# 1NC

## 1

#### Nuclear PRODUCTION must be for the PURPOSE of energy generation

International Atomic Energy Agency 7

<http://www-pub.iaea.org/MTCD/publications/PDF/Pub1290_web.pdf>

 Under the terms of Article III of its Statute, the IAEA is authorized to establish or adopt standards of safety for protection of health and minimization of danger to life and property, and to provide for the application of these standards. The publications by means of which the IAEA establishes standards are issued in the IAEA Safety Standards Series. This series covers nuclear safety, radiation safety, transport safety and waste safety, and also general safety (i.e. all these areas of safety). The publication categories in the series are Safety Fundamentals, Safety Requirements and Safety Guides.

 The process of inducing radioactivity.􀁌 Most commonly used to refer to the induction of radioactivity in moderators, coolants, and structural and shielding materials, caused by irradiation with neutrons.􀁌 The BSS definition — “The production of radionuclides by irradiation.” [1] —is technically adequate; however, the term ‘production’ gives a connotation that this is being done intentionally rather than, as is normally the case,incidentally.

All demonstration gets class 104 licenses – that’s research, not production

Matuzan and Walker 85

 Controlling the Atom:

The Beginnings of Nuclear Regulation, 1946-1962

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 Sections of the 1954 act reflected the state of the technology by establishing two classes of licenses for atomic facilities. One section authorized the AEC to issue commercial or "class 103" licenses (after the section number in the law) whenever it had determined that a facility had been "sufficiently developed to be of practical value for industrial or commercial purposes." Since the agency and the Joint Committee interpreted "practical value" to mean that atomic facilities had to be judged eco- nomically competitive with other energy sources, issuance of class-103 licenses was postponed until the industry had passed through its research and development phase.33 Instead, early power reactor facilities received "class-104" licenses un- der the terms of section 104. Reactors used in medical therapy, university research, and power demonstration came under this category. A key phrase authorized reactor licenses that would lead to the "demonstra- tion of the practical value . . . for industrial or commercial purposes." Class-104 licenses, then, covered all power reactors used during the developmental period until the industry could find a design that would eventually meet the "practical value" criterion of a class-103 commercial license. Furthermore, section 104 specifically instructed the AEC to im- pose the minimum amount of regulation on a licensee consistent with the public health and safety. In other words, a class-104 license indicated that the government wanted to encourage the new industry to undertake research and development under minimum regulation that would lead to major advances in power-reactor technology.34

Limits and precision – research reactors are both formally and technically distinct. There are HUNDREDS of types

World Nuclear Assocation 10

http://www.world-nuclear.org/info/inf61.html

 The World Nuclear Association (WNA), formerly the Uranium Institute, is an international organization that promotes nuclear power and supports the many companies that comprise the global nuclear industry. Its members come from all parts of the nuclear fuel cycle, including uranium mining, uranium conversion, uranium enrichment, nuclear fuel fabrication, plant manufacture, transport, and the disposition of used nuclear fuel as well as electricity generation itself [1]. Together, WNA members are responsible for 95% of the world's nuclear power outside of the U.S. [2] as well as the vast majority of world uranium, conversion and enrichment production.[3] The WNA says it aims to fulfill a dual role for its members: Facilitating their interaction on technical, commercial and policy matters and promoting wider public understanding of nuclear technology. [4] Accredited to the United Nations, the WNA is an independent, non-profit organization, funded primarily by membership subscriptions

Many of the world's nuclear reactors are used for research and training, materials testing, or the production of radioisotopes for medicine and industry. They are basically neutron factories.

These are much smaller than power reactors or those propelling ships, and many are on university campuses. There are about 240 such reactors operating, in 56 countries. Some operate with high-enriched uranium fuel, and international efforts are underway to substitute low-enriched fuel. Some radioisotope production also uses high-enriched uranium as target material for neutrons, and this is being phased out in favour of low-enriched uranium. Research reactors comprise a wide range of civil and commercial nuclear reactors which are generally not used for power generation. The term is used here to include test reactors, which are more powerful than most. The primary purpose of research reactors is to provide a neutron source for research and other purposes. Their output (neutron beams) can have different characteristics depending on use. They are small relative to power reactors whose primary function is to produce heat to make electricity. They are essentially net energy users. Their power is designated in megawatts (or kilowatts) thermal (MWth or MWt), but here we will use simply MW (or kW). Most range up to 100 MW, compared with 3000 MW (i.e. 1000 MWe) for a typical power reactor. In fact the total power of the world's 283 research reactors is little over 3000 MW.Research reactors are simpler than power reactors and operate at lower temperatures. They need far less fuel, and far less fission products build up as the fuel is used. On the other hand, their fuel requires more highly enriched uranium, typically up to 20% U-235, although some older ones use 93% U-235. They also have a very high power density in the core, which requires special design features. Like power reactors, the core needs cooling, though only the higher-powered test reactors need forced cooling. Usually a moderator is required to slow down the neutrons and enhance fission. As neutron production is their main function, most research reactors also need a reflector to reduce neutron loss from the core.As of October 2011 the IAEA database showed that there were 241 operational research reactors (92 of them in developing countries), 3 under construction, 202 shut down (plus 13 temporary) and 211 decommissioned.Types of research reactors There is a much wider array of designs in use for research reactors than for power reactors, where 80% of the world's plants are of just two similar types. They also have different operating modes, producing energy which may be steady or pulsed.A common design (67 units) is the pool type reactor, where the core is a cluster of fuel elements sitting in a large pool of water. Among the fuel elements are control rods and empty channels for experimental materials. Each element comprises several (e.g. 18) curved aluminium-clad fuel plates in a vertical box. The water both moderates and cools the reactor, and graphite or beryllium is generally used for the reflector, although other materials may also be used. Apertures to access the neutron beams are set in the wall of the pool. Tank type research reactors (32 units) are similar, except that cooling is more active.The TRIGA reactor is another common design (40 units). The core consists of 60-100 cylindrical fuel elements about 36 mm diameter with aluminium cladding enclosing a mixture of uranium fuel and zirconium hydride (as moderator). It sits in a pool of water and generally uses graphite or beryllium as a reflector. This kind of reactor can safely be pulsed to very high power levels (e.g. 25,000 MW) for fractions of a second. Its fuel gives the TRIGA a very strong negative temperature coefficient, and the rapid increase in power is quickly cut short by a negative reactivity effect of the hydride moderator.Other designs are moderated by heavy water (12 units) or graphite. A few are fast reactors, which require no moderator and can use a mixture of uranium and plutonium as fuel. Homogenous type reactors have a core comprising a solution of uranium salts as a liquid, contained in a tank about 300 mm diameter. The simple design made them popular early on, but only five are now operating.Research reactors have a wide range of uses, including analysis and testing of materials, and production of radioisotopes. Their capabilities are applied in many fields, within the nuclear industry as well as in fusion research, environmental science, advanced materials development, drug design and nuclear medicine.The IAEA lists several categories of broadly classified research reactors. They include 60 critical assemblies (usually zero power), 23 test reactors, 37 training facilities, two prototypes and even one producing electricity. But most (160) are largely for research, although some may also produce radioisotopes. As expensive scientific facilities, they tend to be multi-purpose, and many have been operating for more than 30 years.A total of over 670 research and test reactors has been built worldwide, 227 of these in the USA and 97 in the former Soviet Union. In the USA, 193 were commissioned in 1950s and 1960s.

## 2

Obama is winning but the race is close

Silver 10/7 (Nate Silver, NYT 538 elections expert, “Oct. 7: National Polls Show Signs of Settling”, http://fivethirtyeight.blogs.nytimes.com/2012/10/07/oct-7-national-polls-show-signs-of-settling/#more-35662)

Mitt Romney remains in a considerably stronger polling position than he was before last Wednesday’s debate in Denver. But the polls released on Sunday **did not tell quite as optimistic a story** for him as those in the debate’s immediate aftermath. The four national tracking polls as published on Sunday were largely unchanged from their Saturday releases. Mr. Romney maintained a 2-point lead in the Rasmussen Reports tracking poll, but President Obama’s lead held at 2 points in an online poll published by Ipsos and at 3 points in the Gallup tracking poll. In the RAND Corporation’s online tracking poll, which lists its results to the decimal place, Mr. Obama’s lead declined incrementally, to 3.9 percentage points from 4.4 on Saturday. Only the Rasmussen Reports tracking poll consists of interviews that were conducted entirely after the debate, but the share of post-debate interviews is now large enough in the other polls that we can start to come to some inferences about the overall magnitude of Mr. Romney’s bounce. My effort to do that is reflected in the chart below. I’ve compared the most recent reading in each poll to the average result that the poll showed in the period between the Democratic convention and the Denver debate. I’ve also listed the approximate share of interviews in each poll that post-dated the debate. On average, the four tracking polls showed Mr. Obama with a 3.7 percentage point lead between the convention and the debate. The numbers did seem to fluctuate slightly during this period — with Mr. Obama polling especially well just after the release of the “47 percent” tape, but then fading a bit early last week, even before the debate. But in general the polls were fairly stable and seemed to reflect a near-term equilibrium for the campaign. Based on the numbers that the tracking polls published on Sunday, however, Mr. **Obama’s lead was down to just 1.7 percentage points on average** — a net shift of 2 points toward Mr. Romney since the debate. But that calculation potentially underestimates Mr. Romney’s gains since only about two-thirds of the interviews in these polls were conducted after the debate. If Mr. Romney gained 2 points based on two-thirds of the interviews being conducted after the debate, that would imply a 3-point gain for him based on the post-debate interviews alone. A 3-point gain for Mr. Romney would be consistent with what candidates received following some of the stronger debate performances in the past. It would also make the national race very close. The FiveThirtyEight “now-cast” had Mr. Obama ahead by an average of about 4.5 percentage points between the conventions and the debate. (This is higher than the average result from the national tracking polls alone, which have been a pinch less favorable to Mr. Obama on balance than the broader consensus of surveys.) A 3-point gain for Mr. Romney would imply that Mr. Obama’s advantage is now **only 1 or 2 points**, putting Mr. Romney **well within striking distance** **depending on how well the rest of the campaign goes for** **him** and how accurate the polls turn out to be. However, the fact that Mr. Romney did not make further gains in the polls on Sunday can be read as mildly disappointing for him. The way tracking polls work is to replace the oldest day of interviews with fresh interviews conducted the previous day. In the Sunday release of the polls, this meant that interviews from Saturday were replacing a day of interviewing from before the debate. The fact that the Saturday interviews that entered the polls were roughly as strong for Mr. Obama as the predebate day of interviews that they displaced is an encouraging sign for Mr. Obama — at least as compared with most of the polling news that he has received since the debate. Of course, making these sorts of inferences based on trying to reverse-engineer just one day’s worth of polling is an imprecise exercise. Sunday’s evidence is consistent with the hypothesis that Mr. Romney initially received a very large bounce in the polls that has since receded some, perhaps in part because of Friday morning’s favorable jobs report. But it is not dispositive of it; these methods are too crude to know for sure. The next few days of polling may well be the most interesting and important that we’ll see all cycle. Mr. Romney continues to make gains in the FiveThirtyEight forecast, which had been sluggish to catch up to his post-debate bounce. **The forecast now gives him a 21.6 percent chance of winning the Electoral College on Nov. 6,** up from 15.1 percent before the debate.

Environmentalists oppose military nuclear expansion

Clausing, 2011

Jeri Clausing, 5-27-2011, AP, “Critics line up against plutonium lab,”

http://www.krqe.com/dpp/news/technology/critics-line-up-against-plutonium-lab-

ALBUQUERQUE (AP) - It's a familiar scene in New Mexico: Peace activists, environmentalists and scientists lining up to oppose expansions of the military and nuclear facilities that are a major economic engine for the state.

They were back in force this week, this time to oppose the "bomb factory," ''cash cow" and "jobs program for scientists" — their names for a $5.8 billion nuclear lab being designed to replace the 60-year-old lab at Los Alamos National Laboratories where scientists make and store the "pits," or cores, of the nation's nuclear bombs. It's a project that has been on the drawing board for nearly a decade, and one that won't be finished for at least another decade.

But it's back in the public spotlight, thanks to new study mapping earthquake danger in the area, a doubling of the facility's estimated cost and public outcry for caution in light of the nuclear disaster that followed the Japan earthquake and tsunami.

"The lesson of Fukushima is don't build nuclear reactors and nuclear facilities in unsafe geological areas," Dave McCoy, director of Citizen Action, said during a contentious hearing Monday where activists argued with officials enforcing a three-minute speaking limit.

While safety concerns are at the front and center of any nuclear debate, the deeper underlying controversy here centers around the more than 20-year-old efforts by anti-nuclear activists to scale back and force a change in the long-term mission for Los Alamos, which was founded during World War II to develop the world's first nuclear weapons.

"We've been working for a diversification of the mission ever since the end of the cold war in 1989," said Joni Arends of Concerned Citizens for Nuclear Safety, whose members attended the public hearings held last week in Albuquerque, Los Alamos, Espanola and Santa Fe.

"... If we are really moving toward a nuclear weapons-free world, the lab has an enormous amount of expertise that should be used in the field of non-proliferation and the rounding up of these materials."

Instead, critics charge, the lab is looking to beef up its nuclear bomb making capabilities with the new lab that they say would dramatically increase its nuclear bomb-making and storage capacities.

Flips environmentalists – key to Obama

Schnur, 4-9

Dan Schnur, director of the Jesse M. Unruh Institute of Politics at the University of Southern California; he served as the national communications director of Senator John McCain’s presidential campaign in 2000, “The President, Gas Prices and the Pipeline,” http://campaignstops.blogs.nytimes.com/2012/04/09/the-president-gas-prices-and-the-keystone-pipeline/

Like every president seeking re-election, Barack Obama walks the fine line every day between the discordant goals of motivating his party’s strongest loyalists and reaching out to swing voters for their support. A few weeks ago, that pathway took him to a tiny town in Oklahoma, where, caught between the anti-drilling demands of the environmental community and the thirst for more affordable gasoline from unions, business owners and drivers, the president announced his support for building half of an oil pipeline.

The economic impact of rising energy prices in itself is considerable, but the psychological toll on voters is just as significant, as tens of millions of motorists are reminded by large signs on almost every street corner of the financial pain of filling their gas tanks. Obama and his political lieutenants are acutely aware that this growing frustration has the potential to complicate an election year that otherwise seems to be shifting in the incumbent’s favor.

As a result, Obama has been hitting the energy issue hard in recent weeks, at least as hard as a candidate can hit when forced to navigate between two almost mutually exclusive political priorities. The result is a president who talks forcefully of the benefits of wind and solar power while also boasting about the amount of oil the nation produces under his leadership.

There are times when this gets slightly uncomfortable. Obama recently called for increased exploration along the Atlantic Coast but stopped short of calling for expanded drilling in that region. This is the energy policy equivalent of admitting to an experiment with marijuana but not inhaling.

Where the issue becomes more tangible and therefore trickier for Obama is when the multiple choices become binary. The debate over the proposed XL Keystone Pipeline that would transport Canadian oil through the nation’s heartland to the Gulf of Mexico crystallizes the choices involved and forces a shades-of-gray conversation into starker hues of black and white.

Obama recognizes that the devoted environmentalists who represent a critical portion of the Democratic party base need some motivation to turn out for him in the fall. But he also understands that centrist voters who support him on a range of other domestic and foreign policy matters could be lured away by a Republican opponent who either promises relief at the gas pump or who can lay blame at the White House doorstep for those higher prices. Even more complicated is the role of organized labor, which has poured immense amounts of support into Obama’s re-election but also prioritizes the job-creation potential of the pipeline.

The result of these competing political and policy pressures brought Obama to Ripley, Okla., where he tried to satisfy the needs of these various audiences without alienating any of them. First, the president endorsed the southern portion of the Keystone project in order to relieve the glut of domestically drilled oil that is now unable to make it to refineries near the Gulf of Mexico in a timely manner. This had the effect of irritating his environmental allies but failed to mollify the project’s advocates, who pointed out that the review process that the president called for was already underway.

He then reiterated the administration’s antipathy toward the northern section of the pipeline, which would allow Canadian-drilled oil to be transported into this country. This provided some comfort to drilling opponents, but infuriated both the pro-oil forces and the Canadian government. The most likely outcome is that Canada will still build a pipeline, but rather one that goes westward to the Pacific Ocean north of the United States border and then ships Canadian oil to China instead of into this country.

#### Romney win causes economic collapse – turns auslin

Waldron 12

(Travis, Economists: Romney’s Economic Plan Fails to Deal With ‘Main Drags’ On U.S. Economy, 1/12/2012 Think Progress, p. <http://thinkprogress.org/economy/2012/01/12/403210/economists-romneys-draconian/>)

Former Massachusetts Gov. Mitt Romney’s (R) economic plan has become the centerpiece of his presidential campaign. Though his proposals are often vague, analyses of the plan shows that it would provide huge tax breaks for the wealthiest Americans while raising taxes on low-income families. And though Romney claims to be concerned about the federal budget deficit, his plan would add more than $6 trillion in deficits over 10 years. Romney, who touts his experience as a job creator, has suggested laying off thousands of public sector workers. He wants to slash vital programs for the poor and middle-classes, repeal the Affordable Care Act, and gut Medicare and Social Security. His embrace of the radical Cut, Cap, and Balance plan pushed by House Republicans would, in effect, shrink the federal government to pre-Ronald Reagan era sizes. But for all his talk about the plan on the campaign trail, economists surveyed by Reuters say Romney’s plan **likely wouldn’t deal with the main drags on the American economy**, while the cuts to vital programs would be “utterly draconian“: These steps would shrink the federal government’s role more than even former president Ronald Reagan managed 30 years ago when he turned many social programs over to the states. That scenario concerns liberal economists. “If applied, these fiscal measures would be utterly draconian. The attacks on Medicare and Social Security would throw large portions of the population into poverty,” said Jamie Galbraith, business professor at the University of Texas in Austin. Mainstream economists worry more that neither Romney nor his Republican opponents are addressing the main drag on the U.S. economy – weak demand from American consumers still weighed down by debt. Among the “main drags” highlighted in the Reuters piece is the housing crisis, which has placed “a big drag on consumer spending which drives two thirds of the U.S. economy.” But the GOP candidates have offered little in the way of solutions for the crisis, and Romney’s own prescription involves **letting the housing market hit rock bottom** — further damaging millions of homeowners. “Markets work,” Romney told moderators at a debate in November when asked what he would do to address the housing crisis. According to former Wall Street economist Thomas Gallagher, addressing demand should be at the top of the list when it comes to speeding the recovery. Instead, Romney is focused on budget deficits and tax reform — the types of austerity measures that are pushing Europe toward another recession. Perhaps that’s why a survey of economics professors found that the Republican proposals were so bad, they wouldn’t pass an Econ 101 class.

## 3

#### Fiscal cliff negotiations will succeed now, but pre-election groundwork key

Jonathan Weisman, NYTimes, 10/1/12, Leaders at Work on Plan to Avert Mandatory Cuts, www.nytimes.com/2012/10/02/us/senate-leaders-at-work-on-plan-to-avert-fiscal-cliff.html?\_r=2&hp&&pagewanted=all

Senate leaders are closing in on a path for dealing with the “fiscal cliff” facing the country in January, opting to try to use a postelection session of Congress to reach agreement on a comprehensive deficit reduction deal rather than a short-term solution.

Senate Democrats and Republicans remain far apart on the details, and House Republicans continue to resist any discussion of tax increases. But lawmakers and aides say that a bipartisan group of senators is coalescing around an ambitious three-step process to avert a series of automatic tax increases and deep spending cuts.

#### Plan kills Obama

Petroleum Intelligence Weekly, 1/9/12, Obama Plays Safe on Energy Policy, Lexis

With less than a year to go until he faces re-election, US President Barack Obama is trying to avoid controversial energy policy decisions, postponing the finalization of restrictions on oil refinery and power plant emissions and delaying the approval of a major crude pipeline project. The president’s caution will prolong the status quo on issues where the industry both opposes and supports the administration’s plans, and also illustrates what's at stake for energy policy depending on whether or not Obama is given another four years in office. Most of Obama's original campaign pledges on promoting alternatives to fossil fuels and tackling climate change have not passed muster with Congress, most notably an ambitious plan for national carbon controls, a subsequent toned-down clean energy standard floated after the carbon legislation failed, and repeated efforts to repeal $30 billion-$40 billion worth of oil industry tax deductions over 10 years ( PIW May9'11 ). The one exception has been the passage of $90 billion in clean energy funding as part of an economic stimulus bill passed early in Obama's term, but the White House has been unable to repeat this success in other energy policy areas ( PIW Feb.23'09 ).

#### Presidential leadership is key to a compromise – the alternative is the collapse of hegemony, a double-dip recession, and war in the Middle East

Hutchison, U.S. Senator from the great state of Texas, 9/21/2012

(Kay Bailey, “A Looming Threat to National Security,” States News Service, Lexis)

Despite warnings of the **dire consequences**, **America is teetering at the edge of a fiscal cliff**, with January 1st, 2013 as the tipping point. On that date, **unless Congress and the White House can reach agreement** on how to cut the federal deficit, all taxpayers will be hit with higher taxes and deep cuts - called "sequestration" - will occur in almost all government spending, disrupting our already weak economy and putting our national security at risk.

According to the House Armed Services Committee, if sequestration goes into effect, it would put us on course for more than $1 trillion in defense cuts over the next 10 years. What would that mean? A huge hit to our military personnel and their families; devastating cuts in funding for critical military equipment and supplies for our soldiers; and **a** potentially **catastrophic blow to our** national defense and **security capabilities** in a time of increasing violence and danger.

All Americans feel a debt of gratitude to our men and women who serve in uniform. But Texas in particular has a culture that not only reveres the commitment and sacrifice they make to protect our freedom, we send a disproportionate number of our sons and daughters to serve.

The burden is not borne solely by those who continue to answer the call of duty, but by their families as well, as they endure separation and the anxiety of a loved one going off to war. These Americans have made tremendous sacrifices. They deserve better than to face threats to their financial security and increased risks to their loved ones in uniform, purely for political gamesmanship.

Sequestration would also place an additional burden on our economy. In the industries that support national defense, as many as 1 million skilled workers could be laid off. With 43 straight months of unemployment above 8 percent, it is beyond comprehension to add a virtual army to the 23 million Americans who are already out of work or under-employed. **Government and private economic forecasters warn that sequestration will push the country back into recession next year**.

The recent murder of our Ambassador to Libya and members of his staff, attacks on US embassies and consulates and continued riots across the Middle East and North Africa are stark reminders that great portions of the world remain volatile and hostile to the US. **We have the mantle of responsibility that being the world's lone super-power brings**. **In the absence of U.S. military leadership**, **upheaval in the Middle East would be worse**. **As any student of history can attest**, **instability does not confine itself to national borders**. **Strife that starts in one country can spread like wildfire across a region**.

Sequestration's cuts would reduce an additional 100,000 airmen, Marines, sailors and soldiers. That would leave us with the smallest ground force since 1940, the smallest naval fleet since 1915 and the smallest tactical fighter force in the Air Force's history. With the destabilization in the Middle East and other areas tenuous, we would be left with a crippled military, **a diminished stature internationally and a loss of technological** research, development and **advantage** - just as actors across the globe are increasing their capabilities.

Sequestration can still be avoided. **But that will require** leadership from the President that has thus far been missing. Congress and the White House must reach a long-term agreement to reduce $1 trillion annual budget deficits, without the harsh tax increases that could stall economic growth and punish working families.

#### Middle East goes nuclear

James A. **Russell,** Senior Lecturer, National Security Affairs, Naval Postgraduate School, ‘9 (Spring) “Strategic Stability Reconsidered: Prospects for Escalation and Nuclear War in the Middle East” IFRI, Proliferation Papers, #26, http://www.ifri.org/downloads/PP26\_Russell\_2009.pdf

Strategic stability in the region is thus undermined by various factors: (1) asymmetric interests in the bargaining framework that can introduce unpredictable behavior from actors; (2) the presence of non-state actors that introduce unpredictability into relationships between the antagonists; (3) incompatible assumptions about the structure of the deterrent relationship that makes the bargaining framework strategically unstable; (4) perceptions by Israel and the United States that its window of opportunity for military action is closing, which could prompt a preventive attack; (5) the prospect that Iran’s response to pre-emptive attacks could involve unconventional weapons, which could prompt escalation by Israel and/or the United States; (6) the lack of a communications framework to build trust and cooperation among framework participants. These systemic weaknesses in the coercive bargaining framework all suggest that escalation by any the parties could happen either on purpose or as a result of miscalculation or the pressures of wartime circumstance. Given these factors, it is disturbingly easy to imagine scenarios under which a conflict could quickly escalate in which the regional antagonists would consider the use of chemical, biological, or nuclear weapons. It would be a mistake to believe the nuclear taboo can somehow magically keep nuclear weapons from being used in the context of an unstable strategic framework. Systemic asymmetries between actors in fact suggest a certain increase in the probability of war – a war in which escalation could happen quickly and from a variety of participants. Once such a war starts, events would likely develop a momentum all their own and decision-making would consequently be shaped in unpredictable ways. The international community must take this possibility seriously, and muster every tool at its disposal to prevent such an outcome, which would be an unprecedented disaster for the peoples of the region, with substantial risk for the entire world.

