz, and Russia, for its rush to claim natural resources exposed by the Arctic ice melt, while also dangling an olive branch before a domestic rival in hopes of winning the treaty's passage in the U.S. Senate. The White House deployed top Pentagon leaders to make the point that approving the treaty, the United Nations' Convention on the Law of the Seas, would give Washington a new tool to combat Iran, China, and Russia. And in a deft political move, the defense brass also noted that U.S. firms stand to rake in greater profits if the Senate acts. First adopted in 1982, the treaty sets a broad range of rules intended to guide how nations act on the open seas and establishes economic zones exclusive to certain nations. The European Union and 161 nations have signed onto the pact. The United States is the lone industrial nation and the lone member of the United Nations Security Council that has yet to ratify it. "The time has come for the United States to have a seat at the table, to fully assert its role as a global leader, and accede to this important treaty," Defense Secretary Leon Panetta said during a forum in Washington. "It is the bedrock legal instrument underpinning public order across the maritime domain." [Gallery: New Wave of Violence Hits Afghanistan] The Senate would have to ratify the treaty before the U.S. would officially join that list. U.S. lawmakers and past presidents have resisted approving it, raising concerns that it would hurt America's national security by limiting its military options and also cause economic harm. "We would become the leader in the convention as soon as we enter it," Joint Chiefs Chairman Gen. Martin Dempsey said. Panetta and Dempsey assured a crowded hotel ballroom that joining the oceans group would not prevent Washington from using its military in any way, nor would it hinder U.S. intelligence-gathering efforts. Taking a seat at the table would allow the U.S. to influence rules the global body makes, and bend them toward Washington's goals, he said. After a decade of war in the Middle East, the U.S. faces "a range of security challenges that are growing in complexity," Panetta said. Those include terrorism, the nuclear ambitions of Iran and North Korea, Middle East and North African instability, and China military buildup. "These real and growing challenges are beyond the ability of any single nation to resolve alone," the defense secretary said. "That is ... why the United States should be exerting a leadership role in the development and interpretation of the rules that determine legal certainty on the world's oceans." Panetta opaquely sent a message that joining the convention would allow the U.S. a new tactic in countering the anti-Washington whims and actions by Iran, China, and Russia. Approving the treaty would hinder Iran's ability to close the Strait of Hormuz, a key oil transit route, which Tehran has recently threatened to do. "We are determined to preserve freedom of transit there in the face of Iranian threats to impose a blockade," Panetta said. "U.S. accession ... would help strengthen worldwide transit passage rights under international law and isolate Iran."

That draws out intervention to clear the Strait – risks escalation

**Talmadge ‘8** (Caitlin Talmadge, doctoral candidate in political science at the Security Studies Program, Massachusetts Institute of Technology, former fellow at the John M. Olin Institute for Strategic Studies at Harvard University, “Closing Time: Assessing the Iranian Threat to the Strait of Hormuz,” International Security, 33(1), Summer 2008, p.115-116,<http://web.mac.com/caitlintalmadge/Site/Publications_files/Talmadge%20article.pdf>)

The United States’ ultimate military superiority vis-à-vis Iran is without question, and eventually the United States would prevail in any confrontation.Nevertheless, mine warfare is within Iran’s capabilities, and Iran possesses the antiship cruise missiles and air defense needed to make U.S. MCM operations even more difficult and time-consuming than they normally are. It does not take much imagination to suggest that the traffic in the Strait of Hormuz could be impeded for weeks or longer, with major air and naval operations required to restore the full flow of traffic. Iran’s limitations, such as the command and control and targeting challenges it would face in littoral warfare, are not often appreciated. But its strengths are often overlooked as well, such as the stocks of missiles and much more explosively powerful mines it has acquired since the tanker wars of the 1980s. Likewise, although the United States retains the world’s best conventional military, its past experiences hunting mobile targets from the air and conducting MCM operations in the littorals do not inspire confidence that confrontation in the strait would end quickly. The United States’ fleet defenses have never been tested in combat against an adversary with large numbers of cruise missiles, and the United States is in the midst of a major transition in its entire concept of MCM operations. Given these realities, sanguine assurances about the course and outcome of military conflict in the strait seem unjustified at best, and dangerous at worst. Most important, Iran does not have to seal the strait entirely to provoke U.S. intervention, and once that intervention begins, the potential for further military escalation is high. In particular, if the air and naval campaigns appear to be dragging on, the United States might be forced to consider holding hostage other targets in Iran or using ground forces. Either way, a significant and sustained increase in the price of oil would seem likely.

