# 2AC Blocks Compiled

# Counterplans

## 2AC Global Warming Advantage CP

### 1. Perm – Do both

### a. Not mutually exclusive – possible to sequester rocks and enact SBSP simultaneously

### b. Perm gets double solvency – we trap carbon and stop emissions

### 2. CP can’t solve

###  a. Only aff presents a long-term solution – SBSP provides unlimited energy, that’s 1AC Morgan ’07, and corks carbon emissions by shifting away from fossil fuels.

### b. Carbon sequestration fails – encourages fallback to fossil fuels and inevitably fails when we run out of [insert rock of CP].

### A. Lack of catalyst 🡪 ten thousand year timeframe

### B. Turn –CP generates more CO2 than it sequesters

Kornell ’09 (Sam, Staff Writer for Miller-McCune.“A Rock That Helps Out In a Hard Place” http://www.miller-mccune.com/science-environment/a-rock-that-helps-out-in-a-hard-place-10909/. November 10, 2009”

The problem Krevor and other researchers must surmount is that ultramafic rock sequesters CO2 very slowly — over tens of thousands of years. “This process is important on geological time scales in buffering the CO2 concentration of the atmosphere, but on a year-to-year time scale it doesn’t keep up,” he said. “So the question is: Is there a way to speed the process up so that it’s fast enough to counteract the emissions from industrial processes?” In 2003, a group of researchers at the Albany Research Center, a laboratory in Oregon funded by the Department of Energy, attempted to answer that question. They focused on two traditional methods of accelerating chemical reactions in minerals — pulverizing them into tiny particles, and heating them to extreme temperatures. Both methods worked, but there was a problem: They required so much energy to enact that they produced more CO2 than they sequestered. After the ARC study was published, the Department of Energy effectively cut off funding into mineral sequestration research. The decision was based on a simple equation — the cost, in energy and money, appeared to outweigh the benefit. But according to Krevor, the goal of the ARC study was not to find the best way to accelerate mineral sequestration, but simply to prove it could be done. It was supposed to be the first step — “proof of concept” — but funding never arrived to develop step two.

### [ ] No solvency – all their evidence talks about peridotite in Oman, can’t utilize resources not in the US

### And case is a DA to the CP, only SBSP solves for resource wars, warming, and global conflict

## 2AC Oil Advantage CP

### 1. Perm – Do both

### a. Not mutually exclusive – we can use natural gas and SBSP simultaneously

### b. Double solvency – switching to natural gas and SBSP accelerates oil transition

### 2. CP can’t solve

###  a. Only SBSP presents a long-term solution – we provide unlimited energy and shift away from fossil fuels.

###  b. Natural gas still links to resource wars and warming – non-renewable resource that’s running out with carbon emissions

### No solvency – running out

**Heinberg ’05** (Richard Heinberg, American journalist and educator who has written extensively on ecological issues, including oil depletion. He is the author of at least ten books. “The Party’s Over - Oil, War, and the fate of Industrial societies”. June 1, 2005)