## 4

#### The United States federal government should establish a Quadrennial Energy Review. In the Quadrennial Energy Review, the United States federal government should include a recommendation to provide enhanced user leases, energy savings performance contracting partnerships, and use P.L. 106 and its Section 3236 authority to allocate funds to enable the use of small modular reactor technology on Marine Corps bases in the United States.

CP solves:

#### Recommending plan mandates through a QER process solves—only the CP creates policy sustainability and private sector coordination that unlocks energy innovation

Moniz 12

Ernest Moniz, Cecil and Ida Green Professor of Physics and Engineering Systems and Director of the Energy Initiative at the Massachusetts Institute of Technology; Former Clinton Administration Under Secretary of the Department of Energy and as Associate Director for Science in the Office of Science and Technology Policy ; serves on the President’s Council of Advisors on Science and Technology, Spring 2012, Stimulating Energy Technology Innovation, Daedalus, Vol. 141, No. 2, Pages 81-93

It should come as no surprise that I do not have the answers for how the government should intersect the latter stages of the innovation process in a general sense. However, PCAST recommended a pragmatic approach to an integrated federal energy policy that would employ all the tools available to the government in a coherent way. Termed **the** Quadrennial Energy Review (**QER**), the process is necessarily complex, but **history suggests** that **anything short of a full multiagency effort is unlikely to provide a robust plan that accounts for the many threads of an energy policy**. Furthermore, a degree of analysis is required that has not been present in previous efforts.

Energy policy is derivative of many policies: environment, technology and competitiveness, diplomacy and security, natural resources, and land and food, among many others. Indeed, multiple agencies that are not labeled “energy” have major equities and long-held perspectives on key elements of energy policy. Often, the preferred policies for different agencies’ agendas conflict. Further, states and local governments play a strong role, for example with building codes, and their approaches can vary dramatically in different parts of the country; certainly, California’s energy policies have influenced the national market. The tools available to support innovation are also diverse, ranging from direct support of RD&D to a variety of economic incentives, regulation, standards, and federal procurement, among other instruments. Congress is equally fragmented: in the House of Representatives and Senate, many committees beyond those tasked with energy policy have equities that mirror those of the different executive agencies. **To overcome this fragmentation** of responsibilities and perspectives, and **especially if the goal is a plan that has staying power in advancing adoption and diffusion, PCAST recommended a QER process** to provide a multiyear roadmap that:

• lays out an integrated view of short-, intermediate-, and long-term objectives for Federal energy policy in the context of economic, environmental, and security priorities;

• outlines **legislative proposals** to Congress;

• puts forward anticipated Executive actions (programmatic, regulatory, fiscal, and so on) coordinated across multiple agencies;

• **identifies resource requirements** for the RD&D programs **and** for innovation **incentive programs**; and, most important,

• provides a strong analytical base.14

This is a tall order intellectually and organizationally. Several process elements are essential to fostering a chance for success. First, the Executive Office of the President (eop) must use its convening power to ensure effective cooperation among the myriad relevant agencies. However, the capacity to carry out such an exercise and to sustain it does not (and should not) reside in the eop. The doe is the logical home for a substantial Executive Secretariat supporting the eop interagency process that would present decision recommendations to the president. However, the scope of the analytical capability needed does not currently reside at the doe or any other agency. The doe needs to build this capability, presumably supplemented by contractor support to gather data, develop and run models, and carry out analysis, such as independent energy-system engineering and economic analysis. Market trends and prices would be part of the analysis, including international markets and robust analyses of uncertainty. The Energy Information Administration can help with some data gathering and models, but its independence from the policy function needs to be preserved. The national laboratories also lack this range of functions, and tasking them with providing the analytical support to the policy process would be regarded as a conflict of interest; their focus is best directed at research, invention, and technology transfer. Building this analysis capacity is a large job that will take time.

For the QER to succeed, the government must seek substantial input from many quarters in a transparent way; certainly, ongoing dialogue with Congress and the energy industry are essential. The good news is that members of Congress have supported the development of the QER as a way to present a coherent **starting point for congressional action across many committees.** A hope is that **Congress could then use the QER as a basis for** a four or five-year **authorization that would provide the private sector with the increased confidence needed to make sound clean energy investment decisions**.

Given the magnitude of the task, PCAST recommended in 2011 that the doe carry out a Quadrennial Technology Review (qtr)–a first step centered in a single department and focused on technology. The qtr resulted in a rebalancing of the R&D portfolio toward the oil dependence challenge through advanced vehicle development, particularly transportation electrification. The key now will be to extend the processes developed for the qtr to the multiagency QER, involving the eop in a leadership role. Taking the next steps in 2012 will maintain momentum and establish the capabilities needed for the QER by early 2015, the time frame recommended by PCAST.

While some may view 2015 as a frustratingly long time away, the alternative is to rely on wishes rather than analysis while failing to gain multiple perspectives in a fair and open manner. **Rushing the process will result in a poorly done job that will not accomplish** any of the **key** QER **goals**. Certainly, **it will not bring together succeeding administrations and Congresses around a** reasonably **shared vision** and set of objectives **that can accelerate innovation in service of national competitiveness and environmental and security goals. Continuing with fragmented** and economically inefficient **policies, technologies “du jour,” and frequent shifts will complicate private-sector decisions rather than facilitate innovation**. The government unavoidably plays a strong role in the innovation process, even when this is unacknowledged in policy and political debates. The issue now is to present both a set of principles and fact-based analyses supporting coordinated government-wide actions that earn decent buy-in from major stakeholders.

[Note: PCAST = President’s Council of Advisors on Science and Technology]

## 5

#### Simulating conflict scenarios ignores the complexity which taints predictions—the aff’s linear war-planning fails and causes escalating conflict

Jervis, professor of international affairs – Columbia, ‘97

(Robert, “Complex Systems: The Role of Interactions,” in Complexity, Global Politics, and National Security, eds. David S. Alberts and Thomas J. Czerwinski, National Defense University)

Because actions change the environment in which they operate, identical but later behavior does not produce identical results: history is about the changes produced by previous thought and action as people and organizations confront each other through time. The final crisis leading to World War II provides an illustration of some of these processes. Hitler had witnessed his adversaries give in to pressure; as he explained, "Our enemies are little worms. I saw them at Munich."21 But the allies had changed because of Hitler’s behavior. So had Poland. As A.J.P. Taylor puts it, "Munich cast a long shadow. Hitler waited for it to happen again; Beck took warning from the fate of Benes."22 Hitler was not the only leader to fail to understand that his behavior would change his environment. Like good linear social scientists, many statesmen see that their actions can produce a desired outcome, all other things being equal, and project into the future the maintenance of the conditions that their behavior will in fact undermine. This in part explains the Argentine calculations preceding the seizure of the Falklands/Malvinas. Their leaders could see that Britain’s ability to protect its position was waning, as evinced by the declining naval presence, and that Argentina’s claim to the islands had received widespread international support. But what they neglected was the likelihood that the invasion would alter these facts, unifying British opinion against accepting humiliation and changing the issue for international audiences from the illegitimacy of colonialism to the illegitimacy of the use of force. A similar neglect of the transformative power of action may explain why Saddam Hussein thought he could conquer Kuwait. Even if America wanted to intervene, it could do so only with the support and cooperation of other Arab countries, which had sympathized with Iraq’s claims and urged American restraint. But the invasion of Kuwait drastically increased the Arabs’ perception of threat and so altered their stance. Furthermore, their willingness to give credence to Iraqi promises was destroyed by the deception that had enabled the invasion to take everyone by surprise. Germany’s miscalculation in 1917 was based on a related error: although unrestricted submarine warfare succeeded in sinking more British shipping than the Germans had estimated would be required to drive Britain from the war, the American entry (which Germany expected) led the British to tolerate shortages that otherwise would have broken their will because they knew that if they held out, the U.S. would rescue them.23

The failure to appreciate the fact that the behavior of the actors is in part responsible for the environment which then impinges on them can lead observers—and actors as well— to underestimate actors’ influence. Thus states caught in a conflict spiral believe that they have little choice but to respond in kind to the adversary’s hostility. This may be true, but it may have been the states’ earlier behavior that generated the situation that now is compelling. Robert McNamara complains about how he was mislead by faulty military reporting but similarly fails to consider whether his style and pressure might have contributed to what he was being told.24

Products of Interaction as the Unit of Analysis

Interaction can be so intense and transformative that we can no longer fruitfully distinguish between actors and their environments, let alone say much about any element in isolation. We are accustomed to referring to roads as safe or dangerous, but if the drivers understand the road conditions this formulation may be misleading: the knowledge that, driving habits held constant, one stretch is safe or dangerous will affect how people drive—they are likely to slow down and be more careful when they think the road is dangerous and speed up and let their attention wander when it is "safe." It is then the road-driver system that is the most meaningful unit of analysis. In the wake of the sinking of a roll-on roll-off ferry, an industry representative said: With roro’s, the basic problem is that you have a huge open car deck with doors at each end. But people are well aware of this, and it is taken into account in design and operation. You don’t mess around with them. There have not been too many accidents because they are operated with such care.25

#### Warfighting based on linearity causes extinction—rethinking the terms of the simulation itself is key to grappling with every threat environment

Skyttner, professor of natural science – University of Gâvle, professor – Royal Swedish Military Academy, ‘5

(Lars, “Systems theory and the science of military command and control,” Kybernetes Vol. 34, Issue 7/8, p. 1240-1260)

Military activity has constantly been characterised by the need to design, realize, train and thereafter maintain an organization capable to fight against various kinds of external threats. Such a force has always been used in offensive as well as defensive tasks, e.g. from attacking neighbouring enemies to going together in order to defend oneself from invading forces. To succeed with this, strategical, operational and tactical skill is necessary for the joint effort. Further, a flexible tactical adaptation is necessary when the enemy changes his behaviour or take countermeasure.

The military manoeuvring has always felt the need for some kind of decision support and a management system. The decision support has sometimes manifested itself as good advisors or as today in the shape of advanced high-technological computer-aided expert systems. The management system has always consisted of various communication and control devices. How these systems should be constructed, adapted and developed to challenge new threatening pictures in the constantly changing surrounding world is no simple task.

Today the socio-technical systems of the modern society are increasingly all embracing and tighter integrated. System-relations more and more stand out as untransparent, incomprehensible and unmanageable. Furthermore, the world around is so rapidly changed that circumstantial planning often is a thing of the past.

The uncertainties regarding the nature of future combat therefore bring about great demands of flexibility and adaptability of our command and control systems. That qualities like information-advantage and a realistic surrounding-world apprehension call for increased integration of different sensors, arms and communication systems are nevertheless given. As given is that success in combat always is a function of how command is executed and how danger, stress, obscurity and general confusion which constantly exist will be handled. When the enemy no longer is seen in our binoculars and when we not even know who has released an attack against us, the need for creative thinking is of highest priority. Today an event of war even can lack the attacking component and imply hitherto unknown social phenomena.

As compared with such circumstances, traditional military thinking could not be considered particularly successful. There tactical problems always have been reduced to easily recognizable situations with a well-learned standard response. Quite natural, critical thinking, questioning and creativity have not got a prominent role in this kind of education.

Today the security policy situation of Sweden is radically different from the situation only ten years ago. New, extremely fragmented scenarios of a threat exist. A military threatening picture still exists even if it has deteriorated substantially after the end of the cold war. Russia still has attacking capability via distant and NBC-weapons. A military recovery in this country can result in nonmilitary information operations within a ten-year period. The development is difficult to judge but is coherent with the democratic development and the relations to the West.

Just now the most probable threat comes from terrorism. The last years have signified a development towards an ever increasing extent of terrorist groups with better and better armaments. No doubt, some of these groups have NBC-weapons. Those who not have access to such weapons strive for them. Attacks resulting in thousands of victims among innocent people, today is a reality which has been demonstrated by the assault upon World Trade Centre. It is quite possible that such groups will choose to locate internal controversies to neutral ground like Stockholm with pertinent consequence like taking hostages, etc. When such things happen, the odds are against the anti terrorist forces. The terrorists only need to have success once while the combatting forces must be successful every time.

A third kind of security policy threat are those which are information technology related. States as well as criminal gangs and terrorist organisations already today use IT-related systems as weapons apart from their ordinary use. Attacks can be targeted toward our own IT systems, electricity supply systems, telecommunications and economical systems. In our highly computerized society, a small group can cause damages which early required an army. That the danger of IT-attacks has increased can be related to the simple fact that the more something is exposed, the more the threatening picture is reinforced. A special problem in this context is the difficulty to discover if an attack exists at all. The defence against such information warfare will be a big problem in the foreseeable future for our vulnerable society.

It is also not possible to leave out of account the threats coming from economical warfare. Even if the country today has a reasonably stable economy and is supported by the membership of EU, strongly increased fuel price during a period will destabilize society. Large-scale economical crimes pursued for example by the powerful drug mafia in Colombia can also be a real threat. This organisation has scarcely an interest to capture a geographical area. However, they want to consolidate and expand their economical flows. It is necessary to bear in mind that their financial annual turnover is bigger than most European countries.

Consequently, it is necessary to realise that the old and exact security-policy classification into “war” and “peace” hardly is relevant today. A war-like terror action with disastrous consequence can happen without early warning in a situation which we apprehend to be in deepest peace. The goal can be to crush our basic values – not our geographical area. An enumeration of what the modern societies consider these values to be, can be the following:

territorial integrity in the livingspace;

political sovereignty and democracy;

freedom of thought, religion and speech;

a state governed by law with human rights and minority rights;

free market economy; and

the free university.

In the protection of these values, the extensive invasion and mobilization defence with its mass army no longer has a justification. Not including the frontiers of land, sea and air combat, a new frontier has emerged where the battle is fought with global information systems. There the strategic goals have changed so that destruction has been replaced by manipulation, infiltration and assimilation.

All this taken together is the reason why big-scale problem solving seldom work as before. The traditional way of managing war with a large quantity of troops fighting a well defined and localized enemy is barely no longer possible. The lack of success for traditional methods is visible also on civil frontiers like the war against poverty, the war against drugs, and the attempts to extinct AIDS.

The new, multinational and complex threatening pictures which have replaced the old ones, can only be met with a smaller, more modern and flexible elite-force. The heavy striking-force with small command and intelligence resources will be reduced in favour of a network-defence based on the development within information and communication technology. The designation network will, however, not in the first instance represent the connecting of different technical systems. Instead it will represent a more flexible way of handling a new situation – to combine different entities and components for more complex tasks. One of its main duties will be peace-keeping international contributions. Another task will be to handle attacks realised with nerve-gas or bacteria. High-technological data-virus should also be possible to combat.

The building up of such a defence will demand an entirely new way of thinking regarding decision-making, command and control and use of modern technology. Internationally, this kind of thinking has attracted great interest and got the designation “Revolution in Military Affairs” (RMA). The term is based on a number of technological breakthroughs which have occurred after the end of the cold war about 1990. In several ways, these have changed the ground for modern warfare. Here the most important achievements have been the information-technological progresses which will permit the use of lots of sensors and the capability to transfer and manage big information-flows. Realistic training with the aid of virtual three-dimensional computer scenarios (“Battlefield Computer Games”), has signified a pronounced increase in the combat-skill of tank-crews.

Some important trends within the RMA-concept is presented below:

Unmanned fighting vehicles and aircrafts. Automated, computerized technology will replace drivers and pilots. Start navigation, interpreting of the surrounding world, target-interpretation, target combatting and possible landing, is handled completely automatic. The opportunity of human handling and target combats remain. No consideration regarding the weight of the pilot, G-forces and life-supporting systems is necessary. The construction can be lighter, stronger, more rapid and cheaper. The instruction time can be shorter.

Data-streams, threat-analyses and military preparedness. Miniaturized networks of cheap sensors deliver data from areas which earlier have not been accessible. Immediate processing creates information which is distributed via coded broadband to all units needing it.

Chemical, bacteriological, radiological detection and protection. Micro sensors integrated in new protective clothes will dramatically increase the ability to move and increase freedom of action in contaminated areas. High sensibility and selectivity will make possible an immediate detection of the threat.

Body-armour for fighting soldiers. Extremely strong and light bullet proof materials increase the survival on the battlefield.

Field-equipment of lightweight type. New, lightweight materials will decrease the total carrying load for the soldier. Hence endurance and strength will increase. This holds well for uniforms, personal weapons, communication equipment and darkness-optics.

New bio-treatment for augmented performance. Without the use of drugs, human staying power can be doubled. Lack of sleep and impaired vigilance now can be compensated for as well as the impact of physical damage.

A science of command and control

Today's military command and control embrace different kinds of affairs from battle conduct to more administrative activities. It takes place on different strata from lower tactical levels to the highest strategical level. In contrast to civil command and control it includes fundamental questions regarding life and death for involved persons. In battlefields the unmasked principle of causality always rules. There the connection between conclusions and orders and their consequences are terrifyingly short.

A simple definition of the aim of command and control could be the coordination of human actions with different resources to get effects. In practise, this is often considered as something diffuse. Difficulties often arise when analysing the content and form of the activity. Problem solutions too often are seen as applied science without either theories or scientific method. Obstacles to attain a comprehensive view with hitherto used frames of reference have been experienced by both commanders and military theorists.

With this background, an attempt to regard command and control as part of “The Art of War” may be understandable. As an art, it can only be developed and reach its fulfilment inside the born leader with his special creativity, intuition capability and the divine vestige, existing in very few persons. However, such a view will have some less successful consequences, especially for the education of higher commanders. The divine vestige is scarcely possible to gauge and the number of born leaders is not in enough supply for the demands of society. At all events it cannot be the foundation for the recruitment of general staff candidates. Here more measurable and tangible properties must be decisive.

A more fruitful attitude therefore has appeared to be an integration of the problems of military management into a general scientific educational frame and denote it a science of command and control. The military competent at once realise that this area has two central questions at issue, on the one hand to make relevant decisions and on the other to carry them out adequately. With a slight reformulation it is possible to say that decision-making is to determine what should be done. The realization, the command, concerns how it should be done. Here the continuous existing aspect of time is present with its deadlines for thinking, planning, decision-making, taking measures, etc. This kind of activity always embraces the old truism of the equal importance of making the right things as doing things right. Regarding civil decision-making and execution, it often differs marginally (in principle) from the military counterpart. Thus, it is possible to speak of a general science of command and control.

In English, the area is denoted by the words command, control, communication and information with the acronym C3I. Command implies goal-oriented conduct and action, executed by people over people who all are living creatures and thereby process information for their survival. The process of life is to adapt the own situation to an ever-changing environment and a relation between information and control. Control comprises the processing of information, programming, decision and communication. Two-way communication between the controller and the controlled feeds back the result of the action for necessary justification and new activity.

In reality, the described control and command process is a very complex phenomenon. The physical and mental status of the decision-maker as well as deeply existing conceptions and preferences influence the procedure. Also organisational structures and technical equipment will influence the result. “Everything is connected to everything else”. Later in the text, it will be evident that the used English keywords can represent subsets of a comprehensive theory. Without this theory the term science in the label “A science of command and control” should be irrelevant.

To synthesize a new subject field like command and control will imply the finding and understanding of the joint factors existing within different kinds of the area. It also demands definitions regarding basic terms and concepts as a starting point for problem-solving and various kinds of reasoning. Below some fundamental concept are presented.

The theory of command and control is founded on a number of related academic areas. The integration of these creates the theoretical basis which allows a commander to understand the function of command and control. That is to master the prerequisite for relevant decisions and their transformation into reality.

The science of command and control is the application of the theory in a real world. It indicates how a system of command and control should be designed and used for decision-making, execution, followup, and government in a mainly unpredictable and chaotic environment (especially the combat).

A system of command and control is an integrated gathering of people, functions, procedures and equipment which together constitute the function of command and control. This system is the tool of the commander and secures that the capacity of the directed unity is utilized in the best manner in order to fulfill the goal.

The research problem of the science of command and control can be formulated as: How should the intentions of the commander be converted into reality as completely as possible?

Something which must be elucidated in the definitions above is the concept of a commander. The presumption that one can count with an unambiguous, conclusive commander as in military units, civil service departments or oil-tankers are not always correct. A committee, a board or some kind of collective often is the equivalent. This must be considered the rule when controversial political problems should be solved.

The concept of a commander implies that somebody (sometimes several) can formulate a criterion for the best problem solution and take the responsibility for a decision. Likewise that this (or these) people finally shoulder the responsibility for execution even if this can be transferred to other instances.

Today a science of command and control is necessary to adapt managing power and exercise of command to new kinds of organisations and new operational principles. The area is transformed at a rapid pace by social changes and new trends like the internationalisation of economies and knowledge production, globalization of media and knowledge mediation and also changed forms of cooperation and conflicts.

Moreover, modern leadership is often executed at a distance which implies both possibilities and risks. Today's communication technology will permit operations (both surgical and military!) to be literally managed and controlled from the other side of the globe. Modern dispersed organisations thus have their specific problems which cannot be neglected. How should social relations be managed when the personal encounter becomes a rare event and directors are dematerialized to a voice in a satellite-mediated phone call?

Regarding military command and control systems, they are today typically multi-component phenomena. The deciding functions are performed by people, simple decision-support systems in computer-based algorithms and advanced expert-systems. The decision-components are geographically dispersed dependent on the appearance of the environment but also for reason of survival. This distributed system gets its character by the quality of the sensors together with velocity and effectiveness of actual weapons.

The need for a comprehensive theory

For the military scientist it is obvious that studies in such a complex area as command and control scarcely are possible without the help of a theory of generalization, a meta-theory. Such a theory must be able to sum up and explain common factors and problems existing in all kinds of command and control. It must also be able to integrate different knowledge and reflections from various subject fields, which apparently do not seem to be related. In addition it must preferably furnish a hierarchy of theories and models where key-variables and their changes are intelligible and measurable. The supply of relevant models to facilitate studies, simulations and calculations defines the limits for both knowledge acquisition and information-dispersal.

A meta-theory likewise must supply general definitions and a common language, joining all subareas which taken together, will constitute a science of command and control. The application must take place in an area which has an ever growing need for rapid decisions and the mastering of very complex processes despite tight margins, ambiguous and disturbed information. As a frame of reference it must also be able to answer the same questions like other scientific areas, namely:

what theories represent the core of the field?

which methods are used?

which sources are used? and

to what extent are these theories, methods and sources universally applicable?

Does such a theory exist? From the viewpoint of the systems-scientist, the answer is affirmative. General Systems Theory (GST) studies patterns which do not relate to a specific area. It examines generalizations, applicable on specific problems, e.g. in command and control. As meta-discipline it can transfer its knowledge-structure to other areas without calling in question their content. It can supplement a great number of areas and integrate phenomena which had not been successfully handled. Above all this theory will support the generalist, who often is found to solve today's problem better than the specialist with his narrow limits.

A popular formulation could be that systems theory creates a knowledge structure which facilitates the providing of fact to the right place and creates possibilities to see a connected whole. A locution is that its main task is to help scientists to elucidate the complexity of the existence, technologists to make use of it and generalists to learn to live with it.

#### The alternative is to reject linear scenario planning in favor of complex theoretical analysis—unconditionally inserting complexity analysis into the simulation creates better policy planning

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(James, “Many Damn Things Simultaneously: Complexity Theory and World Affairs,” in Complexity, Global Politics, and National Security, eds. David S. Alberts and Thomas J. Czerwinski, National Defense University)

In short, there are strict limits within which theorizing based on the premises of complexity theory must be confined. It cannot presently—and is unlikely ever to— provide a method for predicting particular events and specifying the exact shape and nature of developments in the future. As one observer notes, it is a theory "meant for thought experiments rather than for emulation of real systems."18

Consequently, it is when our panacean impulses turn us toward complexity theory for guidance in the framing of exact predictions that the policy payoffs are least likely to occur and our disillusionment is most likely to intensify. For the strides that complexity theorists have made with their mathematical models and computer simulations are still a long way from amounting to a science that can be relied upon for precision in charting the course of human affairs that lies ahead. Although their work has demonstrated the existence of an underlying order, it has also called attention to a variety of ways in which the complexity of that order can collapse into pervasive disorder. Put differently, while human affairs have both linear and nonlinear dimensions, and while there is a range of conditions in which the latter dimensions are inoperative or "well behaved,"19 it is not known when or where the nonlinear dimensions will appear and trigger inexplicable feedback mechanisms. Such unknowns lead complexity theorists to be as interested in patterns of disorder as those of order, an orientation that is quite contrary to the concerns of policy makers.

