# 1AC

### 1AC – China Advantage

#### CONTENTION 1: CHINA

#### SMRs allow the Marines to ensure mobility and reduced logistics---other energies fail

Andres and Breetz 11 Richard B, Professor of National Security Strategy at the National War College and a Senior Fellow and Energy and Environmental Security and Policy Chair in the Center for Strategic Research, Institute for National Strategic Studies, at the National Defense University and Hanna L, doctoral candidate in the Department of Political Science at The Massachusetts Institute of Technology, February, "Small Nuclear Reactors for Military Installations: Capabilities, Costs, and Technological Implications", www.ndu.edu/press/lib/pdf/StrForum/SF-262.pdf

Operational Vulnerability. Operational energy use represents a second serious vulnerability for the U.S. military. In recent years, the military has become significantly more effective by making greater use of technology in the field. The price of this improvement has been a vast increase in energy use. Over the last 10 years, for instance, the Marine Corps has more than tripled its operational use of energy. Energy and water now make up 70 percent of the logistics burden for troops operating in forward locations in the wars in Afghanistan and Iraq. This burden represents a severe vulnerability and is costing lives. In 2006, troop losses from logistics convoys became so serious that Marine Corps Major General Richard Zilmer sent the Pentagon a “Priority 1” request for renewable energy backup.11 This unprecedented request put fuel convoy issues on the national security agenda, triggering several high-level studies and leading to the establishment of the Power Surety Task Force, which fast-tracked energy innovations such as mobile power stations and super-insulating spray foam. Currently, the Marine Corps is considering a goal of producing all nonvehicle energy used at forward bases organically and substantially increasing the fuel efficiency of vehicles used in forward areas.¶ Nevertheless, attempts to solve the current energy use problem with efficiency measures and renewable sources are unlikely to fully address this vulnerability. Wind, solar, and hydro generation along with tailored cuts of energy use in the field can reduce the number of convoys needed to supply troops, but these measures will quickly reach limits and have their own challenges, such as visibility, open exposure, and intermittency. Deploying vehicles with greater fuel efficiency will further reduce convoy vulnerability but will not solve the problem.¶ **A strong consensus has been building** within planning circles **that small reactors have the potential to significantly reduce liquid fuel use and**, consequently, **the need for convoys to supply power at forward locations.** Just over 30 percent of operational fuel used in Afghanistan today goes to generating electricity. Small reactors could easily generate all electricity needed to run large forward operating bases. This innovation would, for instance, allow the Marine Corps to meet its goal of self sufficient bases. Mobile reactors also have the potential to make the Corps significantly lighter and more mobile by reducing its logistics tail.

#### Marine SMRs solve and make bases like Guam energy self-sufficient

Baker 12 Matthew, American Security Project Think Tank, "Do Small Modular Reactors Present a Serious Option for the Military’s Energy Needs?", June 22, americansecurityproject.org/blog/2012/do-small-modular-reactors-present-a-serious-option-for-the-militarys-energy-needs/

The Defense Energy Security Caucus (DESC) held a briefing yesterday afternoon with proposals to surge the usage of small modular reactors (SMRs). The speakers at the briefing, included Rep. Bartlett (R-MD) and representatives from the American Nuclear Society, recommended that Congress and the White House need to do more “encourage the development and deployment of multiple SMR designs.”¶ SMRs are small, nuclear-powered reactors with power levels less than or equal to 300 MW and the capacity to produce as little as 25MW at a time.¶ SMRs differ from conventional nuclear reactors, which are capable of producing upward of 1,000MW, is that they are much smaller and cheaper. That makes them more capable of catering to our modern energy needs.¶ SMRs are able to be constructed in factories, with manufacturing capabilities already available in the United States. Their smaller size means that they require less construction time and can be deployed in areas that cannot accommodate conventional reactors. Although still in the design stage, SMRs could support small townships and military bases once manufactured. The flexibility of the new technology is particularly important to the DESC audience because SMRs can support remote military bases.¶ The speakers at the DESC briefing suggested a surge is needed in SMR production to combat a major vulnerability in America’s national security: possible attacks to the power grid. Such attacks could cause blackouts for over a year according to Congressman Bartlett, leading to blackouts never before experienced in the United States. In such an event the U.S. military would still need to function 24/7. Current predictions made by the DESC suggest that up to 90% of the US military’s energy needs could be supplied by SMRs.¶ Congressman Bartlett also pointed out that current military bases such as Guam – which is fueled by the transport of diesel – are extremely vulnerable should the energy transport system be disrupted. Fuel supplies are even more unstable in Afghanistan, where one out of every twenty-four convoys results in a casualty. According to Congressman Bartlett, SMRs could make such bases energy self-sufficient.

#### China’s rising now---US must harden military bases like Guam to avoid loss of Asia

Barton 11 Paul C, Gannett Washington Bureau citing Thomas Mahnken, Professor at the Naval War College, "Strategist: Guam in reach of Chinese missiles", March 30, www.armytimes.com/news/2011/03/gannett-guam-within-reach-of-china-missiles-033011/

Advancements in Chinese military capabilities mean Guam has lost its status as a safe haven for American forces in the Western Pacific, a top war strategist says.¶ “We are no longer out of reach,” Thomas Mahnken, professor at the Naval War College in Newport, R.I., said in an interview.¶ That’s especially the case, he said, in regard to Chinese ballistic missiles that could rain down on U.S. airfields and other facilities on the island.¶ “They have put a lot of resources into missile programs,” Mahnken said.¶ While the United States has been tied down for the past decade in Afghanistan and the Middle East, he said, the Chinese have been making rapid progress on a range of military technologies.¶ “They have exploited that,” Mahnken said.¶ Besides conventionally armed ballistic missiles, developments in Chinese armaments include sea-launched missiles, both nuclear and conventionally armed; nuclear and diesel submarines; cruise missiles; intercontinental ballistic weapons; better combat aircraft and bombers; and anti-satellite weapons. And cyberwarfare, he said, has not been neglected.¶ Mahnken said the U.S. military retains clear superiority, but “in some cases our advantage is slipping.” Earlier this month, Mahnken delivered similar warnings to the House Armed Services Committee and Delegate Madeleine Bordallo, D-Guam.¶ “This is a matter of some urgency since China is, for the first time, close to achieving a military capability to deny U.S. and allied forces access to much of the Western Pacific rim,” he told the committee.¶ “The assumption that U.S. bases in Guam, Japan and elsewhere will be secure from attack is in question. The Chinese military is fielding ballistic and cruise missile systems and a number of other capabilities designed to destroy most key facilities,” Mahnken also testified.¶ Despite Mahnken’s testimony, Bordallo said in a statement Wednesday: “There is no specific threat from China against U.S. interests in Guam. The re-posturing of U.S. military forces in the Pacific seeks to realign our forces to better respond to a variety of threats or humanitarian crises in the region. Moreover, our military maintains a variety of assets that can counter a wide range of weapons that any country may possess, and this was a point made by U.S. Pacific Command in testimony before our committee.”¶ She added: “Although I share the concerns that have been voiced regarding China’s level of investment in its military, greater transparency by the Chinese government will go a long way in addressing these concerns. I am also confident that the U.S.-China relationship will continue to improve through greater interaction between our military officials as well as greater economic opportunities between our countries.”¶ Since World War II, the United States has relied on a system of forward bases to deter adversaries and reassure allies, Mahnken said. Guam has frequently been called “the tip of the spear.”¶ Now in doubt, he told lawmakers, is the notion that on Guam — or anywhere else in the Western Pacific — the U.S. will “enjoy an operational sanctuary in space.”¶ Assumptions that U.S. naval vessels “can operate with impunity in all parts of the Western Pacific is questionable” as well, he told the committee.¶ A central question is whether the Chinese would regard Guam as a “red line” that they dare not cross because of the threat of U.S. retaliation. Related to that is whether Middle America cares enough about Guam to support going to war to defend it, Mahnken said in the interview.¶ A conflict over Taiwan, Mahken said, would likely bring Guam into play for both sides.¶ The Chinese, he testified, are working night and day to develop “programs to degrade or destroy the U.S. command, control and communications abilities, as well as American intelligence, surveillance and reconnaissance and the navigational systems that are critical for U.S. military operations.”¶ American forces would hardly be defenseless, he said, but the Chinese are clearly working to develop military power that compliments their status as an economic superpower.¶ In sum, he told lawmakers, “Chinese military modernization threatens to reshape the balance of power in Asia.”¶ When interviewed, Mahnken said China’s emphasis on its military could be likened to Germany’s buildup in the early 1930s. A lot of Chinese military activities, he said, are shielded from spy satellites by tunneling.¶ In response to China’s enhancement of its forces, Mahnken testified, the United States should bolster its intelligence, surveillance and reconnaissance networks in the Pacific; harden and diversify its Pacific bases, especially Guam; and bolster the submarine forces of allies and develop better ways to better link with them.¶ “Military power has a role to play in dealing with the rise of China,” he said, adding that the United States “must maintain a preponderance of power in the Pacific in order to ensure access to the global commons.”

#### Energy diversification on Guam is critical to the US military buildup

Peterson 11 Chris, Special Projects Editor at Energy and Infrastructure, North America’s Best Utility Management and Underground Solutions, "Guam Power Authority", Winter 2011, www.energyandinfrastructure.com/index.php/featured-content/307-guam-power-authority-gpa

Diversification of its energy sources will become much more important in the coming years, as a planned buildup of United States military presence on Guam figures to place additional demand on the power grid. According to GPA, the buildup is expected to take place sometime after 2014 and will increase demand for electricity by 30 MW. Although GPA has sufficient capacity to meet the increased demand, the cost of meeting that need is of some concern. The U.S. Navy is the GPA’s single largest customer, using more than 350 million kilowatt-hours each year

#### Guam is the lynchpin of deterrence in the region---proximity to hotspots ensures rapid response and deters Chinese expansionism

Caryl 7 Christian, Senior fellow at the Legatum Institute, a contributing editor at Foreign Policy, and a senior fellow at the MIT Center for International Studies, The Daily Beast, 2/25/07, “America's Unsinkable Fleet”, <http://www.thedailybeast.com/newsweek/2007/02/25/america-s-unsinkable-fleet.html>

For an out-of-the-way spit of land in the West Pacific, Guam has been getting a lot of interesting visitors recently. First came a steady stream of Pentagon bureaucrats and senior U.S. military officers. Then, a few weeks ago, a high-ranking delegation of Japanese officials arrived. And this week the island is set to greet its most illustrious guest yet: U.S. Vice President Dick Cheney. So why all the fuss over a tropical island just 30 miles long, known mainly for its white-sand beaches and glorious sunsets? The answer: the Pentagon has begun a major redeployment of U.S. forces in the region, pulling troops and equipment out of sometimes unreliable allies and beefing up its presence in more-congenial locales. First on its list is Guam, a U.S. territory since 1898 that is fast becoming the linchpin of Washington's new Asia strategy. Current U.S. forces on the island number just a few thousand but within a decade will total well over 20,000--about the same size as the Bush administration's planned surge in Iraq. By comparison, there are some 29,000 U.S. troops left in South Korea, yet despite the dangers of a nuclear-armed North, that number is expected to drop significantly. At a time when most of the world's attention is focused on the United States' misadventures in Iraq and Afghanistan, Pentagon planners are quietly working on ways to fortify the U.S. presence in East Asia. And they're looking to do so in ways that will give them a free hand in a wide range of contingencies--including fighting regional terrorists and a possible showdown with China. Guam offers the U.S. military both proximity to potential hot spots and the advantages of operating off U.S. soil. The transfer of forces to the island also reflects the Pentagon's determination to give regional allies such as South Korea and Japan more responsibility for their own security. Guam, a sleepy but diverse place that looks like a cross between Micronesia and Middle America, has long served as a U.S. air base and way station for troops traveling through the Pacific. At the end of the cold war, the Pentagon began shutting down some facilities on the island. But then came September 11, and a dramatic reassessment of America's global forces. Former secretary of Defense Donald Rumsfeld began to advocate the lily-pad strategy: rather than relying on large, static bases in Germany and South Korea, the Pentagon should create a global network of jumping-off points for quick responses to unpredictable attacks. Guam is an ideal lily pad, since the United States can act there without seeking permission from allies, says Honolulu-based defense analyst Richard Halloran. Declares Carl Peterson of the Guam Chamber of Commerce: "This is the U.S. in Asia. This is the tip of the spear." The island has already become a convenient base for fighting Washington's "Global War on Terror" in Indonesia and the Philippines. Small wonder that Brig. Gen. Douglas H. Owens, the commanding officer of Guam's Andersen Air Force Base, describes the island as "an unsinkable aircraft carrier." It's also well positioned for possible trouble to come. As Rear Adm. Charles Leidig, U.S. Navy commander on Guam, points out, if you take a map and draw a circle with Guam at the center and a radius of 1,500 nautical miles--equivalent to three hours' flying time or two to three days by ship--you come close to the main islands of Japan, Okinawa, Indonesia and the Philippines. China and the Korean Peninsula are only a bit farther off. So are several of the world's most important sea lanes, such as the Strait of Malacca, through which some 50 percent of the world's oil passes each year. The Pentagon, however, may be building up its forces on Guam with even bigger game in mind. "The larger strategic rationale [for the shift] can be summed up in one word, and that's 'China'," says Halloran. "They [the Bush administration] don't want to contain China, and they couldn't. What they are trying to do is to deter the Chinese. That's what the buildup on Guam is all about." The nature of the U.S. reorganization reinforces this point. Washington and Tokyo have agreed to move 8,000 Marines to Guam from Okinawa by 2014, at a cost of $10 billion (60 percent of which will be paid for by the Japanese government). But this is only the most public part of a broader buildup that has largely escaped notice. If all the pieces come together, it could mean billions more in Defense Department funds and a total increase in Guam's population (which is currently just 170,000) of 35,000. Guam is already home to a major U.S. Navy port and one of the biggest bases in the U.S. Air Force, featuring twin two-mile-long runways. Not long after September 11, flights of massive B-52 bombers began returning to Andersen to carry out regular training missions. Now the Air Force has begun to prepare for the deployment of tanker aircraft and up to 48 fighter planes, including the state-of-the-art F-22 Raptor. Andersen has also already started construction of a $52.8 million project that will house up to 10 Global Hawks--large unmanned spy planes that, according to Pacific Command Air Force Gen. Paul Hester, could end up replacing aging U-2 spy planes now based in South Korea. Meanwhile, the Navy has turned its port at Guam's Apra Harbor into a home for two Los Angeles-class nuclear-powered attack submarines, with a third to come later this year. It also plans to refurbish wharves to accommodate aircraft carriers and to transform Guam into a base for its new Littoral Combat Ship (a shallow-draft stealth ship designed to operate close to shore) and Trident submarines. The Tridents, immense cold-war-era craft converted to fire Tomahawk cruise missiles, can also be used by Navy Special Operations Forces, who can set off on missions in mini-submarines launched through the Tridents' missile ports. Guam is already home to an undisclosed number of Navy SEALs, many of whom have seen duty in the war on terror, and their number will likely grow. Guam's new capabilities, however, are designed for more than just low-intensity conflicts. The attack submarines that will soon be based there, for example, probably wouldn't be much use in a conflict with North Korea or Qaeda-allied terrorists in the Philippines; the presence of the subs, experts say, is clearly aimed at the possibility of a naval confrontation with China over the Taiwan Strait. Similarly, analysts argue, the stationing of F-22s and tanker planes on Guam points to the Pentagon's desire to ensure dominance in the air should it have to fight the Chinese. China's media often worry about just this scenario, but not everyone agrees that China is the main target of the Guam buildup. Evan Medeiros of the RAND Corporation says "the initial impetus and primary driver" were to restructure the U.S. military for the wide range of operations it now faces, from fighting the war on terror to chasing pirates and conducting humanitarian missions. In the complicated post-9/11 world, the United States believes it must be able to respond to various threats as flexibly as possible. This means keeping its forces close to the action. In the past that's required basing them in other countries' territories. But Guam offers an almost unique combination of a good location, excellent facilities (including a topnotch harbor, vast warehouses and massive airfields) and a lack of political restraints. As Kurt Campbell, a former White House staffer and Defense Department official now at the Center for a New American Security, says, "[Guam is] a point from which you can do a variety of things. And it's a place to remind people that you're still focused on the region." Campbell points out that these secondary missions, such as protecting sea lanes, countering weapons proliferation and conducting relief missions, remain important; the U.S. military's humanitarian efforts after the tsunami of December 2005 gave a huge boost to the country's reputation in Asia. Brad Glosserman, executive director of Pacific Forum CSIS, a Hawaii-based think tank, agrees. The Asia-Pacific region, he says, "is a jigsaw puzzle where all the pieces are changing shape and size all the time. China's the big story--but there are also changes going in on Japan, India, South Korea, Taiwan." One such development driving the move to Guam has been the steady withdrawal of the United States from South Korea in recent years (more than 9,000 troops have left in the last three years)--a result, in part, of rising anti-Americanism there and Rumsfeld's reluctance to keep troops in politically sensitive places. Some Air Force units that have pulled out of South Korea have already arrived on Guam; others may be yet to come. That, along with the planned removal of the Marines from Okinawa, has led some commentators to characterize the Guam expansion as evidence of a virtual U.S. retreat from East Asia. But Campbell and others disagree: "I would see this not as a retrenchment but as a diversification." Indeed, after years of maintaining an even balance between its Atlantic and Pacific fleets, the U.S. Navy is now clearly emphasizing its force in Asia. Whatever the rationale, the changes represent good news for Guam's population. The locals were hit hard in the early 1990s when the U.S. military's post-cold-war drawdown, combined with the Asian financial crises and the resulting plunge in tourism, caused the loss of thousands of skilled and unskilled jobs on the island. Guamanians are hoping that the Pentagon's new plan can bring billions in investment into the territory as well as new support for its sagging infrastructure. Contractors are already maneuvering for deals to build housing and other structures. Real-estate prices shot up 50 percent between 2005 and 2006 and there were more property sales in the fourth quarter of last year than in all of 2003. To be sure, hurdles remain, such as ensuring that the Marines from Okinawa actually make the move. The deal, which requires Japanese cooperation, has already run into political problems there. Then there's the possibility that local activists in Guam will throw a wrench into the works. Some of Guam's indigenous Chamorro people, who wield great influence on the island, have opposed the changes, warning that the military could overrun the island. The Pentagon, which already controls one third of the territory, has promised not to expand this share, but that pledge could prove hard to keep. Still, most Guamanians support the buildup, given their traditional patriotism--traumatic memories linger of Japan's occupation during World War II--and the potential economic benefits the rebasing will bring. Guam's significance as a regional base and steppingstone for U.S. military power therefore seems set to grow exponentially. Notes Gov. Felix Camacho: "We can no longer be ignored as some distant American territory." He seems right about that. If, as many in the region predict, the 21st century ends up belonging to the nations of the Pacific--and conflict in the region rises--Guam will have to get used to being in the headlines.

#### Conflict is emerging as China expands its military---escalating tensions and resource claims make miscalc likely

Westhead 12 Rick, Writer for Foreign Affairs, staff writer/South Asia Bureau Chief for the Toronto Star, The Star, 7/14, “Battle for the Pacific: Naval arms race in the China Sea”, http://www.thestar.com/news/world/article/1225396--battle-for-the-pacific-naval-arms-race-in-the-china-sea

A 21st-century Great Game is unfolding in the Asia Pacific, a region that accounts for more than half the world’s population and many emerging powers. Some, such as China, India, Pakistan and North Korea, are nuclear-armed rivals who have battled before. As these regional rivals vie for control of trade routes, fishing stocks and rich, untapped oil and gas deposits, they are expanding and modernizing their maritime forces, conducting war games and opening naval bases in what has become the most perilous arms race in the world. At the same time, the U.S. is trying to reestablish a dominant presence in the region, strengthening ties to some countries, including the Philippines and Australia, and trying to warm relations with others, such as Burma (Myanmar). With the U.S. pledging to send more troops and ships to the Asia Pacific, regional neighbours want to coax China to be more open at the negotiating table. Ten Southeast Asian nations this week agreed on a code of conduct to prevent disputes over the South China Sea from escalating into open conflict. China has refused to sign the pact. “The more militarized the region becomes the harder it is to resolve conflicts,” says Stephanie Kleine-Ahlbradt, a China analyst with the International Crisis Group, which works to defuse conflicts. “You have increasing harassment of fishermen in disputed waters, which becomes a proxy for bigger issues of claimed territory,” she says. “It can easily spiral into a security dilemma, especially when nationalist sentiments in the region are increasing. There’s a real pressure in these countries not to cave in on disputes, and when you’ve been telling people for 50 years that you have a claim, it’s hard to agree to go to an international tribunal and live with its decisions.” China is the pacesetter. It is said to be spending $106 billion this year alone on its military, up from $14 billion in 2000. It recently began sea trials on its first aircraft carrier, the Shi Lang, and is developing an anti-ship ballistic missile that can penetrate the defences of U.S. aircraft carriers, according to its military. India — whose first prime minister, Jawaharlal Nehru, once wrote, “to be secure on land we must be supreme at sea” — bought a Russian-built attack submarine, the Chakra, in January. It’s the first nuclear-powered sub India has operated in 20 years. India’s first locally built aircraft carriers, the Vikramaditya and Vikrant, are scheduled to join the navy in 2013 and 2014. South Korea last year began construction on a $970-million naval base for 20 warships, including submarines. Australia, which has signalled it will build a sub fleet after construction is finished on three destroyers, recently agreed to allow the U.S. navy to station 2,500 marines in Darwin, while the Philippines is in talks with the U.S. about expanding an American military presence there. Half a world away, the U.S. looms over the islands, straits and channels of the Indian Ocean and South China Sea, a region U.S. Secretary of State Hillary Clinton has called a “national interest.” In January, President Barack Obama said the U.S. would “pivot” and “rebalance” its global military forces toward the Asia-Pacific region. The U.S. is concerned about China’s sweeping claims of sovereignty, such as its directive to foreign oil companies not to help Vietnam develop oilfields in the South China Sea. While the U.S. Defence Department has been ordered to pare spending by $487 billion over the next 10 years, Obama has mostly spared the navy from cuts. In June, Defence Secretary Leon Panetta told a conference in Singapore that by 2020, 60 per cent of U.S. warships, including six aircraft-carrier groups, would be stationed in the Asia-Pacific. Mitt Romney, the Republican nominee in November’s presidential election, has pledged to increase the naval fleet from 285 warships to 346. “In many respects, the broader Pacific will be the most dynamic and significant part of the world for American interests for many decades to come,” U.S. Deputy Secretary of State William J. Burns said in November. The U.S. announced last year it would develop long-range nuclear-capable bombers and better electronic jammers for the navy. The military contractors General Dynamics and Northrop Grumman are also building a new stealth destroyer. The ship, known as the DDG-1000, will cost as much as $3.3 billion and feature a new type of radar that offers improved scanning in shallow coastlines, a wave-piercing hull that leaves a minimal wake, and an electromagnetic rail gun, which employs a magnetic field and electric current to shoot a projectile at several times the speed of sound. While the navy originally wanted 32 of the DDG-1000s, its order has been trimmed to three. But Chinese Rear Admiral Zhang Zhaozhong, a professor at China’s National Defence University, said the DDG-1000’s high-tech design wouldn’t protect it from a group of fishing boats packed with explosives. If enough fishing boats could be mobilized, the DDG-1000 “would be a goner,” Zhaozhong said recently on CCTV, China’s public broadcaster. History would seem to support Zhaozhong. During the Falklands War in 1982, Argentina used a single $200,000 air-to-surface missile to sink a $50-million destroyer, HMS Sheffield. And in 1967, an Egyptian vessel used several guided missiles to sink an Israeli destroyer. Meanwhile, Indonesia, Malaysia, Pakistan, Thailand, Taiwan, Vietnam and Bangladesh have either acquired submarines or plan to buy them. Japan is increasing its 18-sub fleet to 24. And China has more than 68 subs, three nuclear-powered, according to The Military Balance in Asia, a May 2011 report by the Center for Strategic and International Studies. “For most countries, it’s not about a fight, it’s about the ability to dispatch to preserve your quarter,” says Mike Hennessy, a professor of naval history at the Royal Military College of Canada. “It’s about being able to intimidate so your claims go unchallenged.” Throughout the sprawling Asia Pacific region, there is no shortage of maritime claims. The biggest dispute is over the Spratly Islands, a barren patch of 750 islets, coral reefs and outcroppings in the South China Sea about 350 kilometres southeast of Vietnam and 900 kilometres southeast of China. For more than 50 years, China, Vietnam, the Philippines, Malaysia and Brunei have fought for control of the archipelago. In 1956, a Filipino businessman named Tomas Clomas arrived at the islands and declared an independent country, Freedomland. Manila rejected the suggestion but claimed the islands, occupying some with armed troops since 1968. Last year, Vietnam announced that six monks who belong to the government-sanctioned wing of the Buddhist church would set up temples and live on several islands in the Spratlys chain, presumably to establish Vietnam’s claim. In April, the Philippines and Vietnam said they would hold soccer and basketball matches in the Spratlys, the same day a Chinese cruise ship completed a voyage to the disputed territory. At first glance, the Spratlys seem to hold scarce value. Some of the islands actually disappear below the water at high tide. But, the Spratlys offer a prime location to monitor the shipping lanes of the South China Sea. More important, the seabed is believed to contain as much as 225 billion barrels worth oil and natural gas — enough to fuel Canada for 280 years, based on current consumption of about 2.2 million barrels per day. (The Athabasca oilsands formation, by contrast, is estimated to contain 1.7 billion barrels of recoverable oil.) It’s no wonder China covets the Spratlys. The world’s fastest-growing economy, China uses five times as much oil and gas as Canada, but its supply of hydroelectricity declined by 40 per cent last year because of a prolonged drought. When the Philippines announced recently that it would work with a U.K. company to explore for deposits near the Spratlys, China’s government-owned Global Times newspaper wrote an editorial that China should strike first. “Everything will be burned to the ground should a military conflict break out,” the paper argued. “We shouldn’t waste the opportunity to launch some tiny-scale battles that could deter provocateurs from going further.” Oil and gas are only one reason for the naval buildup. The Persian Gulf, Indian Ocean and the Strait of Malacca off Indonesia combine to form a crucial trade route. At least 40 per cent of the world’s oil is carried aboard tankers that travel these waters. An estimated 700 million people live near the South China Sea and depend on the rich fishing stocks for their livelihoods, as well as 80 per cent of their diets. Vietnam, for instance, estimates its population of 87 million will surge by 25 per cent by 2050 and it will need additional food and fish. This spring, on April 8, China and the Philippines quarrelled in a stretch known as the Scarborough Shoal after the Philippine Navy discovered coral, giant clams and live sharks on a Chinese boat. The Philippines announced the Chinese fishermen would be arrested for poaching. The showdown, some 200 kilometres west of the Philippine island of Luzon, simmered for more than two months. Then, on June 17, the Philippines ordered its two ships to withdraw. The day before they left, China had seven large ships and as many as 26 fishing boats stationed at the shoal, the Philippine Daily Inquirer reported. China has alienated and antagonized its regional neighbours during the past two few years over a string of incidents, pushing them “into a coalition and toward the Americans,” says M. Taylor Fravel, a political scientist at the Massachusetts Institute of Technology, who has written a book about China’s territorial issues. Last year, a boat owned by PetroVietnam was surveying the ocean floor about 120 kilometres south of Vietnam and 600 kilometres from China’s Hainan Island. Three Chinese patrol vessels intercepted the Vietnamese ship and cut its cables to the seabed. China’s foreign ministry blamed Vietnam for the clash, claiming its oil and gas operations “undermined China’s interests and jurisdictional rights.” That incident came 10 months after the U.S. and Vietnam began joint naval exercises in the South China Sea. “I think China has realized the open hostility has been a mistake and you’re seeing it take a more moderate approach now,” Fravel says. “It’s unarmed or lightly armed vessels, the Chinese version of the coast guard, who are responding to conflicts, not its navy.” Fravel says China is also becoming better at international diplomacy, using civilian maritime law agencies to press its claims in conjunction with its navy, which is becoming formidable. In 1990, China’s navy amounted to two Soviet-era destroyers. By 2011, China had 71 frigates and destroyers and 71 submarines, as well as its first aircraft carrier.