That triggers multiple scenarios for bioweapons use  
**Allen ‘7** (Steven J. Allen, former Vice President for Communications, The Progress & Freedom Foundation, Ph.D. in Biodefense, George Mason University, studying under the top scientist for the Soviet biological weapons program, J.D. Cumberland Law School, M.A., B.A. Political Science, Jacksonville State University, “Iran Chemical, Bio Weapons Threat Is Real,” Newsmax, 11-7-2007,<http://web.archive.org/web/20071217010210/http>://www.newsmax.com/headlines/Iran\_Chemical,\_Bio\_Weapon/2007/11/07/47636.html)

An attack on Iran could trigger horrific retaliation against the U.S. and her allies in the Middle East with chemical and biological weapons including nerve gas, anthrax, and a germ similar to the devastating Ebola virus. While the U.S. has not overtly threatened to bomb Iran’s burgeoning nuclear facilities, it has warned of using the “military option.” And Iran has countered if attacked it would retaliate. Western intelligence experts doubt Iran has acquired a nuclear device and suggest she is several years from doing so. But many agree that Iran has a program for chemical and biological weapons (CBWs) – one more shrouded in secrecy than her nuclear program. Not only do analysts say the Islamic regime has stockpiles of CBWs, they also suggest that Iran also has the means to deliver the weapons to targets in Israel, Iraq and the United States. “The threat ofchemical and biological retaliatory attack by Iran is very real,” Dr. Dany Shoham, a chemical and biological weapons expert at the Begin Sadat Center for Strategic Studies in Israel, tells Newsmax. “Iran is prone to dare what Iraq did not, and has the needed operational capabilities.” In response to a U.S. or Israeli attack, analysts maintain that Iran could strike U.S. forces in Iraq with artillery shells containing CBWs. Iran’s Shahab-3 missiles, with a range of up to 1,200 miles, could hit U.S. bases as far away as Oman, as well as Israeli targets in Haifa and Tel Aviv, experts say. In addition to aerial bombardment, the Iranians could spray CBWs -- including anthrax -- from unmanned aerial vehicles, helicopters or boats. Iran could also employ suicide attackers to drive trucks filled with CBWs into target areas, experts add. Military experts also fear that Iran’s retaliation might not be limited to the Middle East. CBWs – especially biological weapons, which take up little space – could even be smuggled into the U.S. A single gram of anthrax spores, the size of a packet of artificial sweetener, represents 5 million to 100 million lethal doses via inhalation. Once in the U.S., CBWs could be used in countless forms of attack, from direct attacks on civilians at shopping malls or schools, to infection of livestock, to poisoning of water supplies, experts say.

Extinction

Ochs, ‘02 (Richard; Naturalist – Grand Teton National Park with a Masters in Natural Resource Management from Rutgers, “Biological Weapons must be abolished immediately”, 6/9 www.freefromterror.net/other\_articles/abolish.html)