Theorizing Within the Limits

To acknowledge the limits of complexity theory, however, is not to assert that it is of no value for policy makers and academics charged with comprehending world affairs. Far from it: if the search for panaceas is abandoned and replaced with a nuanced approach, it quickly becomes clear that the underlying premises of complexity theory have a great deal to offer as a perspective or world view with which to assess and anticipate the course of events. Perhaps most notably, they challenge prevailing assumptions in both the academic and policy-making communities that political, economic, and social relationships adhere to patterns traced by linear regressions. Complexity theory asserts that it is not the case, as all too many officials and analysts presume, that "we can get a value for the whole by adding up the values of its parts."20 In the words of one analyst, Look out the nearest window. Is there any straight line out there that wasn’t man-made? I’ve been asking the same question of student and professional groups for several years now, and the most common answer is a grin. Occasionally a philosophical person will comment that even the lines that look like straight lines are not straight lines if we look at them through a microscope. But even if we ignore that level of analysis, we are still stuck with the inevitable observation that natural structures are, at their core, nonlinear. If [this] is true, why do social scientists insist on describing human events as if all the rules that make those events occur are based on straight lines?21

A complexity perspective acknowledges the nonlinearity of both natural and human systems. It posits human systems as constantly learning, reacting, adapting, and changing even as they persist, as sustaining continuity and change simultaneously. It is a perspective that embraces non-equilibrium existence. Stated more generally, it is a mental set, a cast of mind that does not specify particular outcomes or solutions but that offers guidelines and lever points that analysts and policy makers alike can employ to more clearly assess the specific problems they seek to comprehend or resolve. Furthermore, the complexity perspective does not neglect the role of history even though it rejects the notion that a single cause has a single effect. Rather, focusing as it does on initial conditions and the paths that they chart for systems, complexity treats the historical context of situations as crucial to comprehension.

The first obstacle to adopting a complexity perspective is to recognize that inevitably we operate with some kind of theory. It is sheer myth to believe that we need merely observe the circumstances of a situation in order to understand them. Facts do not speak for themselves; observers give them voice by sorting out those that are relevant from those that are irrelevant and, in so doing, they bring a theoretical perspective to bear. Whether it be realism, liberalism, or pragmatism, analysts and policy makers alike must have some theoretical orientation if they are to know anything. Theory provides guidelines; it sensitizes observers to alternative possibilities; it highlights where levers might be pulled and influence wielded; it links ends to means and strategies to resources; and perhaps most of all, it infuses context and pattern into a welter of seemingly disarrayed and unrelated phenomena.

It follows that the inability of complexity theory to make specific predictions is not a serious drawback. Understanding and not prediction is the task of theory. It provides a basis for grasping and anticipating the general patterns within which specific events occur. The weather offers a good example. It cannot be precisely predicted at any moment in time, but there are building blocks—fronts, highs and lows, jet streams, and so on—and our overall understanding of changes in weather has been much advanced by theory based on these building blocks....We understand the larger patterns and (many of) their causes, though the detailed trajectory through the space of weather possibilities is perpetually novel. As a result, we can do far better than the old standby: predict that "tomorrow’s weather will be like today’s" and you stand a 60 percent probability of being correct. A relevant theory for [complex adaptive systems] should do at least as well.22 Given the necessity of proceeding from a theoretical standpoint, it ought not be difficult to adopt a complexity perspective. Indeed, most of us have in subtle ways already done so. Even if political analysts are not—as I am not—tooled up in computer science and mathematics, the premises of complexity theory and the strides in comprehension they have facilitated are not difficult to grasp. Despite our conceptual insufficiencies, we are not helpless in the face of mounting complexity. Indeed, as the consequences of turbulent change have become more pervasive, so have observers of the global scene become increasingly wiser about the ways of the world and, to a large degree, we have become, each of us in our own way, complexity theorists. Not only are we getting accustomed to a fragmegrative world view that accepts contradictions, anomalies, and dialectic processes, but we have also learned that situations are multiply caused, that unintended consequences can accompany those that are intended, that seemingly stable situations can topple under the weight of cumulated grievances, that some situations are ripe for accidents waiting to happen, that expectations can be self-fulfilling, that organizational decisions are driven as much by informal as formal rules, that feedback loops can redirect the course of events, and so on through an extensive list of understandings that appear so commonplace as to obscure their origins in the social sciences only a few decades ago.23 Indeed, we now take for granted that learning occurs in social systems, that systems in crisis are vulnerable to sharp turns of directions precipitated by seemingly trivial incidents, that the difference between times one and two in any situation can often be ascribed to adaptive processes, that the surface appearance of societal tranquillity can mask underlying problems, and that "other things being equal" can be a treacherous phrase if it encourages us to ignore glaring exceptions. In short, we now know that history is not one damn thing after another so much as it is many damn things simultaneously.

And if we ever slip in our understanding of these subtle lessons, if we ever unknowingly revert to simplistic formulations, complexity theory serves to remind us there are no panaceas. It tells us that there are limits to how much we can comprehend of the complexity that pervades world affairs, that we have to learn to become comfortable living and acting under conditions of uncertainty.

The relevance of this accumulated wisdom—this implicit complexity perspective—can be readily illustrated. It enables us to grasp how an accidental drowning in Hong Kong intensified demonstrations against China, how the opening of a tunnel in Jerusalem could give rise to a major conflagration, how the death of four young girls can foster a "dark and brooding" mood in Brussels, how an "October surprise" might impact strongly on an American presidential election, or how social security funds will be exhausted early in the next century unless corrective policies are adopted—to cite three recent events and two long-standing maxims.24 We know, too that while the social security example is different from the others—in that it is founded on a linear projection of demographic change while the other examples involve nonlinear feedback loops—the world is comprised of linear as well as nonlinear dynamics and that this distinction is central to the kind of analysis we undertake.

In other words, while it is understandable that we are vulnerable to the appeal of panaceas, this need not be the case. Our analytic capacities and concepts are not so far removed from complexity theorists that we need be in awe of their accomplishments or be ready to emulate their methods. Few of us have the skills or resources to undertake sophisticated computer simulations—and that may even be an advantage, as greater technical skills might lead us to dismiss complexity theory as inapplicable—but as a philosophical perspective complexity theory is not out of our reach. None of its premises and concepts are alien to our analytic habits. They sum to a perspective that is consistent with our own and with the transformations that appear to be taking the world into unfamiliar realms. Hence, through its explication, the complexity perspective can serve as a guide both to comprehending a fragmegrated world and theorizing within its limits.

## china

#### China can’t catch up and no risk of war

**Zenko and Cohen 12** (Micah Zenko, Fellow in the Center for Preventive Action at the Council on Foreign Relations, and MIchael Cohen, Senior Fellow at the American Security Project, serves on the board of the National Security Network and has taught at Columbia University’s School of International and Public Affairs, served in the U.S. Department of State, former Senior Vice President at the strategic communications firm of Robinson, Lerer and Montgomery, bachelor’s degree in international relations from American University and a master’s degree from Columbia University, 3/14/2012, "Clear and Present Safety", yaleglobal.yale.edu/content/clear-and-present-safety)

As the threat from transnational terrorist groups dwindles, the United States also faces few risks from other states. China is the most obvious potential rival to the United States, and there is little doubt that China’s rise will pose a challenge to U.S. economic interests. Moreover, there is an unresolved debate among Chinese political and military leaders about China’s proper global role, and the lack of transparency from China’s senior leadership about its long-term foreign policy objectives is a cause for concern. However, the present security threat to the U.S. mainland is practically nonexistent and will remain so. Even as China tries to modernize its military, its defense spending is still approximately one-ninth that of the United States. In 2012, the Pentagon will spend roughly as much on military research and development alone as China will spend on its entire military. While China clumsily flexes its muscles in the Far East by threatening to deny access to disputed maritime resources, a recent Pentagon report noted that China’s military ambitions remain dominated by “regional contingencies” and that the People’s Liberation Army has made little progress in developing capabilities that “extend global reach or power projection.” In the coming years, China will enlarge its regional role, but this growth will only threaten U.S. interests if Washington attempts to dominate East Asia and fails to consider China’s legitimate regional interests. It is true that China’s neighbors sometimes fear that China will not resolve its disputes peacefully, but this has compelled Asian countries to cooperate with the United States, maintaining bilateral alliances that together form a strong security architecture and limit China’s room to maneuver. The strongest arguments made by those warning of Chinese influence revolve around economic policy. The list of complaints includes a host of Chinese policies, from intellectual property theft and currency manipulation to economic espionage and domestic subsidies. Yet none of those is likely to lead to direct conflict with the United States beyond the competition inherent in international trade, which does not produce zero-sum outcomes and is constrained by dispute-resolution mechanisms, such as those of the World Trade Organization. If anything, China’s export-driven economic strategy, along with its large reserves of U.S. Treasury bonds, suggests that Beijing will continue to prefer a strong United States to a weak one.

#### Economic barriers prevent rise

Derek **Scissors 12**, Research Fellow in Economics at the Asian Studies Center of the Heritage Foundation and Adjunct Professor of Economics at George Washington, “The Wobbly Dragon”, Foreign Affairs, January/February

Arvind Subramanian claims that China will unquestionably replace the United States as the dominant global power in the next two decades ("The Inevitable Superpower," September/October 2011). He is right that if the U.S. economy continues on its current trajectory, the United States will not be able to maintain its position of global leadership. But he is far too bullish on China. Subramanian overlooks Chinese policies that will complicate the country's economic rise and ignores the possibility that Chinese growth will simply stop. And he uses a definition of "dominance" that bears little resemblance to the U.S.-style preeminence he sees China assuming. Consider how Subramanian measures China's growing power. He cites the ability of Beijing to convince African countries to recognize it instead of Taipei, but out-muscling Taiwan diplomatically is hardly a sign of global leadership. He sees the ease with which China undervalues the yuan by pegging it to the dollar as proof of the country's strength, but hiding behind a foreign currency is not a sign of economic might. He forecasts that China in 2030 will have an economy that is one-third larger than the United States', yet he admits that it will remain only half as wealthy. These are notable trends, to be sure, but not ones that indicate China will attain anything close to the position the United States has held over the past 60 years. The biggest flaw in Subramanian's index of dominance is the importance he assigns to China's status as a net creditor. Based on this alone, he is prepared to say that China's economic strength is already comparable to that of the United States. But China's creditor status does not make up for the fact that its economy is presently less than half the size of the United States' and its people are barely one-tenth as wealthy as Americans. Creditor status is also a misleading metric by which to judge China because it is usually used to describe financially open economies, and China is largely closed. Countries with open economies can invest their money in many places. Beijing, because it cannot spend its foreign reserves at home, is forced to keep buying U.S. Treasury bonds. China's creditor status arises largely from its weaknesses, not its strengths. The country's $3.2 trillion worth of foreign currency holdings represents an imbalance between investment and consumption. Instead of loaning money to rich countries, China should be importing capital in order to speed its domestic development and meet its sizable needs, starting with properly capitalized pension and financial systems. China's financial books are strictly divided, with huge assets in foreign currency (primarily dollars) on one side and huge liabilities in local currency on the other. Local governments have incurred high debts by spending heavily on programs such as railroad expansion and by borrowing to fund the 2009 stimulus (which came mostly from local, not national, government coffers). Beijing should be paying down this debt and addressing other domestic shortfalls with its mountain of foreign currency, but it cannot do so under its present balance-of-payments rules, which are designed to keep foreign currency in the hands of the national monetary authorities. Due to a closed capital account, domestic holders cannot send money overseas, and foreign currency can be converted to yuan only through the state financial system. The Chinese government has not let money flow freely because doing so would undermine its control of domestic interest rates, reducing its ability to influence economic cycles, and it would expose the domestic banking sector to devastating competition. If domestic entities were allowed to send money abroad, hundreds of billions of dollars would flee the country for financial institutions that operate commercially, unlike Chinese banks. Such a stark fear of competition does not suggest a country ready to exert dominance anytime soon. Lastly, Subramanian inflates China's financial influence over the United States, forgetting that influence in a buyer-seller relationship is determined not by what-if scenarios but by who has better alternatives. The United States has already diversified away from Chinese debt by having the Federal Reserve flood the U.S. financial system with liquidity. This is hardly ideal, but it has driven down the Chinese share of U.S. debt while keeping interest rates historically low. In contrast, Beijing, despite its best efforts to diversify, still holds 70 percent of its foreign currency reserves in dollars. The reason is simple: those reserves are so large and growing so quickly that there is no alternative. The United States needs China to keep U.S. interest rates below historic norms; China needs the United States to maintain its entire balance-of-payments system. Even if Subramanian acknowledges that China's lopsided financial system is holding the country back now, he assumes that Beijing will soon rewrite its balance-of-payments rules and become an open economy. This assumption underestimates the Communist Party's antipathy to change. In fact, the principal advocate for such reforms has been Washington, which hopes to encourage China's transformation from an investment-led to a consumption-led economy. Such a transition would undermine China's net creditor status--what Subramanian sees as its main claim to dominance. But implementing market reforms would also allow China to keep growing at its blistering pace and surpass the United States in GDP. If China insists on maintaining government control over development, on the other hand, its long-term growth prospects will be dim. Salvatore Babones ("The Middling Kingdom," September/October 2011) warns against drawing conclusions about China's trajectory by simply projecting its growth rates forward. Indeed, it is entirely possible that Chinese GDP growth will simply stop. Growth depends on land, labor, capital, and innovation. China has depleted its ecology, its labor surplus will soon begin to erode, and vast overspending has driven down the return on capital--all discouraging trends from the standpoint of growth. As for innovation, Subramanian praises China's growing technology sector and its ability to absorb new advances. But a true economic leader must create, not absorb, and Beijing's favoritism toward large state firms will hinder innovation. Moreover, the quality of the Chinese higher-education system is poor and not necessarily improving. A no-growth scenario is a genuine danger--just ask the Japanese. By underemphasizing or ignoring China's various weaknesses, Subramanian underestimates the United States' ability to influence the competition with China. That said, his criticisms of the United States are valid; indeed, his baseline prediction of U.S. growth at 2.5 percent annually may be too optimistic. Crippled by debt, the United States faces a period of stagnation. If the overall economy remains sluggish, a lack of import growth will cause trade to lag and further reduce the United States' global influence. Still, the Chinese dragon will not fly forward indefinitely, as Subramanian suggests; it may even crash. For the foreseeable future, China will not attain the kind of dominance the United States has long held. The world should not expect to crown a new global leader but prepare for the absence of one.

#### No risk of Asia war – Peaceful China and multilateral institutions

Bitzinger and Desker, 9

[Richard, Senior Fellow at the S. Rajaratnam School of International Studies, Barry, Dean of the S. Rajaratnam School of International Studies and Director of the Institute of Defense and Strategic Studies, Nanyang Technological University, Singapore, “ Why East Asian War is Unlikely,” Survival | vol. 50 no. 6 | December 2008–January 2009

 The Asia-Pacific region can be regarded as a zone of both relative insecurity and strategic stability. It contains some of the world’s most significant flashpoints – the Korean peninsula, the Taiwan Strait, the Siachen Glacier – where tensions between nations could escalate to the point of major war. It is replete with unresolved border issues; is a breeding ground for transnational terrorism and the site of many terrorist activities (the Bali bombings, the Manila superferry bombing); and contains overlapping claims for maritime territories (the Spratly Islands, the Senkaku/Diaoyu Islands) with considerable actual or potential wealth in resources such as oil, gas and fisheries. Finally, the Asia-Pacific is an area of strategic significance with many key sea lines of communication and important chokepoints. Yet despite all these potential crucibles of conflict, the Asia-Pacific, if not an area of serenity and calm, is certainly more stable than one might expect. To be sure, there are separatist movements and internal struggles, particularly with insurgencies, as in Thailand, the Philippines and Tibet. Since the resolution of the East Timor crisis, however, the region has been relatively free of open armed warfare. Separatism remains a challenge, but the break-up of states is unlikely. Terrorism is a nuisance, but its impact is contained. The North Korean nuclear issue, while not fully resolved, is at least moving toward a conclusion with the likely denuclearisation of the peninsula. Tensions between China and Taiwan, while always just beneath the surface, seem unlikely to erupt in open conflict any time soon, especially given recent Kuomintang Party victories in Taiwan and efforts by Taiwan and China to re-open informal channels of consultation as well as institutional relationships between organisations responsible for cross-strait relations. And while in Asia there is no strong supranational political entity like the European Union, there are many multilateral organisations and international initiatives dedicated to enhancing peace and stability, including the Asia-Pacific Economic Cooperation (APEC) forum, the Proliferation Security Initiative and the Shanghai Co-operation Organisation. In Southeast Asia, countries are united in a common geopolitical and economic organisation – the Association of Southeast Asian Nations (ASEAN) – which is dedicated to peaceful economic, social and cultural development, and to the promotion of regional peace and stability. ASEAN has played a key role in conceiving and establishing broader regional institutions such as the East Asian Summit, ASEAN+3 (China, Japan and South Korea) and the ASEAN Regional Forum. All this suggests that war in Asia – while not inconceivable – is unlikely. This is not to say that the region will not undergo significant changes. The rise of China constitutes perhaps the most significant challenge to regional security and stability – and, from Washington’s vantage point, to American hegemony in the Asia-Pacific. The United States increasingly sees China as its key peer challenger in Asia: China was singled out in the 2006 Quadrennial Defense Review as having, among the ‘major and emerging powers … the greatest potential to compete militarily with the United States’.1 Although the United States has been the hegemon in the Asia-Pacific since the end of the Second World War, it will probably not remain so over the next 25 years. A rising China will present a critical foreign-policy challenge, in some ways more difficult than that posed by the Soviet Union during the Cold War.2 While the Soviet Union was a political and strategic competitor, China will be a formidable political, strategic and economic competitor. This development will lead to profound changes in the strategic environment of the Asia-Pacific. Still, the rise of China does not automatically mean that conflict is more likely; the emergence of a more assertive China does not mean a more aggressive China. While Beijing is increasingly prone to push its own agenda, defend its interests, engage in more nationalistic – even chauvinistic – behaviour (witness the Olympic torch counter-protests), and seek to displace the United States as the regional hegemon, this does not necessarily translate into an expansionist or warlike China. If anything, Beijing appears content to press its claims peacefully (if forcefully) through existing avenues and institutions of international relations, particularly by co-opting these to meet its own purposes. This ‘soft power’ process can be described as an emerging ‘Beijing Consensus’ in regional international affairs. Moreover, when the Chinese military build-up is examined closely, it is clear that the country’s war machine, while certainly worth taking seriously, is not quite as threatening as some might argue.

#### Sequestration swamps the aff

O'Hanlon 12

Michael O'Hanlon, director of research on foreign policy – Brookings, 2/24/12, The specter of sequestration, globalpublicsquare.blogs.cnn.com/2012/02/24/the-specter-of-sequestration/

This budget can cannot be kicked down the road. The two of us disagree about the advisability of the first round of budget cuts, as reflected in the new Obama budget. But there is widespread agreement among defense analysts that **sequestration would be a nightmare**. The implications of yet another round of 10 percent reductions in the military - coming on top of the 10 percent reductions resulting from the August stipulations of the Budget Control Act, yet another 8 to 10 percent that former Secretary of Defense Robert Gates had put in place during the first two years of the Obama administration, and another 20 percent resulting from the gradual winding down of the nation’s wars - would be **enormous and dangerous.**

Simply put, the cuts already baked into the cake and the sequestration that will happen without specific action to reverse it will make it nigh on impossible for the administration to maintain what it rightly considers irreducible strategic requirements for simultaneous military presence, crisis response and warfighting capability in both the Western Pacific/East Asia region as well as the broader Persian Gulf and Middle East.

#### No Guam realignment

Jeffrey W. Hornung, Associate Professor at the Asia-Pacific Center for Security Studies in Honolulu, HI and an Adjunct Fellow with the Office of the Japan Chair at the Center for Strategic and International Studies, 1/5/12, Time to Acknowledge the Realignment Impasse,

http://csis.org/files/publication/120105\_Hornung\_RealignmentImpasse\_JapanPlatform.pdf

Japanese foreign minister Koichiro Gemba and U.S. secretary of state Hillary Clinton recently reaffirmed their countries’ commitment to an agreement to build a Futenma Replacement Facility (FRF) in northern Okinawa and relocate over 8,000 Marines to Guam. Despite this high-level reaffirmation, the agreement is no longer workable. Although the allies are no closer to implementing it than they were the day negotiations began, developments over the past few months have pushed them further from their goal. Tokyo and Washington need to acknowledge that the conditions that were once conducive to implementation no longer exist. Because of the impasse, it is time to temper political rhetoric with reality.

#### Overwhelms the aff

Sydney Freedberg, 7/27/12, Pentagon, Congress Must Break 'Logjam' Over Japan, Guam Bases: CSIS, defense.aol.com/2012/07/27/pentagon-congress-must-break-logjam-over-japan-guam-bases-c/

Congress commissioned the study from the Center for Strategic and International Studies in the authorization bill for fiscal year 2012. SASC chairman Sen. Carl Levin's office formally received the report on Tuesday, according to a stamp on the posted version of the document. While the Senators are still reviewing it, Levin, ranking member John McCain, and Virginia Democrat Jim Webb released a statement this morning praising CSIS's work, in particular its call for the administration to better articulate the strategic logic and practical logistics of the "rebalancing to Asia" -- the term that has replaced the catchier but controversial "pivot to Asia."

The Senators' statement was silent on another part of the study, however: CSIS also challenges Capitol Hill and the administration to compromise on stalled plans to move Marines from Okinawa to Guam.

"These plans are at the center of a logjam between DoD [the Department of Defense], which would like to implement them, and the Congress, which is reluctant to authorize funding absent better details about cost and long-term master plans." The report argues that decades-long commitments to Japan and Korea have resulted in a Pacific posture that puts too many forces in the north of the region and not enough in the south, where China has become increasingly aggressive towards its maritime neighbors in the South China Sea, especially the Philippines. Shifting forces from Okinawa to Guam would help correct that imbalance, and China, our allies, and neutral parties are all watching for signs of US clarity and resolve: "The current impasse between DoD and the Congress is not cost-free in terms of US strategic influence in the region," the report warns.

#### Pre-positioning and alternative bases sufficient to solve

Jeffrey W. Hornung, Associate Professor at the Asia-Pacific Center for Security Studies in Honolulu, HI and an Adjunct Fellow with the Office of the Japan Chair at the Center for Strategic and International Studies, 1/5/12, Time to Acknowledge the Realignment Impasse,

What the alternative is remains open for discussion, although closing Futenma and integrating its current assets and operations elsewhere needs to be included. Understanding that building large military bases is unaffordable today, a joint basing option on Japanese military bases for the marines may prove beneficial, something Sheila Smith of the Council of Foreign Relations has advocated. Not only does it save money by utilizing existing infrastructure, it also improves interoperability between the allies. Another option, advocated for years by Mike Mochizuki of George Washington University and Michael O’ Hanlon of the Brookings Institution, could be the pre-positioning of U.S. equipment and supplies. This could be at Japanese military bases (with access agreed ahead of time), on amphibious ships at Japanese military ports, or on maritime vessels pre-positioned in Japanese waters. Pre-positioning equipment would allow marines to be flown in from bases abroad (or a smaller number that remain in Okinawa) to quickly access their equipment in a crisis. Another option is looking to other states. When U.S. realignment plans were first negotiated, one of the reasons Guam was chosen was because no other countries offered to host U.S. forces. Yet, this past November, Washington and Canberra agreed for the port of Darwin to host a full marine task force of up to 2,500 personnel. The implications of having this many marines based in Australia could take some pressure off the U.S. focus on Okinawa. Likewise, in December, Admiral Jonathan Greenert, chief of naval operations, wrote in the U.S. Naval Institute’s Proceedings that the United States will station several of its newest littoral combat ships in Singapore and may step up periodic aircraft deployments to the Philippines and Thailand. While not marines, this strengthens the U.S. presence in the region and could therefore further alleviate pressure to have a heavy military presence on Okinawa or Guam.

Though none of these alternatives are perfect substitutes for the Roadmap, they represent innovative approaches to maintaining U.S. forward presence in the Asia-Pacific region to ensure rapid, flexible responses during times of crisis.

#### Guam doesn’t solve

Klingner 11

Bruce Klingner is Senior Research Fellow for Northeast Asia in the Asian Studies Center at The Heritage Foundation, Heritage Foundation, May 18, 2011, " Proposed Re-Realignment for Northeast Asia Ignores Strategic Realities", <http://www.heritage.org/research/reports/2011/05/proposed-re-realignment-for-northeast-asia-ignores-strategic-realities>

The Senators casually suggest that U.S. Air Force units now at Kadena could be dispersed “into other areas of the Pacific region.” They fail to understand that all of the units are on Okinawa to fulfill critical treaty commitments and other alliance missions and are already best positioned to deal with the highest probability contingencies. Okinawa’s strategic location contributes to potent U.S. deterrent and power projection capabilities and enables rapid and flexible contingency response. Redeploying U.S. forces from Okinawa to Guam would reduce these capabilities. Guam is 1,400 miles, a three-hour flight, and multiple refueling operations farther from potential conflict zones in and around Japan and Korea. Some of the planes currently at Kadena do not have aerial refueling capability, reducing their availability and effectiveness if redeployed to Guam. Moving fixed-wing aircraft to Guam would drastically reduce the number of combat aircraft and logistic sorties that U.S. forces could conduct during crises involving North Korea or China while exponentially increasing and likely exceeding refueling and logistic capabilities. Deploying additional aircraft carriers would not be sufficient. Aircraft carriers cannot support transport or air-to-air refueling aircraft, nor can they generate the necessary combat aircraft sorties planned for both Kadena and Futenma during contingency and combat operations. Potentially Dangerous If Levin, McCain, and Webb have concerns about the slow pace of DoD planning and construction or doubts over the manner in which military realignment funds have been dispersed, then they should address those specific issues. But advocating that comprehensive U.S. military realignment plans in two countries be brought to a screeching halt is counterproductive at best and strategically dangerous at worst. Accepting the Senators’ recommendations would push U.S. Air Force and Marine Corps units away from potential conflict zones. Diminishing U.S. military assets would concern the nation’s Asian allies, degrade American deterrent and defense capabilities, embolden North Korea and China, and signal a U.S. retreat from Asia.