#### Territorial disputes snowball into nuclear conflict

Chakraborty 10 Tuhin Subhro, Research Associate at Rajiv Gandhi Institute for Contemporary Studies (RGICS), his primary area of work is centered on East Asia and International Relations. His recent work includes finding an alternative to the existing security dilemma in East Asia and the Pacific and Geo Political implications of the ‘Rise of China’. Prior to joining RGICS, he was associated with the Centre for Strategic Studies and Simulation, United Service Institution of India (USI) where he examined the role of India in securing Asia Pacific. He has coordinated conferences and workshops on United Nation Peacekeeping Visions and on China’s Quest for Global Dominance. He has written commentaries on issues relating to ASEAN, Asia Pacific Security Dilemma and US China relations. He also contributed in carrying out simulation exercise on the ‘Afghanistan Scenario’ for the Foreign Service Institute (FSI). Tuhin interned at the Indian Council of World Affairs (ICWA), Sapru House, wherein he worked on the Rise of People’s Liberation Army (PLA) military budget and its impact on India. He graduated from St. Stephen’s College, Delhi and thereafter he undertook his masters in East Asian Studies from University of Delhi. His areas of interest include China, India-Japan bilateral relations, ASEAN, Asia Pacific security dynamics and Nuclear Issues, The United States Service Institution of India, 2010, “The Initiation & Outlook of ASEAN Defence Ministers Meeting (ADMM) Plus Eight”, <http://www.usiofindia.org/Article/?pub=Strategic%20Perspective&pubno=20&ano=739>

The first ASEAN Defence Ministers Meeting Plus Eight (China, India, Japan, South Korea, Australia, New Zealand, Russia and the USA) was held on the 12th of October. When this frame work of ADMM Plus Eight came into news for the first time it was seen as a development which could be the initiating step to a much needed security architecture in the Asia Pacific. Asia Pacific is fast emerging as the economic center of the world, consequently securing of vulnerable economic assets has become mandatory. The source of threat to economic assets is basically unconventional in nature like natural disasters, terrorism and maritime piracy. This coupled with the conventional security threats and flashpoints based on territorial disputes and political differences are very much a part of the region posing a major security challenge. As mentioned ADMM Plus Eight can be seen as the first initiative on such a large scale where the security concerns of the region can be discussed and areas of cooperation can be explored to keep the threats at bay. The defence ministers of the ten ASEAN nations and the eight extra regional countries (Plus Eight) during the meeting have committed to cooperation and dialogue to counter insecurity in the region. One of the major reasons for initiation of such a framework has been the new face of threat which is non-conventional and transnational which makes it very difficult for an actor to deal with it in isolation. Threats related to violent extremism, maritime security, vulnerability of SLOCs, transnational crimes have a direct and indirect bearing on the path of economic growth. Apart from this the existence of territorial disputes especially on the maritime front plus the issues related to political differences, rise of China and dispute on the Korean Peninsula has aggravated the security dilemma in the region giving rise to areas of potential conflict. This can be seen as a more of a conventional threat to the region. The question here is that how far this ADMM Plus Eight can go to address the conventional security threats or is it an initiative which would be confined to meetings and passing resolution and playing second fiddle to the ASEAN summit. It is very important to realize that when one is talking about effective security architecture for the Asia Pacific one has to talk in terms of addressing the conventional issues like the territorial and political disputes. These issues serve as bigger flashpoint which can snowball into a major conflict which has the possibility of turning into a nuclear conflict.

#### Independently, Guam is the crucial pivot point for the US Asia-Pacific strategy

Halloran 11 Richard, New York Times Foreign Correspondent, “Pacific Push”, January, http://www.airforce-magazine.com/MagazineArchive/Pages/2011/January%202011/0111pacific.aspx

A force buildup on Guam anchors a broad US military strategy to keep China in check. In its strategy to deter China from driving the US out of Asia and the Western Pacific, US Pacific Command has quietly shifted its focus from Northeast to Southeast Asia, especially the South China Sea and nations along its littoral areas. To dissuade China, the US has begun positioning forces which could threaten China’s supply lines through the South China Sea. The oil and raw materials transported through those shipping lanes are crucial to a surging Chinese economy—an economy paying for Beijing’s swiftly expanding military power. The pivot point of this emerging strategy is Guam, the US territory in the central Pacific within striking distance of the South China Sea. The island is also 1,800 miles from the coast of China, and therefore, within range of Chinese missiles. Asked why the US was expanding Andersen Air Force Base and other bases on Guam, sites that could be hit by intermediate-range ballistic missiles, a senior US officer replied, "The message to China is that we are here and we mean to stay." Despite North Korea’s episodic provocations and fiery rhetoric, the primary objective of the new US focus is a China that has become more belligerent toward the US since the Beijing Olympics in August 2008. That event, especially its elaborate opening ceremony, is seen by some senior US officers now as a nationalistic declaration of China’s sense of pre-eminence. That attitude was reflected in a somewhat testy exchange between Secretary of Defense Robert M. Gates and Gen. Ma Xiaotian of the People’s Liberation Army at the Shangri-La conference of Defense Ministers in Singapore in June. With China, Gates said, the US wanted "sustained and reliable military-to-military contacts at all levels that reduce miscommunication, misunderstanding, and miscalculation. There is a real cost to the absence of military-to-military relations." In rebuttal, Ma said: "If anyone has been setting up barriers to cooperation, it is certainly not us." Territorial Overreach The general asserted, "There are three main obstacles in the development of military relations: The first is the sales of arms to Taiwan, the second is the intense spy and patrol behaviors of US planes and ships in South China Sea and East China Sea."The third, Ma said, was the 2000 National Defense Authorization Act and the amendment introduced by then-Rep. Tom DeLay (R-Tex.) that set restrictions on US military contact with the PLA. DeLay sponsored another amendment the next year, prohibiting the US from paying the $1 million demanded by China for repatriating the Navy reconnaissance aircraft and crew that landed on Hainan Island after the EP-3 and a Chinese fighter shadowing it collided in international airspace. In addition to harassing US ships in international waters, the Chinese have startled senior US officers with harsh rhetoric in private. Officers who analyze the PLA said Chinese military leaders have their own tactics, not controlled by the Communist Party or government, for dealing with Americans. Despite their bluster, some Chinese appear to recognize that their swelling economic might has made them vulnerable. By the end of 2010, China will be importing about half the 8.2 million barrels of oil a day it consumes to keep the economy humming. Some 80 percent of that will have come through the Strait of Malacca. That lifeline could be cut with relative ease by air and sea power; a single B-52, for instance, can deliver a wide range of cruise missiles, torpedoes, and anti-ship mines. Thus, President Hu Jintao once pointed to Beijing’s "Malacca dilemma" and during a visit to Malaysia went out to the strait to see for himself. Within the last six months, China has elevated its territorial claim to most of the international waters of the South China Sea by calling the sea a "core interest." In rebuttal, Secretary of State Hillary Rodham Clinton said in Hanoi in July that the US "has a national interest in freedom of navigation, open access to Asia’s maritime commons, and respect for international law in the South China Sea." If Chinese shipping in the South China Sea were disrupted, ships would be forced to navigate the tricky waters of the Arafura Sea between Indonesia and Australia or to sail around Australia, at enormous cost. Moreover, the shipping would still be vulnerable to attack on the long sea-lane north in what strategists call a "distant blockade." Some US naval thinkers have shown new interest in the "Heartland Theory" propounded by the British geographer Halford J. Mackinder more than a century ago. Mackinder argued that whoever controlled the heartland of Eastern Europe could control the "world island," or Eurasian continent. Applying that strategy to Asia, students of Mackinder contend that controlling the South China Sea would enable an air and naval power to control East Asia, including China, and therefore the "world island." In 2006, Maj. Lawrence Spinetta, a student at the Air War College, came to a similar conclusion. "To counter China’s growing naval power, the United States can exploit a critical vulnerability—China’s dependence on sea lines of communication," notably the Strait of Malacca, he wrote. Guam is critical to this strategy. The latest addition to Guam’s arsenal was the arrival in September of the first of three RQ-4 Global Hawk unmanned surveillance aircraft that will be based on the island by mid-2011. Together, the three Global Hawks will be able to maintain a 24-hour watch, seven days a week, over the South China Sea or wherever Pacific Command deems necessary. USAF Gen. Gary L. North, commander of Pacific Air Forces, flew from Hawaii in September to tell a crowd at Andersen that Global Hawk missions would include humanitarian, anti-piracy, and if necessary, "combat operations." Global Hawk is packed with sensors that can cover 40,000 square miles in a day from an altitude of 60,000 feet. The intelligence aircraft has a range of 10,900 miles, enough to recon the East Asian littoral from Seoul to Singapore. It operates day and night, in all weather, and produces high-resolution images that can be transmitted to a ground station at Joint Base Pearl Harbor-Hickam, the Pacific Air Forces headquarters in Hawaii, and several others almost instantly. Persistent Presence While new to Andersen, Global Hawk provides a proven capability, North said. The general, who commanded the aircraft in the air war over Iraq for three years, said Global Hawk had flown 35,000 hours over Iraq and Afghanistan—and another 10,000 hours elsewhere. Lt. Gen. Herbert J. Carlisle, commander of 13th Air Force at Hickam, which oversees the operations on Guam, suggested an added benefit from Global Hawk: "People have a tendency to behave" when they know they are being watched. Still to come on Guam are a wharf and maintenance facilities for transiting nuclear-powered aircraft carriers and escorting warships. This support unit is intended to keep the ships on station longer without having to return to Pearl Harbor or to rely on bases in Japan and Singapore. An Army missile defense unit of 600 soldiers, plus families, is due to be stationed on Guam, according to an environmental impact statement (EIS), to be a direct counter to the Chinese missile threat. Further, senior US officers said plans to move 8,600 marines, plus 9,000 dependents from Okinawa to Guam by 2014, were on track despite dithering by successive governments in Tokyo. (At least, that is the official view. Privately, US senior officers have expressed skepticism that the schedule will be maintained.)

#### That’s key to prevent a regional arms race, war over Taiwan, and seizure of shipping lanes and the Strait of Malacca

Spinetta 6 Major Lawrence, “The Malacca Dilemma-Countering China’s String of Pearls with Land Based Air Power”, <http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA476931>

With regard to Japan, China has made repeated incursions into Japanese territorial waters and the country's economic zones in order to warn its neighbor in unusually blunt terms that any interference with Beijing's designs over disputed territory will be met with force.30 Tensions between China and Japan over the enforcement of territorial claims and the exploitation of disputed natural resources could erupt in a conflict with wide regional repercussions.31 Japan's unilateral declaration of an exclusive economic zone in the East China Sea, the site of intensive hydrocarbon prospecting, may spark military confrontation. Energy as a Driver of China’s National Security Policy 32 No longer inward looking, China shifted its foreign policy focus towards achieving regional dominance, bolstering national prestige, ensuring diplomatic ascension, and safeguarding economic interests. With regard to the last, economic considerations are intimately intertwined with Chinese security strategy. As such, energy concerns loom large in Chinese foreign policy calculations. China’s desire to secure energy imports to fuel its economy remains a prime driver of its security policy. China’s demand for energy grew by more than 30 percent in 2003, and Chinese automobile ownership increased 80 percent during the past four years. China is the second largest consumer of oil in the world and the third largest importer of oil. Importing 60 percent of its oil from the Middle East, China is heavily dependent on foreign oil, particularly Middle Eastern sources.33 As China’s economy expands, its dependence on foreign oil will increase, exacerbating pressures to secure energy resources. In the near term, China is projected to remain the fastest growing energy consumer in the world. Oil industry experts expect Chinese imports to rise from 6 million barrels in 2004 to 16-20 million barrels per day in 2020. If this projection proves accurate, China will have to import eighty percent of its total oil consumption. Even if both China’s economy and oil consumption grows at a rate below expectations, many experts agree that China “faces acute and unavoidable energy vulnerabilities.”34 The specter of an impending energy crisis is not remote; China is already experiencing oil shortages. In 2004, 24 of China’s 31 provinces experienced power cuts as demand surpassed energy grid capacities. The Chinese government introduced energy rationing in industrial centers near Guangzhou and Shanghai, ordered six thousand factories to take a one-week break or operate at non-peak hours, and mandated shopping malls in Beijing reduce their air conditioning by one-third to conserve energy.35 The Chinese government recognizes “a growing reliance on Middle Eastern suppliers for stable energy supplies is problematic and must be mitigated through a comprehensive diversification strategy.”36 But, its diversification strategy has made little progress. China lost bids to buy stakes in oil fields outside the Middle East, such as its July 2005 failed attempt to buy UNOCAL.37 Similarly, a deal to build a land pipeline from Russia to China collapsed after Japan entered the competition and offered more money to reroute the pipeline. Because regional energy grids in Southeast Asia have been built in a piecemeal fashion, Chinese efforts to connect grids and facilitate regional energy interdependence have produced only marginal benefits. China’s dependence on sea lanes to import oil is a critical strategic vulnerability. Almost all of the oil that China imports passes through maritime chokepoints and hence, is susceptible to disruption. Eighty percent of China’s oil imports pass through the Strait of Malacca. In a 2003 speech to the Chinese Communist Party leadership, President Hu Jintao identified this dependence on sea lanes as a critical vulnerability and directed national security officials to figure out a solution for the “Malacca Dilemma.” Predictably, China is allocating substantial resources to its military, buying sophisticated weapons, and seeking to expand its influence in the Western Pacific and Indian Ocean based on fears that the United States will exploit this economic vulnerability in a potential conflict. A Strategic Crossroads China’s aggressive strategy to challenge US maritime superiority suggests traditionalists who view national security as a zero-sum game with the United States are triumphing over integrationists who favor cooperation. Traditionalists view security issues more narrowly through a military filter, whereas integrationists emphasize cooperation and interdependence.38 Traditionalists and integrationists advocate different methods of securing access to energy imports. Traditionalists support a policy of direct physical control. They advocate the resolution of territorial disputes with force if necessary and encourage Chinese companies to acquire equity in foreign natural resources.39 In contrast, integrationists argue China “must expand ties to foreign supplies through diverse market arrangements, encourage foreign suppliers to pursue ‘linking’ projects in China, expand cooperation with the International Energy Agency to better anticipate and respond to international energy crises, and increase reliance on markets.”40 Although China seems to be pursuing elements of both the traditionalist and integrationist approaches, its weight of effort and magnitude of military spending suggests the government is prioritizing a military approach over cooperation. China is at a strategic crossroads. China’s break-neck military build-up has given it the capability to increasingly threaten its neighbors and US regional influence.41 The government can either choose a martial path to an expanded sphere of influence, or it can broaden its definition of security and focus on economic growth through commercial rather than military means. Based on recent antagonistic actions, it is far from a forgone conclusion that the integrationists will eventually triumph in the policy debate and China will embark upon a path of benign competition. Ideological differences with the United States increase the risk that China will choose a martial path. Additionally, the 2005 Department of Defense annual report to Congress on Chinese military power identifies other factors that could lead to conflict. These include: ƒ Nationalistic fervor bred by expanding economic power and political influence ƒ Structural economic weakness and inefficiencies that undermine economic growth ƒ An inability to accommodate the forces of an open, transparent market economy ƒ A government that is still adapting to great power roles ƒ An expanding military-industrial complex that proliferates advanced weapons.42 The interactions of complex political, economic, and social forces within China and their influence on Chinese strategic behavior are difficult to predict. For example, economic stagnation could aggravate domestic political problems for Communist Party leaders, leading Beijing to reduce military spending. Conversely, Chinese leaders could shift investments to the military in a bid to sustain domestic support through nationalistic assertions abroad.43 An economic downturn and demographic change may catalyze the government to focus on internal rather than external threats to regime survival. Alternatively, an economic downturn may cause Chinese leaders to advocate the acquisition by force of natural resources to fuel their economy. The unpredictability of Taiwanese politics may provoke China to act militarily despite a willingness of certain factions within the Chinese government to negotiate a settlement. The point is that US action will not be the sole determinant or driver of Chinese foreign policy. The United States needs to be prepared for the contingency that China follows a less than friendly path. The Need for US Action The stakes are high; the United States cannot cede control of the region’s strategic waterways without incurring immeasurable risk to vital US interests. First, failure to respond to China’s “String of Pearls” strategy threatens US power projection capability. Emphasizing preparations to fight and win short-duration, high-intensity conflicts, China hopes to negate the United States’ ability to intervene in the region, especially during a conflict with Taiwan. The US military cannot perform its primary missions—peacetime engagement, deterrence and conflict prevention, and fighting and winning the nation’s wars—unless it maintains the ability to deploy forces in a timely and effective manner. China enjoys the enduring advantage of proximity and interior lines of communication in Asia.44 The United States must overcome the tyranny of distance to project power and to protect the region’s sea lines of communication. In a China-Taiwan conflict, delaying or harassing a US carrier task force may create conditions sufficient for PRC victory. Unimpeded access through the South China Sea is strategically important not only in the event of conflict in the region, but also as a route to the Persian Gulf. Sixty-four percent of the known global oil reserves are concentrated in the Middle East. Surrendering maritime control to China would effectively give it a vote in US foreign policy. Even if China did not actively oppose US forces transiting through strategic chokepoints, it could impose significant time delays and costs. For example, a naval battle group proceeding from Yokosuka, Japan to Bahrain forced to sail around Australia would require an additional 15 days of transit. The extra fuel costs alone would amount to almost $10 million.45 More critical than the monetary cost, the loss of speed and responsiveness may prove difficult to overcome.46 Second, failure to respond to China’s “String of Pearls” strategy would jeopardize freedom of navigation through chokepoints that are critically important to global economic interests. One quarter of the world’s trade passes through the Strait of Malacca. Over 1,100 fully laden supertankers, many with only a meter or two of clearance between their keels and the channel bottom, pass eastbound through the Strait each year.47 If China succeeds in gaining control of the Strait, then half of the world’s merchant fleet would be required to seek alternative routes. This situation would result in huge economic losses, delays in shipping, and generate a substantial increase in the requirement for vessel capacity. If the Chinese threaten to close the Strait of Malacca and merchant ships are re-routed, commercial transportation costs will increase by 60 percent.48 More importantly, China would be able to harm the economies of close allies, most notably Japan and South Korea. Threats to exert control over sea lanes would have an enormous impact, giving Beijing tremendous bargaining leverage. Japan and South Korea rely on US naval power to help protect the transit of their goods to market and the flow of resources. Seventy percent of Japan’s trade passes through the Strait of Malacca. The Japanese and South Korean economies are heavily dependent on the free passage of commercial traffic through the Strait of Malacca, yet neither country has the naval forces necessary to adequately protect its long-haul commercial shipping in the region. Not only does it benefit the United States to protect the vital interests of its close allies, the United States is bound by treaty to secure Japanese and South Korean sea lines of communication.49 An American failure to protect Japanese and South Korean interests would weaken strategic alliances and encourage those nations to take their own defensive measures, potentially setting the conditions for a spiraling arms race. Ross Terrill, a national security expert at Harvard’s Asia Center says, “A Japan that saw China eclipse the U.S. -- its major ally and whose primacy in East Asia explains six decades of Japanese restraint -- would surely challenge China.”50 If a regional arms race does not come to fruition and Japan chooses a conciliatory approach, then Japan may be forced into political accommodation as a result of overt Chinese threats or soft power influence. Developing a Hedge Strategy A Chinese national security strategist closely tied to the People’s Liberation Army stated, “When a nation embarks upon a process of shifting from an ‘inward-leaning economy’ to an ‘outward-leaning economy,’ the arena of national security concerns begins to move to the oceans. Consequently, people start to pay attention to sea power. This is a phenomenon in history that occurs so frequently that it has almost become a rule rather than an exception.”51 In an Atlantic Monthly article, “How We Would Fight China,” Robert Kaplan predicts a future conflict as the Chinese navy increasingly seeks to project power and control the region’s sea lanes. He warns, “Given the stakes, and given what history teaches us about the conflicts that emerge when great powers all pursue legitimate interests, the result is likely to be the defining military conflict of the twenty-first century: if not a big war with China, then a series of Cold War-style standoffs that stretch out over years and decades.”52 Many political scientists argue it’s a question of “when,” not “if” US-China relations sour (i.e., relations are defined by more than benign competition). As a result, some neo-conservatives advocate the United States follow a strategy that seeks to prevent or at least moderate China’s rise. Max Boot chides the Pentagon for failing to recognize China’s nefarious plotting and accuses “Chinese strategists, in the best tradition of Sun Tzu, [of] working on crafty schemes to topple the American hegemon.”53 In response, Richard Haas, president of the Council on Foreign Relations, points out, “One problem with this thinking is that the rise and fall of countries is largely beyond the ability of the United States or any other outsider to control. The performance of states is mostly the result of demographics, culture, natural resources, educational systems, economic policy, political stability, and foreign policy. It is not clear the United States could prevent China's rise even if it wanted to.”54 Either way, strained relations between the two countries are likely. While war with China is not inevitable, it would be a serious mistake for the United States not to protect its vital interests and create a hedge against the risk of some sort of conflict—military and/or diplomatic. China stands at a strategic crossroads, and the United States must be prepared to respond to the uncertainties of any Chinese course of action. The dispute over Taiwan is an obvious flashpoint, but countering Chinese soft power requires strategic considerations beyond preparing against direct military confrontation. The United States must be prepared to fully engage China, but also capable of responding to potential Chinese attempts to attain regional hegemony through force or intimidation. The United States has little influence over the pace and scope of Chinese military spending, but it can strive to maintain a strategic advantage in the region to protect trade, preserve regional influence, and threaten China’s strategic vulnerabilities if required. China’s ultimate goal is to control strategic chokepoints in the South China Sea and Indian Ocean. China’s “String of Pearls” strategy supports efforts to exclude the United States from the region. To offset the ability of Beijing to leverage its emergent military capabilities, the United States needs a sustained and robust naval and air presence in the region to prevent China from having the option of threatening US and allied interests. The United States should take steps to encourage a peaceful and prosperous China while pursuing a hedge strategy to reduce the risks associated with a China that chooses a belligerent attitude in the realm of foreign policy. Ross Terrill remarked, “The expansionist claims of Beijing are unique among today's powers. But the Chinese regime is a rational dictatorship that has, for the past quarter century, been patient in fulfilling its goals. It surely realizes that others -- such as the U.S., Japan, Russia and India -- have a variety of reasons for denying China the opportunity to be a 21st century Middle Kingdom. If Beijing continues to be faced with a countervailing equilibrium that keeps the peace in East Asia, it will probably act prudently.”55