**Of *all*** the *w*eapons of *m*ass *d*estruction, the genetically engineered ***bio***logical ***weapons***, many without a known cure or vaccine, are an **extreme danger** to the continued survival of life on earth. Any perceived military value or deterrence pales in comparison to the great risk these weapons pose just sitting in vials in laboratories. While a "nuclear winter," resulting from a massive exchange of nuclear weapons, could also kill off most of life on earth and severely compromise the health of future generations, they are ***easier* to control**. ***Biological weapons***, on the other hand, can **get out of control *very easily***, as the recent anthrax attacks has demonstrated. There is no way to guarantee the security of these doomsday weapons because very tiny amounts can be ***stolen* or *accidentally released* and** then **grow** or be grown to ***horrendous proportions***. The Black Death of the Middle Ages would be small in comparison to the potential damage bioweapons could cause. Abolition of chemical weapons is less of a priority because, while they can also kill millions of people outright, their persistence in the environment would be less than nuclear or biological agents or more localized. Hence, chemical weapons would have a lesser effect on future generations of innocent people and the natural environment. Like the Holocaust, once a localized chemical extermination is over, it is over. With nuclear and biological weapons, the killing will probably never end. Radioactive elements last tens of thousands of years and will keep causing cancers virtually forever. Potentially worse than that, bio-engineered agents **by the hundreds** with ***no known cure*** could wreck even greater ***calamity on the human race* than** could **persistent radiation**. AIDS and ebola viruses are just a small example of recently emerging plagues with no known cure or vaccine. Can we imagine hundreds of such plagues?

[\_] Any risk of methane release controls your impact calculus – it’s the most probable and only empirical extinction event, and accesses an invisible threshold

**Dorritie ‘7** (Dan Dorritie, paleontologist, studies mass extinction events, M.A. Geology, University of California—Davis, “Preface,” Killer in our Midst, 2007, http://www.killerinourmidst.com/)