#### Trade doesn’t solve war

Martin et. al. 8(Phillipe, University of Paris 1 Pantheon—Sorbonne, Paris School of Economics, and Centre for Economic Policy Research; Thierry MAYER, University of Paris 1 Pantheon—Sorbonne, Paris School of Economics, CEPII, and Centre for Economic Policy Research, Mathias THOENIG, University of Geneva and Paris School of Economics, The Review of Economic Studies 75)

Does globalization pacify international relations? The “liberal” view in political science argues that increasing trade flows and the spread of free markets and democracy should limit the incentive to use military force in interstate relations. This vision, which can partly be traced back to Kant’s Essay on Perpetual Peace (1795), has been very influential: The main objective of the European trade integration process was to prevent the killing and destruction of the two World Wars from ever happening again.1 Figure 1 suggests2 however, that during the 1870–2001 period, the correlation between trade openness and military conflicts is not a clear cut one. The first era of globalization, at the end of the 19th century, was a period of rising trade openness and multiple military conflicts, culminating with World War I. Then, the interwar period was characterized by a simultaneous collapse of world trade and conflicts. After World War II, world trade increased rapidly, while the number of conflicts decreased (although the risk of a global conflict was obviously high). There is no clear evidence that the 1990s, during which trade flows increased dramatically, was a period of lower prevalence of military conflicts, even taking into account the increase in the number of sovereign states.

## korea

#### Zero risk of Korean conflict

Ashley **Rowland**, 12/3/20**10**. Stars and Stripes. “Despite threats, war not likely in Korea, experts say,” http://www.stripes.com/news/despite-threats-war-not-likely-in-korea-experts-say-1.127344?localLinksEnabled=false.

Despite increasingly belligerent threats to respond swiftly and strongly to military attacks, analysts say there is one thing both North Korea and South Korea want to avoid: an escalation into war. The latest promise to retaliate with violence came Friday, when South Korea’s defense minister-to-be said during a confirmation hearing that he supports airstrikes against North Korea in the case of future provocations from the communist country. “In case the enemy attacks our territory and people again, we will thoroughly retaliate to ensure that the enemy cannot provoke again,” Kim Kwan-jin said, according to The Associated Press. The hearing was a formality because South Korea’s National Assembly does not have the power to reject South Korean president Lee Myung-bak’s appointment. Kim’s comments came 10 days after North Korea bombarded South Korea’s Yeonpyeong island near the maritime border, killing two marines and two civilians — the first North Korean attack against civilians since the Korean War. South Korea responded by firing 80 rounds, less than half of the 170 fired by North Korea. It was the second deadly provocation from the North this year. In March, a North Korean torpedo sank the South Korean warship Cheonan, killing 46 sailors, although North Korea has denied involvement in the incident. The South launched a series of military exercises, some with U.S. participation, intended to show its military strength following the attack. John Delury, a professor at Yonsei University in Seoul, said South Korea is using “textbook posturing” to deter another attack by emphasizing that it is tough and firm. But it’s hard to predict how the South would respond to another attack. The country usually errs on the side of restraint, he said. “I think they’re trying to send a very clear signal to North Korea: Don’t push us again,” Delury said. “For all of the criticism of the initial South Korean response that it was too weak, in the end I think people don’t want another hot conflict. I think the strategy is to rattle the sabers a bit to prevent another incident.” Meanwhile, Yonhap News reported Friday that North Korea recently added multiple-launch rockets that are capable of hitting Seoul, located about 31 miles from the border. The report was based on comments from an unnamed South Korean military source who said the North now has 5,200 multiple-launch rockets. A spokesman for South Korea’s Joint Chiefs of Staff would not comment on the accuracy of the report because of the sensitivity of the information. Experts say it is a question of when — not if — North Korea will launch another attack. But those experts doubt the situation will escalate into full-scale war. “I think that it’s certainly possible, but I think that what North Korea wants, as well as South Korea, is to contain this,” said Bruce Bechtol, author of “Defiant Failed State: The North Korean Threat to International Security” and an associate professor of political science at Angelo State University in Texas. He said North Korea typically launches small, surprise attacks that can be contained — not ones that are likely to escalate. Delury said both Koreas want to avoid war, and North Korea’s leaders have a particular interest in avoiding conflict — they know the first people to be hit in a full-scale fight would be the elites.

#### No extinction

Layton 10 (Julia, B.A. in English literature from Duke University and a M.F.A. in creative writing from the University of Miami, 7/18, “Is North Korea equipped to attack the United States?”, http://science.howstuffworks.com/north-korea-threat.htm)

On October 11, 2006, the newly nuclear North Korea took its rhetoric up a notch when it threatened to attack the United States, which has been "pestering" the country ever since it conducted its internationally rattling nuclear test to declare itself a member of the club. North Korean officials are demanding a one-on-one meeting with the United States, but the latter refuses. Instead, the United States insists on multilateral talks and envisions harsh sanctions if North Korea doesn't cooperate. And North Korea has promised to launch a nuclear-tipped missile if the United States doesn't do something to solve the impasse. But does North Korea have the capabilities to carry out its threats against the United States? Not really. And, yes, kind of. There is actually no evidence that North Korea has a nuclear weapon, only that it has a nuclear device. A device capable of a nuclear explosion is one thing; delivering that device to a specific location by way of a missile is a whole different story. Most experts believe that North Korea has not yet developed the technology to weaponize its nuclear capability. It could presumably deliver a weapon by dropping it from a plane, but planes are relatively easy to shoot down before they near their target. North Korea's ability to shrink a nuclear device to the size necessary to fit it onto a missile is considered pretty much out of the question at this point in time.

## heg

Grid is resilient and sustainable

Clark, MA candidate – Intelligence Studies @ American Military University, senior analyst – Chenega Federal Systems, 4/28/’12

(Paul, “The Risk of Disruption or Destruction of Critical U.S. Infrastructure by an Offensive Cyber Attack,” American Military University)

In 2003, a simple physical breakdown occurred – trees shorted a power line and caused a

fault – that had a cascading effect and caused a power blackout across the Northeast (Lewis

2010). This singular occurrence has been used as evidence that the electrical grid is fragile and

subject to severe disruption through cyber-attack, a disruption that could cost billions of dollars,

brings business to a halt, and could even endanger lives – if compounded by other catastrophic

events (Brennan 2012). A power disruption the size of the 2003 blackout, the worst in American¶ history at that time (Minkel 2008), is a worst case scenario and used as an example of the¶ fragility of the U.S. energy grid. This perceived fragility is not real when viewed in the context¶ of the robustness of the electrical grid.¶ When asked about cyber-attacks against the electrical grid in April of 2012, the¶ intelligence chief of U.S. Cyber Command Rear Admiral Samuel Cox stated that an attack was¶ unlikely to succeed because of the “huge amounts of resiliency built into the [electrical] system¶ that makes that kind of catastrophic thing very difficult” (Capaccio 2012). This optimistic view¶ is supported by an electrical grid that has **proven to be robust in the face of large natural¶ catastrophes.** Complex systems like the electrical grid in the U.S. are prone to failures and the¶ U.S. grid fails frequently. Despite efforts to reduce the risk out power outages, the risk is always¶ present. Power outages that affect more than 50,000 people have occurred steadily over the last¶ 20 years at a rate of 12% annually and the frequency of large catastrophes remains relatively¶ high and outages the size of the 2003 blackout are predicted to occur every 25 years (Minkel¶ 2008). In a complex system that is always at risk of disruption, the effect is mitigated by policies¶ and procedures that are meant to restore services as quickly as possible. The most visible of these policies is the interstate Emergency Management Assistance Compact, a legally binding¶ agreement allowing combined resources to be quickly deployed in response to a catastrophic¶ disaster such as power outages following a severe hurricane (Kapucu, Augustin and Garayev¶ 2009).¶ The electrical grid suffers service interruptions regularly, it is a large and complex system¶ supporting the largest economy in the world, and yet commerce does not collapse (Lewis 2010).¶ **Despite blizzards, earthquakes, fires, and hurricanes** that cause blackouts, the economy is¶ affected but does not collapse and even after massive damage like that caused by Hurricane¶ Katrina, national security is not affected because U.S. military capability is not degraded (Lewis¶ 2010).¶ Cyber-security is an ever-increasing concern in an increasingly electronic and¶ interconnected world. Cyber-security is a high priority “economic and national security¶ challenge” (National Security Council n.d.) because cyber-attacks are expected to become the¶ top national security threat (Robert S. Mueller 2012). In response to the threat Congress is¶ crafting legislation to enhance cyber-security (Brito and Watkins 2012) and the Department of¶ Homeland Security budget for cyber-security has been significantly increased (U.S. Senate¶ Committee on Homeland Security and Governmental Affairs 2012).

Microgrids solve DOD vulnerability

Pike Research, market research and consulting firm that provides in-depth analysis of global clean technology markets, 9/16/’11

(<http://www.pikeresearch.com/newsroom/military-microgrid-capacity-to-experience-more-than-700-growth-by-2017>)

Military Microgrid Capacity to Experience More than 700% Growth by 2017

September 16, 2011

The United States Department of Defense (DOD) is the single largest consumer of petroleum in the world. U.S. military operations are also the largest consumer of all forms of energy globally. Microgrids, which enable distributed energy generation at a localized scale including the ability to “island” themselves from larger utility grids, can shrink the amount of fossil fuels consumed to create electricity by networking generators as a system to maximize efficiency. Microgrids enable military bases – both stationary and tactical – to sustain operations no matter what is happening on the larger utility grid or in the theater of war.

According to a new report from Pike Research, the capacity of military microgrids will grow at a rate of 739% between 2011 and 2017, increasing from 38 megawatts (MW) to 316 MW during that period, under a baseline forecast scenario. The cleantech market intelligence firm expects that, under a more aggressive adoption scenario, stationary and mobile military microgrid capacity could reach as high as 817 MW during the same timeframe.

“The military’s **primary concern** is disruption of service from utility transmission and distribution lines,” says senior analyst Peter Asmus. “The lack of control and ownership of these lines – and the uneven quality of power service regionally throughout the United States – has **prompted the DOD to reexamine the existing electricity service delivery model.** This analysis has led the DOD to the inevitable conclusion that the **best way** to bolster its ability to secure power may well be through microgrid technology it can own and control.”

Asmus adds that, as awareness about the electrical grid’s vulnerability to terrorist attacks has increased in recent times, the U.S. military has become one of the strongest proponents of microgrids, which offer the ultimate secure power supply for fixed base mobile operations. Many army, navy, air force, and other related bases and offices already have vintage microgrids in place. What is new, says Asmus, is that these facilities are looking to **envelop entire bases** with microgrids and integrate distributed energy generation on-site. These resources, when capable of safe islanding from the surrounding grid, offer the ultimate security since fuel never runs out with renewable energy resources such as solar or wind. The opportunity to help develop these microgrids has attracted a number of powerful technology companies including Lockheed Martin, GE, Honeywell, Boeing, and Eaton.

DOD would be fine—critical systems are air-gapped

Weimann 4

Gabriel Weimann, senior fellow at the United States Institute of Peace and professor of communication at the University of Haifa, Israel, 2004, Cyberterrorism How Real Is the Threat?, ttp://www.usip.org/files/resources/sr119.pdf

Neither al Qaeda nor any other terrorist organization appears to have tried to stage a serious cyberattack. For now, insiders or individual hackers are responsible for most attacks and intrusions and the hackers’ motives are not political. According to a report issued in 2002 by IBM Global Security Analysis Lab, 90 percent of hackers are amateurs with limited technical proficiency, 9 percent are more skilled at gaining unauthorized access but do not damage the files they read, and only 1 percent are highly skilled and intent on copying files or damaging programs and systems. Most hackers, it should be noted, try to expose security flaws in computer software, mainly in the operating systems produced by Microsoft. Their efforts in this direction have sometimes embarrassed corpo- rations but have also been responsible for alerting the public and security professionals to serious security flaws. Moreover, although there are hackers with the ability to damage systems, disrupt e-commerce, and force websites offline, the vast majority of hackers do not have the necessary skills and knowledge. The ones who do, generally do not seek to wreak havoc. Douglas Thomas, a professor at the University of Southern California, spent seven years studying computer hackers in an effort to understand better who they are and what motivates them. Thomas interviewed hundreds of hackers and explored their “literature.” In testimony on July 24, 2002, before the House Subcommittee on Govern- ment Efficiency, Financial Management and Intergovernmental Relations, Thomas argued that “with the vast majority of hackers, I would say 99 percent of them, **the risk [of cyberterrorism] is negligible** for the simple reason that those hackers do not have the skill or ability to organize or execute an attack that would be anything more than a minor inconvenience.” His judgment was echoed in Assessing the Risks of Cyberterrorism, Cyber War, and Other Cyber Threats, a 2002 report for the Center for Strategic and International Studies, written by Jim Lewis, a sixteen-year veteran of the State and Commerce Depart- ments. “The idea that hackers are going to bring the nation to its knees is too far-fetched a scenario to be taken seriously,” Lewis argued. “Nations are more robust than the early analysts of cyberterrorism and cyberwarfare give them credit for. Infrastructure systems [are] more flexible and responsive in restoring service than the early analysts realized, in part because they have to deal with failure on a routine basis.”

Many computer security experts do not believe that it is possible to use the Internet to inflict death on a large scale. Some pointed out that the resilience of computer systems to attack is the result of significant investments of time, money, and expertise. As Green describes, **nuclear weapons systems are protected by “air-gapping”: they are not connected to the Internet or** to **any open computer network and** thus they **cannot be accessed by intruders, terrorists, or hackers**. Thus, for example, the **Defense** Department **protects** **sensitive systems by isolating them from the Internet and even** from **the Pentagon’s own internal network**. The CIA’s classified computers are also air-gapped, as is the FBI’s entire computer system.

DOD won’t lose oil access—any alternative is less efficient

Sarewitz, Co-Director – Consortium for Science, Policy & Outcomes, and Thernstrom, senior climate policy advisor – Clean Air Task Force, ‘12

(Daniel and Samuel, “Introduction,” in Energy Innovation at the Department of Defense: Assessing the Opportunities, March)

Even so, given adequate forward planning, DoD has little¶ reason to fear constraints on supply of petroleum-based fuels¶ for several decades, perhaps many. A tightening international¶ oil market, resulting in continuing price increases, would pose¶ greater difficulties for other segments of the U.S. economy and¶ society, **and for other countries.** DoD’s expenditures on fuel **may¶ seem large**, but should be viewed in the context of other routine¶ expenditures. Even for the Air Force, the principal consumer with¶ its fleet of nearly 6,000 planes, fuel accounts for only around¶ one-fifth of operations and maintenance costs.12 In Afghanistan¶ and Iraq, fuel and water have made up 70 percent (by weight) of¶ the supplies delivered to forward areas.13 Transport convoys have¶ drawn frequent and deadly attacks, but the only way to reduce¶ risks, casualties, and delivery costs is to cut consumption (of¶ water as well as fuel)—**not something that alternative fuels can¶ promise.** Alternative fuels might have somewhat lower energy¶ densities than petroleum (less energy content per gallon or per¶ pound), meaning somewhat more fuel would have to be burned¶ for the same power output, but not higher (by any significant¶ amount). Indeed, alternative fuels cannot promise performance¶ advantages of any sort.

No disruptions—multiple trends

Alic, former tech and science consultant – Office of Technology Assessment, adjunt professor – Johns Hopkins SAIS, ‘12

(John, “Defense Department Energy Innovation: Three Cases,” in Energy Innovation at the Department of Defense: Assessing the Opportunities, March)

Over 80 percent of the petroleum purchased and consumed¶ by the U.S. military consists of jet fuel designated JP-5 or JP-8;¶ diesel fuel makes up nearly all the rest.46 By volume, recent¶ purchases peaked in fiscal 2003 with the invasion of Iraq, then¶ declined even as rising oil prices pushed expenditures upward:¶ fuel doubled as a share of DoD outlays, from 1.5 percent to 3¶ percent, between fiscal years 2004 and 2008. Consumption did¶ not change much, but purchases rose from $7 billion (2004) to¶ $18 billion (2008). Prices then fell back somewhat, but in 2011¶ DoD paid more for jet fuel just as motorists did for gasoline.¶ Even so, the Energy Information Administration (EIA, part of the¶ Energy Department) predicts relatively flat oil prices over the next¶ quarter century, with inflation-adjusted prices in the range of¶ $120 per barrel.47¶ Oil prices respond almost instantaneously to international¶ political events (e.g., the threat of supply constrictions) and to¶ economic fluctuations affecting demand. A small number of big¶ suppliers—state-owned or state-controlled enterprises inside¶ and outside the Organization of Petroleum Exporting Countries¶ (OPEC), plus a handful of private multinationals—dominate¶ production. In recent years, most have appeared to pump¶ oil at or near capacity most of the time. By most indications,¶ Saudi Arabia alone retains the ability to affect prices by raising¶ or lowering output. Otherwise suppliers must act together to¶ set prices, and in recent years that has come to seem mostly a¶ theoretical possibility. Periodic fears of disruption linked with¶ political unrest or war have had greater effects, and sharp swings¶ in prices have been common, affected also by asynchronous¶ demand variations in major markets. **Price increases have been¶ moderated by declining energy intensity** (energy consumption¶ relative to economic output) **in most parts of the world.** This is¶ the principal reason EIA does not expect the long-term trend to¶ be sharply upward.¶ Acknowledging the more dramatic scenarios some analysts¶ put forward, **there seems little** in what is actually known about¶ world oil reserves and the workings of the international market **to¶ suggest that the U.S. military faces** either intolerably **burdensome¶ fuel costs or supply risks** in the foreseeable future. DoD buys¶ fuel alongside other purchasers. It is a big customer, but not¶ big enough to affect prices. Long-distance transport of crude¶ oil and refined products is **routine and inexpensive.** So long¶ as the world market remains effectively integrated, it would¶ take a massive injection of substitutable alternatives to affect¶ prices. Private investors, absent proven capability to produce¶ alternatives in substantial quantities at competitive costs—or a¶ package of subsidies such as those for domestic ethanol, perhaps¶ including binding price guarantees—will find little reason to¶ increase production capacity rapidly. Fuel is fuel, and as output¶ of substitutable alternatives builds it will simply flow into the¶ international market at prices little different from those for other¶ refined petroleum products.¶ Given U.S. dependence on imported oil, it is reliability of¶ supply, rather than pricing, that might seem the larger issue.¶ But again, the market is international; indeed, DoD buys much¶ of its fuel abroad—in recent years, something like half (box¶ 2.3). Innovations—perhaps sustainable biofuels—would, once¶ proven, migrate to the lowest-cost-production locations, many of¶ them presumably overseas. (The United States has no monopoly¶ on sunshine and arable land.) DoD and the government might¶ support innovation and subsidize production, but it would be¶ difficult to wall off domestic output without some compelling¶ national security rationale. Wartime supply interruptions¶ might be accepted as justifying government ownership and¶ reservation of output for the military, but not indefinite fears of¶ future interruptions. Private ownership coupled with domestic¶ production and export restrictions would more than likely be¶ seen as contravening bedrock principles of U.S. foreign economic¶ policy, which since World War II has been based on borders¶ nominally open to trade.

Switching energy sources doesn’t reduce the risk of supply cut-offs—it’s also vulnerable to the same price swings

Shachtman, contributing editor – Wired, editor – Danger Room, nonresident fellow – Brookings, 4/27/’12

(Noah, “Is the Pentagon Going Green, or Eco-Pretending?” <http://www.wired.com/dangerroom/2010/04/is-the-pentagon-going-green-or-eco-pretending/?utm_source=Contextly&utm_medium=RelatedLinks&utm_campaign=Previous>)

Navy Secretary Ray Mabus says he’s ready to turn an entire carrier strike group an environmentally friendly armada — from biofueled fighter jets to hybrid ships — by 2016. The idea: demonstrate that some of the military’s biggest gas guzzlers don’t have to stay that way. But even Mabus’ own energy specialists aren’t sure what “deploying” this so-called “Great Green Fleet” will really mean. “**It’ll depend on the supply chain.** If they go over the horizon and 30 days later they have to go back to regular fuel because there’s not enough biofuel, then so be it,” says Chris Tindal, deputy director for renewable energy in the Navy’s Energy Office.¶ The story is already generating some discussion in the Defense Department. “How will replacing one fuel with another (a la the Green Fleet) change any military advantage or vulnerability” asks one Pentagon official in a thought-provoking e-mail. The note in full, after the jump.¶ Here are some thoughts to consider. How will replacing one fuel with another (a la the Green Fleet) change any military advantage or vulnerability? From a military perspective, a requirement for maple syrup (instead of JP-8 [the standard, petroleum-based fuel]) would still mean that we’re vulnerable to supplies of maple syrup. You’re right to bring up the nuclear navy example, but the benefits of nuclear power were more clear from a military perspective. Primarily, they cut the need for oilers to refuel the carrier. Unless we’re brewing up the fuel at sea (which I haven’t heard about), the Green Fleet does no such thing. It’s also useful to remember that a criticism of the carrier’s nuclear power is that the air wing and battle group still needed to be refueled (esp after demise of nuclear power CGs [cruisers]) and retained the need for the long logistics tails. Makes me think of the scenario of the CVN [aircraft carrier] speeding to the Arabian Sea, only to leave behind the battle group when they needed to refuel.¶ Supplier diversity is important, but equally – maybe more important – is reducing our energy needed for a given level of mission output. Developing non-petroleum supplies of fuel does not, by itself, affect any form of military vulnerability. The quote by Chris Tindal is telling. It may be a net social or public policy good to pursue the Green Fleet, but it’s not clear how this increases our military advantage or decreases our vulnerability. Strategically, we’ll always be able to get petroleum – it may cost a lot, but we can get it. DoD consumption is a pittance compared to global supply (or even US supply), and **the bigger problem is getting it to the user.** Operational energy risk is about being vulnerable to those logistics **being disrupted**. Reducing demand, not substituting one fuel for the other, will reduce that vulnerability.**¶** Something to consider. I’m all for energy alternatives, but we should place them in the related but often distinct contexts of national policy objectives on the one hand, and more narrow military risks and opportunities on the other.¶ Hope all is well. Look forward to talking more, if you like.¶ Cheers,¶ XXXXXXXX¶ PS: One final comment. Someone once said that the best solution to global warming is a gallon of fuel not used. Never mind the new exotic alternative fuels, better efficiency might do the trick better. Not sexy, but efficiency pays.

#### Data disproves hegemony impacts

Fettweis, 11

Christopher J. Fettweis, Department of Political Science, Tulane University, 9/26/11, Free Riding or Restraint? Examining European Grand Strategy, Comparative Strategy, 30:316–332, EBSCO

It is perhaps worth noting that there is no evidence to support a direct relationship between the relative level of U.S. activism and international stability. In fact, the limited data we do have suggest the opposite may be true. During the 1990s, the United States cut back on its defense spending fairly substantially. By 1998, the United States was spending $100 billion less on defense in real terms than it had in 1990.51 To internationalists, defense hawks and believers in hegemonic stability, this irresponsible “peace dividend” endangered both national and global security. “No serious analyst of American military capabilities,” argued Kristol and Kagan, “doubts that the defense budget has been cut much too far to meet America’s responsibilities to itself and to world peace.”52 On the other hand, if the pacific trends were not based upon U.S. hegemony but a strengthening norm against interstate war, one would not have expected an increase in global instability and violence.

The verdict from the past two decades is fairly plain: The world grew more peaceful while the United States cut its forces. No state seemed to believe that its security was endangered by a less-capable United States military, or at least none took any action that would suggest such a belief. No militaries were enhanced to address power vacuums, no security dilemmas drove insecurity or arms races, and no regional balancing occurred once the stabilizing presence of the U.S. military was diminished. The rest of the world acted as if the threat of international war was not a pressing concern, despite the reduction in U.S. capabilities. Most of all, the United States and its allies were no less safe. The incidence and magnitude of global conflict declined while the United States cut its military spending under President Clinton, and kept declining as the Bush Administration ramped the spending back up. No complex statistical analysis should be necessary to reach the conclusion that the two are unrelated.