#### Taiwan conflict goes nuclear

Glaser 11 Professor of Political Science and International Affairs – George Washington University, “Will China’s Rise Lead to War?” *Foreign Affairs* Vol. 9 Iss. 2, March/April

THE PROSPECTS for avoiding intense military competition and war may be good, but growth in China's power may nevertheless require some changes in U.S. foreign policy that Washington will find disagreeable--particularly regarding Taiwan. Although it lost control of Taiwan during the Chinese Civil War more than six decades ago, China still considers Taiwan to be part of its homeland, and unification remains a key political goal for Beijing. China has made clear that it will use force if Taiwan declares independence, and much of China's conventional military buildup has been dedicated to increasing its ability to coerce Taiwan and reducing the United States' ability to intervene. Because China places such high value on Taiwan and because the United States and China--whatever they might formally agree to--have such different attitudes regarding the legitimacy of the status quo, the issue poses special dangers and challenges for the U.S.-Chinese relationship, placing it in a different category than Japan or South Korea. A crisis over Taiwan could fairly easily escalate to nuclear war, because each step along the way might well seem rational to the actors involved. Current U.S. policy is designed to reduce the probability that Taiwan will declare independence and to make clear that the United States will not come to Taiwan's aid if it does. Nevertheless, the United States would find itself under pressure to protect Taiwan against any sort of attack, no matter how it originated. Given the different interests and perceptions of the various parties and the limited control Washington has over Taipei's behavior, a crisis could unfold in which the United States found itself following events rather than leading them. Such dangers have been around for decades, but ongoing improvements in China's military capabilities may make Beijing more willing to escalate a Taiwan crisis. In addition to its improved conventional capabilities, China is modernizing its nuclear forces to increase their ability to survive and retaliate following a large-scale U.S. attack. Standard deterrence theory holds that Washington's current ability to destroy most or all of China's nuclear force enhances its bargaining position. China's nuclear modernization might remove that check on Chinese action, leading Beijing to behave more boldly in future crises than it has in past ones. A U.S. attempt to preserve its ability to defend Taiwan, meanwhile, could fuel a conventional and nuclear arms race. Enhancements to U.S. offensive targeting capabilities and strategic ballistic missile defenses might be interpreted by China as a signal of malign U.S. motives, leading to further Chinese military efforts and a general poisoning of U.S.-Chinese relations.

**Collapse of Asian trade from Malacca causes nuclear war**

Auslin 9 Michael, resident scholar at AEI, “Averting Disaster”, The Daily Standard, 2/6, http://www.aei.org/publications/filter.all,pubID.29339/pub\_detail.asp

As they deal with a collapsing world economy, policymakers in Washington and around the globe must not forget that when a depression strikes, war can follow. Nowhere is this truer than in Asia, the most heavily armed region on earth and riven with ancient hatreds and territorial rivalries. **Collapsing trade flows** can lead to political tension, nationalist outbursts, growing distrust, and ultimately, military miscalculation. The result would be disaster on top of an already dire situation. Asia's political infrastructure may not be strong enough to resist the slide towards confrontation and conflict. No one should think that Asia is on the verge of conflict. But it is also important to remember what has helped keep the peace in this region for so long. Phenomenal growth rates in Japan, South Korea, Hong Kong, Singapore, China and elsewhere since the 1960s have naturally turned national attention inward, to development and stability. This has gradually led to increased political confidence, diplomatic initiatives, and in many nations the move toward more democratic systems. America has directly benefited as well, and not merely from years of lower consumer prices, but also from the general conditions of peace in Asia. Yet policymakers need to remember that even during these decades of growth, moments of economic shock, such as the 1973 Oil Crisis, led to instability and bursts of terrorist activity in Japan, while the uneven pace of growth in China has led to tens of thousands of armed clashes in the poor interior of the country. Now **imagine such instability multiplied region-wide**. The economic collapse Japan is facing, and China's potential slowdown, **dwarfs any previous economic troubles,** including the 1998 Asian Currency Crisis. Newly urbanized workers rioting for jobs or living wages, conflict over natural resources, further saber-rattling from North Korea, all can take on lives of their own. This is the nightmare of governments in the region, and particularly of democracies from newer ones like Thailand and Mongolia to established states like Japan and South Korea. How will overburdened political leaders react to internal unrest? What happens if Chinese shopkeepers in Indonesia are attacked, or a Japanese naval ship collides with a Korean fishing vessel? Quite simply, Asia's political infrastructure may not be strong enough to resist the slide towards confrontation and conflict. This would be a political and humanitarian disaster turning the clock back decades in Asia. It would almost certainly drag America in at some point, as well. First of all, we have **alliance responsibilities** to Japan, South Korea, Australia, and the Philippines should any of them come under armed attack. Failure on our part to live up to those responsibilities could mean the end of America's credibility in Asia. Secondly, peace in Asia has been kept in good measure by the continued U.S. military presence since World War II. There have been terrible localized conflicts, of course, but nothing approaching a systemic conflagration like the 1940s. Today, such a conflict would be far more bloody, and it is unclear if the American military, already stretched too thin by wars in Afghanistan and Iraq, could contain the crisis. Nor is it clear that the American people, worn out from war and economic distress, would be willing to shed even more blood and treasure for lands across the ocean. The result could be a historic changing of the geopolitical map in the world's most populous region. Perhaps China would emerge as the undisputed hegemon. Possibly democracies like Japan and South Korea would link up to oppose any aggressor. India might decide it could move into the vacuum. All of this is guess-work, of course, but it has happened repeatedly throughout history. There is no reason to believe we are immune from the same types of miscalculation and greed that have destroyed international systems in the past.

### 1AC – Hegemony Advantage

#### CONTENTION 2: HEGEMONY

#### Marine nuclear energy progress spills over to all other military sectors

Roberts 11 David, Staff Writer for Grist, "THE MARINES GO RENEWABLE", Outside Magazine, December 2011, www.outsideonline.com/outdoor-adventure/natural-intelligence/Natural-Intelligence-Charge.html?page=all

The effort has covered ground so quickly in part because of the Corps’s relentless, non-ideological pragmatism. They have looked everywhere for good ideas, including the other armed services, development groups, and … Burning Man. In August, Marine Corps representatives traveled to the alternative arts festival to visit the Playagon, a camp where humanitarian-minded futurists and gear geeks, many ex-military, test disaster-relief technology in the austere conditions of the Nevada desert. ¶ “They’re reaching out into all the non-traditional venues they can find,” says Eric Rasmussen, a 25-year Navy veteran who now leads relief efforts in places like Haiti and Indonesia. “That’s pretty damn smart.”¶ THE MARINE CORPS is the smallest of the armed forces, with just over 200,000 active-duty soldiers and a budget of less than $30 billion—around 4 percent of U.S. military spending. In terms of sheer numbers, energy markets will likely be more affected by the Air Force seeking alternative fuels for its planes, the Navy for its ships, or the Army for its large, enduring bases. But the Marines’ progress in expeditionary energy could have an impact well beyond the gallons or dollars involved. ¶ For one thing, battlefield success will focus attention on the tactical advantages of small-scale, distributed renewable energy. Christine Parthemore, a fellow at the independent Washington, D.C.–based Center for a New American Security, credits India 3/5 with accelerating a “shift in thinking” that has military brass willing to go beyond merely using fossil fuels more efficiently. This was apparent in the Operational Energy Strategy, released by the Department of Defense in June, which prioritizes diversifying energy sources and, specifically, hails the Marines’ experience in Helmand province. ¶ For another, the Marines’ efforts will drive R&D that could bring down prices for the kinds of technologies desperately needed in regions affected by war, poverty, or natural disasters. The same solar panels and LED lights that worked for India 3/5 could be utilized in remote villages or refugee camps. This is of more than altruistic interest to the Pentagon. Even under Donald Rumsfeld’s leadership, the Department of Defense acknowledged that “stability operations are a core U.S. military mission.”

#### SMRs resolve grid and convoy risks---islanding and reduced fuel needs

Bourget 11 Remy, worked at Center for Advanced Defense Studies, “Small Modular Reactors: Opportunity for Global Leadership and Innovation”, 7/1, Google Cache

Small Modular Reactors offer unambiguous national security advantages. Unlike other alternative energy sources such as solar and wind power, nuclear reactors can be relied on for energy 24/7, making them a very stable source of energy. The fragility of the U.S. electric grid was underscored in 2003 by a blackout which swept the north-east United States, affecting 45 million Americans. The electric grid is especially vulnerable to cyber-attack, though some experts claim it has already been penetrated and “prepared in advance” for cyber war. Putting greater military reliance on nuclear energy mitigates this risk. Small reactors would help to “island” domestic bases, making them invulnerable to such attacks. Another security advantage is independence from oil. Currently, cutting off the oil supply would cripple US defenses. Reactors deployed to Forward Operating Bases would reduce the need for fuel convoys, saving American lives and eliminating the possibility of a crisis on the scale of Pakistan's 2008 closure of the Khyber Pass. Proliferation is another important security concern, and there are two opposing views in the SMR debate. Some claim that because thorium is not a fissile material and there is only low-grade uranium used to start the fission reaction, the Liquid Fluoride Thorium Reactor model will avoid many of the security and proliferation concerns associated with traditional reactors. Ninety percent enriched uranium is needed for weapons, but only 20% (at most) would be used in the thorium reactions. Other scientists dispute this claim, saying that it is relatively easy to enrich uranium from 20% to 90%, which is weapons-grade. The environmental aspects of SMRs are also hotly debated. The smaller size of the modular reactors means they have smaller “radiological footprints” - a strong environmental case for the use of SMRs. However, opponents argue that more small reactors will produce more hazardous waste because they use more fuel per unit of energy produced than traditional reactors. They also argue that the radioactivity of thorium is 200 times that of the same mass of uranium. This point is still in dispute because other scientific models indicate that thorium reactors are more efficient and could produce 10,000 times less waste than a pressurized water reactor. This would help military bases achieve their goal of reducing carbon emissions 28% by 2020. Their small size also allows them to be buried underground to contain potential leaks. Additionally, Molten Salt Reactors that use thorium have a natural safety mechanism which does not require a cooling system run by vulnerable computers. This makes disastrous meltdowns like Fukushima, Three Mile Island and Chernobyl next to impossible. Naval vessels have been operating similar small reactors for decades without a single disaster. Proponents of SMRs argue that they overcome many of the financial drawbacks faced by traditional reactors. The overhead costs are lower, requiring only several hundred million compared to the $10 billion required for a traditional twin-core complex. However, opponents dispute this calculation, saying that the material cost per kilowatt of a reactor goes up as the size goes down, making the same amount of energy produced by numerous small reactors ultimately more expensive than one big one. If the reactors turn out to be economical, it could save the DoD billions in electric bills. The air conditioning bill alone for Iraq and Afghanistan is $20 billion each year. Another benefit is construction time. They take only three years to become operational, instead of five to six. It would also take less time to repair the reactors if they were damaged during an attack. Having a decentralized system of modular reactors makes it more difficult for enemies to achieve a decisive hit that will cripple a base's energy supply. Some argue that as a highly advanced industrialized nation, the US would be one of the few countries with the capabilities to manufacture the reactors, stimulating job growth. Others say that contracts would inevitably be given to another country like China that competes with lower wages. Congress must first decide what the nation's energy priorities are, then weigh the costs and benefits of developing Small Modular Reactors. This process will involve defining the precise scientific aspects of SMRs more clearly than has been done in the past. Ultimately, DOD and Congress must assess the question of whether the security benefits of SMRs are worth the potential costs. The United States has a history of bold innovation, but now the Chinese are trailblazing the development of thorium-based reactors, which could have major implications on great-power politics. The US still has the chance to lead the way in the next generation of nuclear energy, but recent budgetary decisions suggest a missed opportunity.

#### Fewer fuel convoys and sustainable operations boost mission effectiveness

Pompilio 12 Natalie, Freelance Writer and co-author of More Philadelphia Murals and the Stories They Tell, citing Retired Brigade General Steven Anderson, "The real reason the military is going green", June 8, www.energybulletin.net/stories/2012-06-08/real-reason-military-going-green

Cleaner Energy, A More Secure World¶ In the Middle East, realities in the field lend immediacy and urgency to new strategies that can break America’s oil habits. By Anderson’s count, more than 1,000 Americans have been killed moving fuel in Iraq and Afghanistan, usually in convoys that some soldiers call “Taliban Targets.” ¶ After writing an op-ed on the subject that appeared in The New York Times, Anderson received an email from an Army company commander in Afghanistan. The commander explained that every two weeks, he had to shut down his combat operations to get fuel and, while he was gone, the enemy would re-entrench their positions. “I have to start over every two weeks,” he wrote.¶ Energy efficiency and military effectiveness go hand in hand. When there are fewer soldiers spending their time protecting fuel convoys, there’s more time for them to do hearts-and-minds-type missions. ¶ Anderson stressed it’s not just foreign oil that’s the enemy; fossil fuels, in general, are the problem. He has publicly come out against domestic developments like the Keystone XL pipeline because, he said, they would only feed our oil addiction.¶ In an editorial co-written with other former military officers and published in multiple newspapers, Anderson noted that “clean energy is a solution we must pursue.”¶ “Without changing our energy mix,” he wrote, “we will continue to undermine our economic stability—and with it, our stature in the world.”

#### Loss of mission effectiveness results in nuclear war in every hotspot

Kagan and O’Hanlon 7 Frederick, resident scholar at AEI and Michael, senior fellow in foreign policy at Brookings, “The Case for Larger Ground Forces”, April 2007, http://www.aei.org/files/2007/04/24/20070424\_Kagan20070424.pdf

We live at a time when wars not only rage in nearly every region but threaten to erupt in many places where the current relative calm is tenuous. To view this as a strategic military challenge for the United States is not to espouse a specific theory of America’s role in the world or a certain political philosophy. Such an assessment flows directly from the basic bipartisan view of American foreign policy makers since World War II that overseas threats must be countered before they can directly threaten this country’s shores, that the basic stability of the international system is essential to American peace and prosperity, and that no country besides the United States is in a position to lead the way in countering major challenges to the global order. Let us highlight the threats and their consequences with a few concrete examples, emphasizing those that involve key strategic regions of the world such as the Persian Gulf and East Asia, or key potential threats to American security, such as the spread of nuclear weapons and the strengthening of the global Al Qaeda/jihadist movement. The Iranian government has rejected a series of international demands to halt its efforts at enriching uranium and submit to international inspections. What will happen if the US—or Israeli—government becomes convinced that Tehran is on the verge of fielding a nuclear weapon? North Korea, of course, has already done so, and the ripple effects are beginning to spread. Japan’s recent election to supreme power of a leader who has promised to rewrite that country’s constitution to support increased armed forces—and, possibly, even nuclear weapons— may well alter the delicate balance of fear in Northeast Asia fundamentally and rapidly. Also, in the background, at least for now, Sino Taiwanese tensions continue to flare, as do tensions between India and Pakistan, Pakistan and Afghanistan, Venezuela and the United States, and so on. Meanwhile, the world’s nonintervention in Darfur troubles consciences from Europe to America’s Bible Belt to its bastions of liberalism, yet with no serious international forces on offer, the bloodletting will probably, tragically, continue unabated. And as bad as things are in Iraq today, they could get worse. What would happen if the key Shiite figure, Ali al Sistani, were to die? If another major attack on the scale of the Golden Mosque bombing hit either side (or, perhaps, both sides at the same time)? Such deterioration might convince many Americans that the war there truly was lost—but the costs of reaching such a conclusion would be enormous. Afghanistan is somewhat more stable for the moment, although a major Taliban offensive appears to be in the offing. Sound US grand strategy must proceed from the recognition that, over the next few years and decades, the world is going to be a very unsettled and quite dangerous place, with Al Qaeda and its associated groups as a subset of a much larger set of worries. The only serious response to this international environment is to develop armed forces capable of protecting America’s vital interests throughout this dangerous time. Doing so requires a military capable of a wide range of missions—including not only deterrence of great power conflict in dealing with potential hotspots in Korea, the Taiwan Strait, and the Persian Gulf but also associated with a variety of Special Forces activities and stabilization operations. For today’s US military, which already excels at high technology and is increasingly focused on re-learning the lost art of counterinsurgency, this is first and foremost a question of finding the resources to field a large-enough standing Army and Marine Corps to handle personnel intensive missions such as the ones now under way in Iraq and Afghanistan. Let us hope there will be no such large-scale missions for a while. But preparing for the possibility, while doing whatever we can at this late hour to relieve the pressure on our soldiers and Marines in ongoing operations, is prudent. At worst, the only potential downside to a major program to strengthen the military is the possibility of spending a bit too much money. Recent history shows no link between having a larger military and its overuse; indeed, Ronald Reagan’s time in office was characterized by higher defense budgets and yet much less use of the military, an outcome for which we can hope in the coming years, but hardly guarantee. While the authors disagree between ourselves about proper increases in the size and cost of the military (with O’Hanlon preferring to hold defense to roughly 4 percent of GDP and seeing ground forces increase by a total of perhaps 100,000, and Kagan willing to devote at least 5 percent of GDP to defense as in the Reagan years and increase the Army by at least 250,000), we agree on the need to start expanding ground force capabilities by at least 25,000 a year immediately. Such a measure is not only prudent, it is also badly overdue.

#### Independently, Marines key to overall US power projection

Hagee 4 General Michael W, Commandant of the Marine Corps, "Before the Senate Armed Services Committee Concerning Posture", February 10, www.au.af.mil/au/awc/awcgate/usmc/posture\_feb04.pdf

The Navy-Marine Corps team continues to play a critical role in the Global War On Terrorism and in the establishment of stability and security throughout the world. During this past year, the Marine Corps, both active and reserve, was engaged in operations from Afghanistan, to the Arabian Gulf, the Horn of Africa, Liberia, the Georgian Republic, Colombia, Guantanamo Bay, and the Philippines. Most prominent in highlighting the value and power of the Nation’s naval expeditionary capability was the Marine Corps’ participation in Operation IRAQI FREEDOM. Success in this operation underscored the unique contributions of our multidimensional naval dominance, our expeditionary nature, our flexibility to deal with complex situations and challenges, and the adaptability of our forces and individuals in order to defeat the challenges posed by adaptive, asymmetric enemies and long-term threats. ¶ Early last year, the I Marine Expeditionary Force deployed a combat ready force of almost 70,000 Marines and Sailors in less than 60 days using the full array of our complementary power projection capabilities. Forward deployed Marine Expeditionary Units (Special Operations Capable) again demonstrated their proven value for immediate response. Eleven strategically located Maritime Prepositioned Force ships were unloaded in 16 days to provide the equipment and sustainment for two Marine Expeditionary Brigades. A seven ship amphibious force from each coast embarked a total of 11,500 Marines, Sailors, and their equipment and within thirty days these fourteen ships began to arrive and offload in Kuwait. Strategic sea and air lift was also vital to our success in this effort. Exploiting the operational speed, reach, and inherent flexibility of seapower, the Navy-Marine Corps team achieved a rapid buildup of sustained warfighting power that was combat ready to support U.S. Central Command on 1 March 2003. ¶ Closely integrated with our joint and coalition partners, as well as Special Operations Forces, the I Marine Expeditionary Force provided the Combatant Commander with a potent combined arms force comprising a balance of ground, aviation, and combat service support elements all coordinated by a dynamic command element. This teamwork – the product of demanding and realistic Service and joint training – presented a multi-dimensional dilemma for the Iraqi regime’s forces and loyalists. It also greatly increased the range of options available to our leadership as they addressed each unique and complex situation. The integration of the 1st United Kingdom Division within the I Marine Expeditionary Force provides outstanding lessons for achieving merged coalition capabilities and consistent goals in the future. ¶ The combat power of I Marine Expeditionary Force generated an operational tempo that our enemy could not match. With short notice that operations would commence early, the Marines and their joint and coalition partners rapidly secured key strategic objectives. The I Marine Expeditionary Force then engaged in 26 days of sustained combat operations. Using the tenets of maneuver warfare, they executed four major river crossings, fought ten major engagements, and destroyed eight Iraqi divisions before stopping in Tikrit – almost 500 miles inland. In support of Joint Special Operations Forces Northern Iraq, the 26th Marine Expeditionary Unit inserted a Marine-Air Ground Task Force from the Eastern Mediterranean into Northern Iraq – almost 1,200 miles distance. The sustained resources of the Marine force, which were derived primarily from our seaborne logistics, provided us unrivaled advantages. While our logistics were stretched by the operational commanders, our combat service support units demonstrated flexibility and resourcefulness. ¶ Highlighting the expeditionary mindset of Marines, our combined arms force successfully operated in desert, urban, swamp, and rural environments while effectively conducting combat, peacekeeping, and humanitarian operations – at times simultaneously. Marines also demonstrated the ability to re-task and reorganize to conduct unanticipated missions like the taking of the city of Tikrit. Following major combat operations, I Marine Expeditionary Force assumed responsibility for security and stability in five Central Iraq provinces until they were relieved of the last province by coalition forces this past September. Flexibility and adaptability are key characteristics of an expeditionary force, and they are critical advantages that we must seek to optimize for the future, particularly in this era of global uncertainty. ¶ Recent operations also emphasize the increased importance of access to key regions for projecting our Nation’s power. With global interests, the United States must retain the capability to secure access as needed. Power projection from the sea greatly increases the range of options available to avert or resolve conflicts. A credible naval forcible-entry capability is critical to ensure that we are never barred from a vital national objective or limited to suboptimal alternatives.