Deep beneath the surface of the sea, buried in the oxygen-depleted muds that have accumulated over the ages on the underwater margins of the continents, lies a vast store of natural gas that probably well exceeds, in its carbon equivalence, the entire supply of all other oil, gas, and coal on the planet. Most of this immense store of natural gas, largely comprised of methane, lies trapped in icy cages called hydrates. Below these hydrates is a huge quantity of methane as free gas bubbles, blocked from release by the hydrate, and temperature and pressure conditions above. Still more methane, as hydrate, is found in the permanently frozen (permafrost) regions that surround the poles. Methane is a much more powerful greenhouse gas than carbon dioxide, the gas which is currently warming our globe, even though methane remains in the atmosphere for a much shorter time. If released abruptly, seafloor methane has the potential to deliver a stunning jolt of heat to the planet's already increasing temperatures. Even if released more gradually, seafloor methane will inevitably compound the problem of global warming. But abruptly or gradually, as we warm the planet by our dumping of carbon dioixde into the atmosphere, the seafloor will also warm, and its methane will inevitably be released. This book is about the release of that methane, and, in particular, about the possibility of methane catastrophe.Methane catastrophes have occurred several times in Earth's history, and when they have occurred, they have sometimes caused abrupt changes in the history of life, and at least one significant extinction. That extinction, at the end of the Permian Period 250 million years ago,is the greatest in the history of life. More than 90% of the then-existing species perished, and the course of life on Earth was altered forever. If a methane catastrophe were to happen in the near future, it is likely that not only would a considerable percentage of existing plants and animals be killed off, but a large percentage of the human population as well, as a result of the climate change and significantly more hostile environmental conditions. Yet we may well be heading toward such a catastrophe, produced by our warming of the planet. Just how rapidly seafloor methane will be released depends on numerous factors that are quite difficult to assess. It is possible that seafloor methane will be released so slowly that it will only have a relatively minor warming effect on Earth's climate. On the other hand, because the coming methane release will be the result of our warming of the planet via the burning of fossil and other acrbon fuels, it could happen much more quickly. Indeed, it seems that we are currently pumping the greenhouse gas carbon dioxide into the atmosphere at a much faster -- perhaps tens to hundreds of times faster -- rate than has ever before naturally occurred in the last half billion years or so of the Earth's history. The catastrophic warming we are causing is -- to the best of our knowledge -- unprecedented since the early days of our planet, billions of years ago. Such warming could well lead to methane catastrophe. The onset of a methane catastrophe would be abrupt because it could be initiated by a major submarine landslide, which can happen in a matter of days or even hours, or by the venting of vast quantities of seafloor methane over a period of decades. These events can take place in what is essentially a geological eyeblink. Additional slumping and/or venting can continue for centuries to millennia. The amount of methane that can be released is indeed massive. Estimates of the amount of seafloor methane generally range from about 5000 billion metric tons to around 20,000 billion metric tons (a metric ton is equal to 1.1 imperial tons, the standard ton used in the United States), though they usually range around 10,000 billion metric tons. This amount of methane contains about 7500 billion metric tons of carbon, vastly more than all the estimated carbon in all fossil fuels: petroleum, coal, and natural gas. There is a simple way to put 10,000 billion metric tons of methane into perspective: it contains about ten times the amount of carbon (largely in the form of carbon dioxide) as does the entire atmosphere. Moreover, though methane entering the atmosphere is quickly oxidized, it is oxidized to carbon dioxide, so the problem of its warming ability will remain with us for thousands of years into the future. A methane catastrophe, therefore, is an abrupt surge of greenhouse gas that could rival or exceed the carbon dioxide warming of the planet. It could potentially overwhelm the natural heat regulatory system of the Earth, which operates in a much more gradual way, and on a much more protracted time scale. The quantity of methane that could be released is so massive there would be no remedial action that people would be able to take to mitigate it except in the most superficial way. Once a methane catastrophe were to begin, there would be major consequences for the planet and its inhabitants, human and other, and we would be able to do little except wait it out. Methane, in a very real sense, is the joker in the deck of global warming. As with the current increase in atmospheric carbon dioxide, a large methane release will undoubtedly contribute to an increase in acid rain, and, through its impact on global warming, a further rise of sea level, increased desertification, increased