Military spending figures by themselves are insufficient to disprove a connection between overall U.S. actions and international stability. Once again, one could presumably argue that spending is not the only or even the best indication of hegemony, and that it is instead U.S. foreign political and security commitments that maintain stability. Since neither was significantly altered during this period, instability should not have been expected. Alternately, advocates of hegemonic stability could believe that relative rather than absolute spending is decisive in bringing peace. Although the United States cut back on its spending during the 1990s, its relative advantage never wavered.

However, even if it is true that either U.S. commitments or relative spending account for global pacific trends, then at the very least stability can evidently be maintained at drastically lower levels of both. In other words, even if one can be allowed to argue in the alternative for a moment and suppose that there is in fact a level of engagement below which the United States cannot drop without increasing international disorder, a rational grand strategist would still recommend cutting back on engagement and spending until that level is determined. Grand strategic decisions are never final; continual adjustments can and must be made as time goes on. Basic logic suggests that the United States ought to spend the minimum amount of its blood and treasure while seeking the maximum return on its investment. And if the current era of stability is as stable as many believe it to be, no increase in conflict would ever occur irrespective of U.S. spending, which would save untold trillions for an increasingly debt-ridden nation.

It is also perhaps worth noting that if opposite trends had unfolded, if other states had reacted to news of cuts in U.S. defense spending with more aggressive or insecure behavior, then internationalists would surely argue that their expectations had been fulfilled. If increases in conflict would have been interpreted as proof of the wisdom of internationalist strategies, then logical consistency demands that the lack thereof should at least pose a problem. As it stands, the only evidence we have regarding the likely systemic reaction to a more restrained United States suggests that the current peaceful trends are unrelated to U.S. military spending. Evidently the rest of the world can operate quite effectively without the presence of a global policeman. Those who think otherwise base their view on faith alone.

# 2NC

## Heg

## 2nc no solvency

Alternative production can’t be distributed in-theater—it’s just as vulnerable to disruptions as oil

Bartis, PhD chemical physics – MIT, senior policy researcher – RAND, and van Bibber, researcher – RAND, ‘11

(James T. and Lawrence, “Alternative Fuels for Military Applications,” RAND Corporation)

Examples of forward-based concepts that require a feedstock include the following:¶ • An alternative fuel plant could be built on a barge that could be towed to a location¶ within or near the theater of operations and where natural gas is available.¶ Each floating plant could produce 10,000 to 20,000 bpd of fuel. If the floating¶ plant is sufficiently close to forward operating units, the produced fuel could be¶ transferred by helicopter; otherwise, it could be offloaded onto a Navy oiler.¶ • A small biomass-to-liquids plant could be built within or near a forward operating¶ base. The fuel plant could produce between a few hundred and as much as¶ 1,000 bpd using biomass delivered by local farmers.¶ While there are many variations of the above two cases and many in between, all of¶ the local-feedstock-based production concepts examined in this study present serious¶ operational, institutional, or logistical problems that significantly limit their military¶ utility, as compared to producing fuel outside of the theater of operations and shipping¶ that fuel to the theater of operations.¶ Floating Production¶ Large floating production facilities are vulnerable to attack and have limited application,¶ since appropriate feedstocks may not be available. There is no evidence that a floating production¶ facility would be less expensive than delivering finished military fuels produced¶ outside the zone of conflict.¶ For production levels of over 10,000 bpd, floating production plant concepts require¶ a barge that is roughly the size of an aircraft carrier. Putting a barge of this size in the¶ vicinity of or within a conflict zone would likely require protection by dedicated naval¶ assets. Most importantly, the concept has limited application. The concept for floating¶ production that has been most extensively examined involves jet and diesel fuel¶ production from natural gas via Fischer-Tropsch synthesis.1 Short-duration conflicts¶ would not support the time and expense necessary to bring the barge to theater, secure¶ a natural gas supply, and conduct equipment shakedown. There is also the question of¶ whether permission to access the needed natural gas feedstock at reasonable prices and¶ within a reasonable time would be granted by the nation (or nations) claiming ownership¶ of the natural resource. Such permission might be delayed due to political reasons,¶ but there are also valid economic and technical reasons. If the natural gas is already¶ being extracted, diversion to alternative liquids production would leave other applications¶ and customers without supplies. If the natural gas is in an undeveloped reservoir,¶ the owner nation may be concerned that a rush to production may preclude the reservoir¶ characterization and engineering necessary for sustainable production.¶ Finally, there is no evidence that a floating production plant would be less expensive¶ than using Navy oilers or commercial oil tankers to bring JP-8, JP-5, and diesel¶ fuel directly to forward-based oil depots. Production economics further suffer from the¶ need to produce a fairly narrow product slate, namely, middle distillates, which will¶ require extensive upgrading or flaring of light hydrocarbon liquids and gases. Also, a¶ production facility capable of producing roughly 10,000 bpd of fuel cannot sit idle¶ in storage and then be expected to operate when needed. When not deployed, such a¶ plant will need to be operated, and such operations could incur net annual losses.¶ Variations of this floating-barge production concept include using nuclear power¶ to provide hydrogen from water, using coal rather than natural gas, and using coproduced¶ water to meet the water needs of forward-based forces. So long as natural gas¶ is the feedstock, there would be no shortage of hydrogen, and therefore no benefit from¶ a nuclear source of hydrogen.¶ There would be no logistical advantages of using coal as the feedstock, even if¶ the coal were to come from a local source. We are aware of no credible analysis that¶ suggests that the costs of loading, unloading, storing, and processing coal in a mobile¶ facility would be less than the costs of transporting finished fuels produced outside the¶ zone of conflict.¶ While it is true that water can be a co-product of an FT gas-to-liquids plant, a¶ search of the literature reveals that there is no experience, globally speaking, in using¶ industrial wastewater for human consumption and very little experience in using industrial¶ wastewater for irrigation of food crops. Even if research revealed that such use would¶ be appropriate, significant water treatment and monitoring resources would be required¶ to ensure that appropriate water quality standards were continuously met.¶ Small-Scale Production¶ It is difficult to identify a credible operational scenario in which having forward-based¶ units carry and operate a small-footprint, modular alternative fuel plant would be an¶ asset. **The logistics and operational burden** of having forward-based units secure a carbon containing¶ feedstock **is greater than that of delivering finished fuels to those units.**¶Motivating interest in small-scale alternative fuel production concepts is the potential¶ to co-locate military fuel production with tactical units. Ongoing advances in chemical¶ microprocessing offer the possibility of designing small-footprint, modular alternative¶ fuel plants that can be delivered to or carried by a forward operating unit. Presumably, a tactical unit supported by such a plant would require less logistics support. In¶ situations in which logistics lines are at risk of attack, fewer fuel-delivery trucks means¶ fewer drivers at risk and fewer military assets dedicated to convoy security.¶ In our analysis of small-scale, forward-based military fuel production concepts,¶ we considered both technical viability and military utility. From a strictly technical¶ perspective, a number of the concepts being supported by DoD funds might be viable.2¶ From a military utility perspective, all of these concepts appear to place a logistical and¶ operational burden on forward-based tactical units that is well beyond that associated¶ with the delivery of finished military fuels, either synthetic or conventional, produced¶ outside the theater of operations. Specifically, all of these concepts require delivery of a¶ carbon-containing feedstock. For all known fuel conversion processes, the weight and¶ volume of the required feedstock deliveries would far exceed the weight and volume of¶ the fuel deliveries that would be displaced. Considering fuel-delivery issues, the diversion¶ of combat strength involved in protecting local extraction and delivery of feedstocks,¶ and the additional personnel required to deliver, set up, operate, and maintain a¶ forward-based military fuel production facility, **we have difficulty identifying credible**¶ **operational scenarios in which such a facility would be a military asset.**

## at: transportation

Can’t replace transport batteries—past innovation proves

Alic, former tech and science consultant – Office of Technology Assessment, adjunt professor – Johns Hopkins SAIS, ‘12

(John, “Defense Department Energy Innovation: Three Cases,” in Energy Innovation at the Department of Defense: Assessing the Opportunities, March)

As the illustrations above suggest, **even the best batteries**,¶ despite the advances of the past several decades, continue to¶ seem costly, clumsy, and heavy. Because of performance ceilings¶ imposed by electrochemical principles, they promise “limited¶ specific energy with little room for improvement.”74 Since the¶ determinants of battery weight are well understood and most¶ of the obviously attractive chemistries have been the subject¶ of at least some research, big jumps in energy density may not¶ be achievable. Cost declines through development of cell types¶ based on inexpensive starting materials hold greater promise.¶ Beyond Batteries¶ A few years ago the Air Force Scientific Advisory Board (SAB),¶ stating that “combat controllers, pararescuemen, and combat¶ weathermen often carry packs weighing several hundred¶ pounds” and that “thirty percent of the weight is batteries,” called¶ for the elimination of batteries. According to the SAB, this would¶ “change the game.”75 Their report does not say how batteries¶ might be dispensed with, but the SAB most likely had fuel cells in¶ mind (box 2.6).¶ Practical small fuel cells would provide a basis for lightweight¶ power packs for soldiers. Larger units could replace towed¶ diesel generators and serve as auxiliary power units to minimize¶ inefficient low-load operation of the main engines in ground¶ vehicles and naval vessels. Unlike solar and wind power, **however**,¶ and **despite massive investments in R&D** over the past two¶ decades motivated chiefly by prospective applications to electric¶ vehicles, fuel cells have not been commercialized to any great¶ extent. Costs remain prohibitive, for reasons alluded to in box¶ 2.6, such as short-lived and expensive catalysts. For DoD, the¶ attractions—quiet stationary power in remote areas, lighter loads¶ for dismounted soldiers—justify much higher costs than civilian¶ markets will accept. The Army has conducted a considerable¶ number of fuel cell demonstrations in recent years, and in 2009¶ began shipping small numbers to Afghanistan.76 Even if costs¶ never decline sufficiently for high-volume commercial sales,¶ advances in fuel cells for military applications will continue and¶ applications spread.

Fuel cells fail

Alic, former tech and science consultant – Office of Technology Assessment, adjunt professor – Johns Hopkins SAIS, ‘12

(John, “Defense Department Energy Innovation: Three Cases,” in Energy Innovation at the Department of Defense: Assessing the Opportunities, March)

In practice, as so often, costs and engineering realities pose obstacles. Hydrogen fuel cells offer simplicity and¶ efficiency, but for reasonable volumetric energy density the hydrogen must be stored as either a very lowtemperature¶ liquid or a very high-pressure gas, as mentioned in the preceding section. This requires either a heavily¶ insulated or a heavily strengthened storage vessel. Liquid fuels consumed directly in the cell or converted first to¶ hydrogen via standard chemical processes known as reformation tend to foul or poison the catalysts on which fuel cells and reformers depend; good catalysts are expensive, and JP-8, which otherwise would be ideal for military¶ applications, is one of the worst starting points because of relatively high sulfur content (sulfur is lethal to catalysts,¶ and the sulfur content of jet fuel, unlike that of diesel fuel for road vehicles, remains essentially unregulated).¶ Comparisons¶ Fuel cells and batteries offer relatively high efficiency (the fraction of energy theoretically available that can be¶ converted into useful work) compared to most other energy converters. The best diesel engines, for example,¶ approach 40 percent efficiency under optimal conditions (i.e., the load-speed combination that gives the highest¶ efficiency). While this is better than gasoline engines or gas turbines can achieve, some batteries approach 90 percent efficiency. For any fuel-burning engine, moreover, efficiency falls off at loads and speeds well away from the¶ maximum point, so that average efficiencies do not approach the maximum under load-varying conditions, as for¶ passenger vehicles. Cars and light trucks in typical urban driving, for example, may average 15 percent efficiency¶ or less. For batteries and fuel cells, by contrast, efficiency does not change much with load (i.e., rate of discharge).¶ On the other hand, fuel-burning engines exhibit greater energy density and power density than batteries and have¶ sometimes, for that reason, been considered for soldier-portable power. The technology for combustion engines is¶ highly developed, manufacturing costs are modest, and small engines can be designed to operate much more quietly¶ than leaf blowers or model airplanes. Miniature diesel engines could burn jet fuel. On the other hand, combustion¶ engines would have to be integrated with a generator to produce electrical power, and all such engines scale down¶ poorly, since heat and mechanical losses rise as a proportion of output. In most evaluations, the disadvantages¶ have seemed to outweigh the advantages.

## at: SMRs on forward bases

SMRs won’t be deployed to forward bases unless they’re thorium—and that won’t happen

Ackerman, editor – Danger Room @ Wired, 2/18/’11

(Spencer, “Latest Pentagon Brainstorm: Nuke-Powered War Bases,” Danger Room)

Buried within Darpa’s 2012 budget request under the innocuous name of “Small Rugged Reactor Technologies” is a $10 million proposal to fuel wartime Forward Operating Bases with nuclear power. It springs from an admirable impulse: to reduce the need for troops or contractors to truck down roads littered with bombs to get power onto the base. It’s time, Darpa figures, for a “self-sufficient” FOB.

Only one problem. “The only known technology that has potential to address the power needs of the envisioned self-sufficient FOB,” the pitch reads, “is a nuclear-fuel reactor.” Now, bases could mitigate their energy consumption, like the solar-powered Marine company in Helmand Province, but that’s not enough of a game-changer for Darpa. Being self-sufficient is the goal; and that requires going nuclear; and that requires … other things.

To fit on a FOB, which can be anywhere from Bagram Air Field’s eight square miles to dusty collections of wooden shacks and concertina wire, the reactor would have to be “well below the scale of the smallest reactors that are being developed for domestic energy production,” Darpa acknowledges.

That’s not impossible, says Christine Parthemore, an energy expert at the Center for a New American Security. The Japanese and the South Africans have been working on miniature nuclear power plants for the better part of a decade; Bill Gates has partnered with Toshiba to build mini-nuke sites. (Although it’s not the most auspicious sign that one prominent startup for modular reactors suspended its operations after growing cash-light last month.) Those small sites typically use uranium enriched to about 2 percent. “It would be really, really difficult to divert the fuel” for a bomb “unless you really knew what you were doing,” Parthemore says.

But Darpa doesn’t want to take that chance. Only “non-proliferable fuels (i.e., fuels other than enriched uranium or plutonium) and reactor designs that are fundamentally safe will be required of reactors that may be deployed to regions where hostile acts may compromise operations.”

Sensible, sure. But it limits your options: outside of uranium or plutonium, thorium is the only remaining source for generating nuclear fuel. The Indians and now the Chinese have experimented with thorium for their nuclear programs, but, alas, “no one has ever successfully found a way” to build a functioning thorium reactor, Parthemore says, “in a safe and economical manner.”

For now, Darpa proposes to spend $10 million of your money studying the feasibility of the project. But it’s just one part of the researchers’ new push to green the military. Another $10 million goes to a project called Energy Distribution, which explores bringing down energy consumption on the FOBs. An additional $5 million will look at ways to keep fuel storage from degrading in extreme temperatures. For $50 million, Darpa proposes to build a turbine engine that uses 20 percent less energy.

But all of that is mere isotopes compared to the Nuclear FOB. Darpa appears to have thought about it a lot. It says it plans to work with the Department of Energy “to ensure that existing advanced reactor development activities are being exploited and/or accelerated as appropriate, based on the military’s needs.”

Still, if it can’t find the right non-proliferable fuel, it suggests that it might look to the “development of novel fuels.” Says a stunned Parthemore, “I have no idea why you’d want to bring that upon the world.”

## 2nc grid stable

Prefer our evidence—grid is actively improving

Koerth-Baker, science editor – Boing Boing, columnist – NYT Magazine, electric grid expert, 8/3/’12

(Maggie, “Blackout: What's wrong with the American grid,” <http://boingboing.net/2012/08/03/blackout-whats-wrong-with-t.html>)

But this is about more than mere bad luck. The real causes of the 2003 blackout were fixable problems, and the good news is that, since then, we’ve made great strides in fixing them. The bad news, say some grid experts, is that we’re still not doing a great job of preparing our electric infrastructure for the future.¶ Let’s get one thing out of the way right up front: The North American electric grid is not one bad day away from the kind of catastrophic failures we saw in India this week. I’ve heard a lot of people speculating on this, but the **folks who know the grid** say that, while such a huge blackout is theoretically possible, it is also extremely unlikely. As Clark Gellings, a fellow at the Electric Power Research Institute put it, “An engineer will never say never,” but you should definitely not assume anything resembling an imminent threat at that scale. Remember, the blackouts this week cut power to half of all Indian electricity customers. Even the 2003 blackout—the largest blackout in North America ever—only affected about 15% of Americans.¶ We don’t know yet what, exactly, caused the Indian blackouts, but there are several key differences between their grid and our grid. India’s electricity is only weakly tied to the people who use it, Gellings told me. Most of the power plants are in the far north. Most of the population is in the far south. The power lines linking the two are neither robust nor numerous. That’s not a problem we have in North America.¶ Likewise, India has considerably more demand for electricity than it has supply. Even on a good day, there’s not enough electricity for all the people who want it, said Jeff Dagle, an engineer with the Pacific Northwest National Laboratory’s Advanced Power and Energy Systems research group. “They’re pushing their system much harder, to its limits,” he said. “If they have a problem, there’s less cushion to absorb it. Our system has rules that prevent us from dipping into our electric reserves on a day-to-day basis. So we have reserve power for emergencies.”

New tech means their 2003 example no longer applies

Koerth-Baker, science editor – Boing Boing, columnist – NYT Magazine, electric grid expert, 8/3/’12

(Maggie, “Blackout: What's wrong with the American grid,” <http://boingboing.net/2012/08/03/blackout-whats-wrong-with-t.html>)

In 2003, it took about 30 seconds for data about what was happening on the grid to be gathered, compiled, analyzed, and displayed in a way that grid controllers could use. That sounds pretty fast, until you consider the fact that changes on the grid happen much, much faster\*\*\*. If a power plant goes offline in Arizona, it can create a measurable effect in Canada in about a second. If your view of the grid is updated only every 30 seconds, you miss important details. After the 2003 blackout, grid experts went back and essentially replayed the whole thing in a computer modeling program. The idea was to try to get a better idea of where things went wrong and how a similar event could be prevented in the future. They found that, about an hour before the blackout, the grid was showing signs of stress that controllers didn’t see at the time, said Carl Imhoff, manager of the Energy and Environment Sector at PNNL. It wasn’t the controllers’ fault. They simply didn’t have the technology to see the big picture.¶ Fixing the Grid¶ Today, that technology exists. Phasor Measurement Units are kind of the opposite of sexy. Also known as PMUs, they’re just anonymous little boxes that sit on server racks in electrical substations. But phasors are linked into transmission lines. They see what’s happening on the line—how well supply and demand are balanced, whether voltage and frequency are stable and within the normal range. That’s just one point of data, recorded in one place. But a network of phasors can tell you a lot. It can show you, for instance, if the stability of the grid is changing as electricity moves from Cleveland to Columbus. And the **phasors process that information far more quickly.** Today, our grid can give controllers information about the big picture in less than 10 seconds. Researchers like Massoud Amin are working on getting that response time down to fewer than 3 seconds.¶ If we’d had a phasor network in 2003, grid controllers would have had that hour warning about the problem. There’s a good chance they’d have been able to fix it, or, at least, make the resulting blackout smaller and more localized.¶ When it comes to PMUs, 2003 was really a wake-up call. It led utilities and the government to team up to install a true phasor network throughout the United States. That effort is currently ongoing. In 2009 there were maybe 200 phasors in operation. By the end of 2013, there will be more than 1000 installed throughout this country. Over the last five years a partnership between federal Recovery Act funds and private industry dollars has invested $7.8 billion in upgrading the grid, Massoud Amin said.

Grid threats are hype

Sorebo, chief cybersecurity technologist and vice president – SAIC, consultant for the government and industry in cybersecurity and smart grid technology, MA – GW University, JD – Catholic U, 2/8/’10

(Gib, “The Many Shades of Project Grey Goose,” RSA Conference)

As I noted in my previous post about a recent 60 Minutes segment, we often rely on rumor and innuendo as the basis for journalism in critical infrastructure. If a current or former high-ranking public official says he heard something, then it must be true. Unfortunately, Project Grey Goose, whose stated objective was “to answer the question of whether there has been any successful hacker attacks against the power grid, both domestically and internationally,” falls victim to much of the same **fear, uncertainty, and doubt.** As in all media reports, there are factual bases for findings that exaggerated the true state of the electric grid. For example, their statement that “90% of the U.S. Department of Defense's (DOD) most critical assets are entirely dependent on the bulk power grid” is presumably taken from a Government Accountability Office (GAO) report noting that 85 percent of critical DoD assets rely on commercial electric power. However, the “entirely dependent” statement ignores the wide variety of backup generators that support these assets, and while not adequate, are nonetheless a significant contribution to the reliability of critical DoD assets. So rather than sounding the alarm that military bases, for the most part, do not have their own power plants, a better response would have been to suggest that the military expand the use of backup generators and micro-grid technology to augment commercial power as the GAO report does. Of course, that would not grab as many headlines.

Similarly, the Grey Goose Report note that “[m]ost Grid asset owners and operators have been historically resistant to report cyber attacks against their networks as well as make the necessary investments to upgrade and secure their networks.” While it may be true that incidents are underreported, the implication that the electricity industry is deficient compared to other industrial sectors is misleading or even wrong. Most companies do not report security incidents unless legally required to or to mitigate the harm to their customers, and even then the evidence of an intrusion and theft of data had better be definitive. Lost laptops and backup tapes are one thing. You cannot say they are within your control if they go missing. However, organizations in general have a horrible record of even detecting when a successful attack has occurred let alone what was taken. Like many industries, the electricity industry has struggled to pinpoint the source of many disruptions associated with their network infrastructure. **More often than not, the problems were inadvertent**

**==MARKED==**

 **and not malicious.** We can certainly do better, and with technologies like Smart Grid, we have to. However, calling out the electricity industry for failures that we’ve all been subjected to is not very productive.

The other statements made about the vulnerabilities in the electricity sector are misleading. While North American Electric Reliability Corporation Critical Infrastructure Protection (NERC CIP) still does not apply to many aspects of the electrical grid for a variety of jurisdictional reasons, where it does apply, it is not voluntary, as the many utilities subjected to rigorous and painful audits can attest. The process may not be perfect, but utilities are being subjected to scrutiny. Moreover, anyone receiving stimulus grants under the Department of Energy’s Smart Grid grant program has to demonstrate a very rigorous approach to cyber security through the entire implementation life cycle.

Finally, the report cites a litany of vulnerabilities discovered in various Smart Grid devices such as meters and perpetuates speculation about the potential impact on the grid without considering compensating security controls. **Nowhere does the report cite names of vulnerable vendors** nor does it provide any information about whether these vulnerable products have actually been implemented. It’s like saying that tests on personal computers showed that they were vulnerable to attack without identifying the operating system or the applications running on the device.

## 2nc no disruptions

Framing issue—we would never let oil prices cripple the army—we’d take oil from everywhere else before it impacts heg

Alic, former tech and science consultant – Office of Technology Assessment, adjunt professor – Johns Hopkins SAIS, ‘12

(John, “Defense Department Energy Innovation: Three Cases,” in Energy Innovation at the Department of Defense: Assessing the Opportunities, March)

In any event, should serious bottlenecks in fuel supplies¶ appear, **the U**nited **S**tates **will be less vulnerable than** many¶ **other countries,** including major allies. The U.S. government¶ can expect to outbid competing customers, beginning with¶ poor countries totally dependent on imported oil and including¶ wealthy economies such as Japan that benefit from the U.S.¶ security umbrella. So long as there is fuel to buy (or commandeer,¶ in war), DoD will be better able to afford it than almost any other¶ customer. The armed forces have first claim on the Strategic¶ Petroleum Reserve. Household consumers and airlines have more¶ to fear from supply constrictions and price rises than DoD.

No scenario for a cut-off and the SPR solves

Green, resident scholar – AEI, 7/2/’12

(Kenneth P., “End the DoD's green energy fuelishness,” AEI)

Virtually **none of these arguments pass a laugh test.** Yes, when conventional fuels rise in price, military operating costs go up. But in a global fuel market, the market value of any liquid fuel will track with the world price of oil on an energy-content basis. Simply switching to biofuels offers no price protection in a world of fuel-fungibility. Analysts at Rand put it quite succinctly in a recent report. "Alternative liquid fuels do not offer DoD a way to appreciably reduce fuel costs."

As to the risk of a supply interruption, we don't face one: Rand further observes, while the U.S. military uses a lot of fuel, when looked at in context, it uses a tiny percentage of world, or even North American production. Its consumption is less than one-half of 1 percent of global petroleum demand. The U.S. also produces over 8 million barrels a day. "we can find no credible scenario in which the military would be unable to access the 340,000 bpd of fuel it needs to defend the nation," says Rand. And, of course, there's that whole Strategic Petroleum Reserve, which can hold 727 million barrels of oil. Let's see, 727 million divided by 340,000 ... the SPR could power the military by itself for almost 6 years.