#### Extinction

Barnett 11 (Thomas P.M., Former Senior Strategic Researcher and Professor in the Warfare Analysis & Research Department, Center for Naval Warfare Studies, U.S. Naval War College American military geostrategist and Chief Analyst at Wikistrat., worked as the Assistant for Strategic Futures in the Office of Force Transformation in the Department of Defense, “The New Rules: Leadership Fatigue Puts U.S., and Globalization, at Crossroads,” March 7 <http://www.worldpoliticsreview.com/articles/8099/the-new-rules-leadership-fatigue-puts-u-s-and-globalization-at-crossroads>)

Events in Libya are a further reminder for Americans that we stand at a crossroads in our continuing evolution as the world's sole full-service superpower. Unfortunately, we are increasingly seeking change without cost, and shirking from risk because we are tired of the responsibility. We don't know who we are anymore, and our president is a big part of that problem. Instead of leading us, he explains to us. Barack Obama would have us believe that he is practicing strategic patience. But many experts and ordinary citizens alike have concluded that he is actually beset by strategic incoherence -- in effect, a man overmatched by the job. It is worth first examining the larger picture: We live in a time of arguably the greatest structural change in the global order yet endured, with this historical moment's most amazing feature being its relative and absolute lack of mass violence. That is something to consider when Americans contemplate military intervention in Libya, because if we do take the step to prevent larger-scale killing by engaging in some killing of our own, we will not be adding to some fantastically imagined global death count stemming from the ongoing "megalomania" and "evil" of American "empire." We'll be engaging in the same sort of system-administering activity that has marked our stunningly successful stewardship of global order since World War II. Let me be more blunt: As the guardian of globalization, the U.S. military has been the greatest force for peace the world has ever known. Had America been removed from the global dynamics that governed the 20th century, the mass murder never would have ended. Indeed, it's entirely conceivable there would now be no identifiable human civilization left, once nuclear weapons entered the killing equation. But the world did not keep sliding down that path of perpetual war. Instead, America stepped up and changed everything by ushering in our now-perpetual great-power peace. We introduced the international liberal trade order known as globalization and played loyal Leviathan over its spread. What resulted was the collapse of empires, an explosion of democracy, the persistent spread of human rights, the liberation of women, the doubling of life expectancy, a roughly 10-fold increase in adjusted global GDP and a profound and persistent reduction in battle deaths from state-based conflicts. That is what American "hubris" actually delivered. Please remember that the next time some TV pundit sells you the image of "unbridled" American military power as the cause of global disorder instead of its cure. With self-deprecation bordering on self-loathing, we now imagine a post-American world that is anything but. Just watch who scatters and who steps up as the Facebook revolutions erupt across the Arab world. While we might imagine ourselves the status quo power, we remain the world's most vigorously revisionist force. As for the sheer "evil" that is our military-industrial complex, again, let's examine what the world looked like before that establishment reared its ugly head. The last great period of global structural change was the first half of the 20th century, a period that saw a death toll of about 100 million across two world wars. That comes to an average of 2 million deaths a year in a world of approximately 2 billion souls. Today, with far more comprehensive worldwide reporting, researchers report an average of less than 100,000 battle deaths annually in a world fast approaching 7 billion people. Though admittedly crude, these calculations suggest a 90 percent absolute drop and a 99 percent relative drop in deaths due to war. We are clearly headed for a world order characterized by multipolarity, something the American-birthed system was designed to both encourage and accommodate. But given how things turned out the last time we collectively faced such a fluid structure, we would do well to keep U.S. power, in all of its forms, deeply embedded in the geometry to come. To continue the historical survey, after salvaging Western Europe from its half-century of civil war, the U.S. emerged as the progenitor of a new, far more just form of globalization -- one based on actual free trade rather than colonialism. America then successfully replicated globalization further in East Asia over the second half of the 20th century, setting the stage for the Pacific Century now unfolding.

### 1AC – Water Advantage

#### CONTENTION 3: WATER

#### Extreme water shortages are coming and will cause mass instability

AFP 9/10, “World water crisis must be top UN priority: report”, http://www.google.com/hostednews/afp/article/ALeqM5gcIGn59te-BGkDoG1uG6XrAMXO\_A?docId=CNG.96ef5382d53f44338468570447594103.851

WASHINGTON — A **rapidly worsening** water shortage threatens to destabilize the planet and should be a top priority for the UN Security Council and world leaders, a panel of experts said in a report.¶ The world's diminishing water supply carries serious security, development and social risks, and could adversely affect global health, energy stores and food supplies, said the report titled "The Global Water Crisis: Addressing an Urgent Security Issue," published Monday.¶ The study was released by the InterAction Council (IAC), a group of 40 prominent former government leaders and heads of state, along with the United Nations University's Institute for Water, Environment and Health, and Canada's Walter and Duncan Gordon Foundation.¶ "As some of these nations are already politically unstable, such crises may have regional repercussions that extend well beyond their political boundaries," said Norway's former Prime Minister Gro Harlem Brundtland, a member of the group.¶ The Norwegian leader underscored that the danger is particularly acute in sub-Saharan Africa, western Asia and North Africa, where critical water shortages already exist.¶ She added that water insecurity could wreak havoc "even in politically stable regions."

#### Especially in China, Egypt, and Pakistan --- goes nuclear

NPR 10 (1/3/10, https://www.npr.org/templates/story/story.php?storyId=122195532)

Just as wars over oil played a major role in 20th-century history, a new book makes a convincing case that many 21st century conflicts will be fought over water. In Water: The Epic Struggle for Wealth, Power and Civilization, journalist Steven Solomon argues that water is surpassing oil as the world's scarcest critical resource. Only 2.5 percent of the planet's water supply is fresh, Solomon writes, much of which is locked away in glaciers. World water use in the past century grew twice as fast as world population. "We've now reached the limit where that trajectory can no longer continue," Solomon tells NPR's Mary Louise Kelly. "Suddenly we're going to have to find a way to use the existing water resources in a far, far more productive manner than we ever did before, because there's simply not enough." One issue, Solomon says, is that water's cost doesn't reflect its true economic value. While a society's transition from oil may be painful, water is irreplaceable. Yet water costs far less per gallon — and even less than that for some. "In some cases, where there are large political subsidies, largely in agriculture, it does not [cost very much]," Solomon says. "In many cases, irrigated agriculture is getting its water for free. And we in the cities are paying a lot, and industries are also paying an awful lot. That's unfair. It's inefficient to the allocation of water to the most productive economic ends." At the same time, Solomon says, there's an increasing feeling in the world that everyone has a basic right to a minimum 13 gallons of water a day for basic human health. He doesn't necessarily have an issue with that. "I think there's plenty of water in the world, even in the poorest and most water-famished country, for that 13 gallons to be given for free to individuals — and let them pay beyond that," he says. Solomon says the world is divided into water haves and have-nots. China, Egypt and Pakistan are just a few countries facing critical water issues in the 21st century. In his book he writes, "Consider what will happen in **water-distressed, nuclear-armed, terrorist-besieged, overpopulated, heavily irrigation dependent and already politically unstable Pakistan** when its single water lifeline, the Indus river, loses a third of its flow from the disappearance from its glacial water source."

#### Middle East war causes World War 3

The Earl of Stirling 11, hereditary Governor & Lord Lieutenant of Canada, Lord High Admiral of Nova Scotia, & B.Sc. in Pol. Sc. & History; M.A. in European Studies, “General Middle East War Nears - Syrian events more dangerous than even nuclear nightmare in Japan”, http://europebusines.blogspot.com/2011/03/general-middle-east-war-nears-syrian.html

Any Third Lebanon War/General Middle East War is apt to involve WMD on both side quickly as both sides know the stakes and that the Israelis are determined to end, once and for all, any Iranian opposition to a 'Greater Israel' domination of the entire Middle East. It will be a case of 'use your WMD or lose them' to enemy strikes. Any massive WMD usage against Israel will result in the usage of Israeli thermonuclear warheads against Arab and Persian populations centers in large parts of the Middle East, with the resulting spread of radioactive fallout over large parts of the Northern Hemisphere. However, the first use of nukes is apt to be lower yield warheads directed against Iranian underground facilities including both nuclear sites and governmental command and control and leadership bunkers, with some limited strikes also likely early-on in Syrian territory.¶ The Iranians are well prepared to launch a global Advanced Biological Warfare **terrorism based strike** against not only Israel and American and allied forces in the Middle East but also against the American, Canadian, British, French, German, Italian, etc., homelands. This will utilize DNA recombination based genetically engineered **'super killer viruses'** that are designed to spread themselves throughout the world using humans as vectors. There are very few defenses against such warfare, other than total quarantine of the population until all of the different man-made viruses (and there could be dozens or even over a hundred different viruses released at the same time) have 'burned themselves out'. This could kill a third of the world's total population.¶Such a result from an Israeli triggered war would almost certainly cause a Russian-Chinese response that would eventually finish off what is left of Israel and begin a truly global war/WWIII with multiple war theaters around the world. It is highly unlikely that a Third World War, fought with 21st Century weaponry will be anything but the Biblical Armageddon.

#### SMRs enhance desalination which enables mission effectiveness and prevents water wars

Pfeffer and Macon 2 Robert A, physical scientist at the Army Nuclear and Chemical Agency in Springfield, Virginia, working on nuclear weapons effects, a graduate of Trinity University and has a master's degree in physics from The Johns Hopkins University and William A, project manager at the Nuclear Regulatory Commission, formerly the acting Army Reactor Program Manager at the Army Nuclear and Chemical Agency, "Nuclear Power: An Option for the Army's Future", Jan 16 2002 is last date modified, [www.almc.army.mil/alog/issues/SepOct01/MS684.htm](http://www.almc.army.mil/alog/issues/SepOct01/MS684.htm)

The idea of using nuclear power to produce synthetic fuels, originally proposed in 1963, remains feasible today and is gaining significant attention because of recent advances in fuel cell technology, hydrogen liquefaction, and storage. At the same time, nuclear power has become a significant part of the energy supply in more than 20 countries—providing energy security, reducing air pollution, and cutting greenhouse gas emissions. The performance of the world's nuclear power plants has improved steadily and is at an all-time high. Assuming that nuclear power experiences further technological development and increased public acceptance as a safe and efficient energy source, its use will continue to grow. Nuclear power possibly could provide district heating, industrial process heating, **desalination of seawater, and marine transportation**.¶ Demand for cost-effective chemical fuels such as hydrogen and methanol is expected to grow rapidly. Fuel cell technology, which produces electricity from low-temperature oxidation of hydrogen and yields water as a byproduct, is receiving increasing attention. Cheap and abundant hydrogen eventually will replace carbon-based fuels in the transportation sector and eliminate oil's grip on our society. But hydrogen must be produced, since terrestrial supplies are extremely limited. **Using nuclear power to produce hydrogen offers the potential for a limitless chemical fuel supply with near-zero greenhouse gas emissions**. As the commercial transportation sector increasingly moves toward hydrogen fuel cells and other advanced engine concepts to replace the gasoline internal combustion engine, DOD eventually will adopt this technology for its tactical vehicles.¶ The demand for desalination of seawater also is likely to grow as inadequate freshwater supplies become an urgent global concern. Potable water in the 21st century will be what oil was in the 20th century—a limited natural resource subject to intense international competition. In many areas of the world, rain is not always dependable and ground water supplies are limited, exhausted, or contaminated. Such areas are likely to experience conflict among water-needy peoples, possibly prompting the deployment of U.S. ground forces for humanitarian relief, peacekeeping, or armed intervention. **A mobile desalination plant using waste heat from a nuclear reactor could help prevent conflicts** or provide emergency supplies of freshwater to indigenous populations, and to U.S. deployed forces if necessary.¶ Promising Technology for Tomorrow¶ Compact reactor concepts based on high-temperature, gas-cooled reactors are attracting attention worldwide and could someday fulfill the role once envisioned for the energy depot. One proposed design is the pebble bed modular reactor (PBMR) being developed by Eskom in South Africa. Westinghouse, BNFL Instruments Ltd., and Exelon Corporation currently are supporting this project to develop commercial applications.¶ A similar design is the remote site-modular helium reactor (RS-MHR) being developed by General Atomics. If proven feasible, this **technology could be used to replace retiring power plants, expand the Navy's nuclear fleet, and provide mobile electric power for military or disaster relief operations**. Ideally, modular nuclear power plants could be operated by a small staff of technicians and monitored by a central home office through a satellite uplink.¶ The technology of both the PBMR and the RS-MHR features small, modular, helium-cooled reactors powered by ceramic-coated fuel particles that are **inherently safe and cannot melt under any scenario**. This results in simpler plant design and lower capital costs than existing light water reactors. The PBMR, coupled with a direct-cycle gas turbine generator, would have a thermal efficiency of about 42 to 45 percent and would produce about 110 megawatts of electricity (MWe). The smaller RS-MHR would produce about 10 to 25 MWe, which is sufficient for powering remote communities and military bases. Multiple modules can be installed on existing sites and refueling can be performed on line, since the fuel pebbles recycle through the reactor continuously until they are expended. Both designs also feature coolant exit temperatures high enough to support the thermochemical water-splitting cycles needed to produce hydrogen.¶ For military applications, RS-MHR equipment could be transported inland by truck or railroad, or single modules could be built on barges and deployed as needed to coastal regions. The Army's nuclear reactor on the barge Sturgis, which provided electric power to the Panama Canal from 1968 to 1976, demonstrated the feasibility of this concept. In fact, the military previously used several power barges (oil-fired, 30-MWe power plants) during World War II and in Korea and Okinawa as emergency sources of electric power.¶ Research teams around the world also are examining other reactor concepts based on liquid-metal-cooled reactor systems with conventional sodium or lead-alloy coolants and advanced water-cooled systems. The Department of Energy (DOE) is supporting research and development of innovative concepts that are based on ultra-long-life reactors with cartridge cores. These reactors would not require refueling, and they could be deployed in the field, removed at the end of their service life, and replaced by a new system. The proposed international reactor innovative and secure (IRIS) design, funded by DOE's Nuclear Energy Research Initiative, would have a straight burn core lasting 8 years and may be available by 2010. Based on increasing costs of fossil fuels, a growing consensus that greenhouse gas emissions must be reduced, and a growing demand for energy, there is little doubt that we will continue to see significant advances in nuclear energy research and development.¶ Nuclear power is expected to grow in the 21st century, with potential benefits applicable to the military**. Small, modular nuclear power reactors in mobile or portable configurations, coupled with hydrogen production and desalination systems, could be used to produce fuel and potable water for combat forces deployed in remote areas and reduce our logistics requirements**. Assuming the inevitability of hydrogen fuel replacing fossil fuels, a clearly defined objective that was missing in 1966 now exists.¶ The partnership between DOD and the former AEC to develop Army nuclear reactors contributed to the technology of both military and small commercial power plants. This historical relationship should be renewed based on recent technological advances and projected logistics requirements. DOD logistics planners should reconsider military applications of nuclear power and support ongoing DOE research and development initiatives to develop advanced reactors such as RS-MHR, IRIS, and others. For the Army **to fight and win on tomorrow's distant battlefields,** **nuclear power will have to play a significant role.**

#### Only SMR’s solve desalinization

IAEA 7 “Economics of Nuclear Desalination: New Developments and Site Specific Studies”, July, <http://www-pub.iaea.org/MTCD/publications/PDF/te_1561_web.pdf>

Seventy percent of the planet is covered with water, but only 2.5% of that is fresh water. Nearly 70% of this fresh water is frozen in the icecaps of Antarctica and Greenland. Most of the rest is in the form of soil moisture or in deep inaccessible aquifers or comes in the form of heavy rains and floods that are difficult to contain and exploit. Consequently, only less than 0.008% (about 70 000 km3) of the world’s water is readily accessible for direct human use, and even that is very unevenly distributed. Recent statistics show that currently 2.3 billion people live in water-stressed areas and among them 1.7 billion live in water-scarce areas, where the water availability per person is less than 1000 m3/year. In fact, the situation is expected to worsen further since, by 2025, the number of people suffering from water stress or scarcity could swell to 3.5 billion, out of which 2.4 billion would live in water-scarce regions. Water scarcity is a global issue. Every year new countries are affected by growing water problems.¶ It is for this reason that the Millennium Declaration by UN General Assembly in 2000 set up a target¶ to halve, by the year 2015, the world population, which is unable to reach, or to afford, safe drinking¶ water. Vision 21: shared vision for Hygiene, Water Supply and Sanitation, has a target to provide¶ water, sanitation and hygiene for all by 2025.¶ Better water conservation, water management, pollution control and water reclamation are all part of the integrated solution to projected water stresses. So too are new sources of fresh water, including the desalination of seawater.¶ Desalination technologies have been well established since the mid-20th century and widely deployed in the Middle East and North Africa. The contracted capacity of desalination plants has increased steadily since 1965 and is now about 36 million m3/day worldwide, as shown in Figure 1. This capacity could cater to world’s population roughly 6 litres a day per capita of fresh potable water. If this capacity were available to 1.5 billion in the world without direct access to drinking water, it would provide approximately 20 litres/day/capita.¶ Large scale commercially available desalination processes can generally be classified into two categories: (a) distillation processes that require mainly heat plus some electricity for ancillary equipment, and (b) membrane processes that require only electricity. In the first category (distillation) there are two major processes: multi-stage flash (MSF) and multi-effect distillation (MED). In both processes, seawater is heated; the steam that evaporates is condensed and collected as freshwater; and the residual brine is discharged.¶ In the second category (membranes) is the reverse osmosis process (RO), in which pure water passes from the high-pressure seawater side of a semi-permeable membrane to the low-pressure freshwater side. The pressure differential must be high enough to overcome the natural tendency for water to move from the low concentration freshwater side of a membrane to the high concentration seawater side in order to balance osmotic pressures.¶ The energy for the desalination plants is generally supplied in the form of either steam or electricity. Conventional fossil fuel-powered plants have normally been utilized as the primary sources but their intensive use raises increasing environmental concerns, specifically in relation to greenhouse gas emissions (Section 1.3.3). The depleting sources and the future price uncertainty of the fossil fuels and their better use for other vital industrial applications are also the factors to be considered.¶ 1.3. THE ROLE OF NUCLEAR POWER IN DESALINATION¶ The world energy requirements are presently met from oil, coal, gas, hydro, nuclear and renewable energies in that order as shown in Table 1.¶ It is now universally recognized that there will be an increase in the world’s requirement for electricity over the next few decades. The present trend towards meeting this demand includes the building of fossil fuel plants, particularly combined cycle gas fired plants.¶ However, the spiralling increase in greenhouse gas (GHG) emissions has resulted in setting the emission targets in international meetings held at Toronto, Rio de Janeiro and Kyoto. The IAEA predicts that the GHG emissions would be 36-50% higher by 2010 compared to 1990 levels. Many analysts, therefore, feel that the only viable alternative to fossil fuels is nuclear energy to reduce the rate of increase of GHG, particularly, carbon dioxide.¶ Yet another incentive for nuclear power is to maintain diversity of supply. A national strategy limited to one particular form of energy (fossil fuels) will be vulnerable to increased fuel costs and pressures from exporting countries.¶ Nuclear power is a proven technology, which has provided more than 16% of world electricity supply in over 30 countries. More than ten thousand reactor-years of operating experience have been accumulated over the past 5 decades.¶ There are many reasons which favour a possible revival of the nuclear power production in the years to come. It is thus expected that this revival would also lead to an increased role of nuclear energy in non-electrical energy services, which, at the moment, are almost entirely dominated by fossil energy sources. Among various utilization of nuclear energy for non-electrical products, using it for the production of freshwater from seawater (nuclear desalination) has been drawing broad interest in the IAEA Member States as a result of acute water shortage issues in many arid and semi-arid zones worldwide. With technical co-ordination or support of the IAEA, several demonstration programs of nuclear desalination are also in progress in several Member States to confirm its technical and economical viability under country-specific conditions¶ The desalination of seawater using nuclear energy is a feasible option to meet the growing demand for potable water. Over 175 reactor-years of operating experience on nuclear desalination have already been accumulated worldwide.¶ 1.3.1. Nuclear desalination¶ In the IAEA terminology, nuclear desalination is defined to be the production of potable water from seawater in a facility in which a nuclear reactor is used as the source of energy for the desalination process. Electrical and/or thermal energy may be used in the desalination process on the same site. The facility may be dedicated solely to the production of potable water, or may be used for the generation of electricity and production of potable water, in which case only a portion of the total energy output of the reactor is used for water production.¶ The design approaches for a nuclear desalination plant are essentially derived from those of the nuclear reactor alone, with some additional aspects to be considered in the design of a desalination plant and its integration with the nuclear system.¶ All nuclear reactor types can provide the energy required by the various desalination processes. In this regard, it has been shown that Small and Medium Reactors (SMRs) offer the largest potential as coupling options to nuclear desalination systems in developing countries. The development of innovative reactor concepts and fuel cycles with enhanced safety features as well as their attractive economics are expected to improve the public acceptance and further the prospects of nuclear desalination.¶ The coupling with nuclear system is not difficult technically but needs some consideration in (a)¶ avoiding cross-contamination by radioactivity, (b) providing backup heat or power sources in case the¶ nuclear system is not in operation (e.g. for refuelling and maintenance), (c) incorporation of certain¶ design features, minimising the impact of the thermal desalination systems’ coupling to the nuclear¶ reactors (Section 1.6).¶ 1.3.2. Why nuclear desalination?¶ The International Atomic Energy Agency is a specialized organization of the UN system that seeks to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world. The institutional basis for the IAEA’s involvement in nuclear desalination is in its Statute and Medium Term Strategy.¶ Article II of the IAEA Statute provides that:¶ “ The Agency shall seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world”.¶ This refers implicitly to nuclear desalination as an option for the use of nuclear technologies.¶ The same applies to the Article III of the Statute, which authorizes the IAEA:¶ “ To encourage and assist research on, and development and practical application of, atomic energy for peaceful uses throughout the world….”; (Article III, A.1); and¶ “To foster the exchange of scientific and technical information on peaceful uses of atomic energy.” (Article III, A.3).¶ In addition, Objective A.3 of the Agency’s Medium Term Strategy requires the Agency:¶ “ To support and facilitate the development of new and emerging applications of nuclear technologies by co-generation and heat applications, including seawater desalination”.¶ Request of assessing feasibility of using nuclear energy for seawater desalination was first made by the five North African countries to the IAEA in 1989 and the General Conference adopted its resolution to resume the study. These countries are located in semi-arid zones and already suffer from water shortages.¶ In recent years, interests have been also been indicated by Member States in South and South East Asia for the feasibility, as well as the demonstration, of nuclear desalination projects. The issue has since then been repeatedly stressed at the General Conference (Committee on the Whole) and supported by many Member States including most members of Group-77. The support stems not only from their expectation of its possible contribution to the freshwater issue but has also been motivated by a variety of reasons that include: the economic competitiveness of nuclear desalination in areas lacking cheap hydropower or fossil fuel resources, energy supply diversification, conservation of fossil fuel resources and spin-off effects of nuclear technology for industrial development.¶ Looking to the future, there are several reasons for focusing now on expanding nuclear power’s contribution to desalination. Apart from the expanding demand for freshwater and the increasing concern about GHG emissions and pollution from fossil fuels, there is a renewed and growing emphasis on small and medium sized nuclear reactors, and this is particularly important for desalination because the countries most in need of new sources of freshwater often have limited industrial infrastructures and relatively weaker electricity grids. The size of the grid limits the possibilities for integrating a co-generating nuclear power plant into the grid to supply the electricity market, in addition to meeting the energy requirements of a desalination plant. The largest power unit that can be integrated into an electricity grid must not exceed about 10-20 % of the total grid capacity. Of course, smaller nuclear reactors would be more appropriate for remote areas that are not suitable for connections to the grid.¶ For nuclear desalination to be attractive in any given country, two conditions have to be satisfied simultaneously: a lack of water and the ability to use nuclear energy for desalination. In most regions, only one of the two is present. Both are present for example in China, the Republic of Korea, India and Pakistan. These regions already account for almost half the world’s population, and thus represent a potential long term market for nuclear desalination. The market will expand further to the extent that regions with high projected water needs, such as the Middle East and North Africa, increase their nuclear expertise and capabilities.¶ 1.3.3. Environmental impact of desalination by fossil fuelled energy sources¶ Desalination is an energy intensive process. A future desalination strategy based only on the use of fossil fuelled systems is not sustainable: Fossil fuel reserves are finite and must be conserved for more important uses such as transport, petrochemical industry etc. Besides, the demands for desalted water would continue increasing as population grows and standards of living improve. Conservation measures such as the modernisation of water networks to minimise leakages, the recycling of used water etc. will certainly reduce the future water demands slightly but they would not be able to halt the dissemination of desalination plants and consequently of the fossil fuelled based systems for the production of needed electricity and heat.¶ The following paragraphs illustrate the damaging consequences of such a policy by taking the example of the Mediterranean region.¶ Following the recent “Blue Plan” [2], the total available natural water resources (1), based on the statistics from 1990 to 1998, in the principle countries of the Mediterranean region, are as shown in Table 2.¶ The projected demands (3) for the year 2025 [31] are also included in Table 1.¶ It is obvious that available natural water resources would rather decrease in 2025 because of increased pollution, over exploitation and other human activities. However, to keep matters simple, it would be supposed that they would remain at the same level as in 1998.¶ It can be observed that, in 2025, the total projected water deficit (balance) in the Mediterranean region would of the order of 294 km3/per year.¶ Not all this required capacity would be met by desalination plants. Current contribution of desalination is of the order of 1 to 2 %. If it is supposed that in 2025, this contribution would be about 2.5 %, then the total required desalting capacity would be 7.3 km3/year (20.1 million m3/day).¶ According to the EC ExternE study2, the total emissions of GHG per MW(e).h of electricity produced by representative fossil fuelled power plants in France, are as presented in Table 3.¶ The specific heat and electricity consumptions of three main desalination plants are given in Table 4, [3].¶ The data presented in the above Tables allows to calculate the approximate3 total GHG emissions produced by the fossil fuelled plants and the three desalination plants.¶ Results for a total desalting capacity of 20.1 million m3/day are presented in Table 5.¶ It can thus be concluded that for a desalting capacity of 20.1 million m3/day in the Mediterranean region alone, required in 2025, one would produce, depending upon the energy source and the desalination process used,¶ 13 to 264 million tonnes/year of CO2.¶ 1350 to 1 310 000 tonnes/year of SOx.¶ 21 100 to 540 000 tonnes/year of NOx.¶ 1190 to 40 000 tonnes/year of particles.¶ The potential levels of GHG and particle emissions on the world scale could then be more than double these figures.¶ These could naturally be avoided through the use of nuclear energy.