heavy precipitation, and extreme weather events. The slowing of ocean circulation or its actual stagnation because of greater planetary warmth are also possibilities. Such a slowing would paradoxically produce a decreased transport of warm water to the coasts of northeastern North America and northernmost Europe, making for much colder winters. In addition, the destabilization of methane within seafloor sediments can send 20 meter (60 foot) high tsunamis crashing into nearby coastlines. A methane catastrophe can have other major consequences in addition to sudden global warming. It can accelerate the slow but deadly acidification of the surface ocean (down to about 100 meters, or about 300 feet), which is now occurring as a result of the increase of carbon dioxide in the atmosphere and ocean. The methane can combine with dissolved oceanic oxygen, depleting the deeper part of the ocean (that is, the ocean below about 100 meters) of oxygen, and killing off the oxygen-using (aerobic) organisms at those depths. As acidification penetrates the deep ocean, even organisms that do not use oxygen (anaerobes) will be affected. Then there are the worst case scenarios. With the warming of the world ocean, its chemical balance and biological composition will change. The ocean will become stratified, with mixing between its surface and the deep ocean becoming increasingly restricted. If the deep ocean becomes fully anoxic (devoid of oxygen), it will also become toxic, as the remaining anaerobic organisms pump out the deadly gas hydrogen sulfide. In sufficient quantities, that gas could escape oceanic confinement to poison the atmosphere and, combining with the iron in the blood's hemoglobin, kill terrestrial organisms, including us. But the composition of the atmosphere could also change in a second way, because the amount of free oxygen depends on two things: the actual production of oxygen (by the ocean's photosynthetic plankton and terrestrial green plants) and the delivery of large amounts of carbon (as part of a "rain" of organic debris from organisms closer to the surface) to the ocean's bottom. This carbon, if not removed from the global carbon cycle by sinking and eventual burial in the ocean floor, will combine with oxygen and lower its concentration in the atmosphere. Once oceanic anoxia kills off aerobic marine organisms (those which require oxygen to live), the natural regulatory system for carbon will be sent into a tailspin. The amount of organic debris produced in surface waters will likely be reduced, the amount that rapidly descends to the ocean floor will be reduced, and the proportion that gets decomposed on the way to the bottom will be significantly reduced. Exactly how this will play out is unclear, because certain of these changes will operate to slow the removal of carbon from the global carbon cycle (which will act to decrease the amount of oxygen in the atmosphere), while others will enhance it (increasing atmospheric oxygen). When a similar disruption of the marine ecosystem occurred at the end of the Permian, a quarter of a billion years ago, atmospheric oxygen dropped to a fraction (about 2/5ths) of its previous level. But increased oxygen could be just as bad: oxygen ions (sometimes referred to as free radicals) can inflict genetic damage to DNA, causing mutations and cancer. We are certainly on the verge of releasing a huge amount of permafrost andseafloor methane within a very short time; we may also be on the brink of methane catastrophe. By our own actions -- by our continuing and increasing use of carbon fuels -- we are slowly but inexorably creating the conditions during which a such a methane release, catastrophic or more gradual, could occur. We probably have time to prevent a catastrophe, but there is a certain non-negligiblepossibility that we have already crossed -- or will shortly cross -- an invisible threshold that will render a methane catastrophe inevitable and unstoppable. Major anthropogenic global warming by carbon dioxide and possible methane catastrophe will be events more cataclysmic than any that can befall Earth, except for an impact with a giant asteroid or comet, or a stellar explosion in our neighborhood of the Milky Way. These other events, however, are quite rare and unlikely in our immediate future. Major anthropogenic global warming by carbon dioxide and possible methane catastrophe, by contrast, are highly likely and much more immediate. More importantly, unlike those other possible cataclysms, both are preventable -- probably -- if we take them seriously, begin to understand them, and -- most difficult of all -- begin to take steps to avert them. It has become fashionable to dismiss predictions of catastrophe, partly because they have become so common. Many of us have become jaded, what with one such prediction after another. We used to hear a good deal about nuclear holocaust, or nuclear winter, but as those threats seem to have faded in the public consciousness, there are others which have replaced it. We now hear of doomsday asteroids, the ozone hole, SARS (severe acute respiratory syndrome), bird flu, global warming, and the obliteration of species. The number of threats seems to be increasing. And, actually, that number is increasing. Prior to this epoch in human history, people simply did not have the ability to impact our planet in potentially catastrophic ways. Unfortunately, we now do have that