No chance of price spikes and won’t impact the military

Alic, former tech and science consultant – Office of Technology Assessment, adjunt professor – Johns Hopkins SAIS, ‘12

(John, “Defense Department Energy Innovation: Three Cases,” in Energy Innovation at the Department of Defense: Assessing the Opportunities, March)

The Energy Information Administration expects the 12 members of OPEC, which account for some 70 percent¶ of estimated world reserves, to pump slightly more than 40 percent of world oil production over the next several¶ decades.c U.S. oil imports will remain high. At the same time, supplies have become more diversified since the¶ 1970s, and the OPEC cartel weaker. Canada now ships more oil to the United States than does any other nation¶ (followed by Mexico, and only then Saudi Arabia). **Domestic output has crept upward** in recent years. All these¶ factors tend to argue against a repetition of unexpectedly sudden supply constrictions. So does the dependence of¶ many exporting states on oil revenues as a prop to internal security, by buying off political opponents or buying¶ weapons to suppress them.¶ To some observers, common sense nevertheless seems to imply that dependence on imported oil weakens the¶ U.S. economy, and by extension national security, given that military power depends, if indirectly, on the size¶ and composition of a nation’s economy. These extrapolations from dependence on imported oil to some sort of¶ larger national vulnerability have little foundation in empirically grounded understanding of either economic¶ affairs or military security. Within the analytical framework of economics, weakness and strength are problematic¶ notions, lacking an accepted basis in quantitative measures; governments collect statistics on output, income,¶ and productivity, not “strength.” Trade deficits, furthermore, are usually taken to be derivative of savings and¶ investment, viewed as the fundamental forces driving a nation’s balance of payments. The implication of this more¶ or less standard view is that a reduction in U.S. imports of oil (e.g., from greater domestic output), would simply¶ lead to a rise in imports of other goods and services. Third, **the relationships between economic performance and¶ military strength are loose.** The Soviet Union, after all, managed to remain a superpower for decades by steering a¶ large share of economic output to its military.¶ The implications of oil imports for U.S. security interests, then, seem oblique.

## 2nc no impact

#### Their laundry list of vague impacts is academic junk – conflicts can’t just emerge

Fettweis, 11

Christopher J. Fettweis, Department of Political Science, Tulane University, 9/26/11, Free Riding or Restraint? Examining European Grand Strategy, Comparative Strategy, 30:316–332, EBSCO

Assertions that without the combination of U.S. capabilities, presence and commitments instability would return to Europe and the Pacific Rim are usually rendered in rather vague language. If the United States were to decrease its commitments abroad, argued Robert Art, “the world will become a more dangerous place and, sooner or later, that will redound to America’s detriment.”53 From where would this danger arise? Who precisely would do the fighting, and over what issues? Without the United States, would Europe really descend into Hobbesian anarchy? Would the Japanese attack mainland China again, to see if they could fare better this time around? Would the Germans and French have another go at it? In other words, where exactly is hegemony is keeping the peace? With one exception, these questions are rarely addressed.

That exception is in the Pacific Rim. Some analysts fear that a de facto surrender of U.S. hegemony would lead to a rise of Chinese influence. Bradley Thayer worries that Chinese would become “the language of diplomacy, trade and commerce, transportation and navigation, the internet, world sport, and global culture,” and that Beijing would come to “dominate science and technology, in all its forms” to the extent that soon the world would witness a Chinese astronaut who not only travels to the Moon, but “plants the communist flag on Mars, and perhaps other planets in the future.”54 Indeed China is the only other major power that has increased its military spending since the end of the Cold War, even if it still is only about 2 percent of its GDP. Such levels of effort do not suggest a desire to compete with, much less supplant, the United States. The much-ballyhooed, decade-long military buildup has brought Chinese spending up to somewhere between one-tenth and one-fifth of the U.S. level. It is hardly clear that a restrained United States would invite Chinese regional, must less global, political expansion. Fortunately one need not ponder for too long the horrible specter of a red flag on Venus, since on the planet Earth, where war is no longer the dominant form of conflict resolution, the threats posed by even a rising China would not be terribly dire. The dangers contained in the terrestrial security environment are less severe than ever before.

Believers in the pacifying power of hegemony ought to keep in mind a rather basic tenet: When it comes to policymaking, specific threats are more significant than vague, unnamed dangers. Without specific risks, it is just as plausible to interpret U.S. presence as redundant, as overseeing a peace that has already arrived. Strategy should not be based upon vague images emerging from the dark reaches of the neoconservative imagination.

Overestimating Our Importance

One of the most basic insights of cognitive psychology provides the final reason to doubt the power of hegemonic stability: Rarely are our actions as consequential upon their behavior as we perceive them to be. A great deal of experimental evidence exists to support the notion that people (and therefore states) tend to overrate the degree to which their behavior is responsible for the actions of others. Robert Jervis has argued that two processes account for this overestimation, both of which would seem to be especially relevant in the U.S. case.55 First, believing that we are responsible for their actions gratifies our national ego (which is not small to begin with; the United States is exceptional in its exceptionalism). The hubris of the United States, long appreciated and noted, has only grown with the collapse of the Soviet Union.56 U.S. policymakers famously have comparatively little knowledge of—or interest in—events that occur outside of their own borders. If there is any state vulnerable to the overestimation of its importance due to the fundamental misunderstanding of the motivation of others, it would have to be the United States. Second, policymakers in the United States are far more familiar with our actions than they are with the decision-making processes of our allies. Try as we might, it is not possible to fully understand the threats, challenges, and opportunities that our allies see from their perspective. The European great powers have domestic politics as complex as ours, and they also have competent, capable strategists to chart their way forward. They react to many international forces, of which U.S. behavior is only one. Therefore, for any actor trying to make sense of the action of others, Jervis notes, “in the absence of strong evidence to the contrary, the most obvious and parsimonious explanation is that he was responsible.”57

It is natural, therefore, for U.S. policymakers and strategists to believe that the behavior of our allies (and rivals) is shaped largely by what Washington does. Presumably Americans are at least as susceptible to the overestimation of their ability as any other people, and perhaps more so. At the very least, political psychologists tell us, we are probably not as important to them as we think. The importance of U.S. hegemony in contributing to international stability is therefore almost certainly overrated.

In the end, one can never be sure why our major allies have not gone to, and do not even plan for, war. Like deterrence, the hegemonic stability theory rests on faith; it can only be falsified, never proven. It does not seem likely, however, that hegemony could fully account for twenty years of strategic decisions made in allied capitals if the international system were not already a remarkably peaceful place. Perhaps these states have no intention of fighting one another to begin with, and our commitments are redundant. European great powers may well have chosen strategic restraint because they feel that their security is all but assured, with or without the United States.

## at: deterrence

#### No deterrence

Kober, research fellow, foreign policy studies – Cato, 6/13/’10

(Stanley, “The deterrence illusion,” <http://www.guardian.co.uk/commentisfree/cifamerica/2010/jun/10/deterrence-war-peace>)

The world at the beginning of the 21st century bears an eerie – and disquieting – resemblance to Europe at the beginning of the last century.

That was also an era of globalisation. New technologies for transportation and communication were transforming the world. Europeans had lived so long in peace that war seemed irrational. And they were right, up to a point.

The first world war was the product of a mode of rational thinking that went badly off course. The peace of Europe was based on security assurances. Germany was the protector of Austria-Hungary, and Russia was the protector of Serbia.

The prospect of escalation was supposed to prevent war, and it did– until, finally, it didn't. The Russians, who should have been deterred – they had suffered a terrible defeat at the hands of Japan just a few years before – decided they had to come to the support of their fellow Slavs.

As countries honoured their commitments, a system that was designed to prevent war instead widened it.

We have also been living in an age of globalisation, especially since the end of the cold war, but it too is increasingly being challenged.

And just like the situation at the beginning of the last century, deterrence is not working. Much is made, for example, of the North Atlantic Treaty Organisation (Nato) invoking Article V – the famous "three musketeers" pledge that an attack on one member is to be considered as an attack on all – following the terrorist attacks of September 11.

But the United States is the most powerful member of Nato by far. Indeed, in 2001, it was widely considered to be a hegemon, a hyperpower. Other countries wanted to be in Nato because they felt an American guarantee would provide security.

And yet it was the US that was attacked.

This failure of deterrence has not received the attention it deserves. It is, after all, not unique. The North Vietnamese were not deterred by the American guarantee to South Vietnam. Similarly, Hezbollah was not deterred in Lebanon in the 1980s, and American forces were assaulted in Somalia. What has been going wrong?

The successful deterrence of the superpowers during the cold war led to the belief that if such powerful countries could be deterred, then lesser powers should fall into line when confronted with an overwhelmingly powerful adversary.

It is plausible, but it may be too rational. For all their ideological differences, the US and the Soviet Union observed red lines during the cold war. There were crises – Berlin, Cuba, to name a couple – but these did not touch on emotional issues or vital interests, so that compromise and retreat were possible.

Indeed, what we may have missed in the west is the importance of retreat in Soviet ideology. "Victory is impossible unless [the revolutionary parties] have learned both how to attack and how to retreat properly," Lenin wrote in "Left-Wing" Communism: An Infantile Disorder. When the Soviets retreated, the US took the credit. Deterrence worked. But what if retreat was part of the plan all along?

What if, in other words, the Soviet Union was the exception rather than the rule?

That question is more urgent because, in the post-cold war world, the US has expanded its security guarantees, even as its enemies show they are not impressed.

The Iraqi insurgents were not intimidated by President Bush's challenge to "bring 'em on". The Taliban have made an extraordinary comeback from oblivion and show no respect for American power. North Korea is demonstrating increasing belligerence.

And yet the US keeps emphasising security through alliances. "We believe that there are certain commitments, as we saw in a bipartisan basis to Nato, that need to be embedded in the DNA of American foreign policy," secretary of state Hillary Clinton affirmed in introducing the new National Security Strategy.

But that was the reason the US was in Vietnam. It had a bipartisan commitment to South Vietnam under the Southeast Asia Treaty Organisation, reaffirmed through the Tonkin Gulf Resolution, which passed Congress with only two dissenting votes. It didn't work, and found its commitments were not embedded in its DNA. Americans turned against the war, Secretary Clinton among them.

The great powers could not guarantee peace in Europe a century ago, and the US could not guarantee it in Asia a half-century ago.

## AT: No Sequestration

#### Obama blocks kicking the can

Josh Rogin, Foreign Policy, 1/25/12, GOP has different plans to avoid defense 'trigger', thecable.foreignpolicy.com/posts/2012/01/25/gop\_has\_different\_plans\_to\_avoid\_defense\_trigger

Part of the confusion over what to do about the trigger relates to the statement Obama made on the day the supercommittee failed to reach a deal.

"I will veto any effort to get rid of those automatic spending cuts to domestic and defense spending. There will be no easy off-ramps on this one," Obama declared. "The only way these spending cuts will not take place is if Congress gets back to work to reduce the deficit by at least $1.2 trillion [over ten years]. They've still got a year to figure it out."

Many on Capitol Hill view that statement as an indication the administration won't accept efforts to bypass the trigger that only addresses the defense half of the equation.

#### Short-term delays don’t solve

James Carafano, Ph.D., Heritage, 10/2/12, Closing the Deal, www.heritage.org/research/commentary/2012/10/closing-the-deal

But this drawn-out game of budgetary “chicken” does have some definite losers. Defense readiness and capabilities are already being undermined by the “soft” sequestration — the armed forces have already pulled back on activities, operations, and contracts in anticipation of the budget crunch. Further, small and medium companies without the deep pockets to weather the months of uncertainty ahead are facing very tough choices.

Regardless of how the budget battles play out, damage has already been done to our defense industrial base and to troop training and readiness. All of the political jockeying about the WARN Act has done nothing to preserve, much less promote, a strong national defense.

#### Even if sequester doesn’t happen, squo budget triggers

O'Hanlon 12

Michael O'Hanlon, Brookings Foreign Policy Research Director, 7/22/12, Getting Real on Defense Cuts , www.brookings.edu/research/opinions/2012/07/22-defense-cuts-ohanlon

The Congressional Budget Office has thrown another monkey wrench into this debate. Just to fund Obama’s plans for future forces and weapons, the CBO argues in a new report, **the Pentagon will need $500 billion more over the next decade than it estimates**. That is an average of $50 billion a year. Obama’s math is too optimistic; the costs of his planned force posture are likely to be substantially greater than currently recognized. Such reports are not uncommon. The Defense Department tends to be optimistic when forecasting costs. But when the nation is trying to construct a binding plan to guide future spending for a decade, it is more important than usual. What this means: Just to meet Obama’s planned budget, as specified in the first tranche of reductions under the Budget Control Act, we will need to cut back on a lot more weaponry, force structure and civilian and military personnel than planned. Pay cuts may even be needed. Because cutting waste, fraud and abuse, while important, does not offer the potential for savings at anywhere near the levels needed, we will need to cut military muscle, as well. The deeper budget cuts proposed by Bowles and Simpson and sequestration will have to be postponed — or at least softened — because we likely will have a daunting task in simply getting down to Obama’s $500 billion annual defense spending level.

## China/Guam

## Sequester 2NC

#### Signal sufficient to collapse heg

O'Hanlon 12

Michael O'Hanlon, director of research on foreign policy – Brookings, 2/24/12, The specter of sequestration, globalpublicsquare.blogs.cnn.com/2012/02/24/the-specter-of-sequestration/

The military’s warfighting budgets would, in theory, remain untouched, **but the entire institution that supports our fighting** men and women **would be left teetering on the brink of peril** not seen since Vietnam and the immediate post-Vietnam years. The accomplishments of the last 30 years of building the world’s finest military would be at risk based on a law cobbled together in a few weeks one Washington summer that was never intended to take effect even by its proponents.

How do you slash 10 percent in an organization as large as the military overnight? The types of choices available are all ugly. The President could choose to cut military and civilian pay by up to 15 percent immediately (military health care costs will be hard to cut, so salaries must bear the costs disproportionately); he could chop retirement payouts; or he could cut funds for major weapons systems by up to 20 percent (as legal penalties for making unexpected cuts to contracts will cost money, too). Actually he may have to do all three.

Other options include nickel-and-diming combatant commanders, cutting back their training and operating budgets by up to a quarter since these are among the only accounts that can be easily accessed when immediate saving are needed. And of course, the President will be required to make these choices at just the moment we are supposedly trying to signal Iran, North Korea, and China that the United States remains as firmly committed to our interests and allies as ever.

Some will suggest that these choices are exaggerations or worst case scenarios to make a case. But the reality is there are no secret pots of money, trust funds, or bailout resources from which the savings can otherwise be found.

#### Collapses the Asia pivot

Horowitz 12

Michael Horowitz, NDT Champion, associate professor of political science at the University of Pennsylvania, 8/9/12, How Defense Austerity Will Test U.S. Strategy in Asia, thediplomat.com/flashpoints-blog/2012/08/09/how-defense-austerity-will-test-u-s-strategy-in-asia/

**Decisions about defense spending are integrally linked to the U**nited **S**tates’ overall **strategy in the Asia-Pacific**. Given ongoing uncertainty surrounding North Korea, China’s continuing development of anti-access/area-denial (A2/AD) capabilities, and disputes over the East and South China seas, maintaining a robust presence in the region will be a high priority for any future administration. However, sequestration or other major defense cuts could **undermine perceptions of U.S. resolve** in the Asia-Pacific and make core U.S. allies such as Japan and South Korea doubt Washington’s willingness to invest appropriately in relevant capabilities. Concretely, such cuts could make it more difficult for the United States to maintain its current presence.

The United States’ predominant military strategy for ensuring continued superiority in the Asia-Pacific is AirSea battle (ASB)—an operational concept designed to help the U.S. Air Force and Navy jointly respond to A2/AD challenges, enhance deterrence, and ensure freedom of action around the world over the next generation. Implementing ASB will require significant investments in advanced technologies, including long-range precision-strike capabilities and submarine modernization. Furthermore, ASB primarily involves investments in the air force and navy, raising questions about how best to rebuild the readiness of the army and marines. There is a trade-off between providing relatively equal budget shares to the services—potentially reducing inter-service rivalries—and rebalancing toward the Asia-Pacific. Even within the air force and navy, there are disagreements about which programs represent the highest priority for the U.S. military.

One concern is the potential for large decreases in the procurement of F-35s—the multirole replacement fighter for the air force and navy. Unless the military can find substitutes, further cuts beyond those already planned could potentially make it more difficult for the U.S. military to control the skies in a future confrontation in the Asia-Pacific. Decreases in F-35 procurement could also make U.S. allies less likely to purchase the F-35, thereby reducing interoperability with allied Asian militaries and further raising F-35 unit costs. Budget cuts may also lead to the scaling back of plans to purchase the full slate of Virginia-class attack submarines that the navy has requested. Given China’s continuing investments in submarines and anti-ship missiles, the modernization of the U.S. fleet is critical to maintaining U.S. naval capabilities in the Asia-Pacific, particularly for antisubmarine warfare and strike operations. Major cuts could affect the size of the navy, in terms of ships afloat, and compromise the United States’ ability to project power in crisis situations.

**At even greater risk of funding cuts is** **r**esearch **and** **d**evelopment. **R&D** into next-generation robotics, a new long-range bomber, and C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance) **is** **essential to guaranteeing U.S. military power** over the long term. R&D for basic programs is also likely to be on the chopping block during periods of defense austerity. One example is the X-47B drone designed to launch from and recover to aircraft carriers. Decreases in funding for such cutting-edge programs could undermine the United States’ long-term capacity to control the commons in the Asia-Pacific. The unparalleled access the United States enjoys to air, sea, and space could decline if other nations develop new technologies capable of placing legacy platforms such as large carriers or manned fighters at risk. Rising powers in the region are not standing still. The United States will only maintain its conventional superiority if it continues investing in R&D that will pay off with new weapon systems down the road.

#### Guam

Paul C. Barton, writer, 12 [“Analysts: Sequestration threatens Guam buildup,” Marine Times, March 23, http://www.marinecorpstimes.com/news/2012/03/gannett-guam-okinawa-analysts-say-sequestration-threatens-buildup-032312/]

The budget hammer known as sequestration would force abandonment of plans to move U.S. Marines from Okinawa to Guam, regardless of any progress made with Japan over basing issues, some defense analysts say.¶ Sequestration is Capitol Hill-speak for deep, across-the-board federal spending cuts that will start in January as part of a budget agreement that President Obama reached with Congress in August.¶ “It would scuttle Guam,” said Bruce Klingner, a specialist on Asian military issues at the Heritage Foundation, a Washington think tank. “The least of our worries are going to be the Guam agreements.”¶ Plans to move at least 4,700 Marines and their dependents from Okinawa to Guam stem from a 2006 agreement the United States negotiated with Japan. But complicating the process have been frequent changes in the Japanese government and its reluctance to agree on a replacement site on Okinawa for the Marine Corps Air Station Futenma, home to about 10,000 Marines. Even with the move, about 10,000 Marines would remain stationed on Okinawa.¶ Several members of the Senate Armed Services Committee have recently complained the delays have already made the move too expensive. The original estimate was $10 billion but some newer projections put it at anywhere from $17 billion to $30 billion. Japan, which was originally supposed to pay 60 percent, has recently called for its costs to be reduced.¶ The Pentagon is already scheduled to see its spending cut $487 billion over the next decade, and another $500 billion in cuts could kick in come January under budget sequestration, which would force cuts of close to 24 percent in all forms of military spending.¶ Defense Secretary Leon Panetta has called mandated-percentage cuts especially troublesome because there is no way to build a fraction of a ship or a fraction of a barrack or some other military installation. Instead, whole projects would have to be called off.¶ “The U.S. military would be scrambling hard to survive,” Klingner said.¶ Even though numerous military experts and top Pentagon officers have warned of catastrophic consequences to U.S. military power, the cuts will happen unless the president and Congress agree on a new course for bringing down deficits over the next 10 years. Obama wants new tax revenues as part of such a plan, but congressional Republicans balk at the idea.¶ A House-Senate supercommittee was supposed to come up with an alternate deficit-reduction plan in November, which would have avoided sequestration, but failed to do so.¶ “There is no doubt the Marine movement to Guam would be scrapped under sequestration,” added Mackenzie Eaglen, defense analyst at the American Enterprise Institute.¶ “The money for these types of activities and military construction is already being reduced in the pending defense budget due to ongoing spending cuts,” Eaglen said.

#### Marines

Roger Wick, Senator, 7/15/12 [“Navy, Marine Corps stand to lose a lot under sequestration,” Federal Times, http://www.federaltimes.com/article/20120715/ADOP06/307150002/Navy-Marine-Corps-stand-lose-lot-under-sequestration]

As the U.S. celebrates the bicentennial of the War of 1812, the lessons of that long-ago conflict should not be forgotten by today’s policymakers. In those bleak years, the U.S. saw that even the border of an expansive ocean would not fully protect our nation.¶ U.S. resilience reaffirmed our sovereignty during that war. The influence of seapower on national security and commerce was clear then, and it remains the same today. Unfortunately, decisions in the coming months could jeopardize the tools required to maintain America’s leadership in the world.¶ There is no doubt the U.S. faces a diverse set of challenges abroad — from the Asia-Pacific region and Iran to a host of emerging threats. And yet, discussions of future investment within the Pentagon and Congress are set against a backdrop of budget uncertainty and looming sequestration, which could cripple our armed forces’ ability to fulfill their strategic priorities**.**¶ With America’s debt nearing $16 trillion, reining in reckless federal spending is imperative to national and economic security. However, addressing the long-term fiscal challenge should not risk the leadership and pre-eminence of the military or the skilled jobs necessary to supply today’s advanced force. Federal debt is a national security threat, but so is unilaterally cutting key funding to America’s men and women in uniform.¶ The Budget Control Act, which passed last year, required immediate cuts, and the Joint Select Committee on Deficit Reduction was responsible for producing a blueprint to reduce the deficit by an additional $1.5 trillion. But the committee’s failure to find savings will trigger an automatic $1.2 trillion in across-the-board budget cuts on Jan. 3.¶ Under sequestration, the Pentagon faces $492 billion in cuts across the board. The rest will be divided equally from the remaining portions of the federal budget.¶ Unless Congress acts, the Navy Department will be particularly hard hit. Areas of greatest concern are:¶ • Readiness: Sequestration would cause the Marine Corps to endure an additional 10 percent cut in troop levels, leaving Marines without sufficient manpower to meet even one major contingency operation.¶ • Fleet size: Currently, the Navy can meet only half of combatant commander requests for naval support. Under sequestration, the Navy fleet would drop to 230 ships, well below the statutory requirement.¶ • Acquisition efficiencies: Experience has shown that stable shipbuilding rates have a direct impact on the acquisition and life-cycle costs of new naval vessels. Sequestration would prevent the Navy from achieving efficiencies required to deliver new ships on time and on budget.¶ • Vitality of the industrial base: The average age of today’s shipyard employee is 45, with only 24 percent of our naval shipbuilding workforce under the age of 35. Sequestration would drive a generation of skilled shipbuilders from the workforce and have a prolonged negative impact on American high-tech manufacturing.¶ The stakes are high for the military and the American economy. Some defense manufacturers have begun issuing legally required layoff warning notices to shareholders and employees. According to multiple reports, up to 1 million jobs could be at risk.

## No Guam Extn

#### There is no Guam build-up!

Jeffrey W. Hornung, Associate Professor at the Asia-Pacific Center for Security Studies in Honolulu, HI and an Adjunct Fellow with the Office of the Japan Chair at the Center for Strategic and International Studies, 1/5/12, Time to Acknowledge the Realignment Impasse,

Mounting Delays on Guam

Unlike Okinawa, many on Guam embraced the idea of an expanded U.S. presence. This was because of the prospect of a rapid influx of money to help rebuild the poor infrastructure and struggling economy. Yet, while most media and scholarly attention has focused on the FRF, problems have been increasing on Guam as well.

The U.S. Navy was not able to release up to $1.2 billion in military construction task orders for the Guam buildup until the March 2011 signing of a Programmatic Agreement. This enabled contractors to complete the final phases of their design work for proposals. The existing buildup is already plagued by infrastructure concerns and cost overruns. Worse, key construction projects are hampered by lawsuits, environmental concerns, and as I discuss below, funding cuts. With the navy promising this past autumn to conduct new studies on proposed construction sites, the commencement of crucial parts of the Guam buildup is now pushed back by several years, at least.

Consider first the navy’s plans for live-fire rifle and grenade ranges for the marines. The navy deferred its decision on a location because of an ongoing lawsuit. In November 2010, three private groups filed a lawsuit against the Department of Defense (DOD) in an effort to prevent the ranges on about 1,090 acres of ancestral Chamorro lands that are host to ancient graves and medicinal plants. The area, known as Pagat, is the preferred site but is listed on the National Register of Historic Places. Opponents encourage the navy to locate the ranges on the island of Tinian, an option the navy has ruled out. Although navy officials have pledged to protect Pagat Village and argued that the ranges could be built with minimal damage to Pagat, that Guamanians can access the land when the ranges are not in use and that some areas would be accessible at all times, Guamanians remain unconvinced. And while the government of Guam approved the plan in March 2011, the plan has not moved forward due to continuing public outcry and the lawsuit. Forward movement completely stopped when, in November, the navy announced it would conduct a supplemental environmental impact statement (SEIS) to evaluate alternatives. The SEIS will take a minimum of two years to complete and is not expected to begin until early 2012. Once completed, the navy will select a location, pushing construction years away.