### New Plan

#### The Executive branch of the United States should provide enhanced use leases and energy savings performance contracting partnerships for deployment of small modular nuclear reactors on Marine Corps installations in the United States.

### 1AC – Solvency

#### CONTENTION 4: SOLVENCY

#### The Marines should lead from the front with SMR deployment---it ensures base security, desalination and service spillover

Butler 11Lt. Col. Glen Butler, USMC, NORAD Strategy, Policy, and Plans Directorate, Security Cooperation Integration Branch, Chase Prize Essay Winner for this Article, 18 Mar 2011, Marine Corps Gazette, Not Green Enough, “Why the Marine Corps should lead the environmental and energy way forward and how to do it”, http://www.mca-marines.org/gazette/not-green-enough \*\*\*Edited: Footnote included\*\*\*

Consider Nuclear Power¶ On 16 March 1979, The China Syndrome opened in theaters across the country, depicting a fictitious story about a reporter witnessing an accident at the Ventanna nuclear plant outside Los Angeles and the subsequent evil plot to suppress the truth. Twelve days later the Three Mile Island partial core meltdown in Pennsylvania helped propel The China Syndrome to theatrical success and permanently scarred the American psyche. The nail in the nuclear energy coffin was the nuclear disaster 7 years later at Chernobyl, in the Ukrainian Soviet Socialist Republic.17 But despite these stains on the nuclear power industry, the time has never been better for the Marine Corps (and Navy) to dive in than now. Here’s why.¶ First, the political climate, though still tenuous, is shifting to favorable, with the change coming from the top down. During his 27 January 2010 State of the Union address, President Barack Obama echoed themes from his campaign trail by clearly voicing his intention to include nuclear power in American’s playbook of energy security options.18 Similarly, as the Department of Energy’s (DoE’s) Secretary of Energy, Steven Chu has articulated similar sentiments, declaring that “President Obama and I are committed to restarting the nuclear industry in the United States.”19 Many other political leaders and policymakers indeed support a true “nuclear renaissance,”20 and the growing momentum stands a chance to bury the ghosts of Chernobyl once and for all.¶ Second, with our well-replicated but limited pursuit of the standard renewable energies,21 we’re putting all energy eggs in one basket, a vessel unlikely to hold a sufficient load for success. Currently pursued renewable energy sources do have limitations.22 More importantly, with military installations relying almost exclusively on external sources for energy, and those sources largely unpredictable, unsecured, and reliant on foreign-based oil,23 if energy security is truly a national security issue, then nuclear power should be considered. Solar demonstrations at Miramar and Barstow are not enough.¶ Third, nuclear technology today has advanced well beyond the days of Three Mile Island. Specifically, small modular reactors (SMRs) offer great potential to safely and effectively provide energy island/net zero capabilities to Marine Corps and Navy installations across the country.24¶ SMRs have relatively low plant cost, can replace aging fossil plants, and do not emit greenhouse gasses. Some are as small as a “hot tub” and can be stored underground, dramatically increasing safety and security from terrorist threats.25 Encouragingly, in fiscal year 2010 (FY10) the DoE allocated $0 to the U.S. SMR Program; in FY11, they’ve requested $38.9 million. This funding is to support two main activities—public/private partnerships to advance SMR designs and research and development and demonstrations. According to the DoE’s website, one of the planned program accomplishments for FY11 is to “collaborate with the Department of Defense (DoD) . . . to assess the feasibility of SMR designs for energy resources at DoD installations.”26 The Marine Corps should vigorously seek the opportunity to be a DoD entity providing one platform for this feasibility assessment.27¶ Fourth, SMR technology offers the Marine Corps another unique means to lead from the front—not just of the other Services but also of the Nation, and even the world.28 This potential Pete Ellis moment should be seized. There are simple steps we could take,29 and others stand ready to lead if we are not.30 But the temptation to “wait and see” and “let the others do it; then we’ll adopt it” mentality is not always best. Energy security demands boldness, not timidity.¶ To be fair, nuclear technology comes with challenges, of course, and with questions that have been kicked around for decades. An April 1990 Popular Science article asked, “Next Generation Nuclear Reactors—Dare we build them?” and included some of the same verbiage heard in similar discussions today.31 Compliance with National Environment Policy Act requirements necessitates lengthy and detailed preaction analyses, critical community support must be earned, and disposal challenges remain. Still, none of these hurdles are insurmountable.32¶ Yet despite the advances in safety, security, and efficiency in recent years, nuclear in the energy equation remains the new “n-word” for most military circles. And despite the fact that the FY10 National Defense Authorization Act called on the DoD to “conduct a study [of] the feasibility of nuclear plants on military installations,” the Office of the Secretary of Defense has yet to fund the study.33¶ Fifth, the cumbersome, bureaucratic certification process of the Nuclear Regulatory Commission (NRC), often enough to scare away potential entrepreneurs and investors, is not necessarily a roadblock to success. The NRC is “responsible for licensing and regulating the operation of commercial nuclear power plants in the United States.” Military installations offer unique platforms that could likely bypass an extended certification process. With established expertise and a long safety record in nuclear reactor certification, operations, training, and maintenance, the Naval Nuclear Propulsion Program comprises the civilian and military personnel who:¶ . . . design, build, operate, maintain, and manage the nuclear-powered ships and the many facilities that support the U.S. nuclear-powered naval fleet.”34¶ Bypassing the NRC and initiating SMR experimentation under ADM Hyman Rickover’s legacy umbrella of naval reactors could shorten the process to a reasonable level for Marine and naval installations.35¶ Finally, Marine Corps-SMR technology opens the pathway for related endeavors and synergetic undertakings. The Army has several smart and influential individuals poised to partner in nuclear energy endeavors, and our naval brethren enjoy a long history of nuclear reactor expertise. Partnerships and enhanced use leases to support SMR deployments should be leveraged.36 As the collective military expertise in SMR technology grows, additional capabilities, such as expeditionary and vehicular power sources, could be explored. And related technologies, such as hybrid/electric vehicle power storage and recharging facilities and water desalination plants, could collocate with nuclear plants on installations to both use the energy.37¶ Explore Desalination¶ Desalination is another evolving technology that many avoid discussing, mainly because it is still a very expensive and immature technology with problems such as high energy consumption, brine disposal, and potential for harm to marine life. But once again, fear of the challenges should not prevent expanded exploration in this area. Worldwide, there are over 13,000 desalination plants, collectively producing more than 12 billion gallons of water each day, many of them in the Middle East, but the trend is spreading to the United States.38¶ Camp Pendleton surfaced in 2009 as a potential desalination plant location, but the official Marine Corps stance has been hesitant rather than an eager courtship of the opportunity.39 Indeed, many major Marine bases are in coastal areas and could benefit from SMR/desalination cogeneration plants. Potential future Marine sites like Guam could undeniably benefit from such advancements,40 and as the number of reverse osmosis sites increases, the cost per unit will decrease.¶ Footnote Begins…¶ 40. Guam’s poor infrastructure is no secret, as is its substandard health and environmental conditions. Rapid growth there over the next several years will exacerbate several problems, including drinking water supply; desalination might provide one solution.¶ Footnote Ends…¶ The CMC has repeatedly explained how the Marine Corps Warfighting Laboratory looked 25 years into the future and believes that, by then, water will be as precious a commodity as oil, so the time to start preparing for that dire situation is now.41¶ Overall, the Navy-Marine Team has made huge strides in the E2 fields, yet much remains to be accomplished. E2 is more than compact fluorescent lightbulbs and protection of sea turtles and tern nests. The warfighting mission will always come first, but combat mission accomplishment and E2 goals are not mutually exclusive; the first can be strengthened through the latter. When considering the Marine Corps’ Service Campaign Plan 2009–2015,42 we should remember that one of the CMC’s seven main focus areas in his planning guidance is to “Posture the Marine Corps for the Future.”¶ A decade ago, some discussed the “Revolution in Military Affairs.” Now is the time to be bold and daring, to recognize that the Marine Corps is not yet green enough. Now is the time to embark on a revolution in environmental and energy affairs. Our natural, and national, security depends on it.43

#### Marine SMRs through EULs and ESPCs solve---offer expertise, bypass NRC licensing and other renewables fail

Butler and Rice 12 Lt. Col Glen, Marine officer and director, operations and training, at Marine Corps Base Hawaii and Col Robert D, commanding officer at Marine Corps Base Hawaii, "The Nuclear Option", www.armedforcesjournal.com/2010/11/4847032/

But the focus on more widely accepted “renewable” energy sources, while a step in the right direction, does not go far enough. Not only will the services be unable to achieve their ambitious goals with these more traditional renewable energy sources, but each source is burdened with its own share of problems. The wind and sun are intermittent (the sun does not always shine; the wind does not always blow), and at best they will provide no more than 20 percent to 30 percent of our electricity, after many years. (In 2009, wind contributed only 2 percent of total generation, and solar gave us less than 0.1 percent of total U.S electrical production.) Wind farms cause conflicts with low-flying aircraft, surveillance radars and sensitive land areas, and they don’t solve the storage problem. Northern Command’s former commanding officer, Gen. Gene Renuart, recently voiced some of these concerns when he told the House Armed Services Committee that wind farms cause radar interference and can inhibit the defense of North America. They also often require significant new electrical distribution lines, a challenge daunting enough it famously convinced investor T. Boone Pickens to abandon his massive Texas wind farm plan last year.¶ Solar power causes some similar, overlapping concerns, and also suffers from vulnerability of photovoltaic and solar technology systems. Ocean Thermal Energy Conversion raises fears of restricted fishing access and dangers to sea life, and because the technology is still fairly new, wave power can cost as much as five or six times as wind power.¶ To be sure, most every other form of emerging, renewable energy suffers some degree of restrictions and has challenges — including potential conflict with local utility providers and unassured grid interface. Given all of these issues, the likelihood of actually achieving our ambitious energy goals without additional generation sources and technology is questionable.¶ Beyond these limitations and the obvious “doing the right thing” aspect of traditional renewable energy, another reason — the key reason — for the military to consider nuclear energy on our installations is to strengthen national security. President Obama, former National Security adviser James Jones and other political and military leaders have said energy security is national security. If this is true, then our bases and stations — so largely reliant on external power sources — are at risk, and there is much work to be accomplished.¶ The elephant in today’s energy room is the fact that many military communities rely disproportionately on foreign oil for energy. Hawaii is a prime example, a state strategically located in the middle of the Pacific (and where the military passed tourism last year as the No. 1 economic source), yet a state with the highest dependence in the nation on fossil fuels — approximately 90 percent, mostly from Indonesian oil.¶ To achieve the kind of energy independence — and thus security — our leaders are calling for requires much more than compact fluorescent light bulbs, photovoltaic panels, biofuel plants and wind farms. Nuclear energy is a promising, yet rarely mentioned, option.¶ Of course, the U.S. is not the only country striving for energy advancements. China, India, Brazil, Japan, South Korea, France and many other nations, including our adversaries, are ambitiously moving forward with renewable — and yes, nuclear — power production. France generates almost 80 percent of its power from nuclear energy. Some sources indicate that the nuclear energy sector is likely to grow to a trillion-dollar market by 2030.¶ This means there will be growing international competition to provide this energy source. American entrepreneurs understand the nature of this competition, too. Bill Gates identified nuclear power as one attractive avenue while discussing energy and climate issues. He specifically mentioned new technology he was investing in — developing nuclear technology that ran on its own waste. However, recognizing the lack of apparent interest and expertise in the U.S., he acknowledged that he’s been looking to Russia, India and China for ideas.¶ SMALL MODULAR REACTORS¶ While fears of nuclear energy remain, some forward thinkers are pressing on and helping emerging technology to gain momentum. Small Modular Reactors (SMRs) are being developed by several companies and offer attractive energy options for military installations. These reactors are defined by the Department of Energy (DoE) as “nuclear power plants that are smaller in size [300 megawatts or less] than current generation base load plants [1,000 megawatts or higher]. These smaller, compact designs are factory-fabricated reactors that can be transported by truck or rail to a nuclear power site … ‘modular’ ... refers to a single reactor that can be grouped with other modules to form a larger nuclear power plant ... [they] require limited on-site preparation ... [and will be] ‘plug and play.’”¶ Although acquiring SMRs might remain fiscally prohibitive for individual bases, there are ways to make this option feasible. U.S. Rep. Jim Marshall inserted text into the fiscal 2010 National Defense Authorization Act that directed the defense secretary to “conduct a study to assess the feasibility of developing nuclear power plants on military installations ... summarize options available to the Department to enter into public-private partnerships or other transactions for the construction and operation of the nuclear power plants; estimate the potential cost per kilowatt-hour and life-cycle cost savings to the Department; consider the potential energy security advantages of generating electricity on military installations through the use of nuclear power plants.”¶ In October 2009, the president signed a provision to facilitate a study on the development of nuclear power plants for military installations. Despite a less-than-enthusiastic reception of this provision by the Pentagon, sources indicate the study is ongoing but will not be completed until later this year.¶ Energy Secretary Steven Chu, meanwhile, has proven to be a nuclear energy champion. He has emphatically advocated SMRs, and penned a Wall Street Journal op-ed (“America’s New Nuclear Option,” March 23, 2010), which highlighted the potential significant advantages of SMR technology. Chu called SMRs “one of the most promising areas” in new energy technologies, and said “most importantly, investing in nuclear energy will position America to lead in a growing industry. ... Our choice is clear: develop these technologies today or import them tomorrow.”¶ In the fiscal 2010 budget, no funds were allocated to the U.S. SMR program, but $38.9 million has been allocated for fiscal 2011. This is to support two primary activities: public/private partnerships to advance SMR designs, and for research and development and demonstrations. According to the DoE’s website, one of the planned program accomplishments for fiscal 2011 is to “collaborate with the Department of Defense ... to assess the feasibility of SMR designs for energy resources at DoD installations.”¶ HOW TO PROCEED¶ So how should the military begin exploring the advantages of SMRs on their installations?¶ First, a multiservice nuclear energy working group should be formed, perhaps similar in spirit to the Global Nuclear Energy Partnership. This joint group should include knowledgeable and empowered individuals from each branch of the service interested in exploring nuclear energy possibilities, and would develop a plan of action and milestones for required resources and the way ahead for this endeavor.¶ The Air Force has installations and experts dedicated to far-reaching, advanced technology such as space research, quantum physics, nuclear fission and even the holy energy grail of nuclear fusion. With places like Albuquerque’s Sandia National Laboratories, and an energy strategy vision catchphrase “make energy a consideration in all we do” as one of its centerpieces, this technologically savvy service might make a good partner with which to cross into SMR exploration.¶ The Marines pride themselves on innovation and “out-of-the-box” approaches, and with their naval partners including many experts in the nuclear propulsion and power fields, offer not only enthusiasm but expertise and possibly even administrative acceleration, if plant certifications can be achieved through the Naval Nuclear Propulsion Program (NNPP; “Naval Reactors”) and not the Nuclear Regulatory Commission. The NRC is responsible for “licensing and regulating the operation of commercial nuclear power plants in the United States.” Military installations, however, offer unique platforms that could very possibly bypass an extended certification process. This option should be explored.¶ With established expertise and a long safety record in nuclear reactor certification, operations, training and maintenance, “Naval Reactors” comprises the civilian and military personnel who “design, build, operate, maintain and manage the nuclear-powered ships and the many facilities that support the U.S. nuclear-powered naval fleet.” The program responsibilities are specified in Executive Order 12344 (Feb. 1, 1982) and Public Laws 98-525 (Oct. 19, 1984) and 106-65 (Oct. 5, 1999). E.O. 12344 explains that the NNPP is an “integrated program carried out by two organizational units, one in the Department of Energy (DOE) and the other in the Department of the Navy.” So, Naval Reactors should adopt an additional mission: coordinating with the Joint Nuclear Energy Working Group to research and pursue SMR technology on military installations.¶ Finally, partnerships and Enhanced Use Leases (EULs) to support SMR deployments should be explored. As the overall expertise in SMR technology grows, additional capabilities such as expeditionary and vehicular power sources should be explored. Other technologies — including hybrid/electric vehicle power storage and recharging facilities, and water desalination plants — could possibly even co-locate with nuclear plants on installations to co-use the energy. Many external challenges do exist; compliance with the National Environmental Policy Act (NEPA) of 1969 takes time, and community support would be a critical piece of this undertaking — but neither are impediments to success if planning and execution are conducted smartly.¶ The idea of putting nuclear power plants on military installations is by no means new, yet the time has never been better and the technology never as promising as now. The president and Chu continue to voice support for new nuclear energy initiatives, and a large, bipartisan group of political leaders stands poised to back such a plan. This inviting climate is the open door and momentum the DoD should capitalize on by aggressively pursuing what could truly be the next Apollo program. If we fail to explore this promising frontier, we are likely to lose this modern energy “space race” to the Chinese and other eager competitors. That is something the U.S. cannot afford to do.¶ Look no further for guidance than the current National Military Strategy, released in May, in which the commander in chief declares: The United States has a window of opportunity to lead in the development of clean energy technology. If successful, the United States will lead in this new Industrial Revolution in clean energy that will be a major contributor to prosperity ... We must continue to transform our energy economy ... increase use of renewable and nuclear power. ... We will invest in research and next-generation technology. ... Our effort begins with the steps we are taking at home. We will stimulate our energy economy at home, reinvigorate the U.S. domestic nuclear industry ... and provide incentives that make clean energy the profitable kind of energy.¶ The military, with its self-sufficient mini-communities across the country, offers perfect beta-test platforms and has the requisite expertise and pioneering spirit to take the nuclear energy helm. Beyond the economic value cited above by the president, putting nuclear SMRs on military installations would greatly improve our energy security — which, in turn, would strengthen our national security. After all, energy security is national security.¶ The time for the long-anticipated nuclear renaissance is now … and the military should enthusiastically seize the opportunity to lead the way.

# 2AC

## \*\*2AC Case\*\*

## Asia

### Asia Pivot Inevitable

#### Asia pivot inevitable

Lobe 12 Jim, Inter Press Service News, "Washington's Asia Pivot Gains Momentum", June 9 2012, www.ipsnews.net/2012/06/washingtons-asia-pivot-gains-momentum/

The much-anticipated U.S. “pivot” from the Greater Middle East to the Asia/Pacific accelerated this week, which began with Pentagon chief Leon Panetta’s high-profile, nine-day swing through the region and ended with a White House summit between Barack Obama and Philippine President Benigno Aquino.¶ For the first time, Panetta put some meat on the bones of the promised military “rebalancing” – the new phrase favoured by the administration – by declaring at a major regional military meeting in Singapore that the U.S. Navy will deploy 60 percent of its global forces, including six aircraft carrier battle groups, to the Asia/Pacific region by 2020, as compared to the current 50 percent.¶ In addition, Washington intends to increase the number and size of its military exercises and port visits to friendly countries in the region, according to Panetta.¶ “Make no mistake – in a steady, deliberate, and sustainable way, the United States military is rebalancing and bringing an enhanced capability to this vital region,” he declared. “We were there then, we are here now, and we will be here for the future.”¶ True to his word, Panetta concluded an agreement in principle with Singapore to deploy up to four Littoral Combat Ships (LCS) within the city-state’s territorial waters and then travelled on to Cam Ranh Bay, Vietnam, the port through which most of the more than two million U.S. servicemen and women entered the country during the Vietnam War.

### AT: Relations DA

#### Relations solve nothing

Blumenthal 11 Dan, Resident fellow at AEI, Current commissioner and former vice chairman of the U.S.-China Economic and Security Review Commission, where he directs efforts to monitor, investigate, and provide recommendations on the national security implications of the economic relationship between the two countries. Previously, he was senior director for China, Taiwan, and Mongolia in the Secretary of Defense's Office of International Security Affairs and practiced law in New York prior to his government service. At AEI, in addition to his work on the national security implications of U.S.-Sino relations, he coordinates the Tocqueville on China project, which examines the underlying civic culture of post-Mao China. Mr. Blumenthal also contributes to AEI's Asian Outlook series and is a research associate with the National Asia Research Program. 10/3/2011, “The top ten unicorns of China policy”, http://www.aei.org/article/foreign-and-defense-policy/regional/asia/the-top-ten-unicorns-of-china-policy/

9) We need China's help to solve global problems. This is further down on my list because it is not really a fantastical unicorn. It is true. What is a fantasy is that China will be helpful. We do need China to disarm North Korea. They do not want to, and North Korea is now a nuclear power. The same may soon be true with Iran. The best we can get in our diplomacy with China is to stop Beijing from being less helpful. It is a fact that the global problems would be easier to manage with Chinese help. However, China actually contributing to global order is a unicorn.

#### Broader strategic cooperation outweighs

Bader 11 Jeffrey A, visiting scholar at the China Center at Brookings, “U.S.-China Senior Dialogue: Maintaining the Balance”, May 6, <http://www.brookings.edu/opinions/2011/0506_strategic_economic_dialogue_bader.aspx>

The S&ED comes at a time when U.S.-China relations are in fundamentally sound condition. President Hu Jintao’s visit to the United States was generally assessed as setting a realistic tone and achieving successes in a relationship that will always be marked by frictions. President Obama, who will be involved in the S&ED, has put a high priority on U.S.-China relations, and the two sides have cooperated, within limits, on major security issues, including Iran, Korea, Sudan, Libya, and nuclear security. From the U.S. perspective, it will certainly not hurt that the meeting comes only a week after the successful raid that eliminated Osama bin Laden, which sends a message of U.S. strength and credibility in a relationship where those qualities are always the subject of Chinese scrutiny. The United States and China have developed reasonable expectations about both the possibilities and limits of cooperation, which will reduce the chances of future miscalculation. All of these subjects, plus broader developments in the Middle East, will be on the agenda of the S&ED.