ability. The ozone hole is a simple example. Never before was humanity on the verge of destroying this gaseous umbrella which protects us (and all other organisms that live at or near the surface of the Earth) from deadly ultraviolet light. Humanity simply didn't have that kind of power. But the advent of chloro-flouro-carbon (CFC) refrigerants gave us that ability, and the ozone layer sustained significant damage before the problem began to be addressed. Luckily, this is a problem for which there is a ready solution, and by banning the production of these ozone-harming chemicals, we have begun to bring the problem under control. The problem of carbon dioxide emissions, consequent global warming, and the prospect of a major seafloor methane release, however, will not be addressed so easily. We currently have no technology to trap and hold large quantities of carbon dioxide, and we are not likely to have such a technology for many decades in the future -- if indeed we ever will. Some of the excess carbon dioxide we produce is in fact currently slipping beyond our potential grasp, entering the oceans at the astounding rate of about a million metric tons (a metric ton = 1.1 standard ton) per hour, and increasing the acidity of seawater. There is, in addition, great resistance in a world economy driven and dominated by fossil fuels to shifting the energy base of that economy. Enormous corporate profits and personal fortunes, and the success of political efforts on their behalf, are also at stake. Slowing the stampede to catastrophically higher global temperatures and ocean destruction will require substantial international effort. Even so, should we today stop spewing carbon dioxide into the atmosphere, global temperatures will continue to increase for some time into the future. Despite our aversion to warnings of imminent catastrophe, our problem may be that we are not alarmed enough. Because of the delayed consequences of our dumping carbon dioxide into the atmosphere, the major effects of global warming will only be starting just as the world supply of oil is well on its way to depletion (about 2050). But already startling environmental changes -- the early, "minor" effects of global warming -- are occurring on Earth: ·With the exception of 1996, the years from 1995 to 2004 constitute 9 of the 10 warmest years since systematic record keeping began in 1861. ·The year 2005 was the warmest year since records have been kept. The next warmest years, in order, are, 1998, 2002, 2003, and 2004. ·Globally, glaciers have retreated, on average, almost some 15% since 1850. Glacial retreat has been recorded in Tibet, Alaska, Peru, the Alps, Kenya, Antarctica. ·Alaskan temperatures have risen about 2.8°C (5°F) in the past few decades. ·In the past several decades, about 40% of Arctic Ocean sea ice has disappeared. (Some researchers now believe, however, that at least part of this sea ice loss may be due to changing wind patterns over the North Pole, but these wind changes, themselves, may be due to a warming climate.) ·Between 1965 and 1995, the amount of melt water from the Arctic region going into the North Atlantic was about 20,000 cubic kilometers (about 4800 cubic miles), the equivalent of the fresh water in all of the Great Lakes combined (Superior, Huron, Erie, and Ontario) with the exception of Lake Michigan. Preliminary calculations indicate that an additional 18,000 cubic kilometers (4300 cubic miles) or so could shut down ocean circulation in the North Atlantic. That shutdown could occur in two decades or less, though most scientists believe it will take much longer. The Intergovernmental Panel on Climate Change, comprised of thousands of climate scientists worldwide, puts the likely slowing at about 25% by 2100. ·Trade winds across the equatorial Pacific have slowed because of higher humidity, and are projected to do so even more as time passes. The increase in humidity is the result of increased evaporation, traceable to global warming. This slowing of Pacific winds will also slow the ocean surface currents that the winds push along. Some scientists fear that at some point "the switch will be tripped" and nutrient-rich bottom water will no longer rise to the surface in the eastern Pacific (a "permanent El Niño" situation which did exist about three million years ago). These waters feed the plankton which feed the anchovies in one of the world's greatest fisheries. Much of the anchovy harvest is dried, ground up, and added to chicken feed, of which it is a major protein constituent. If the switch does trip, good-bye to inexpensive chicken. ·Upper ocean temperatures have risen between 0.5 and 1.0°C (0.9 to 1.8°F) since 1960. Deeper water has also warmed, but not by as much. The total amount of energy that has gone into the oceans as a consequence of global warming, however, is staggering: enough to run the state of California for 200,000 years. ·In addition to significant retreats of the glaciers on Greenland's margins, as of 2005 Greenland's massive ice sheet is melting at more than twice the rate it was in the previous three years. Glaciologists report that portions of the sheet which were solid ice just a few years ago are now riddled with meltwater caverns. ·The deep waters of the Southern Ocean (that which encircles Antarctica) have become significantly colder and less salty than they were just ten years ago. This is presumably due to the melting of Southern Ocean sea