The navy has also delayed a decision on where to locate a wharf for transient aircraft carriers. As part of the Guam buildup, the navy plans to build a new wharf somewhere in Guam’s main harbor, Apra Harbor. Although the navy never officially chose a site, after a one-year study its initial plans were narrowed to two locations (Polaris Point or the former Ship Repair Facility) that required dredging of about 71 acres of coral. However, several U.S. federal agencies, including the Environmental Protection Agency, the Fish and Wildlife Service, and the National Marine Fisheries Service requested that the navy conduct a new environmental impact study to focus not just on coral, but also fishes, sponges, and protected sea turtles at 72 sites in Apra. There was also opposition from local residents and lawmakers who pressured the navy to use the San Luis area instead, an area west of the proposed locations that would require less dredging. Although the initial fieldwork showed little high-quality coral would be removed, the navy agreed this past autumn to conduct another full study and consider an alternative site. Because this study could take several years and may require artificial reefs or other forms of protection, the final decision on location (let alone completion) is now several years delayed.

As delays mount, and give rise to new requirements, costs continue to rise. With the final number of personnel, dependents, and civilians yet to be determined, costs are expected to rise further still. Worse, it is uncertain how Guam will be able to handle the expected population increase. There are about 183,000 people living on Guam. According to the navy’s July 2010 Final Environmental Impact Statement, Guam’s permanent population is expected to increase by about 30,000 (troops, dependents, civilian workers). In addition, the island will see an estimated short-term increase of 79,000 workers. Both expansions will take a terrible toll on the island’s infrastructure, including utilities, roads, and water supplies, as well as services, such as dentists, doctors, clinics, and schools. Until these problems are resolved, which is still many years away, it is uncertain how quickly the Guam buildup can proceed.

It is clear that the Guam buildup is beset by problems. The decisions by the navy this past autumn to conduct new studies means that work cannot begin on key portions of the Guam buildup for at least the next few years. Continuing infrastructure problems may push this back even further. With key aspects of Guam’s buildup now uncertain, the likelihood of the Roadmap’s success diminishes further still.

#### Funding was zeroed out

Jeffrey W. Hornung, Associate Professor at the Asia-Pacific Center for Security Studies in Honolulu, HI and an Adjunct Fellow with the Office of the Japan Chair at the Center for Strategic and International Studies, 1/5/12, Time to Acknowledge the Realignment Impasse,

Evaporating Financial Support from Tokyo and Washington

More than anything else, money is needed for the Roadmap to succeed. In 2006, costs for facility and infrastructure development on Guam were calculated at $10.27 billion. Japan would provide $6.09 billion and the United States $4.18 billion. Yet, in December, Tokyo and Washington announced cuts and freezes in their funding. With funds drying up, the death bell for the realignment plan has rung.

In the United States, key members of the Senate have been critical of DOD’s realignment plans. In May 2011, Senators John McCain, Carl Levin, and Jim Webb criticized the plans as “unrealistic, unworkable and unaffordable.” Acting out of a need to address ballooning costs and rising opposition, they proposed an alternative to sync with current fiscal and political realities, although it was bereft of many specifics. A Government Accountability Office (GAO) study the same month supported their thinking, showing that the military did not develop an accurate cost estimate or appropriately consider alternatives. Instead of the expected $10.27 billion, the GAO study stated that the cost of the Okinawa and Guam relocations could be closer to $29.1 billion.

As such, it was not surprising that senators cut funding during discussions on the FY2012 National Defense Authorization Act (NDAA). Last month, they slashed the entire $150 million allocated for the planned relocation of marines from Okinawa to Guam. Additionally, despite the House of Representatives approving $303 million for military construction projects on Guam, the Senate reduced it to $83.6 million but froze it until certain conditions are met. Furthermore, they cut the entire $33 million approved by the House to fund socioeconomic projects directly related to the Guam transfer and the influx of people (although it was revived in the Consolidated Appropriations Act).

In the past, funding cuts have later been restored. Yet, because DOD faces automatic cuts of $600 billion during a financial recession, it is unlikely the NDAA cuts will be restored until DOD presents a more rigorous analysis of the need and costs of its realignment plan to convince the Senate.

Worse, Tokyo followed Washington by cutting its funding by about 80 percent. In its initial budget for FY2011, Tokyo dedicated $667 million (¥52 billion) for the planned relocation. Yet, following the NDAA cuts, Tokyo decided it had no choice but to reduce its amount to less than $128 million (¥10 billion) in FY2012. It also is examining whether it should withhold disbursements for related spending included in the FY2011 budget.

Thus, fiscal realities in Washington and Tokyo have now significantly altered the entire realignment plan. These developments are the most damaging because they bring the realignment process to a halt. With little possibility that these cuts will be restored, forward progress on the Roadmap is now unlikely.

No funding

Ritten 12

Travis J. Ritten, staff writer, Stars and Stripes, May 29, 2012, " Senate committee again blocks funding for Marines' move off Okinawa", http://www.stripes.com/news/pacific/pacific-base-relocation/senate-committee-again-blocks-funding-for-marines-move-off-okinawa-1.178866

CAMP FOSTER, Okinawa — Despite a new deal recently struck by the U.S. and Japan, the Senate is poised to block any funding for the realignment of Marines in Japan and the Pacific for the second year in a row as it attempts to force the military into offering up better planning and cost estimates, according to the office of Sen. Jim Webb, D-Va. A Senate Armed Services Committee draft of the National Defense Authorization Act released last week denies any money next fiscal year for shifting thousands of Marines from Okinawa to Guam and Hawaii because the Department of Defense has not provided a schedule of construction projects and costs as well as an explanation how the move fits into overall strategic goals in the region. The Senate had already blocked funding this year for the massive reorganization of Marine forces, claiming previous plans were unaffordable and unrealistic. The effort is supported by powerful Senate lawmakers, including Carl Levin, D-Mich., and John McCain, R-Ariz., the ranking members of the committee. However, the defense bill must still be approved by the full Senate in the coming months and will face a competing House version that includes some funding for Marine Corps realignment projects in the Pacific. “The NDAA expresses the Senate Armed Services Committee’s unwillingness to authorize funding for realignment plans until it is provided details needed to assess the strategic impact, feasibility, and affordability of the lay-down’s initiatives,” Webb’s office said in a news release over the weekend. In April, the U.S. and Japan announced a new realignment plan that would cost $8.6 billion to shift about 9,000 Marines off Okinawa. But that dollar figure is only an initial estimate that is not based on specific construction projects that would be needed on Guam, where about 5,000 of those Marines will be relocated. The estimate also does not include costs for moving thousands of Marines to Hawaii, or the relocation of the controversial Futenma air station on Okinawa, which is expected to be paid for by Japan. The Government Accountability Office cast doubt over U.S. and Japan cost estimates last year when it reported that a previous realignment agreement estimated at $10.27 billion would have actually cost nearly $24 billion when all expenses were tallied. The SASC has again requested this week the military provide a master plan for the Pacific realignment project that includes a description of costs and schedules for the facilities and infrastructure needed to shift the Marines. A master plan has been in the works for years but never completed by the Department of Defense. Before receiving any funding, the U.S. Pacific Command would also be required to weigh in on whether the plans provide what is needed to fight wars and assist with disasters in the region, according to Webb’s office.

## Guam Not Key Extn

#### Australia base and prepositioning now – solves signal and capability

Bruce Vaughn, CRS Specialist in Asian Affairs, 1/13/12, Australia: Background and U.S. Relations, http://www.fas.org/sgp/crs/row/RL33010.pdf

During his visit to Australia, President Obama and Prime Minister Gillard announced that the United States will deploy on a rotational basis up to 2,500 Marines, which are part of a Marine- Air Ground Task Force, to the Northern Territory and that there will be additional joint air force cooperation between the two nations. These moves are part of new force posture initiatives that will significantly enhance defense cooperation between the two nations and will also include the prepositioning of equipment and supplies.5 The U.S. forces will be housed in Australian facilities and are part of a U.S. effort to diversify the U.S. military presence in Asia.6 It was announced that the deployments would begin in the summer of 2012 with an initial group of 250 Marines. The announcement of the decision to expand the U.S. troop presence in Australia came after Secretary of State Hillary Clinton’s “America’s Pacific Century” article in Foreign Policy and has been viewed by many as providing a substantive military component to a policy that was designed to send a signal to Asia that the United States is firmly committed to the region. As such, expanded military ties with Australia can be viewed as a key component that will demonstrate America’s resolve in Asia. The Obama Administration’s decision to rebalance American strategic priorities from the Middle East to Asia coincides with Australian strategic priorities that seek to keep America fully engaged in Asia.

## asia

#### Structural factors check escalation

Alagappa 8 (Muthia, Distinguished Senior Fellow, East-West Center PhD, International Affairs, Fletcher School of Law and Diplomacy, Tufts University, 2008. “The Long Shadow,” p. 512)

International political interaction among Asian states is for the most part rule governed, predictable, and stable. The security order that has developed in Asia is largely of the instrumental type, with certain normative contractual features (Alagappa 2003b). It rests on several pillars. These include the consolidation of Asian countries as modern nation-states with rule-governed interactions, wide- spread acceptance of the territorial and political status quo (with the exception of certain boundary disputes and a few survival concerns that still linger), a regional normative structure that ensures survival of even weak states and supports inter- national coordination and cooperation, the high priority in Asian countries given to economic growth and development, the pursuit of that goal through partici- pation in regional and global capitalist economies, the declining salience of force in Asian international politics, the largely status quo orientation of Asia's major powers, and the key role of the United States and of regional institutions in pre- serving and enhancing security and stability in Asia.

## trade

#### Won’t cause military conflict

Bradford 9 (Anu, Assistant Professor of Law at the University of Chicago Law School, Future of the WTO, http://uchicagolaw.typepad.com/faculty/2009/02/future-of-the-wto-governing-the-world-economy-beyond-trade.html)

Acknowledging this shift towards regionalism, Richard asks: “Will we see competition between blocs? Cooperation between them? What will be the implications for multilateralism?” China’s recent effort to build closer trade relations with its Asian neighbors is one of the most interesting developments. That trend is likely to continue. Greg seems correct in doubting the emergence of coherent rival geopolitical blocks. But the most important regional trade deals will be built around the US, EU and China. In addition, we will see a fragmented web of PTAs within, across and beyond the key trade regions. I would predict some competition but no confrontation among regional blocks. We may see attempts of the “big three” – the US, EU and China – to expand their spheres of economic influence though negotiating PTAs with other states, in particular the energy-rich states in the Middle East, Central Asia and Africa.

## Korea

## 2NC No War

#### North Korea does not have ballistic missile technology

Shah 2009 (Anup, staff writer on Global Issues, “North Korea and Nuclear Weapons”, http://www.globalissues.org/article/698/north-korea-and-nuclear-weapons)

While media and US attention appeared to be on Iran’s nuclear program, North Korea carried out a nuclear test, the first week of October, 2006. Unlike most other countries that had done nuclear tests, North Korea warned the world six days earlier that a test was imminent. At first, there was skepticism that it was a nuclear device, but a few days later, the US confirmed the nuclear explosion. It was one-tenth the size of the bomb dropped on Hiroshima in 1945, with less than a kiloton in yield, US officials said. Another BBC article notes that North Korea is thought not to have any bombs small enough to put in a missile, and although they could try dropping one from a plane, the world is watching closely and that nuclear capabilities do not necessarily imply a fully-fledged nuclear bomb, or a warhead that it can be delivered to a target.

#### Their evidence is media exaggeration – empirics prove neither side will escalate.

Breen 10 (Michael, an author, former foreign correspondent of the Korean Times and the chairman of Insight Communications, a public relations consulting company, 12/162010, “Another Korean War?”, <http://www.koreatimes.co.kr/www/news/opinon/2010/12/137_78140.html>)

For the first time in a long time, commentators are warning of the likelihood of war on the Korean Peninsula. Are they correct? Are the North’s special forces massing in secret DMZ tunnels? Will tens of thousands of us be dead soon? This question, and the commentary that has prompted it, comes of course in the wake of the shelling by the North Koreans of homes and military facilities on Yeonpyeong Island. Although there have been a number of deadly clashes and incidents over the years, at sea or across the DMZ, there was something new about this one. Not only was it the first artillery strike on South Korean soil since the war ended in 1953, but it also happened in daylight and when there were cameras there to capture the explosions and plumes rising from the debris. This was enough to spark global excitement. The BBC went live. CNN correspondent Stan Grant told the world the two Koreas were on ``the brink of war.” Several foreign companies withdrew their people from South Korea and banned all travel through Seoul for two weeks. Citizens discussed their options with their families ― to stay put or leave ― should the worst happen. We were not on the brink of war. But, to ask again, are we now? No, we aren’t. And we know that we aren’t. What we have instead is analysis and commentary and, as we are a global news story for now, it is as if a microphone is being passed around the room. Our ideas all get said out loud. Take, for example, the comment this week by America’s top soldier, Adm. Mike Mullen, chairman of the U.S. Joint Chiefs of Staff, that the situation is becoming ``increasingly dangerous.” (He actually said this in response to a question from a soldier in Iraq, a place which, everyone in Korea will agree, really is a war zone.) He is not wrong. When a cold truce turns hot for an hour, it is very dangerous. But it is not war. Nor did he say it was. But, still, his comments got turned into a ``war warning in Korea.” Another driver of the war theory that gears up at such times is the not-unreasonable long-look view that, as history is the tale of worst-case outcomes, so this Korean story will end in bloodshed. When two states each claim ownership of the other’s land and are willing to die for it, and only one is a democracy with a viable economy, you can confidently predict lots more trouble. But, actually, history is not always about worst-case outcomes. The end-games for Nazism and European Communism, for example, were very different. What has added to the nervousness about the present circumstances is that, after several years of taking a relatively softly-softly approach with North Korea, the government in Seoul is talking about responding vigorously next time. We don’t know if this will make the North Koreans think twice or whether it could lead to escalation. But even this policy change will not result in two sides, unable through pride or public opinion, being dragged kicking into a war they don’t want. For what remains true is that neither side is choosing war. The South is waiting out the communist regime, and not unhappily because there is a consensus about the need to avoid the social and economic costs of unification for a decade or two. The regime in the North is simply bent on survival. Its dilemma is that if it does what it must and change its posture from ``military-first” to ``economy-first,” like everyone else, it will lose its raison d’etre and be removed. War with the south would simply accelerate the day. Thus, we may only expect more of the same.

#### North Korea won’t provoke conflict – they’re rational and concerned with regime survival

Sydney Morning Herald 10(5/29/10, “North Korean war unlikely, say analysts”, http://www.lexisnexis.com)

“China refuses scheming against NK with the US," read the front page banner headline. Patrick Morgan, a leading strategic analyst at the University of California, writes that the North has succeeded in looking "like Mighty Mouse" because its nuclear deterrence has not been tested by highly motivated potential attackers. "Why not? Because a collapse of the North seems at least as dangerous, and much more likely, than its use of nuclear weapons," Morgan says. The good news, however, is that the North's estimated eight nuclear missiles, of questionable functionality, are not nearly enough to embolden the North to deliberately risk outright military confrontation. "Pyongyang has never displayed intense dedication to anything except survival; it will not initiate a war to die for its principles," Morgan says. Peter Hayes, at the Nautilus Institute, recalls being in North Korea in 1998, when the country was also on a war footing. "The whole country just went berserk. It was like throwing petrol on an ant hill," he said. "Presumably [the war ritual] is a positive for the regime, or they wouldn't do it.

#### That means they’ll compromise

**Roy 10** [Denny, Senior Fellow and Supervisor of POSCO Fellowship Program Ph.D., Political Science, University of Chicago, “Parsing Pyongyang’s Strategy,” Survival, Volume 52, Issue 1 February 2010 , pages 111 – 136]

Finally, the necessary-external-enemy argument, a major variant of the domestic-politics theory of North Korean foreign policy, holds that Pyongyang cannot seriously consider rapprochement with its adversaries because this would destroy the foundations of the regime's legitimacy with its people. The argument that Pyongyang is constrained from making peace by the expectations of the North Korean public is dubious. The government has an unparalleled capability to 'manage' the news. Pyongyang has for decades promulgated assertions for mass consumption that have little basis in reality. Announcing to the public that the leadership had achieved improved relations with the United States, South Korea or Japan could easily be spun as another victory for the regime over its cowering adversaries. Finding a way to explain why the unification of Korea would nevertheless not immediately follow rapprochement does not seem a difficult proposition for a government that claims its leader has super-human qualities and that rival South Korea is 'a dark society devoid of democratic freedom and rights and a graveyard of human rights where dictatorship and repression are rampant'.29 On the other hand, a rapprochement with its erstwhile foes could actually bolster the regime's domestic legitimacy at least as much as a continual state of external crisis. A prolonged state of tense and distant relations with the United States, South Korea and Japan has massive opportunity costs for North Korea. It is highly questionable that the regime would consciously choose this outcome, as opposed to wishing for improved relations but failing thus far to find a formula for doing so without sacrificing other political goals.

#### Military’s focused on succession

Scott A. **Snyder 12**, Senior Fellow for Korea Studies at CFR, “Is North Korea Ready for Talks?”, January 19, http://www.cfr.org/north-korea/north-korea-ready-talks/p27106?cid=rss-analysisbriefbackgroundersexp-is\_north\_korea\_ready\_for\_talks-011912

It's been a month since Kim Jong-il died. There had been some speculation that the North Koreans might launch some provocative military action. But that has not happened. The North Korean leadership has been trying to present an image of continuity and stability. And in all probability the main focus is on just trying to ensure that developments are not complicated internally as they move through this leadership transition.

# 1NR

## uq

UC Boulder model sucks

Lewis citing Silver 8/23 (Eric Lewis, writer for the Daily Kos, citing Nate Silver, election expert at 538 for NYT, “Nate Silver Calls B.S. on U. of Colorado Election Prediction Model UPDATED”, http://www.dailykos.com/story/2012/08/23/1123481/-Nate-Silver-Calls-B-S-on-U-of-Colorado-Election-Prediction-Model)

If you were demoralized by news of the recent election model that predicts a Romney victory, don't be. Turns out it's bullshit. Touted as a model "with 100% success rate for the past thirty years", Nate Silver tells us that it is, in fact, a brand new model that has never been used before! Nate also finds "glaring problems with their methodology". Follow me after the jump for an exact transcript of Nate's tweets last night... Nate posted these tweets in fairly rapid succession late last night: A Denver Post reporter asked me (bit.ly/MNOF1C) about this U. of Colorado election model (bit.ly/O7pN4I). (1/5) It's late, so I'll be blunt: I saw their paper and I think there are **glaring problems** with their methodology. (2/5) The U. of Colo. model fits the equivalent of **7 unknowns to 8 elections**. That's not a good idea. (3/5) The Colo. model also assumes huge effects from unemployment if incumbent is a Dem., but none if he's GOP. Hard claim to defend. (4/5) If you want a "fundamentals" model that shows Romney winning, the Hibbs model is a lot more sensible. bit.ly/SqgfnH (5/5) Also, it's **false advertising** to claim CU model has predicted the last 8 elections right. It's a new model. Hasn't predicted anything yet.

#### The UC Boulder professors have not *predicted* the last 8 elections – they have built the model retroactively to fit those 8 elections

Lichtman, professor of history at American University, well-known writer on Presidential elections and lesser-known writer on counterplan theory, 10/2/2012

(Allan J., The Hill, http://thehill.com/opinion/op-ed/259857-forget-the-swing-states-look-to-the-debates)

A competing model by University of Colorado Professors Kenneth Bickers and Michael Berry is perhaps validating Romney’s do-little strategy. Primarily based on the economy, this model predicts that Romney will win both the popular and Electoral College vote. Berry has claimed in a University press release that, “For the last eight presidential elections, [since 1980] this model has correctly predicted the winner.” **In fact**, **the model was developed after the** 2008 **election** — **it has not generated a single correct prediction of any election**, **and 2012 is its first trial run**.

#### Environmentalism disproves econ models

Leiserowitz et al., 2012

Anthony Leiserowitz, Ph.D. and Professor at the School of Forestry and Environmental Studies at Yale University, 3-30-2012, Yale Project on Climate Change Communication, "Public Support For Climate and Energy Policies in March 2012," [www.climatechangecommunication.org/images/files/Policy-Support-March-2012.pdf](http://www.climatechangecommunication.org/images/files/Policy-Support-March-2012.pdf)

92 percent of Americans think that developing sources of clean energy should be a very high

(31%), high (38%), or medium (23%) priority for the president and Congress. Among registered

voters, 96 percent of Democrats and Independents, and 84 percent of Republicans think clean

energy should be a priority.

• 83 percent of Americans think that protecting the environment either improves economic

growth and provides new jobs (58%) or has no effect on economic growth or jobs (25%). Only

17 percent think it reduces economic growth and costs jobs. When there is a conflict between

the two, however, 62 percent of Americans say it is more important to protect the environment,

even if it reduces economic growth, while 38 percent say economic growth is more important,

even if it leads to economic problems.

Among registered voters, 91 percent of Democrats, 77 percent of Independents, and 70 percent

of Republicans think that overall, protecting the environment either improves economic growth

and provides new jobs, or has no effect on economic growth or jobs. When there is a conflict

between the two, however, 72 percent of Democrats, 63 percent of Independents, and 45

percent of Republicans say it is more important to protect the environment than economic

growth.

## at: dod dodge

Obama can’t capitalize on miliary renewables – GOP frames as forcing additional spending cuts

Davenport, 7-13

Coral Davenport, 7-13-2012, “Obama Faces Tough Challenge in Virginia Over Energy,” National Journal, http://www.nationaljournal.com/politics/obama-faces-tough-challenge-in-virginia-over-energy-20120713

But even here, Republicans – including the Romney campaign – have criticized Navy contracts to purchase biofuels that are more expensive than traditional fuels as the Pentagon prepares for spending cuts.

Speaking on Thursday to reporters on behalf of the Romney campaign, Former Navy Secretary John Lehman said, “If the president wants the taxpayer to subsidize alternative fuels, it shouldn’t be done on the Navy’s back.”

## link

#### SMRs are politically “nuclear”

Fairley 10

(IEEE Spectrum, May, "Downsizing Nuclear Power Plants,” spectrum.ieee.org/energy/nuclear/downsizing-nuclear-power-plants/0)

However, there are political objections to SMRs. Precisely because they are more affordable, they may well increase the risk of proliferation by bringing the cost and power output of nuclear reactors within the reach of poorer countries.¶ Russia’s first SMR, which the nuclear engineering group Rosatom expects to complete next year, is of particular concern. The Akademik Lomonosov is a floating nuclear power plant sporting two 35-MW reactors, which Rosatom expects to have tethered to an Arctic oil and gas operation by 2012. The reactor’s portability prompted Greenpeace Russia to call this floating plant **the world’s most dangerous nuclear project in a decade.¶ SMRs may be smaller than today’s reactors. But, politically** at least, **they’re just as nuclear.**

#### Military energy debates are divisive and cause larger energy debates---zero risk of a link turn even if the plan saves money

Snider 12

(E&E reporter, 1/16, “Pentagon still can't define 'energy security,' much less achieve it,” <http://www.eenews.net/public/Greenwire/2012/01/16/1>)

But this is **not a good time** to be requesting money at the Pentagon. ¶ Military budget planners have spent the past year **carving** nearly **a half-trillion dollars in budget cuts**, while top brass have worn out the thesaurus' list of synonyms for "decimate" as they decry the damage that additional looming cuts would do to their forces and weapons. ¶ At the same time, no one has yet made the business case for investing in energy security. Current rules require that renewable energy and efficiency projects prove they will bring savings over the long run, even if they carry an added security benefit. In fact, because the Pentagon **operates on a five-year budget cycle**, projects that **pencil out to great investments over the long term** often get **turned down because they register to the budget as a near-term loss.** ¶ Microgrids are still in the pilot phase and the military has not yet decided what the business model will be for them. Because the technology would help energy managers use power more efficiently on a day-to-day basis, for instance by bringing unnecessary loads offline during peak demand times, some officials say microgrids may be able to create enough savings to pay for themselves. Not all of industry is convinced, though, and a group of business executives will be suggesting financial models to Robyn's office in a report this spring. ¶ Ultimately, many say the military is going to have to decide what "secure energy" is worth to it if it wants to fix its vulnerabilities. ¶ "Until someone establishes the value of energy security, I only have the business case to rely on, because right now the value of energy security is **apparently zero**," said Dan Nolan, a retired Army colonel who writes a defense energy blog. ¶ The Navy has made a rough attempt to do this for its Surface Warfare Center in Dahlgren, Va. Like many military installations, the base sits at the end of the power line. Last year it lost electricity 11 times. ¶ Capt. Kenneth Branch, the commander for Naval Facilities Engineering Command Washington, estimates that the two days the center was without power during Hurricane Irene this summer cost it $60,000. ¶ "That's just lost industrial productivity," he said, noting that the numbers helped him justify infrastructure investments. "I also spend a lot of money on my labor trying to figure what were the problems and get back up and online." ¶ A fuller accounting could also count the costs associated with backup generators, including labor required for maintenance, the price of buying and transporting fuel, and the risk of failure. ¶ Pentagon officials say they are beginning to think through some of these calculations, but nobody is sure yet whether extra money would follow. ¶ "If the military is really serious about this, are we going to have to spend some dedicated funds on energy security?" the Army's Kidd said. "I don't know the answer to that, but I think those are the questions we need to start to ask." ¶ Looking to Congress¶ Ultimately, the answers to those questions will come from Capitol Hill, where **lawmakers have been bitterly divided** on energy policy. ¶ Indeed, a **military energy** issue that has **become a symbol of the larger energy policy debate** was one of the final points to be resolved in last month's congressional budget deal. Republicans mounted an effort to exempt the military from a 2007 ban on purchasing fuels like liquefied coal that have a higher greenhouse gas content than traditional petroleum, but in the end they acquiesced, leaving the ban intact.