#### Plan solves warming

Palley 11 Reese, The London School of Economics, 2011, “The Answer: Why Only Inherently Safe, Mini Nuclear Power Plans Can Save Our World”, p. 186-90

The central investigation of this book has been directed at the scale of the nuclear industry. The book has argued that all anthropogenic challenges that put in question continued human existence on Earth are a matter of scale. It was nature’s unanticipated success with her human experiment, the evolutionary choice of brains over brawn, setting in motion the underlying scale problems that opened our Pandora’s box of calamities. The history of man on Earth can best be viewed as a race between population and resources in which, for some millennia, population expansion leads and the Earth’s resources have been straining to catch up. When population bloomed from 100 million brainy humans to a billion, the problems of scale emerged as the price we had to pay for success as a species. The conversion of forests to agriculture, responding to the need to feed a burgeoning population, initiated the emerging problem of scale. The elimination of oxygen-emitting forests was mitigated to a large measure in the beginning of our population growth by the slow rate of change of the deforestation, which allowed an absorbable increase of CO2 in the atmosphere. Natural processes, such as the ability of the oceans to take up CO2, tamped down global warming. But as the scale of the release of warming gases exploded a few hundred years ago, our remaining forests and our seas, our first line of defense against CO2 imbalance, could not cope and the level of CO2 has risen alarmingly each year since 1800. When human population climbed from a billion to six billion and these six billion reveled in the enormous energy content of coal, the scenario for disaster on a global scale came into play. The impact of the loss of forest paled in comparison to the havoc that the use of fossil fuels represented. In a world that was hungry for energy and, not incidentally, living on a Malthusian edge of food supply, coal burst upon us as manna from heaven. Coal was everywhere, easy to mine, and in enormous, almost unending supply It generated the cheap heat needed to run the engines of early industrialization. An unintended Faustian bargain was struck. The immediate cost of coal in the cities, dirt and pollution, were not out of sync with what urban man had lived with for centuries. It was beyond the science and the understanding of the time that burning vast millennial coal deposits would do little more than discommode the proximate few and benefit many. Again it was not the burning, it was the scale of the burning that dumped billions of tons of CO2 into the atmosphere. We are now presented with a horrendous invoice that must be paid if we are to survive in anywhere near the comfort to which we have become accustomed. It has been the intent of this book to argue that the scale of the warming catastrophe must be viewed primarily in terms of the continuing flow of CO2 into the atmosphere. Every possible source of CO2, no matter how small, must be identified and interdicted, since every fourth molecule of the gas will remain with us as a climate moderator for thousands of years. What we find is that all of the sources of energy including so-called green energy are CO2-culpable and that each, in spite of claims to the contrary, adds its tiny mite or enormous mass to the climate changes looming in man’s future. The book argues that the scale of the consumption of fossil fuels is clearly unsustainable and, more to the point, that the feeble attempts to restrict CO2 production are little more than a glossing over of the problem. Capping but not ending production of greenhouse gases only magnifies the unthinkable future costs of bringing the level of CO2 and other greenhouse gases back into balance. Logic dictates that merely limiting greenhouse gases pushes possible solutions farther and farther into the future and does little to mitigate the difficulties that will arise in the near future. Logic dictates that our reasonably comfortable survival depends on the immediate and total cessation of increases to parts per million of CO2 in the air. Logic dictates that if we are to continue to enjoy the level of comfort, wealth, and ease afforded us since the beginning of the twentieth century we must not only halt the increase but commence the actual decrease of warming gases at work in the atmosphere. That conclusion brings the book to the problems and the solutions inherent in nuclear power, the only energy source that can guarantee us a reasonable future that might be resistant to CO2 warming. Here the argument returns once again to the problem of scale of nuclear reactors, especially as the size of these reactors is related to the brief time left to us to get a grip on calamitous climate changes. The beginnings of nuclear energy lay in the demands of war. The battle between good and evil characterized by the Second World War gave hurried birth to a discovery that had the inherent power to both destroy and salvage. The power to destroy required plutonium on an enormous scale, which was projected forward into the postwar development of civilian reactors. The demand for scarce plutonium for the bombs of the cold war defined the type of reactors that were being developed. These were the breeder reactors, which spewed out plutonium measured in tons that had previously been available only in ounces, and would continue to do so when the wartime need was far behind us. What was once precious, rare, and desirable has become dangerous nuclear waste, and the imperfectly perceived scale of the waste problem has seriously inhibited the logical growth and development of nuclear power. By some unthinkable universal coincidence, nuclear power became available to man for war at the same time that it could prove to be the solution to man’s greatest peacetime challenge. But the gigawatt nuclear power plants that emerged from the war had within them the seeds of their own severe limitation. The scale of the risks, real and imagined, grew exponentially as the scale of energy output grew only linearly. These risks, some merely perceived, some dangerously real and some financial, have conspired to restrict the enormous expansion of nuclear power that is needed to quickly replace our present consumption of energy from fossil fuels. The present rate of replacement of fossil with nuclear sources is at a pace that will have little impact on ultimately dealing with the CO2 imbalance. This slow rate of change is compounded of public fears, bureaucratic regulatory mechanisms resistant to novel solutions, and a private capital market that is unable to conjure with the imagined and real risks of the huge gigawatt reactors that dominate the industry. It is a Gordian knot that cannot be unraveled but which can only be cut by a political sword that, alas, still lacks the edge to do the job. By another rare act of cosmic fortuity, there is a parallel existing nuclear technology that, barring political interference, is capable of addressing the scale problems inherent in gigawatt reactors. From the beginning of the nuclear era, researchers such as Weinberg and Wigner and Teller developed small, inherently safe nuclear reactors that did not breed plutonium. This was reason enough for the military, balancing urgent demands on research and development budgets, to consign the concept of “smaller and safer is better” to dusty shelves in our national science attic. This book has argued that small reactors, that produce a tenth of the energy of the giants also generate inordinately less of the risk that inhibits growth of the industry. Construction of small reactors is a fraction of the cost of construction of gigawatt reactors. Thus the number of years that scarce capital is tied up and at risk is substantially reduced. The book argues that a 100 MWe reactor88 is a much bigger hardware bargain than a gigawatt reactor, which, from start to output, can cost $15 billion. It is not only the hardware costs that contribute to the devilish details of risk. The problem is the inability of the market to accurately or even approximately estimate the real cost of the capital that would be tied up for over a decade in a project that, through technological advancements, could be obsolete before it ever joins the grid.

## Heg

### AT: Grid Resilient

#### Grid’s vulnerable and threats are growing---insiders vote aff

Merica 12 Dan, CNN, "DoD official: Vulnerability of U.S. electrical grid is a dire concern", July 27, security.blogs.cnn.com/2012/07/27/dod-official-vulnerability-of-u-s-electrical-grid-is-a-dire-concern/

Speaking candidly at the Aspen Security Forum, one defense department official expressed great concern about the possibility of a terrorist attack on the U.S. electric grid that would cause a “long term, large scale outage.”¶ Paul Stockton, assistant secretary for Homeland Defense and Americas’ Security Affairs at the Department of Defense, said such an attack would affect critical defense infrastructure at home and abroad – a thought that Stockton said was keeping him up at night.¶ “The DOD depends on infrastructure in order to be able to operate abroad. And to make those operations function, we depend on the electric grid,” Stockton said.¶ The concern, Stockton continued, was that America’s adversaries would avoid attacking “the pointy end of the spear,” meaning combat troops, and would instead look for homeland, possibly non-military, targets.¶ “Our adversaries, state and non-state, are not stupid. They are clever and adaptive,” Stockton said. “There is a risk that they will adopt a profoundly asymmetric strategy, reach around and attack us here at home, the critical infrastructure that is not owned by the Department of Defense.”¶ But Stockton’s concerns were not solely limited to terrorist attacks. Other concerning scenarios, said the assistant secretary, include geomagnetic disturbances, earthquakes and other natural disasters that could take down the grid.¶ According to Stockton, a recurrence of a massive earthquake, like the New Madrid earthquake of 1812, “would cause a power outage for weeks to months across a multi-state area, rolling blackouts in the East Coast…”

## Water

**AT: No Water Impact**

**Wars go global**

Reilly 2 Kristie, Editor for In These Times, a nonprofit, independent, national magazine published in Chicago. We’ve been around since 1976, fighting for corporate accountability and progressive government. In other words, a better world, “NOT A DROP TO DRINK,” <http://www.inthesetimes.com/issue/26/25/culture1.shtml> \*Cites environmental thinker and activist Vandana Shiva Maude Barlow and Tony Clarke—North America’s foremost water experts

The two books provide a chilling, in-depth examination of a rapidly emerging global crisis. “Quite simply,” Barlow and Clarke write, “unless we dramatically change our ways, between one-half and two-thirds of humanity will be living with severe fresh water shortages within the next quarter-century. … The hard news is this: Humanity is depleting, diverting and polluting the planet’s fresh water resources so quickly and relentlessly that every species on earth—including our own—is in mortal danger.” The crisis is so great, the three authors agree, that the world’s **next great wars will be over water**. The Middle East, parts of Africa, China, Russia, parts of the United States and several other areas are already struggling to equitably share water resources. Many conflicts over water are not even recognized as such: Shiva blames the Israeli-Palestinian conflict in part on the severe scarcity of water in settlement areas. As available fresh water on the planet decreases, today’s **low-level conflicts** can only **increase in intensity**.

## \*\*2AC Off-Case\*\*

## T

### 2AC T – Financial Incentives

#### C/I – Financial incentives induce behaviors---that includes alt financing

Webb 93 – lecturer in the Faculty of Law at the University of Ottawa (Kernaghan, “Thumbs, Fingers, and Pushing on String: Legal Accountability in the Use of Federal Financial Incentives”, 31 Alta. L. Rev. 501 (1993) Hein Online)

In this paper, "financial incentives" are taken to mean disbursements 18 of public funds or contingent commitments to individuals and organizations, intended to encourage, support or induce certain behaviours in accordance with express public policy objectives. They take the form of grants, contributions, repayable contributions, loans, loan guarantees and insurance, subsidies, procurement contracts and tax expenditures.19 Needless to say, the ability of government to achieve desired behaviour may vary with the type of incentive in use: up-front disbursements of funds (such as with contributions and procurement contracts) may put government in a better position to dictate the terms upon which assistance is provided than contingent disbursements such as loan guarantees and insurance. In some cases, the incentive aspects of the funding come from the conditions attached to use of the monies.20 In others, the mere existence of a program providing financial assistance for a particular activity (eg. low interest loans for a nuclear power plant, or a pulp mill) may be taken as government approval of that activity, and in that sense, an incentive to encourage that type of activity has been created.21 Given the wide variety of incentive types, it will not be possible in a paper of this length to provide anything more than a cursory discussion of some of the main incentives used.22 And, needless to say, the comments made herein concerning accountability apply to differing degrees depending upon the type of incentive under consideration.¶ By limiting the definition of financial incentives to initiatives where *public funds are either disbursed or contingently committed*, a large number of regulatory programs with incentive *effects* which exist, but in which no money is forthcoming,23 are excluded from direct examination in this paper. Such programs might be referred to as *indirect* incentives. Through elimination of indirect incentives from the scope of discussion, thedefinition of the incentive instrument becomes both more manageable and more particular. Nevertheless, it is possible that much of the approach taken here may be usefully applied to these types of indirect incentives as well.24 Also excluded from discussion here are social assistance programs such as welfare and *ad hoc* industry bailout initiatives because such programs are not designed primarily to *encourage* behaviours in furtherance of specific public policy objectives. In effect, these programs are assistance, but they are not incentives.

#### Precision---our definition’s from the DoE

Waxman 98 **–** Solicitor General of the US (Seth, Brief for the United States in Opposition for the US Supreme Court case HARBERT/LUMMUS AGRIFUELS PROJECTS, ET AL., PETITIONERS v. UNITED STATES OF AMERICA, http://www.justice.gov/osg/briefs/1998/0responses/98-0697.resp.opp.pdf)

2 On November 15, 1986, Keefe was delegated “the authority, with respect to actions valued at $50 million or less, to approve, execute, enter into, modify, administer, closeout, terminate and take any other necessary and appropriate action (collectively, ‘Actions’) with respect to Financial Incentive awards.” Pet. App. 68, 111-112. Citing DOE Order No. 5700.5 (Jan. 12, 1981), the delegation defines “Financial Incentives” as the authorized financial incentive programs of DOE, “including direct loans, loan guarantees, purchase agreements, price supports, guaranteed market agreements and any others which may evolve.” The delegation proceeds to state, “[h]owever, a separate prior written approval of any such action must be given by or concurred in by Keefe to accompany the action.” The delegation also states that its exercise “shall be governed by the rules and regulations of [DOE] and policies and procedures prescribed by the Secretary or his delegate(s).” Pet. App. 111-113.

## K

### 2AC Heg K

#### Judge choice

Hargraves 12 Robert, has written articles and made presentations about the liquid fluoride thorium reactor and energy cheaper than from coal – the only realistic way to dissuade nations from burning fossil fuels. His presentation “Aim High” about the technology and social benefits of the liquid fluoride thorium reactor has been presented to audiences at Dartmouth ILEAD, Thayer School of Engineering, Brown University, Columbia Earth Institute, Williams College, Royal Institution, the Thorium Energy Alliance, the International Thorium Energy Association, Google, the American Nuclear Society, and the Presidents Blue Ribbon Commission of America’s Nuclear Future. With coauthor Ralph Moir he has written articles for the American Physical Society Forum on Physics and Society: Liquid Fuel Nuclear Reactors (Jan 2011) and American Scientist: Liquid Fluoride Thorium Reactors (July 2010). Robert Hargraves is a study leader for energy policy at Dartmouth ILEAD. He was chief information officer at Boston Scientific Corporation and previously a senior consultant with Arthur D. Little. He founded a computer software firm, DTSS Incorporated while at Dartmouth College where he was assistant professor of mathematics and associate director of the computation center. He graduated from Brown University (PhD Physics 1967) and Dartmouth College (AB Mathematics and Physics 1961). THORIUM: energy cheaper than coal, ISBN: 1478161299, purchased online at Amazon.com

New technology makes clean energy, cheaper than coal. New energy technology solves more problems than just global warming. Some people are still skeptical that man-made CO2 emissions are responsible for global warming. They are concerned that increasing energy costs will harm the US economy. Moreover they are concerned that international treaties might disadvantage the US and other OECD nations, by exempting developing nations from emissions constraints and by paying them to avoid CO2 emissions. There are multiple reasons to develop an energy source cheaper than coal. Any one of these reasons can justify the investment in developing a solution such as the liquid fluoride thorium reactor. **Stopping** particulate **air pollution will save million of lives**. Lowering energy costs will increase economic productivity. 9 Ending energy poverty leads to a sustainable population. Reducing CO2 emissions will check global warming. Even climate skeptics should support advanced energy technology for improved economic productivity, population sustainability, and improved human health. In the US conservative Republicans and liberal Democrats bicker over impairing economic growth by imposing taxes to address global warming. Both sides should agree to an energy technology that both improves both the environment and productivity.

#### Multiple independent fields support heg

Wohlforth 9 William, professor of government at Dartmouth College, “Unipolarity, Status Competition, and Great Power War”, Project Muse

Mainstream theories generally posit that states come to blows over an international status quo only when it has implications for their security or material well-being. The guiding assumption is that a state’s satisfaction [End Page 34] with its place in the existing order is a function of the material costs and benefits implied by that status.24 By that assumption, once a state’s status in an international order ceases to affect its material wellbeing, its relative standing will have no bearing on decisions for war or peace. But the assumption is undermined by cumulative research in disciplines ranging from **neuroscience and evolutionary biology to economics, anthropology, sociology, and psychology** that human beings are powerfully motivated by the desire for favorable social status comparisons. This research suggests that the preference for status is a basic disposition rather than merely a strategy for attaining other goals.25 People often seek tangibles not so much because of the welfare or security they bring but because of the social status they confer. Under certain conditions, the search for status will cause people to behave in ways that directly contradict their material interest in security and/or prosperity.

#### US exceptionalism is inevitable---plan prevents failed engagement that triggers their turns

Robert Kagan 11 is a contributing editor to The Weekly Standard and a senior fellow in foreign policy at the Brookings Institution. "The Price of Power" Jan 24 Vol 16 No18 www.weeklystandard.com/articles/price-power\_533696.html?page=3

In theory, the United States could refrain from intervening abroad. But, in practice, will it? Many assume today that the American public has had it with interventions, and Alice Rivlin certainly reflects a strong current of opinion when she says that “much of the public does not believe that we need to go in and take over other people’s countries.” That sentiment has often been heard after interventions, especially those with mixed or dubious results. It was heard after the four-year-long war in the Philippines, which cost 4,000 American lives and untold Filipino casualties. It was heard after Korea and after Vietnam. It was heard after Somalia. Yet the reality has been that after each intervention, the sentiment against foreign involvement has faded, and the United States has intervened again. ¶ Depending on how one chooses to count, the United States has undertaken roughly 25 overseas interventions since 1898: Cuba, 1898 The Philippines, 1898-1902 China, 1900 Cuba, 1906 Nicaragua, 1910 & 1912 Mexico, 1914 Haiti, 1915 Dominican Republic, 1916 Mexico, 1917 World War I, 1917-1918 Nicaragua, 1927 World War II, 1941-1945 Korea, 1950-1953 Lebanon, 1958 Vietnam, 1963-1973 Dominican Republic, 1965 Grenada, 1983 Panama, 1989 First Persian Gulf war, 1991 Somalia, 1992 Haiti, 1994 Bosnia, 1995 Kosovo, 1999 Afghanistan, 2001-present Iraq, 2003-present¶ That is one intervention every 4.5 years on average. Overall, the United States has intervened or been engaged in combat somewhere in 52 out of the last 112 years, or roughly 47 percent of the time. Since the end of the Cold War, it is true, the rate of U.S. interventions has increased, with an intervention roughly once every 2.5 years and American troops intervening or engaged in combat in 16 out of 22 years, or over 70 percent of the time, since the fall of the Berlin Wall. ¶ The argument for returning to “normal” begs the question: What is normal for the United States? The historical record of the last century suggests that it is not a policy of nonintervention. This record ought to raise doubts about the theory that American behavior these past two decades is the product of certain unique ideological or doctrinal movements, whether “liberal imperialism” or “neoconservatism.” Allegedly “realist” presidents in this era have been just as likely to order interventions as their more idealistic colleagues. George H.W. Bush was as profligate an intervener as Bill Clinton. He invaded Panama in 1989, intervened in Somalia in 1992—both on primarily idealistic and humanitarian grounds—which along with the first Persian Gulf war in 1991 made for three interventions in a single four-year term. Since 1898 the list of presidents who ordered armed interventions abroad has included William McKinley, Theodore Roose-velt, William Howard Taft, Woodrow Wilson, Franklin Roosevelt, Harry Truman, Dwight Eisenhower, John F. Kennedy, Ronald Reagan, George H.W. Bush, Bill Clinton, and George W. Bush. One would be hard-pressed to find a common ideological or doctrinal thread among them—unless it is the doctrine and ideology of a mainstream American foreign policy that leans more toward intervention than many imagine or would care to admit. ¶ Many don’t want to admit it, and the only thing as consistent as this pattern of American behavior has been the claim by contemporary critics that it is abnormal and a departure from American traditions. The anti-imperialists of the late 1890s, the isolationists of the 1920s and 1930s, the critics of Korea and Vietnam, and the critics of the first Persian Gulf war, the interventions in the Balkans, and the more recent wars of the Bush years have all insisted that the nation had in those instances behaved unusually or irrationally. And yet the behavior has continued.¶ To note this consistency is not the same as justifying it. The United States may have been wrong for much of the past 112 years. Some critics would endorse the sentiment expressed by the historian Howard K. Beale in the 1950s, that “the men of 1900” had steered the United States onto a disastrous course of world power which for the subsequent half-century had done the United States and the world no end of harm. But whether one lauds or condemns this past century of American foreign policy—and one can find reasons to do both—the fact of this consistency remains. It would require not just a modest reshaping of American foreign policy priorities but a sharp departure from this tradition to bring about the kinds of changes that would allow the United States to make do with a substantially smaller force structure. ¶ Is such a sharp departure in the offing? It is no doubt true that many Americans are unhappy with the on-going warfare in Afghanistan and to a lesser extent in Iraq, and that, if asked, a majority would say the United States should intervene less frequently in foreign nations, or perhaps not at all. It may also be true that the effect of long military involvements in Iraq and Afghanistan may cause Americans and their leaders to shun further interventions at least for a few years—as they did for nine years after World War I, five years after World War II, and a decade after Vietnam. This may be further reinforced by the difficult economic times in which Americans are currently suffering. The longest period of nonintervention in the past century was during the 1930s, when unhappy memories of World War I combined with the economic catastrophe of the Great Depression to constrain American interventionism to an unusual degree and produce the first and perhaps only genuinely isolationist period in American history. ¶ So are we back to the mentality of the 1930s? It wouldn’t appear so. There is no great wave of isolationism sweeping the country. There is not even the equivalent of a Patrick Buchanan, who received 3 million votes in the 1992 Republican primaries. Any isolationist tendencies that might exist are severely tempered by continuing fears of terrorist attacks that might be launched from overseas. Nor are the vast majority of Americans suffering from economic calamity to nearly the degree that they did in the Great Depression. ¶ Even if we were to repeat the policies of the 1930s, however, it is worth recalling that the unusual restraint of those years was not sufficient to keep the United States out of war. On the contrary, the United States took actions which ultimately led to the greatest and most costly foreign intervention in its history. Even the most determined and in those years powerful isolationists could not prevent it. ¶ Today there are a number of obvious possible contingencies that might lead the United States to substantial interventions overseas, notwithstanding the preference of the public and its political leaders to avoid them. Few Americans want a war with Iran, for instance. But it is not implausible that a president—indeed, this president—might find himself in a situation where military conflict at some level is hard to avoid. The continued success of the international sanctions regime that the Obama administration has so skillfully put into place, for instance, might eventually cause the Iranian government to lash out in some way—perhaps by attempting to close the Strait of Hormuz. Recall that Japan launched its attack on Pearl Harbor in no small part as a response to oil sanctions imposed by a Roosevelt administration that had not the slightest interest or intention of fighting a war against Japan but was merely expressing moral outrage at Japanese behavior on the Chinese mainland. Perhaps in an Iranian contingency, the military actions would stay limited. But perhaps, too, they would escalate. One could well imagine an American public, now so eager to avoid intervention, suddenly demanding that their president retaliate. Then there is the possibility that a military exchange between Israel and Iran, initiated by Israel, could drag the United States into conflict with Iran. Are such scenarios so farfetched that they can be ruled out by Pentagon planners? ¶ Other possible contingencies include a war on the Korean Peninsula, where the United States is bound by treaty to come to the aid of its South Korean ally; and possible interventions in Yemen or Somalia, should those states fail even more than they already have and become even more fertile ground for al Qaeda and other terrorist groups. And what about those “humanitarian” interventions that are first on everyone’s list to be avoided? Should another earthquake or some other natural or man-made catastrophe strike, say, Haiti and present the looming prospect of mass starvation and disease and political anarchy just a few hundred miles off U.S. shores, with the possibility of thousands if not hundreds of thousands of refugees, can anyone be confident that an American president will not feel compelled to send an intervention force to help?¶ Some may hope that a smaller U.S. military, compelled by the necessity of budget constraints, would prevent a president from intervening. More likely, however, it would simply prevent a president from intervening effectively. This, after all, was the experience of the Bush administration in Iraq and Afghanistan. Both because of constraints and as a conscious strategic choice, the Bush administration sent too few troops to both countries. The results were lengthy, unsuccessful conflicts, burgeoning counterinsurgencies, and loss of confidence in American will and capacity, as well as large annual expenditures. Would it not have been better, and also cheaper, to have sent larger numbers of forces initially to both places and brought about a more rapid conclusion to the fighting? The point is, it may prove cheaper in the long run to have larger forces that can fight wars quickly and conclusively, as Colin Powell long ago suggested, than to have smaller forces that can’t. Would a defense planner trying to anticipate future American actions be wise to base planned force structure on the assumption that the United States is out of the intervention business? Or would that be the kind of penny-wise, pound-foolish calculation that, in matters of national security, can prove so unfortunate?¶ The debates over whether and how the United States should respond to the world’s strategic challenges will and should continue. Armed interventions overseas should be weighed carefully, as always, with an eye to whether the risk of inaction is greater than the risks of action. And as always, these judgments will be merely that: judgments, made with inadequate information and intelligence and no certainty about the outcomes. No foreign policy doctrine can avoid errors of omission and commission. But history has provided some lessons, and for the United States the lesson has been fairly clear: The world is better off, and the United States is better off, in the kind of international system that American power has built and defended.