ice and parts of the Antarctic ice cap. Deep ocean waters have been previously presumed to be fairly isolated from climate warming but the data obtained from depths of four to five kilometers (more than two to three miles) now suggests otherwise. Such changes could significantly impact global ocean circulation. ·The Southern Ocean, which may absorb more carbon dioxide than any other region of the global ocean, as of more than twenty-five years ago ceased to absorb additional carbon dioxide. In fact, its ability to absorb carbon dioxide seems to be declining -- even as atmospheric levels of that gas are reaching ever higher levels -- most likely due to increased wind speed over that part of the global ocean. The higher wind speed in turn has been attributed to both global warming and the destruction of the Antarctic ozone layer. Because oceans eventually absorb most of the carbon dioxide that goes into the atmosphere, the declining ability of the Southern Ocean to absorb carbon dioxide is a particularly ominous development. ·Huge expanses of floating ice around Antarctica have collapsed into fragments in just weeks, after existing for tens of thousands of years. In addition, the ice that currently covers West Antarctica, known as the West Antarctic Ice Sheet (WAIS), which was quite recently (as of 2001) judged by the UN's Intergovernmental Panel on Climate Change (IPCC) as unlikely to collapse before the end of this century, or even for the next millennium, may now be starting to disintegrate, according to the head of the British Antarctic Survey. If this ice sheet does collapse, global sea level will rise by about 5 meters (16 feet). ·While global daytime temperatures, on average, increased only about 0.33°C (0.6°F) between 1979 and 2003, nighttime temperatures have risen more than 1°C (1.8°F). These environmental changes have had significant biological effects: ·In the eastern North Atlantic, warm-water phytoplankton (marine organisms that photosynthesize, produce oxygen, and constitute the bottom of the food chain) has moved north 1000 km (600 miles) over the past 40 years. ·In 2004, almost a quarter of a million breeding pairs of seabirds in islands north of Scotland failed to produce more than a few dozen offspring. Their reproductive failure is most likely due to the North Atlantic phytoplankton changes, and the consequent breakdown of the marine food chain. Many of the affected birds migrate back and forth between the Scottish islands and areas around the Southern Ocean (off Antarctica) over the course of the year. Starved in the north, they will never make it back to the south. Similar changes have been observed off the West Coast of the United States in 2005. ·Krill, small (about 5 cm/2 inches in length), shrimplike creatures which are a main food source for seals, whales, and penguins in the Southern Ocean, have declined in places to just 20% of their previous number in just 30 years. ·Grass now survives the winter in places on the Antarctic Peninsula, the warmest part of that frigid continent. When grass last was able to survive Antarctic winters is unknown. ·In the 17 year period from 1987 to 2003, the number and size of major wildfires in the western U. S. has increased dramatically. Compared to the 17 year period stretching from 1970 to 1986, the number of major wildfires has increased fourfold, and the area burned by major fires has increased sixfold. All of the presumed causes for this increase -- the earlier melting of snow, increased summer temperatures, an extended fire season, and an increase in the area of high-altitude forests which is vulnerable to such fires -- can be traced to global warming. ·The small increase in global nighttime temperatures indicated above (1°C/1.8°F), is sufficient to have reduced the biomass (the total mass of roots, stems, leaves, and grain) of rice, humankind's most important crop, by 10%. Rice is the primary foodstuff for more than half of the population of the world. With the warming, the release of methane has begun to follow: ·The Western Siberian Peat Bog, comprising an area of a million square kilometers (about 385,000 square miles, roughly the combined size of France and Germany), has begun to melt. This area is underlain by permafrost (permanently frozen ground that has existed since the Ice Age) perhaps a kilometer (about 3000 feet) deep. The permafrost contains an enormous amount of methane hydrate, possibly as much as a quarter of the total inventory of continental methane. As this permafrost warms and melts -- an irreversible process -- methane is released. This melting may add a quantity of methane to the atmosphere roughly equivalent to that released by all other natural and agricultural sources, increasing global warming by 10 to 25%. ·Already, methane emissions from certain areas of Siberian permafrost is proceeding much more rapidly than previously estimated. These extensive areas, characterized by Ice Age deposits of wind-blown dust (called loess) with high carbon and very high ice (50 to 90%) contents, are bubbling out methane at a rate five times higher than earlier presumed. Overall, these "yedoma" regions are contributing an additional 10 to 63% the total rate of methane release from the wetlands of the north. These are only the early effects, ripples from the storm which is to come. Remedial action is still possible, but the likelihood of catastrophe becomes more certain with each passing year.