Their evidence conflates support for nuclear power and incentives for increased production—the plan won’t garner support

Mariotte, 2012

Michael Mariotte, Executive Director of Nuclear Information and Resource Service, 6-5-2012, “Nuclear Power and Public Opinion: What the polls say,” <http://www.dailykos.com/story/2012/06/05/1097574/-Nuclear-Power-and-Public-Opinion-What-the-polls-say>

Conclusion 1: The public does NOT want to pay for new nuclear power. It IS willing to pay for renewable energy.

This one is a slam dunk.

New nuclear reactors are simply too expensive for utilities to build with their own assets. Nor are banks willing to lend money for most nuclear projects; they’re considered too risky given the long history of cost overruns, defaults, cancellations and other problems. Thus, the only two means of financing a new reactor are to either get money from taxpayers, through direct federal loans or taxpayer-backed loan guarantees, or from ratepayers in a few, mostly Southern states, which allow utilities to collect money from ratepayers before reactors are built—a concept known either as “early cost recovery” or Construction Work in Progress (CWIP).

ORC International (which polls for CNN,, among others) has asked a straightforward question for the past two years (March 2011 and February 2012) in polls commissioned by the Civil Society Institute: “Should U.S. Taxpayers Take on the Risk of Backing New Nuclear Reactors?” The answer? Basically identical both years: 73% opposed in 2011, 72% opposed in 2012.

Maybe using the work “risk” skews the poll, you think? So ORC also asked, “Do you favor or oppose shifting federal loan guarantees from nuclear energy to clean renewables?” The answer was basically the same: 74% said yes in 2011, 77% in 2012 with 47% “strongly” holding that opinion both years.

A third poll conducted by ORC for Civil Society Institute in March 2012 asked this question:

“Utilities in some states are allowed to charge electricity ratepayers for “Construction Work in Progress” for new power plants. This means that ratepayers – instead of the companies – pay for construction of new nuclear reactors and other major power plants before any electricity ever reaches customers, thereby lowering the financial risks to shareholders. Knowing this, which of the following statements about “Construction Work in Progress” most closely reflects your view?”

The answer: fully 80% opposed CWIP.

Most pollsters have not asked similar questions; interestingly though, Rasmussen did in May 2012 for an undisclosed client. Their question: “The government is providing billions in loan guarantees to help the development of new nuclear plants. Would that money be better spent on the development of alternative new energy sources?” Unfortunately, Rasmussen did not publicize the results and hid them behind a paywall, which we were not inclined to pursue. But if anyone has access to that, we’d love to know what Rasmussen found.

Conclusion 2: Americans do not think nuclear power is “clean” energy, and still don’t want to pay for it.

Jumping back to ORC International, their March 2012 poll found this:

About two out of three Americans (66 percent) – including 58 percent of Republicans, 65 percent of Independents, and 75 percent of Democrats -- agree that the term “‘clean energy standard’ should not be used to describe any energy plan that involves nuclear energy, coal-fired power, and natural gas that comes from hydraulic fracturing, also known as ‘fracking.’”

and this:

About three out of four Americans (73 percent) agree that “federal spending on energy should focus on developing the energy sources of tomorrow, such as wind and solar, and not the energy sources of yesterday, such as nuclear power.” Fewer than one in four (22 percent) say that “federal spending on energy should focus on existing energy sources, such as nuclear, and not emerging energy sources, such as wind and solar.”

Meanwhile, the New York Times in May reported on a Harvard/Yale poll (also behind a paywall), conducted in 2011 but released in May 2012, that found that Americans are willing to pay an average of $162/year more for clean energy than they are paying now—an average 13% increase in electric bills. But when clean energy was defined as including nuclear power or natural gas, that support plummeted.

This is consistent with findings over the past decade, which have shown that nuclear power has typically ranked well below renewable energy sources, especially solar and wind, in public opinion, at times battling with coal for least-favorite U.S. energy source.

A March 2012 Gallup poll found that 69% of Americans support spending more government money on solar and wind power—with majorities among Democrats (84%) and Republicans (51%) alike. But support for “expanding the use of nuclear power” barely received a majority (52%) and then only due to Republican support: 64% of Republicans supported that idea, only 41% of Democrats.

Conclusion 3: On new reactors, how one asks the question matters.

Gallup and the Nuclear Energy Institute ask the same question: “Overall, do you strongly favor, somewhat favor, somewhat oppose or strongly oppose the use of nuclear energy as one of the ways to provide electricity in the U.S.?”

This question doesn’t really get to the issue of support for new nuclear reactors, although NEI typically tries to spin it that way. Although a question of support for current reactors wasn’t asked in any recent poll we saw, the public traditionally has been more supportive of existing reactors than new ones, and the question above could easily be interpreted as support for existing reactors, or even simple recognition that they exist. The results may also be skewed by the pollsters throwing nuclear in as “one of the ways,” without a context of how large a way.

Nonetheless, despite asking the same question, Gallup and NEI can’t agree on the answer. NEI, for example, in November 2011 asserted that 28% of the public strongly favors nuclear power with an additional 35% somewhat in favor. NEI found only 13% strongly opposed and another 21% somewhat opposed. A May 2012 NEI poll did not publicly break down the numbers into strongly vs somewhat, but claimed a similar 64-33% split between support for nuclear power and opposition.

Gallup, asking the same question in March 2012, found a narrower split. A smaller number was strongly in favor (23%, a drop of 5%) and a larger number strongly opposed (24%, increase of 3%)—overall an 8-point anti-nuclear swing among those with strong opinions. Those in the middle were 34% somewhat favor vs 16% somewhat opposed. The 2012 numbers were slightly worse for nuclear power than the identical question asked in March 2011, just before Fukushima.

But other polls suggest that Gallup and NEI may be asking the wrong question. For example, the LA Times reported on a Yale-George Mason University poll in April 2012 that found that support for new nuclear power had dropped significantly, from 61% in 2008 to 42% today.

Even Rasmussen in its May 2012 poll found that only 44% support building new reactors. That was good news for Rasmussen since it found that only 38% oppose them, with a surprising 18% undecided (surprising because no other poll we saw had such a high undecided contingent for any nuclear-related question).

Meanwhile the March 2012 ORC International poll found that:

“Nearly six in 10 Americans (57 percent) are less supportive of expanding nuclear power in the United States than they were before the Japanese reactor crisis, a nearly identical finding to the 58 percent who responded the same way when asked the same question one year ago. Those who say they are more supportive of nuclear power a year after Fukushima account for well under a third (28 percent) of all Americans, little changed from the 24 percent who shared that view in 2011.”

But perhaps the most telling, and easily the most interesting, poll comes from a March 2012 poll from the Yale Project on Climate Change Communications. Participants were asked, “When you think of nuclear power, what is the first word or phrase that comes to your mind?”

29% of those polled said “disaster.” Another 24% said “bad.” Only about 15% said “good” and that was the only measurable group that had anything positive to say. That poll also found that, “…only 47 percent of Americans in May 2011 supported building more nuclear power plants, down 6 points from the prior year (June 2010), while only 33 percent supported building a nuclear power plant in their own local area.”

Conclusions

Americans are not exactly wild about the idea of building new nuclear reactors. Polls asking the question different ways arrive at different results; at the lowest common denominator it is safe to say the country is divided on the issue. But Americans clearly don’t want to pay for construction of new reactors. And the reality is that no utility wants to or even can spend its own money building new reactors—they’re just too expensive. Congress, State legislatures and Public Service Commissions would do well to heed that warning, especially since it crosses all party and political lines.

It is also clear that the American public does not see nuclear power as a “clean energy” source (nor, for that matter, “clean” coal or natural gas fracking). Congressional or state efforts to include these technologies in a “clean energy standard” or a clean energy bank concept are bound to fail.

## enviro

#### B) Green voters are even more important after losses with other groups

Munro, 8-31

Neil Munro, Daily Caller's White House correspondent, 8-31-2012, Daily Caller, “Obama still has the green energy vote for 2012,” http://dailycaller.com/2011/08/30/obama-still-has-green-energy-vote-for-2012/2/

Obama still has the green energy vote for 2012

Advocates for the $7 billion pipeline — including labor unions — say it will create 20,000 good jobs and reduce gasoline-price disruptions. That’s a message that resonates with the swing-voting independents that Obama needs to win next November.

But there’s little evidence so far that progressives’ disappointment with Obama’s environmental policies threatens to reduce their turnout on election day, or that it pressures White House officials to make additional concessions to environmentalists during a political season dominated by the public’s demand for additional jobs.

Monday’s colorful, TV-ready protests against the Keystone XL pipeline from Canada’s oil fields to U.S consumers took place in Lafayette Park, in front of the White House.

The day’s events included 100 peaceful arrests of environmentalists and celebrities, a multi-faith spiritual event in Lafayette Park, press club speeches by environmental leaders, and numerous suggestions that approval of the pipeline by Obama will cost his campaign votes, volunteers and donations. Hundreds of others have already been arrested, and numerous environmental groups have contributed to two weeks of protest.

If Obama approves the pipeline, environmental activist Andrew Driscoll predicted he would not vote to re-elect him. “He hasn’t done anything to earn our vote yet,” said the Massachusetts activist. “The fate of humanity, the fate of the planet” will be determined by Obama’s pipeline decision, he said.

“If he approves it, it will be a huge blow, not only for our future, but also for this administration,” said Elijah Zarlin, a campaign manager at CREDO Action, an Atlanta-based progressive group. The protesters “are the people who are maybe going to vote for Obama, and are the people Barack will lose” if he approves the pipeline, he added.

However, the leadership of the green movement isn’t threatening to break with Obama over this one decision. (RELATED: Gore: Global warming skeptics are this generation’s racists)

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Instead, they are balancing their goal of stopping the pipeline with the need to keep their supporters motivated even when the public opposes regulation of job-producing companies, and with their shared desire to avoid the election of a GOP president, such as Texas Gov. Rick Perry.

The protests, arrests, caravans and petitions help make the president uncomfortable and reduce the chance that he’ll side with industry interests, said Philip Radford, Greenpeace’s executive director. The movement won’t accept a compromise offer from the White House, but will instead try to defeat the pipeline at the federal, state and local levels, he said. “This will be an embarrassment for the president,” he predicted.

“If the tar-sands pipeline is approved [by Obama], we will be back and our numbers will grow,” said James Hansen, a NASA scientist and political advocate. “For the sake of our children and grandchildren, we must find someone who is worthy of our dreams.”

Advocates for the $7 billion pipeline — including labor unions — say it will create 20,000 good jobs and reduce gasoline-price disruptions. That’s a message that resonates with the swing-voting independents that Obama needs to win next November.

Green activists’ importance to Obama’s re-election campaign is boosted by Obama’s losses among other voters, including whites, women, Hispanics and younger voters. Gallup’s daily poll on August 29 already showed Obama’s approval rate at 38 percent, and his disapproval rate at 55 percent.

#### Obama credibility on energy and the environment key to youth turnout

Brownstein, 2010

Ronald Brownstein, National Journal Group's Editorial Director, 6-17-2010, CongressDaily, “On Energy, Green Issues, Generation Gap Is Pronounced,” http://ecoaffect.org/2010/06/18/on-energy-green-issues-generation-gap-is-pronounced/

Generation Gap On almost every major question examined in the latest weekly Society for Human Resource Management/National Journal Congressional Connection Poll, young people lean much more heavily than older adults toward green-tilting positions favored by environmentalists and President Obama.

That gap is a much more powerful and persistent trend in the survey, conducted by the Pew Research Center, than other divides that usually separate the population — such as the differences in opinion between men and women, whites and nonwhites, and whites with and without college educations. The survey, conducted from June 10-13, surveyed 1,010 adults; it has a 4-point error margin, with larger error margins for subgroups.

Asked, for instance, to identify the top priority for U.S. energy policy, fully 65 percent of young people say the highest goal should be protecting the environment, while just 29 percent say the top goal should be to keep energy prices low.

For older Americans, the balance shifts steadily toward price. Those aged 30-49 also prioritize the environment (60 percent) over price (32 percent); but the numbers shift to 53 percent for the environment and 41 percent price for those aged 50-64. And with seniors, the priorities flip, with 47 percent picking price and just 40 percent the environment.

These sorts of results help explain why White House Chief of Staff Emanuel believes a highly visible debate over energy leading into the November election could help somewhat reverse the usual falloff in midterm turnout among young people.

On average since 1992, the share of the vote cast by voters under 30 has been fully one-third lower in midterm than presidential elections, according to calculations from exit polls by Emory University political scientist Alan Abramowitz. That's obviously a major risk for Democrats, because Obama's standing remains much stronger with young people than with older adults: in this week's Congressional Connection Poll, Obama's favorability rating among adults under 30 (72 percent) is a head-turning 27 percentage points higher than his 45 percent favorability among seniors.

In an interview, Emanuel said that while it's not possible to fundamentally reshape traditional turnout patterns, "at the margins" more young people could be inspired to vote by a legislative debate that shows Democrats committing to moving toward alternative energy and Republicans resisting the change. "It's a way to get them engaged in the coming election," he said. "They see it as being about the future, and less about energy policy."

The shape of the coming energy debate remains uncertain. While environmentalists still hope to pass comprehensive energy legislation that would include legislated reductions in carbon emissions, the administration has sent mixed signals on whether it believes such an approach can obtain the 60 votes required to clear the Senate.

Like Senate Democratic leaders, Obama has left the door open to scaled-down "energy-only" legislation that might jettison carbon limits but maintain incentives to increase production of renewable energy. Some senior House Democrats, like Energy and Commerce Chairman Henry Waxman, the co-author of the climate bill the House passed last June, have suggested that if the Senate passes an energy-only plan, carbon limits could be added during the conference process.

However the legislative maneuvering ultimately unfolds, it's clear that young people align more strongly than older Americans with Obama's positions in the energy and environmental debate.

"This reflects the broader political generation gap," said Andrew Kohut, president of the Pew Research Center. "People under 30 years of age, or under 35, are more liberal across the board. They are certainly more environmentally sensitive, compared to older people, where there is more of a division of opinion."

In the poll, nearly three-fourths of adults under 30 said they favored including in any energy legislation mandatory limits on carbon dioxide and other greenhouse gas emissions linked to climate change. That compares to about two-thirds of those aged 30-64, and just 46 percent of seniors. A near-monolithic 93 percent of young people said they favored including in any bill requirements that utilities generate more power from wind, solar and other renewable sources. That idea drew nearly as broad support from middle-aged respondents, and backing from around three-fourths of seniors.

Equally telling, young people, by a resounding 2-1, said they trusted Obama more than congressional Republicans in deciding whether to regulate greenhouse gases. Middle-aged respondents more narrowly preferred Obama over Republicans while seniors placed more trust in Republicans by a 42 percent to 28 percent margin. White seniors preferred the Republicans over Obama by two-to-one.

Young people didn't differ as much from their elders on what to do next about offshore drilling. Only one-fifth of young adults said they wanted to ban offshore drilling, actually a slightly smaller percentage than seniors (almost one-fourth). Nearly one-third of young people still want to expand offshore drilling, and the largest group (just under two-fifths) would continue to operate existing wells, but ban additional ones.

In other ways, though, young people expressed less enthusiasm than older Americans about measures to promote more **conventional** sources of **energy**. They were less likely than those aged 49 and older to say they favored including in energy legislation incentives for increased development of nuclear power, and expanded exploration of coal, oil and gas. Still, a solid three-fifths of young adults favored more exploration for fossil fuels.

Kohut said it was too early to tell whether a visible energy debate would help politically energize younger voters — but that Democrats needed something to give them a jolt. "They need some way to get people who are core Obama supporters energized again," he said. "Because all of the conservative trends we saw in [the 2009 election] were in part a function of Republican energy, but also a function of Democrats being asleep."

#### Just a smidgeon of a link is enough

Goodman, 7-2

Peter Goodman, business editor of the Huffington Post, 7-2-2012, "How Loss of Enthusiasm Among Young voters Could Cost Obama The Presidencywww.huffingtonpost.com/2012/07/01/how-loss-of-enthusiasm-could-cost-obama-election\_n\_1620253.html

Obama's campaign operatives describe multiple pathways leading to reelection. Obama might compensate for soft support among men by boosting his showing among women. He could lose Florida, which he won narrowly last time, but still win Ohio, where the auto bailout has generated jobs. He might lose Ohio and Florida, but still ride to victory via a strong performance in western states such as Colorado, Nevada, New Mexico and Arizona.

But most of the available pathways share one essential component: Obama needs a dominant showing among young voters.

"The youth vote is incredibly important, and particularly for Obama," says Mark Penn, the pollster who served as Bill Clinton's data guru, and Hillary Clinton's chief strategist on her bid for the White House. "It was his core base in 2008."

In three states, Virginia, Indiana and North Carolina, voters under 30 decisively tipped the scales in Obama's favor, turning what would have been defeats into victories. North Carolina presents the clearest case. George W. Bush carried the state by more than 12 percentage points in both 2000 and 2004. Among voters 30 and over, Obama lost to the Republican nominee, Sen. John McCain, according to exit polls. But he took 73 percent of the under-30 electorate, and that gave him the state by a mere 14,000 votes – less half one of one percent.

According to the consensus view among political strategists, 11 states now considered tossups will determine the outcome of the 2012 race: North Carolina, Virginia, Pennsylvania, New Hampshire, Ohio, Florida, Colorado, Arizona, Nevada, Iowa, and Missouri. These states collectively hold more than half of the 270 electoral votes needed to claim the presidency. Obama lost only two of these states last time -- Missouri, where he came within one percent, and Arizona, home to McCain. In seven of the nine states he won, he took at least 60 percent of the under-30 vote, according to analysis by CIRCLE. In an eighth state, Virginia, he narrowly missed the 60 percent mark.

Evidence of discontent among young voters has pollsters seriously questioning whether Obama will be able to engineer a similar showing this time.

Obama's heavy dependence on youth votes in battleground states explains why the Romney campaign is expending resources courting younger voters, including appearances at universities. On its face, this strategy might seem like a waste of energy and money: Romney not only trails badly in polls among young people, but Democrats tend to have a much easier time winning younger voters, given their liberal proclivities on social issues, environmental regulation and foreign policy. But for Romney, the objective is not to win a large share of votes. It is to deprive Obama of a smidgen of his base – a potentially decisive smidgen.

## nei

#### Ignore NEI evidence – they’re hired guns

Justin Elliott 11, reporter for ProPublica, an independent, nonprofit newsroom in New York City that produces investigative journalism, “What the media missed about the nuclear lobby”, March 15, <http://www.salon.com/2011/03/15/nuclear_energy_institute_tepco/>

The Nuclear Energy Institute is a Washington-based trade group that has been widely quoted in the press — including Salon — in recent days as representing the American nuclear industry. What media reports haven’t mentioned is that NEI is actually an international organization that serves several Japanese member corporations, including the very company whose reactors are at the center of the crisis: Tokyo Electric Power Co. (TEPCO).

According to the trade group’s 2010 “governance roster,” TEPCO is one of about 350 member organizations, along with the Federation of Electric Power Companies of Japan, the Japan Atomic Energy Agency, and other Japanese energy interests.

The trade group’s website describes its international character: “NEI represents and serves the interests of over 350 member organizations in 17 countries.”

Japan is one of those countries and TEPCO is one of the members. This seems like key context to include when NEI representatives are quoted talking about the Japanese disaster. That’s especially true since NEI has at times given overly sunny takes on what is happening. Early on in the crisis, for example, NEI distributed to reporters a document from the Federation of Electric Power Companies of Japan (an NEI member) that claimed there was “no danger of the nuclear fuel being exposed” at Fukushima Daiichi plant. That turned out not to be true. An NEI spokesman also argued on Sunday that Americans should be “reassured” by what is happening because lessons will be learned in Japan.

NEI members pay dues, but the exact amounts are not public. We do know NEI took in $46 million in 2009, the latest year for which tax disclosures are available. That money was spent on lobbying on the Hill, aggressive public relations campaigns, and salaries for executives. In 2009, NEI President Martin Fertel was paid $1.5 million.

NEI also gives out lots of money in campaign contributions. Its political action committee spent $500,000 last election cycle. It’s not clear if that means that foreign money — say, from Japanese power plant operators like TEPCO — has gone to American politicians.

## impact

#### Romneys tax cuts make the deficit worse

Zakaria 12

(Fareed Zakaria, PhD from Harvard, writes a foreign affairs column for The Post, 6/7/12, The Washington Post, “Romney is wrong on tax cuts,” http://www.washingtonpost.com/opinions/fareed-zakaria-romney-is-wrong-on-tax-cuts/2012/06/07/gJQAy1pHLV\_story.html)

By contrast, Mitt Romney’s first major ad is substantive — and wrong. He tells us that on his first day in office — after approving the Keystone XL pipeline — he will “introduce tax cuts . . . that reward job creators not punish them.” The one idea that is almost certain not to jump-start this economy is a tax cut. Why can we be sure of this? Because that is what we have done for the past three years. For those who think President Obama’s policies have done little to produce growth, keep in mind that the single largest piece of his policies — in dollar terms — has been tax cuts. They actually began before Obama, with the tax cut passed under the George W. Bush administration in response to the financial crisis in 2008. Then came the stimulus bill, of which tax cuts were the largest chunk by far — one-third of the total. The Department of Transportation, by contrast, got 6 percent of the total to fix infrastructure. That wasn’t the end of it. There was the payroll tax cut, the small business tax cut, the extension of the payroll tax cut, and so on. The president’s Twitter feed boasted: “President Obama has signed 21 tax cuts to support middle class families.” And how has that worked out? In the wake of a financial crisis caused by excessive debt, tax cuts are **highly unlikely to lead to increased economic activity**. People use the money to pay down their debts rather than shop for cars, houses and appliances. As for the idea that job creators are not creating jobs because their taxes are too high, think about it: Would Mitt Romney invest more of his money in American factories if only he had paid less than the 13.9 percent rate he paid last year? Please! The Wall Street Journal invoked Milton Friedman to say that the problem with all of these tax cuts is that they are temporary. If only we had across-the-board cuts in rates. Except that these were tried as well. The 2001 Bush tax cuts were designed precisely along those lines. They were, in dollar terms, the largest tax cuts in U.S. history. And the nonpartisan Congressional Research Service concluded in 2010 that “by almost any economic indicator, the economy performed better in the period before the [Bush] tax cuts than after the tax cuts were enacted. . . . GDP growth, median real household income growth, weekly hours worked, the employment-population ratio, personal savings, and business investment growth were all lower in the period after the tax cuts were enacted.” The years 2000 to 2007 were the period of the weakest job growth in the United States since the Great Depression. The one certain effect of tax cuts would be to balloon the deficit. Bruce Bartlett, a former economic official under Ronald Reagan, points out that the aggregate revenue loss of the Bush tax cuts was the largest in U.S. history. “Both Harry Truman and Ronald Reagan passed larger individual tax cuts, but both took back about half of them with subsequent tax increases.” When pressed, Romney and his advisers sometimes say that they are just for tax reform; other times, they cite the Simpson-Bowles plan. I’ve long argued that reforming the nation’s bloated and corrupt tax code is vital and that Simpson-Bowles is a superb framework for deficit reduction. But neither will cut taxes. Simpson-Bowles raises them by more than a trillion dollars. You can use euphemisms such as “ending tax expenditures” and “closing loopholes,” but when you do that, someone’s taxes will go up. And when you close big loopholes such as the deduction of mortgage interest — which is the only way to get real revenue — tens of millions of peoples’ taxes will go up. Tax cuts have been a **central cause of America’s deficit problems**. For four decades, Washington politicians have bought popularity by cutting taxes, always saying that spending cuts or growth will make up for lost revenue. That rarely happened, and the result is $11 trillion in federal debt held by the public. To perpetuate this pandering one more time is not just dishonest — it is dangerous.