#### Heg is morally justifiable

Reus-Smit 4 Christian, IR @ Australian Nat’l, American Power and World Order p. 109-115

The final ethical position — the polar opposite of the first — holds that the exercise of hegemonic power is never ethically justifiable. One source of such a position might be pacifist thought, which abhors the use of violence even in unambiguous cases of self-defence. This would not, however, provide a comprehensive critique of the exercise of hegemonic power, which takes forms other than overt violence, such as economic diplomacy or the manipulation of international institutions. A more likely source of such critique would be the multifarious literature that equates all power with domination. Postmodernists (and anarch­ists, for that matter) might argue that behind all power lies self-interest and a will to control, both of which are antithetical to genuine human freedom and diversity. Rad­ical liberals might contend that the exercise of power by one human over another transforms the latter from a moral agent into a moral subject, thus violating their in­tegrity as self-governing individuals. Whatever the source, these ideas lead to radical scepticism about all institutions of power, of which hegemony is one form. The idea that the state is a source of individual security is replaced here with the idea of the state as a tyranny; the idea of hegem­ony as essential to the provision of global public goods is A framework for judgement Which of the above ideas help us to evaluate the ethics of the Bush Administration's revisionist hegemonic project? There is a strong temptation in international relations scholarship to mount trenchant defences of favoured para­digms, to show that the core assumptions of one's pre­ferred theory can be adapted to answer an ever widening set of big and important questions. There is a certain discipline of mind that this cultivates, and it certainly brings some order to theoretical debates, but it can lead to the 'Cinderella syndrome', the squeezing of an un­gainly, over-complicated world into an undersized theor­etical glass slipper. The study of international ethics is not immune this syndrome, with a long line of scholars seeking master normative principles of universal applic­ability. My approach here is a less ambitious, more prag­matic one. With the exceptions of the first and last positions, each of the above ethical perspectives contains kernels of wisdom. The challenge is to identify those of value for evaluating the ethics of Bush's revisionist grand strategy, and to consider how they might stand in order of priority. The following discussion takes up this challenge and arrives at a position that I tentatively term 'procedural solidarism'. The first and last of our five ethical positions can be dismissed as unhelpful to our task. The idea that might is right resonates with the cynical attitude we often feel to­wards the darker aspects of international relations, but it does not constitute an ethical standpoint from which to judge the exercise of hegemonic power. First of all, it places the right of moral judgement in the hands of the hegemon, and leaves all of those subject to its actions with no grounds for ethical critique. What the hegemon dictates as ethical is ethical. More than this, though, the principle that might is right is undiscriminating. It gives us no resources to determine ethical from unethical hegemonic conduct. The idea that might is never right is equally unsatisfying. It is a principle implied in many critiques of imperial power, including of American power. But like its polar opposite, it is utterly undiscriminating. No matter what the hegemon does we are left with one blanket assessment. No procedure, no selfless goal is worthy of ethical endorsement. This is a deeply impoverished ethical posture, as it raises the critique of power above all other human values. It is also completely counter-intuitive. Had the United States intervened militarily to prevent the Rwandan genocide, would this not have been ethically justifiable? If one answers no, then one faces the difficult task of explaining why the exercise of hegemonic power would have been a greater evil than allowing almost a million people to be massacred. If one answers yes, then one is admitting that a more discriminating set of ethical principles is needed than the simple yet enticing propos­ition that might is never right.

#### Only deterrence is an empirically verifiable solution to war

Moore 4 – Dir. Center for Security Law @ University of Virginia, 7-time Presidential appointee, & Honorary Editor of the American Journal of International Law, Solving the War Puzzle: Beyond the Democratic Peace, John Norton Moore, page 27-31.

As so broadly conceived, there is strong evidence that deterrence, that is, the effect of external factors on the decision to go to war, is the missing link in the war/peace equation. In my War/Peace Seminar, I have undertaken to examine the level of deterrence before the principal wars of the twentieth century.10 This examination has led me to believe that in every case the potential aggressor made a rational calculation that the war would be won, and won promptly.11 In fact, the longest period of time calculated for victory through conventional attack seems to be the roughly six reeks predicted by the German General Staff as the time necessary ) prevail on the Western front in World War I under the Schlieffen Plan. Hitler believed in his attack on Poland that Britain and France could not take the occasion to go to war with him. And he believed his 1941 Operation Barbarossa against the Soviet Union that “[w]e have only to kick in the door and the whole rotten structure will come crashing down."12 In contrast, following Hermann Goering's failure to obtain air superiority in the Battle of Britain, Hitler called off the invasion of Britain and shifted strategy to the nighttime bombing of population centers, which became known as the Blitz, in a mistaken effort to compel Britain to sue for peace. Calculations in the North Korean attack on South Korea and Hussein’s attack on Kuwait were that the operations would be completed in a matter of days. Indeed, virtually all principal wars in the twentieth century, at least those involving conventional invasion, were preceded by what I refer to as a "double deterrence absence." That is, the potential aggressor believed that they had the military force in place to prevail promptly and that nations that might have the military or diplomatic power to prevent this were not dined to intervene. This analysis has also shown that many of the perceptions we have about the origins of particular wars are flatly wrong. Anyone who seriously believes that World War I was begun by competing alliances drawing tighter should examine the al historical record of British unwillingness to enter a clear military alliance with the French or to so inform the Kaiser! Indeed, this pre-World War I absence of effective alliance and resultant war contrasts sharply with the later robust NATO alliance and absence of World War III.14¶ Considerable other evidence seems to support this historical analysis as to the importance of deterrence. Of particular note, Yale Professor Donald Kagan, a preeminent United States historian who has long taught a seminar on war, published in 1995 a superb book On the Origins of War and the Preservation of Peace.15 In this book he conducts a detailed examination of the Peloponnesian War, World War I, Hannibal's War, and World War II, among other case studies. A careful reading of these studies suggests that each war could have been prevented by achievable deterrence and that each occurred in the absence of such deterrence.16 Game theory seems to offer yet further support for the proposition that appropriate deterrence can prevent war. For example, Robert Axelrod's famous 1980s experiment in an iterated prisoner's dilemma, which is a reasonably close proxy for many conflict settings in international relations, repeatedly showed the effectiveness of a simple tit for tat strategy.17 Such a strategy is at core simply a basic deterrent strategy of influencing behavior through incentives. Similarly, much of the game-theoretic work on crisis bargaining (and danger of asymmetric information) in relation to war and the democratic peace assumes the importance of deterrence through communication of incentives.18 The well-known correlation between war and territorial contiguity seems also to underscore the importance of deterrence and is likely principally a proxy for levels of perceived profit and military achievability of aggression in many such settings.¶ It should further be noted that the democratic peace is not the only significant correlation with respect to war and peace, although it seems to be the most robust. Professors Russett and Oneal, in recently exploring the other elements of the Kantian proposal for "Perpetual Peace," have also shown a strong and statistically significant correlation between economically important bilateral trade between two nations and a reduction in the risk of war between them. Contrary to the arguments of "dependency theorists," such economically important trade seems to reduce the risk of war regardless of the size relationship or asymmetry in the trade balance between the two states. In addition, there is a statistically significant association between economic openness generally and reduction in the risk of war, although this association is not as strong as the effect of an economically important bilateral trade relationship.° Russett and Oneal also show a modest independent correlation between reduction in the risk of war and higher levels of common membership in international organizations.20 And they show that a large imbalance of power between two states significantly lessens the risk of major war between them.21 All of these empirical findings about war also seem to directly reflect incentives; that is, a higher level of trade would, if foregone in war, impose higher costs in the aggregate than without such trade,22 though we know that not all wars terminate trade. Moreover, with respect to trade, a, classic study, Economic Interdependence and War, suggests that the historic record shows that it is not simply aggregate levels of bilateral trade that matters, but expectations as to the level of trade into the future.23 This directly implicates expectations of the war decision maker as does incentive theory, and it importantly adds to the general finding about trade and war that even with existing high levels of bilateral trade, changing expectations from trade sanctions or other factors affecting the flow of trade can directly affect incentives and influence for or against war. A large imbalance of power in a relationship rather obviously impacts deterrence and incentives. Similarly, one might incur higher costs with high levels of common membership in international organizations through foregoing some of the heightened benefits of such participation or otherwise being presented with different options through the actions or effects of such organizations.¶ These external deterrence elements may also be yet another reason why democracies have a lower risk of war with one another. For their freer markets, trade, commerce, and international engagement may place them in a position where their generally higher level of interaction means that aggression will incur substantial opportunity costs. Thus, the "mechanism" of the democratic peace may be an aggregate of factors affecting incentives, both external as well as internal factors. Because of the underlying truth in the relationship between higher levels of trade and lower levels of war, it is not surprising that theorists throughout human history, including Baron de Montesquieu in 1748, Thomas Paine in 1792, John Stuart Mill in 1848, and, most recently, the founders of the European Union, have argued that increasing commerce and interactions among nations would end war. Though by themselves these arguments have been overoptimistic, it may well be that some level of "globalization" may make the costs of war and the gains of peace so high as to powerfully predispose to peace. Indeed, a 1989 book by John Mueller, Retreat From Doomsday,24 postulates the obsolescence of major war between developed nations (at least those nations within the "first and second worlds") as they become increasingly conscious of the rising costs of war and the rising gains of peace.¶ In assessing levels of democracy, there are indexes readily available, for example, the Polity III25 and Freedom House 26 indexes. I am unaware of any comparable index with respect to levels of deterrence that might be used to test the importance of deterrence in war avoidance?' Absent such an accepted index, discussion about the importance of deterrence is subject to the skeptical observation that one simply defines effective deterrence by whether a war did or did not occur. In order to begin to deal with this objection and encourage a more objective methodology for assessing deterrence, I encouraged a project to seek to develop a rough but objective measure of deterrence with a scale from minus ten to plus ten based on a large variety of contextual features that would be given relative weighting in a complex deterrence equation before applying the scaling to different war and nonwar settings.28 On the disincentive side of the scale, the methodology used a weighted calculation of local deterrence, including the chance to prevent a short- and intermediate-term military victory, and economic and political disincentives; extended deterrence with these same elements; and contextual communication and credibility multipliers. On the incentive side of the scale, the methodology also used a weighted calculation of perceived military, economic, and political benefits. The scales were then combined into an overall deterrence score, including, an estimate for any effect of prospect theory where applicable.2 This innovative first effort uniformly showed high deterrence scores in settings where war did not, in fact, occur. Deterring a Soviet first strike in the Cuban Missile Crisis produced a score of +8.5 and preventing a Soviet attack against NATO produced a score of +6. War settings, however, produced scores ranging from -2.29 (Saddam Hussein's decision to invade Kuwait in the Gulf War), -2.18 (North Korea's decision to invade South Korea in the Korean War), -1.85 (Hitler's decision to invade Poland in World War II), -1.54 (North Vietnam's decision to invade South Vietnam following the Paris Accords), -0.65 (Milosevic's decision to defy NATO in Kosovo), +0.5 (the Japanese decision to attack Pearl Harbor), +1.25 (the Austrian decision, egged on by Germany, to attack Serbia, which was the real beginning of World War I), to +1.75 (the German decision to invade Belgium and France in World War I). As a further effort at scaling and as a point of comparison, I undertook to simply provide an impressionistic rating based on my study of each pre-crisis setting. That produced high positive scores of +9 for both deterring a Soviet first strike during the Cuban Missile Crisis and NATO's deterrence of a Warsaw Pact attack and even lower scores than the more objective effort in settings where wars had occurred. Thus, I scored North Vietnam's decision to invade South Vietnam following the Paris Accords and the German decision to invade Poland at the beginning of World War II as -6; the North Korean/Stalin decision to invade South Korea in the Korean War as -5; the Iraqi decision to invade the State of Kuwait as -4; Milosevic's decision to defy NATO in Kosovo and the German decision to invade Belgium and France in World War I as -2; and the Austrian decision to attack Serbia and the Japanese decision to attack Pearl Harbor as -1. Certainly even knowledgeable experts would be likely to differ in their impressionistic scores on such pre-crisis settings, and the effort at a more objective methodology for scoring deterrence leaves much to be desired. Nevertheless, both exercises did seem to suggest that deterrence matters and that high levels of deterrence can prevent future war.¶ Following up on this initial effort to produce a more objective measure of deterrence, two years later I encouraged another project to undertake the same effort, building on what had been learned in the first iteration. The result was a second project that developed a modified scoring system, also incorporating local deterrence, extended deterrence, and communication of intent and credibility multipliers on one side of a scale, and weighing these factors against a potential aggressor's overall subjective incentives for action on the other side of the scale.3° The result, with a potential range of -5.5 to +10, produced no score higher than +2.5 for eighteen major wars studied between 1939 and the 1990 Gulf War.31 Twelve of the eighteen wars produced a score of zero or below, with the 1950-53 Korean War at -3.94, the 1965-75 Vietnam War at -0.25, the 1980-88 Iran-Iraq War at -1.53, and the 1990-91 Gulf War at -3.83. The study concluded that in more than fifty years of conflict there was "no situation in which a regime elite/decision making body subjectively faced substantial disincentives to aggressive military action and yet attacked."32¶ Yet another piece of the puzzle, which may clarify the extent of deterrence necessary in certain settings, may also assist in building a broader hypothesis about war. In fact, it has been incorporated into the just-discussed efforts at scoring deterrence. ¶ That is, newer studies of human behavior from cognitive psychology are increasingly showing that certain perceptions of decision makers can influence the level of risk they may be willing to undertake, or otherwise affect their decisions.33 It now seems likely that a number of such insights about human behavior in decision making may be useful in considering and fashioning deterrence strategies. Perhaps of greatest relevance is the insight of "prospect theory," which posits that individuals evaluate outcomes with respect to deviations from a reference point and that they may be more risk averse in settings posing potential gain than in settings posing potential loss.34 The evidence of this "cognitive bias," whether in gambling, trading, or, as is increasingly being argued, foreign policy decisions generally, is significant. Because of the newness of efforts to apply a laboratory based "prospect theory" to the complex foreign policy process generally, and particularly ambiguities and uncertainties in framing such complex events, our consideration of it in the war/peace process should certainly be cautious. It does, however, seem to elucidate some of the case studies.¶ In the war/peace setting, "prospect theory" suggests that deterrence may not need to be as strong to prevent aggressive action leading to perceived gain. For example, there is credible evidence that even an informal warning to Kaiser Wilhelm II from British Foreign Secretary Sir Edward Grey, if it had come early in the crisis before events had moved too far, might have averted World War I. And even a modicum of deterrence in Kuwait, as was provided by a small British contingent when Kuwait was earlier threatened by an irredentist Iraqi government in 1961, might have been sufficient to deter Saddam Hussein from his 1990 attack on Kuwait. Similarly, even a clear United States pledge for the defense of South Korea before the attack might have prevented the Korean War. Conversely, following the July 28 Austrian mobilization and declaration of war against Serbia in World War I, the issue for Austria may have begun to be perceived as loss avoidance, thus requiring much higher levels of deterrence to avoid the resulting war. Similarly, the Rambouillet Agreement may have been perceived by Milosevic as risking loss of Kosovo and his continued rule of Serbia and, as a result, may have required higher levels of NA-TO deterrence to have prevented Milosevic's actions in defiance. Certainly NATO's previous hesitant responses in 1995 against Milosevic in the Bosnia phase of the Yugoslav crisis and in 1998-99 in early attempts to deal with Kosovo did not create a high level of deterrence.35 One can only surmise whether the killing in Kosovo could have been avoided had NATO taken a different tack, both structuring the issue less as loss avoidance for Milosevic and considerably enhancing deterrence. Suppose, for example, NATO had emphasized that it had no interest in intervening in Serbia's civil conflict with the KLA but that it would emphatically take action to punish massive "ethnic cleansing" and other humanitarian outrages, as had been practiced in Bosnia. And on the deterrence side, it made clear in advance the severity of any NATO bombardment, the potential for introduction of ground troops if necessary, that in any assault it would pursue a "Leadership Strategy" focused on targets of importance to Milosevic and his principal henchmen (including their hold on power), and that it would immediately, unlike as earlier in Bosnia, seek to generate war crime indictments of all top Serbian leaders implicated in any atrocities. The point here is not to second-guess NATO's actions in Kosovo but to suggest that taking into account potential "cognitive bias," such as "prospect theory," may be useful in fashioning effective deterrence. "Prospect theory" may also have relevance in predicting that it may be easier to deter (that is, lower levels are necessary) an aggression than to undo that aggression. Thus, much higher levels of deterrence were probably required to compel Saddam Hussein to leave Kuwait than to prevent him initially from invading that state. In fact, not even the presence of a powerful Desert Storm military force and a Security Council Resolution directing him to leave caused Hussein to voluntarily withdraw. As this real-world example illustrates, there is considerable experimental evidence in "prospect theory" of an almost instant renormalization of reference point after a gain; that is, relatively quickly after Saddam Hussein took Kuwait, a withdrawal was framed as a loss setting, which he would take high risk to avoid. Indeed, we tend to think of such settings as settings of compellance, requiring higher levels of incentive to achieve compulsion producing an action, rather than deterrence needed for prevention.¶ One should also be careful not to overstate the effect of "prospect theory" or to fail to assess a threat in its complete context. We should remember that a belated pledge of Great Britain to defend Poland before the Nazi attack did not deter Hitler, who believed under the circumstances that the British pledge would not be honored. It is also possible that the greater relative wealth of democracies, which have less to gain in all out war, is yet another internal factor contributing to the "democratic peace."36 In turn, this also supports the extraordinary tenacity and general record of success of democracies fighting in defensive settings as they may also have more to lose.¶ In assessing adequacy of deterrence to prevent war, we might also want to consider whether extreme ideology, strongly at odds with reality, may be a factor requiring higher levels of deterrence for effectiveness. One example may be the extreme ideology of Pol Pot leading him to falsely believe that his Khmer Rouge forces could defeat Vietnam.37 He apparently acted on that belief in a series of border incursions against Vietnam that ultimately produced a losing war for him. Similarly, Osama bin Laden's 9/11 attack against America, hopelessly at odds with the reality of his defeating the Western World and producing for him a strategic disaster, seems to have been prompted by his extreme ideology rooted in a distorted concept of Islam at war with the enlightenment. The continuing suicide bombings against Israel, encouraged by radical rejectionists and leading to less and less for the Palestinians, may be another example. If extreme ideology is a factor to be considered in assessing levels of deterrence, it does not mean that deterrence is doomed to fail in such settings but only that it must be at higher levels (and properly targeted on the relevant decision elites behind the specific attacks) to be effective, as is also true in perceived loss or compellance settings.38 Even if major war in the modern world is predominantly a result of aggression by nondemocratic regimes, it does not mean that all nondemocracies pose a risk of war all, or even some, of the time. Salazar's Portugal did not commit aggression. Nor today do Singapore or Bahrain or countless other nondemocracies pose a threat. That is, today nondemocracy comes close to a necessary condition in generating the high risk behavior leading to major interstate war. But it is, by itself, not a sufficient condition for war. The many reasons for this, of course, include a plethora of internal factors, such as differences in leadership perspectives and values, size of military, and relative degree of the rule of law, as well as levels of external deterrence.39 But where an aggressive nondemocratic regime is present and poses a credible military threat, then it is the totality of external factors, that is, deterrence, that become crucial.

#### Heg is key to decrease excess American interventionism

Kagan and Kristol 2k Robert and William, “Present Dangers”, Kagan is a Senior Associate at the Carnegie Endowment for International Peace, and Kristol is the editor of The Weekly Standard, and a political analyst and commentator, page 13-14, http://www2.uhv.edu/fairlambh/asian/present\_dangers.htm

It is worth pointing out, though, that a foreign policy premised on American hegemony, and on the blending of principle with material interest, may in fact mean fewer, not more, overseas interventions than under the "vital interest" standard. (13). The question, then, is not whether the US should intervene everywhere or nowhere. The decision Americans need to make is whether the US should generally lean forward, as it were, or sit back. A strategy aimed at preserving American hegemony should embrace the former stance, being more rather than less inclined to weigh in when crises erupt, and preferably before they erupt. This is the standard of a global superpower that intends to shape the international environment to its own advantage. By contrast, the vital interest standard is that of a "normal" power that awaits a dramatic challenge before it rouses itself into action.

#### War down because heg is peaceful

Busby 12 Josh, Assistant Professor of Public Affairs and a fellow in the RGK Center for Philanthropy and Community Service as well as a Crook Distinguished Scholar at the Robert S. Strauss Center for International Security and Law, <http://duckofminerva.blogspot.com/2012/01/get-real-chicago-ir-guys-out-in-force.html>

Is Unipolarity Peaceful? As evidence, Monteiro provides metrics of the number of years during which great powers have been at war. For the unipolar era since the end of the Cold War, the United States has been at war 13 of those 22 years or 59% (see his Table 2 below). Now, I've been following some of the discussion by and about Steven Pinker and Joshua Goldstein's [work](http://www.nytimes.com/2011/12/18/opinion/sunday/war-really-is-going-out-of-style.html?pagewanted=all) that suggests the world is becoming more peaceful with interstate wars and intrastate wars becoming more rare. I was struck by the graphic that Pinker used in a Wall Street Journal [piece](http://online.wsj.com/article/SB10001424053111904106704576583203589408180.html) back in September that drew on the Uppsala Conflict Data, which shows a steep decline in the number of deaths per 100,000 people. How do we square this account by Monteiro of a unipolar world that is not peaceful (with the U.S. at war during this period in Iraq twice, Afghanistan, Kosovo) and Pinker's account which suggests declining violence in the contemporary period? Where Pinker is focused on systemic outcomes, Monteiro's measure merely reflect years during which the great powers are at war. Under unipolarity, there is only one great power so the measure is partial and not systemic. However, Monteiro's theory aims to be systemic rather than partial. In critiquing Wohlforth's early work on unipolarity stability, Monteiro notes: Wohlforth’s argument does not exclude all kinds of war. Although power preponderance allows the unipole to manage conflicts globally, this argument is not meant to apply to relations between major and minor powers, or among the latter (17). So presumably, **a more adequate test of the peacefulness or not of unipolarity** (at least for Monteiro) is not the number of years the great power has been at war **but whether the system as a whole is becoming more peaceful under unipolarity compared** to previous eras, including wars between major and minor powers or wars between minor powers and whether the wars that do happen are as violent as the ones that came before. Now, as Ross Douthat pointed [out](http://douthat.blogs.nytimes.com/2011/10/17/steven-pinkers-history-of-violence/), Pinker's argument isn't based on a logic of benign hegemony. It could be that even if the present era is more peaceful, unipolarity has nothing to do with it. Moreover, Pinker may be wrong. Maybe the world isn't all that peaceful. I keep thinking about the places I don't want to go to anymore because they are violent (Mexico, Honduras, El Salvador, Nigeria, Pakistan, etc.) As Tyler Cowen [noted](http://marginalrevolution.com/marginalrevolution/2011/10/steven-pinker-on-violence.html), the measure Pinker uses to suggest violence is a per capita one, which doesn't get at the absolute level of violence perpetrated in an era of a greater world population. **But, if my read of other** [**reports**](http://www.hsrgroup.org/human-security-reports/20092010/graphs-and-tables.aspx) **based on Uppsala data is right, war is becoming more rare and less deadly** (though later [data](http://www.pcr.uu.se/research/ucdp/charts_and_graphs/) suggests lower level armed conflict may be increasing again since the mid-2000s). The apparent violence of the contemporary era may be something of a presentist bias and reflect our own lived experience and the ubiquity of news media .Even if the U.S. has been at war for the better part of unipolarity, the deadliness is declining, even compared with Vietnam, let alone World War II. Does Unipolarity Drive Conflict? So, I kind of took issue with the Monteiro's premise that unipolarity is not peaceful. What about his argument that unipolarity drives conflict? Monteiro suggests that the unipole has three available strategies - defensive dominance, offensive dominance and disengagement - though is less likely to use the third. Like Rosato and Schuessler, Monteiro suggests because other states cannot trust the intentions of other states, namely the unipole, that minor states won't merely bandwagon with the unipole. Some "recalcitrant" minor powers will attempt to see what they can get away with and try to build up their capabilities. As an aside, in Rosato and Schuessler world, unless these are located in strategically important areas (i.e. places where there is oil), then the unipole (the United States) should disengage. In Monteiro's world, disengagement would inexorably lead to instability and draw in the U.S. again (though I'm not sure this necessarily follows), but neither defensive or offensive dominance offer much possibility for peace either since it is U.S. power in and of itself that makes other states insecure, even though they can't balance against it.

#### No impact – threat con doesn’t cause wars

Kaufman 9 Stuart J, Professor of Political Science and IR – U Delaware, “Narratives and Symbols in Violent Mobilization: The Palestinian-Israeli Case,” *Security Studies* 18:3, 400 – 434

Even when hostile narratives, group fears, and opportunity are strongly present, war occurs **only if these factors are harnessed.** Ethnic narratives and fears must combine to create significant ethnic hostility among mass publics. Politicians must also seize the opportunity to manipulate that hostility, evoking hostile narratives and symbols to gain or hold power by riding a wave of chauvinist mobilization. Such mobilization is often spurred by prominent events (for example, episodes of violence) that increase feelings of hostility and make chauvinist appeals seem timely. If the other group also mobilizes and if each side's felt security needs threaten the security of the other side, the result is a security dilemma spiral of rising fear, hostility, and mutual threat that results in violence. **A virtue of** this **symbolist theory is that symbolist logic explains why** ethnic **peace is more common than ethnonationalist war.** Even if hostile narratives, fears, and opportunity exist, severe violence usually can still be avoided if ethnic elites skillfully define group needs in moderate ways and collaborate across group lines to prevent violence: this is consociationalism.17 War is likely only if hostile narratives, fears, and opportunity spur hostile attitudes, chauvinist mobilization, and a security dilemma.