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And, one policy not enough

Kagan, 2

(Robert, Carnegie Endowment for International Peace, Policy Review, June-July, http://www.msu.edu/course/iss/325/stein/policyreviewarticles.html)

IT IS TIME to stop pretending that Europeans and Americans share a common view of the world, or even that they occupy the same world. On the all-important question of power -- the efficacy of power, the morality of power, the desirability of power -- American and European perspectives are diverging. Europe is turning away from power, or to put it a little differently, it is moving beyond power into a self-contained world of laws and rules and transnational negotiation and cooperation. It is entering a post-historical paradise of peace and relative prosperity, the realization of Kant's "Perpetual Peace." The United States, meanwhile, remains mired in history, exercising power in the anarchic Hobbesian world where international laws and rules are unreliable and where true security and the defense and promotion of a liberal order still depend on the possession and use of military might. That is why on major strategic and international questions today, Americans are from Mars and Europeans are from Venus: They agree on little and understand one another less and less. And this state of affairs is not transitory -- the product of one American election or one catastrophic event. The reasons for the transatlantic divide are deep, long in development, and likely to endure. When it comes to setting national priorities, determining threats, defining challenges, and fashioning and implementing foreign and defense policies, the United States and Europe have parted ways.

And, Mutual interests solve cooperation

Ayoob and Zierler, 5

(Mohammed Ayoob is a University Distinguished Professor of International Relations, and Matthew Zierler is a visiting Assistant Professor of International Relations at James Madison College, World Policy Journal, Spring, Volume 22, “The Unipolar Concert: The North-South Divide Trumps Transatlantic Differences”)

Second, disagreements within the concert are often over policy choices, as opposed to fundamental rules of the system or basic objectives. Deterring and punishing “rogue” states and denying unconventional capabilities to those outside the club are shared objectives from which no member of the concert dissents. This was very clear in the runup to the invasion of Iraq in 2003. A reading of the U.N. Security Council debates on Iraq from 1991 to 2003 makes it obvious that there were hardly any differences among the club of powerful states on taking steps that would severely derogate Iraq’s sovereignty and eventually bring about a regime change. The imposition of no-flight zones and invasive inspections under U.N. auspices between 1991 and 2003 clearly demonstrated this unity of purpose. The differences were over the tactics to achieve these ends. The same applies to the concert’s objectives regarding Iran. The shared objective is to deny Iran nuclear weapons capabilities and to curb its regional influence; the debate is about how best to attain these goals. A similar situation prevails in the economic arena. While there may be differences over details and even intra-concert bickering about certain issues, for example, the American attempt to impose tariffs on European steel, there is a basic consensus about prying open world markets under the guise of free trade and liberal investment policies, thus making it easier for developed countries to market their high-value-added products and to invest in profitable ventures abroad. This is accompanied by imposing conditionalities, or structural adjustments, on Third World economies that would ostensibly help to reduce their fiscal deficits. It is clear that this can only be achieved through multilateral mechanisms, such as the World Bank, the IMF, and the World Trade Organization. The concert of industrialized states, working through the G-7 in particular, harmonizes its economic policy in such a fashion that it can effectively use these multilateral forums to promote its neoliberal agenda. We do not mean to suggest that the current multilateral arrangements and initiatives are set in stone. However, it is unlikely that the instrument will be jettisoned, if only because of the deep commitment on the part of the concert to maintain it. Moreover, multilateral institutions in the North are being strengthened as the states from Eastern Europe seek membership in the European Union and NATO. The deepening and broadening of multilateral institutions in the North have had the added effect of reinforcing the divide between those in the concert and those outside. In short, multilateralism has not proved to be antithetical to unipolarity. In fact, the two have worked in tandem to promote the interests of the North in both the economic and security spheres.

And, Elites favor cooperation

Hachigan and Sutphen 8

[Nina and Monica, Stanford Center for International Security, 2008, The Next American Century, p. 30]

The extent and degree of European comfort with the status quo of a close U.S. relationship has been hotly debated for decades. The Suez Crisis of 1956, in which the United States forced the U.K., France, and Israel to back down in their confrontation with Egypt, led the British to conclude that they should be on the side of the U.S. on any global strategic issue. The French concluded the opposite, and the split more or less endures today. Generally, though, there is an assumption of a continuing, thick transatlantic partnership; policy elites assert that there are real advantages to staying close to the U.S.