#### Anti-heg rhetoric causes isolationism and precipitous decline

Kagan 98 Robert, Summer, “The Benevolent Empire,” Foreign Policy, <http://people.cas.sc.edu/rosati/a.kaplan.benevolentempire.fp.sum98.pdf>

Those contributing to the growing chorus of antihegemony and multipolarity may know they are playing a dangerous game, one that needs to be conducted with the utmost care, as French leaders did dur- ing the Cold War, lest the entire intemational system come crashing down around them. What they may not have adequately calculated, however, is the possibility that Americans will not respond as wisely as they generally did during the Cold War. Americans and their leaders should not take all this sophisticated whining about U.S. hegemony too seriously. They certainly should not take it more seriously than the whiners themselves do. But, of course, Americans are taking it seriously. In the United States these days, the lugubrious guilt trip of post-Vietnam liberalism is echoed even by conservatives, with William Buckley, Samuel Huntington, and James Schlesinger all decrying American "hubris," "arrogance," and "imperial- ism." Clinton administration officials, in between speeches exalting America as the "indispensable" nation, increasingly behave as if what is truly indispensable is the prior approval of China, France, and Russia for every military action. Moreover, at another level, there is a stirring of neo-isolationism in America today, a mood that nicely complements the view among many Europeans that America is meddling too much in everyone else's business and taking too little time to mind its own. The existence of the Soviet Union disciplined Americans and made them see that their enlightened self-interest lay in a relatively generous foreign policy. Today, that discipline is no longer present. In other words, foreign grumbling about American hegemony would be merely amusing, were it not for the very real possibility that too many Americans will forget--even if most of the rest of the world does not-- just how important continued American dominance is to the preservation of a reasonable level of international security and prosperity. World leaders may want to keep this in mind when they pop the champagne corks in celebration of the next American humbling.

#### Water wars are real and their K doesn’t apply

Dinar 2 Shlomi, Ph.D. candidate at the Johns Hopkins University School of Advanced International Studies, SAIS Review 22.2 (2002) 229-253, Water, Security, Conflict, and Cooperation, "Negotiation and International Relations: A Framework for Hydropolitics”, International Negotiation 5, no. 2

The dichotomy of conflict and cooperation over water and its relationship to national and regional security reflects the reality of hydropolitics. While military clashes have been associated with water, the concept of security does not end with nor does it only imply armed conflict. Because the pursuit of peace, and thus conflict and cooperation, constitutes the flip side of security, water is indeed relevant to the concept of security. It is this phenomenon that traditionalists have cast off as irrelevant and other rejectionists of the environment-security link have ignored.¶ Linking security with the environment does not increase the possibility that nations will engage in more armed action against other states for the sake of natural resources such as water. Albeit minimal, evidence already exists as to the military skirmishes and military threats that have taken place over water. Nations will engage in armed conflict and political disputes over water **whether or not scholars acknowledge the link** between the environment and security. Similarly, the existence of more than 3,600 water treaties, the oldest dating to 805 AD, demonstrates a rich history of cooperation [End Page 239] over water regardless of scholarly debate on cooperation and the environment. The debate regarding the link between water, conflict, and cooperation is thus futile and has become a scholarly debate marred by polemics and semantics.¶ Given its geographical attributes, freshwater truly straddles the notion of sovereignty that traditionalists cherish so deeply and the international or regional conception that environmental globalists hold true. The problems that arise from shared water resources are both national and regional in nature. Similarly, the solutions that are needed to solve such problems are both national and regional. Most importantly for the debate on the environment and security, however, the impediments to cooperation and the instigation of conflict over water are both national and international in their sources. States in particular regions will continue to see water as a national security concern. Even though a regional agreement may be the best solution to states' water problems, they will continue to couch their need to access sufficient and clean freshwater in security and nationalist terms.

## CP

### 2AC Civilian CP

#### Military has unique capabilities to advance SMRs---innovative financing

Cohen 12 Armond, Executive Director for the Clean Air Task Force, "DoD: A Model for Energy Innovation?", May 21, energy.nationaljournal.com/2012/05/powering-our-military-whats-th.php

Unlike most other agencies, including the Energy Department, the Pentagon is the ultimate customer for the new technology it helps create, spending some $200 billion each year on R&D and procurement. The implications of DoD’s role as customer have not been widely appreciated, as:¶ · DoD, uniquely in government, supports multi-year, billion-dollar “end to end” innovation efforts that produce technology that is continuously tested, deployed and refined on bases and in the field, providing real world feedback that leads to increases in performance and reductions in cost. By contrast, most of the federal government’s civilian energy innovation efforts involve research loosely connected at best with the few commercialization efforts that it supports.¶ · DoD and its contractors know how to bring together multiple innovations to achieve system-level advances leading to big performance gains (examples range from nuclear submarines to unmanned aircraft to large-scale information systems). This systems approach is precisely what is needed to advance clean energy technologies.¶ · Relatively stable, multi-year funding allows the Pentagon to pursue “long cycle” innovation that is necessary for large, capital- intensive technologies and supports a highly capable contractor base that can respond to changing national security demands.¶ · The Pentagon’s scope and budget has allowed it to experiment with new and creative innovation tools such as the well-known Defense Advanced Projects Research Agency, which has produced extraordinary technological breakthroughs; and the Environmental Security Technology Certification Program, which develops and demonstrates cost-effective improvements in environmental and energy technologies for military installations and equipment.¶ · Because of DoD’s size and demands for performance and reliability, it is unique among government and private sector organizations as a demonstration test-bed. Smart-grid technologies and advanced energy management systems for buildings are already poised to benefit from this aspect of the Pentagon’s innovation system.¶ · DoD has collaborated effectively with other federal agencies, including the Department of Energy and its predecessors (for example, to advance nuclear energy technologies). Continuing competition and cooperation between DoD and DOE will spur energy innovation. DoD’s innovation capabilities can enhance U.S. national security, improve U.S. international competitiveness, and spur global energy restructuring and greenhouse gas emissions reductions.¶ At the same time, while providing enormous opportunities to develop and test energy efficiency technologies and small scale distributed energy appropriate to forward bases, the Pentagon is unlikely to become an all-purpose hub for advancing all categories of clean-energy technologies, because its energy innovation activities will be sustainable only where they can support the nation’s defense capabilities.¶ Therefore, many other large-scale technologies that are of great importance to improving the environment, such as carbon-free central station generation or zero carbon transportation, may not as easily fit with DoD’s mission. Possible exceptions might include small modular nuclear reactors that can be used for producing independent, non-grid power at military bases, or, conceivably, zero-carbon liquid fuels other than anything resembling current generation biofuels.¶ In any case, the challenge for military-led energy innovation is to further define and delineate avenues for improved clean-energy performance that are linked to the national strategic mission. History shows that when such linkages are strong, DoD’s innovation capabilities are second to none.

### Guam---North Korea

#### North Korea will attack Guam with IRBMs absent hardening

Shirley A. Kan 12, Specialist in Asian Security Affairs, Congressional Research Service, “Guam: U.S. Defense Deployments”, 3-29, <http://www.fas.org/sgp/crs/row/RS22570.pdf>

Strategic Target. A concern is that Guam’s higher military profile could increase its potential as a¶ strategic target for terrorists and adversaries during a conflict. For example, potential PRC and¶ DPRK missile attacks could raise Guam’s need for missile defense. Still, when he worked in¶ Guam in 1974, Senator James Webb wrote that “as long as the U.S. maintains and communicates¶ a credible military presence and capability, Guam is under no greater threat, in reality, than any¶ other part of the U.S.”21 China is believed to have deployed ballistic missiles that could target¶ Guam, considered by China as part of the “Second Island Chain” from which it needs to break out¶ of perceived U.S.-led “containment.” China’s missiles that could target forces based at Guam¶ include the DF-3A (CSS-2) medium-range ballistic missile (MRBM). China also has developed¶ an extended-range DH-10 ground-launched land-attack cruise missile (LACM) and the world’s¶ first anti-ship ballistic missile (ASBM), the DF-21D ASBM, to target aircraft carriers and other¶ ships. While the DF-21D’s initial range could be 1,500-2,000 km (930-1240 mi), a more¶ advanced variant could extend the range to about 3,000 km and reach Guam.22 In addition, the¶ DPRK has developed an intermediate range ballistic missile (IRBM) with a range over 2,000¶ miles. There has been a question about whether North Korea deployed this IRBM. In 2008, South¶ Korea’s Defense White Paper stated that North Korea started to deploy its IRBM (Taepodong-X)¶ with a range that could reach Guam. At a high-profile military parade in October 2010, North¶ Korea showed a new IRBM (a missile some called Musudan), apparently deployed without flight¶ testing in North Korea. It was unclear whether it was the same IRBM reported by South Korea,¶ with a different designation. The U.S. National Intelligence Council (NIC) reported to Congress¶ in early 2011 that North Korea in 2010 continued to develop a mobile IRBM and did not report¶ that it was deployed. Still, the Director of the Defense Intelligence Agency (DIA), Lieutenant¶ General Ronald Burgess, Jr., testified to the Senate Armed Services Committee on March 10,¶ 2011, that North Korea has tried to upgrade already deployed missiles that included IRBMs.23

#### Extinction

Chol 11 Kim Myong Chol is author of a number of books and papers in Korean, Japanese and English on North Korea, including Kim Jong-il's Strategy for Reunification. He has a PhD from the Democratic People's Republic of Korea's Academy of Social Sciences "Dangerous games" Aug 20 www.atimes.com/atimes/Korea/MH20Dg01.html

The divided and heavily armed Korean Peninsula remains the most inflammable global flashpoint, with any conflict sparked there likely to become a full-blown thermonuclear war involving the world's fourth-most powerful nuclear weapons state and its most powerful. ¶ Any incident in Korea by design, accident, or miscalculation could erupt into a devastating DPRK-US war, with the Metropolitan US serving as a main war theater. ¶ Rodong Sinmun warned on August 16: "The Korean Peninsula is faced with the worst crisis ever. An all-out war can be triggered by any accident." ¶ Recent incidents illustrate the real danger of miscalculation leading to a total shooting war, given the volatile situation on the Land of Morning Calm. ¶ 1. The most recent case in point is the August 10 shelling of North Korea by the South. Frightened South Korea marines on Yeonpyeong Island mistook three noises from a North Korean construction site across the narrow channel for artillery rounds, taking an hour to respond with three to five artillery rounds. ¶ The episode serves as a potent reminder to the world that the slightest incident can lead to war. A reportedly malfunctioning firefinder counter-artillery radar system seems to partly account for the panicky South Korean reaction. ¶ South Korean conservative newspaper the Joong Ang Daily reported August 17: ¶ "A military source said that radar installed to detect hostile fire did not work last week when North Korea fired five shots toward the Northern Limit Line (NLL), the disputed maritime border, on Aug 10. ¶ "'We must confirm the location of the source of the firing through the ARTHUR (Artillery Hunting Radar) and HALO (hostile artillery location) systems, but ARTHUR failed to operate, resulting in a failure to determine the source of the fire,' said the source." ¶ BBC reported on November 25 last year the aggressive nature of troops on the South Korea-held five islands in North Korean waters. ¶ "Seen in this sense, they (five islands including Yeonpyeong Island) could provide staging bases for flanking amphibious attacks into North Korea if South Korea ever takes the offensive." ¶ 2. An almost catastrophic incident took place at dawn on June 17 near Inchon. South Korean marines stationed on Gyodong Island near Inchon Airport fired rifles at a civilian South Korean jetliner Airbus A320 with 119 people aboard as it was descending to land, after mistaking it for a North Korean military aircraft. ¶ The Asiana Airlines flight was carrying 119 people from the Chinese city of Chengdu. ¶ About 600 civilian aircraft fly near the island every day, including those flying across the NLL, but they face a perennial risk of being misidentified as a hostile warplane. ¶ It is nothing short of a miracle that the Airbus A320 was not hit and nobody harmed. ¶ 3. On March 26, 2010, the high-tech South Korean corvette Sokcho fired 130 rounds at flocks of birds, mistaking them for a hostile flying object. The innocent birds looked like a North Korean warplane just at a time when an alleged North Korean midget submarine had managed to escape with impunity after torpedoing the hapless Cheonan deep inside security-tight South Korean waters. ¶ The South Korean military's habit of firing at the wrong target increases the risk of an incident running out of control. ¶ CNN aired a story December 16, headlined: "General: South Korea Drill Could Cause Chain Reaction." ¶ F/A-18 pilot-turned Marine Corp General James Cartwright told the press in the Pentagon, "What we worry about, obviously, is if that it [the drill] is misunderstood or if it's taken advantage of as an opportunity. ¶ "If North Korea were to react to that in a negative way and fire back at those firing positions on the islands, that would start potentially a chain reaction of firing and counter-firing. ¶ "What you don't want to have happen out of that is ... for us to lose control of the escalation. That's the concern." ¶ Agence France-Presse on December 11 quoted former chief of US intelligence retired admiral Dennis Blair as saying that South Korea "will be taking military action against North Korea". ¶ New Korean war differs from other wars¶ Obama and the Americans seem to be incapable of realizing that North Korea is the wrong enemy, much less that a new Korean War would be fundamentally different from all other wars including the two world wars. ¶ Two things will distinguish a likely American Conflict or DPRK-US War from previous wars. ¶ The first essential difference is that the US mainland will become the main theater of war for the first time since the US Civil War (1861-1865), giving the Americans an opportunity to know what it is like to have war fought on their own land, not on faraway soil. ¶ The US previously prospered by waging aggressive wars on other countries. Thus far, the Americans could afford to feel safe and comfortable while watching TV footage of war scenes from Afghanistan, Iraq, Pakistan and Libya as if they were fires raging across the river. ¶ The utmost collateral damage has been that some American veterans were killed or returned home as amputees, with post traumatic stress disorder, only to be left unemployed and homeless. ¶ However, this will no longer be the case. ¶ At long last, it is Americans' turn to have see their homeland ravaged.¶ An young North Korea in 1950-53 was unable to carry the war all the way across the Pacific Ocean to strike back, but the present-day North Korea stands out as a fortress nuclear weapons state that can withstand massive American ICBM (Intercontinental ballistic missile) attacks and launch direct retaliatory transpacific strikes on the Metropolitan USA. ¶ The second essential difference is that the next war in Korea, that is, the American Conflict or the DPRK-USA War would be the first actual full-fledged nuclear, thermonuclear war that mankind has ever seen, in no way similar to the type of nuclear warfare described in science fiction novels or films. ¶ North Korea is unique among the nuclear powers in two respects: One is that the Far Eastern country, founded by legendary peerless hero Kim Il-sung, is the first country to engage and badly maul the world's only superpower in three years of modern warfare when it was most powerful, after vanquishing Nazi Germany and Imperial Japan. ¶ The other is that North Korea is fully ready to go the length of fighting [hu]mankind's first and last nuclear exchange with the US. ¶ The DPRK led by two Kim Il-sungs - the ever-victorious iron-willed brilliant commander Kim Jong-il and his heir designate Kim Jong-eun - is different from Russia under Nikita Khrushchev which backed down in the 1962 Cuban missile crisis. ¶ Khrushchev and his company never fought the Americans in war. As a rule, most countries are afraid to engage the Americans. As the case is with them, North Korea is the last to favor war with the Americans. ¶ However, it is no exaggeration to say that the two North Korean leaders are just one click away from ordering a retaliatory nuclear strike on the US military forces in Guam, Hawaii and metropolitan centers on the US mainland. ¶ On behalf of Supreme Leader Kim Jong-il, Kim Jong-eun will fire highly destructive weapons of like Americans have never heard of or imagined to evaporate the US. ¶ The North Koreans are too proud of being descendents of the ancient civilizations of Koguryo 2,000 years ago and Dankun Korea 5,000 years ago, to leave the Land of morning Calm divided forever with the southern half under the control of the trigger-happy, predatory US. The North Koreans prefer to fight and die in honor rather than kowtow to the arrogant Americans. ¶ At the expense of comforts of a better life, North Koreans have devoted more than half a century to preparing for nuclear war with the Americans. All available resources have been used to convert the whole country into a fortress, including arming the entire population and indigenously turning out all types of nuclear thermonuclear weapons, and developing long-range delivery capabilities and digital warfare assets. ¶ An apocalyptic Day After Tommorow-like scenario will unfold throughout the US, with the skyscrapers of major cities consumed in a sea of thermonuclear conflagration. The nuclear exchange will begin with retaliatory North Korean ICBMs detonating hydrogen bombs in outer space far above the US mainland, leaving most of the country powerless. ¶ New York, Washington, Chicago, San Francisco and major cities should be torched by ICBMs streaking from North Korea with scores of nuclear power stations exploding, each spewing as much radioactive fallout as 150-180 H-bombs.

## DA

### AT: Community Backlash

#### DoD programs now resolve backlash

M2 Presswire 12, “'Pockets of excellence' across Army, but work still needs to be done on health of force,” 7/30/12, lexis

Additionally, Ferriter said, about two-thirds of military families live in the local communities off base. The Army is working to make stronger connections with those communities, with community groups, and with sports teams, for instance, to ensure that military families stay engaged. ¶ Finally, Ferriter said, the Army is working, from headquarters-level in Washington, to further efforts that help keep military spouses employed when they move from state to state as part of the transition process. Continuity, Ferriter said, is critical. To that end, the Army has worked to develop a program where credentials that military spouses might need to do their jobs can be transferred from state to another during a transition. About 23 states now participate, he said. ¶ The Army is also making a similar effort that will allow the children of military families to transfer school credits from one school to another. ¶ "What we offer is a full layer cake of opportunity to create stability and certainty during this time of a lot of movement," Ferriter said. ¶ COMMANDERS ARE ENGAGED¶ Following the visit around the force, at installations chosen both for their size and their diversity, Austin said he came away with one clear picture of the Army's health. ¶ "The overriding piece of feedback is that commanders are engaged and are very concerned about taking care of their troops and are very focused on building a better force," Austin said.

#### Islanding provides benefits for communities

King et al 11 Marcus, Associate Director of Research, Associate Research Professor of International Affairs, Elliot School of International Affairs, The George Washington University, et al., March 2011, “Feasibility of Nuclear Power on U.S. Military Installations,” http://www.cna.org/sites/default/files/research/Nuclear%20Power%20on%20Military%20Installations%20D0023932%20A5.pdf

Electricity control capabilities, such as self-healing 6 and optimization of assets to increase operational efficiency, could improve overall power availability; however, they are not necessary for the integration of small nuclear power plants. Key components for improving electricity control include advanced electricity meters and electricity meter data management. These tools are needed in order to establish islanding, a condition in which a portion of the utility system, which contains both load and generation, is isolated from the remainder of the utility system and continues to operate. Since the power generation capacities of small nuclear power plants are larger than required for most DoD bases, islanding could extend to adjacent communities if sufficient technical upgrades were performed to systems outside of the installation. This contributes to DoD missions because civilians and service members working on the installation often live with their families in adjacent communities. The power would ensure that critical services such as emergency response, waste water treatment, and hospitals could be maintained.

#### No community backlash---base installation avoids NIMBY

Clifton 10 Lt Col Scott B, "There are options that should be explored", 2010 is last date modified, www.mca-marines.org/gazette/atomic-bases-nuclear-power-dod

The visceral opposition to nuclear power is very similar to the opposition to any renewable energy source—not in my backyard (NIMBY). Americans are in favor of renewable energy as long as it doesn’t affect their daily lives or change the local aesthetics near their homes. Solar panels and wind farms are wonderful ideas as long as they are installed somewhere else. It is possible that by offering up DoD installations, the NIMBY argument would be marginalized as the installation would be the “somewhere else,” and for those Americans who believe DoD installations are already intrusive on local aesthetics, they might think this is a fine place to construct a nuclear reactor. The NIMBY argument would be offset through a thorough explanation of the steps that would be taken to ensure the safety of the local populace as well as clearly define the positive economic impacts to the local community through increased job opportunities as well as reducing electrical costs for the local area. Regardless of the location, as long the NIMBY mentality prevails, no progress will be made in the realm of renewable energy.¶ ¶ Whether you are in support of nuclear energy in general, this proposal specifically, or are vehemently opposed to both, the undeniable fact is that the United States is in need of viable alternatives for energy production. Credible solutions should address both the method and the location of renewable energy efforts. Real solutions will only happen after someone steps up.¶ This proposal does that. It provides for a method of renewable energy and a location in the form of DoD installations nationwide.

#### Normal means is considering local impacts in siting

Marcus King et al 11, Associate Director of Research, Associate Research Professor of International Affairs, Elliot School of International Affairs, The George Washington University, et al., March 2011, “Feasibility of Nuclear Power on U.S. Military Installations,” http://www.cna.org/sites/default/files/research/Nuclear%20Power%20on%20Military%20Installations%20D0023932%20A5.pdf

A reactor owner/operator, typically a utility, will select a site and may apply for an early site permit from the NRC. They select a reactor design, (certified under a separate process), to construct on the site and then apply for a combined operating license. Construction begins after approval.¶ With respect to the requirement to “consider the potential impact on the quality of life of personnel stationed at military installations at which a nuclear power plant is installed and ways to mitigate those impacts,” it is impossible to talk in specific terms without knowing details about which specific power plant is being considered and the specific locations being considered. In general terms, finding an appropriate site will be challenging. Part of the reason finding an appropriate site will be challenging is because the NRC site consideration process will force full consideration of these factors. Describing the NRC site assessment process is the best and most relevant information that can be provided with respect to this aspect of feasibility at this stage in the process. The NRC approval process described in this section will require that any potential impacts on the quality of life of personnel stationed at military installations at which a nuclear power plant is proposed will be fully considered and that ways are planned to mitigate those impacts.

### Water---Central Asia

**Water scarcity causes Central Asian war**

**Priyadarshi 12** Nitish, lecturer in the department of environment and water management at Ranchi University in India, “War for water is not a far cry”, June 16, <http://www.cleangangaportal.org/node/44>

That's been a constant dilemma for the Central Asian states since they became independent after the Soviet break-up. ¶ Much of Central Asia's water flows from the mountains of Kyrgyzstan and Tajikistan, leaving downstream countries Uzbekistan, Kazakhstan, and Turkmenistan dependent and worried about the effects of planned hydropower plants upstream. ¶ Tashkent fears that those two countries' use of water from Central Asia's two great rivers -- the Syr Darya and Amu Darya -- to generate power will diminish the amount reaching Uzbekistan, whose 28 million inhabitants to make up Central Asia's largest population. ¶ After the collapse of communism in the 1990s, a dispute arose between Hungary and Slovakia over a project to dam the Danube River. It was the first of its type heard by the International Court of Justice and highlighted the difficulty for the Court to resolve such issues decisively. There are 17 European countries directly reliant on water from the Danube so there is clear potential for conflict if any of these countries act selfishly.¶ Experts worry that dwindling water supplies could likely result in regional conflicts in the future. For example, in oil-and-gas rich Central Asia, the upstream countries of Kyrgyzstan and Tajikistan hold 90 percent of the region's water resources, while Uzbekistan, the largest consumer of water in the region, is located downstream.

**Extinction**

**Blank 2k** Stephen J. - Expert on the Soviet Bloc for the Strategic Studies Institute, “American Grand Strategy and the Transcaspian Region”, World Affairs. 9-22

In 1993 Moscow even threatened World War III to deter Turkish intervention on behalf of Azerbaijan. Yet the new Russo-Armenian Treaty and Azeri-Turkish treaty suggest that Russia and Turkey could be dragged into a confrontation to rescue their allies from defeat. 72 Thus Many of the conditions for conventional war or protracted ethnic conflict in which third parties intervene are present in the Transcaucasus. For example, many Third World conflicts generated by local structural factors have a great potential for unintended escalation. Big powers often feel obliged to rescue their lesser proteges and proxies. One or another big power may fail to grasp the other side's stakes, since interests here are not as clear as in Europe. Hence commitments involving the use of nuclear weapons to prevent a client's defeat are not well established or clear as in Europe. Clarity about the nature of the threat could prevent the kind of rapid and almost uncontrolled escalation we saw in 1993 when Turkish noises about intervening on behalf of Azerbaijan led Russian leaders to threaten a nuclear war in that case. Precisely because Turkey is a NATO ally but probably could not prevail in a long war against Russia - or if it could, would trigger a potential **nuclear blow** (not a small possibility given the erratic nature of Russia's declared nuclear strategies) - **the danger of major war is higher here than** almost **everywhere else**. As Richard Betts has observed, The greatest danger lies in areas where (1) the potential for serious instability is high; (2) both superpowers perceive vital interests; (3) neither recognizes that the other’s perceived interest or commitment is as great as its own; (4) both have the capability to inject conventional forces; and, (5) neither has willing proxies capable of settling the situation.74