Many industry analysts believe the outlook for future discoveries in North America is far less favorable than HIA forecasts suggest. In the decade from 1977 to 1987,9,000 new gas fields were discovered, but the following decade yielded only 2,500 new fields. **This general downward trend in discovery is continuing, despite strenuous efforts on the part of the industry**. Matthew Simmons has reported that the number of drilling rigs in the Gulf of Mexico grew by 40 percent between April 1996 and April 2000, yet production remained virtually flat. That is largely because the newer fields tend to be smaller; moreover, because of the application of new technology, they tend to be depleted faster than was the case only a decade or two ago: new wells average a 56 percent depletion rate in the first year of production. In a story dated August 7, 2001, Associated Press business writer Brad Foss noted that in the previous year, "there were 16,000 new gas wells drilled, up nearly 60 percent from 10,400 drilled in 1999. But output only rose about 2 percent over the same period, according to estimates from the Energy Department. The industry is on pace to add 24,000 wells by the end of the year, with only a marginal uptick expected in production."1 In June 1999, Oil & Gas Journal described how the Texas gas industry, which produces one-third of the nation's gas, had to drill 6,400 new wells that year to keep production from plummeting. Just the previous year, only 4,000 wells had to be drilled to keep production steady.4 According to Randy Udall of the Community Office for Resource Efficiency in Aspen, Colorado, no one likes talking about |natural-gas| depletion; it is the crazy aunt in the attic, the emperor without clothes, the wolf at the door. But the truth is that drillers in Texas are chained to a treadmill, and they must run faster and faster each year to keep up." **US natural gas production has been wavering for years; in order to make up for increasing shortfalls, the nation has had to increase its imports from Canada, and Canada is itself having to drill an increasing number of wells each year just to keep production steady — a sign of a downward trend in discovery**. A May 31, 2002 article by Jeffrey Jones for Reuters, entitled "Canada Faces Struggle Pumping More Natgas to US," begins ominously: "Canadian natural gas production may have reached a plateau just as the country's role as supplier to the United States is becoming more crucial due to declining US gas output and rising demand. Furthermore, Mexico has already cut its gas exports to the US to zero, and has become a net importer of the fuel. A gas pipeline from Alaska could help, but not much. A three-foot-diameter pipeline would deliver only two percent of the projected needs for the year 2020. Nearly all of the natural gas used in the US is extracted in North America. While gas is more abundant in the Middle East, which has over a third of the world's reserves, the amount that could be transported by ship to the American market is limited. The shipment process itself is feasible (there is only a 15 percent energy penalty from cooling and transportation), but the US has only tour liquefied natural gas offloading terminals at present, and it will take time and considerable investment to build more. Moreover, nearly all of the existing I.NG shipping capacity is spoken for by Japan, Korea, and Taiwan through long-term contracts. Europe and the Far East may be able to depend on gas from the Middle East and Russia for several decades to come, but that is probably not a realistic prospect for the US. The public got its first hint of a natural gas supply problem in the latter months of 2000, when the wellhead price shot up by 400 percent. **This was a more dramatic energy price increase than even the oil spikes of the 1970s**. Homeowners, businesses, and industry all suffered. This gas crisis, together with simultaneous oil price hikes, helped throw the nation — and the world — into recession. Farmland Industries shut down some of its fertilizer plants because it could not afford to use expensive natural gas to make cheap fertilizer; many consumers were dismayed to find that their utility bills had doubled. A frenzy of new drilling resulted, which, together with a scaling back of demand due to the reces sion, enabled the natural gas market to recover so that prices eased back. Vet by the spring of2001, wellhead gas prices were still twice what they had been twelve months earlier, and gas in storage had reached its lowest level ever. The nation narrowly averted serious shortages again in 2003; however, unusually mild winter and summer weather in 2004 enabled the refilling of underground gas storage reservoirs. **The US has managed to avoid a train wreck so far, but given declining production, the event seems inevitable**, whether it occurs this year or next. The increasing demand for gas is coming largely from an increasing demand for electricity. To meet growing electricity needs, utilities in 2000-2001 ordered 180,000 megawatts of gas-fired power plants to be installed by 2005. This strategy seemed perfectly logical to the utilities\* managers since burning gas is currently the cheapest and cleanest way to convert fossil fuel into electricity. But apparently no one in the industry had bothered to inquire whether there will be enough gas available to fire all of those new generators over their useful lifetime. Many exploration geologists are doubtful. By mid-2002, plans for many of those new gas-fired plants were being cancelled or delayed. Does natural gas extraction follow the same Hubbert curve as does oil extraction? Oil wells arc depleted relatively slowly, whereas, as we have seen, gas wells — especially newer ones — often deplete much more quickly. The typical natural gas well production profile rises from zero, plateaus for some time, and then drops off sharply. However, in aggregate, combining all of the natural gas wells in a country or large geographical region, extraction does follow a modified Hubbert curve, with the right-hand side of the curve being somewhat steeper than that for crude. Hence, **natural gas will not solve the energy-supply problem caused by oil depletion; rather, it may actually compound that problem.** Our society is already highly dependent on natural gas and becoming more so each year. But soon **we are likely to see a fairly rapid crash in production**. As my colleague Julian Darley has written in his book Hipb Noon for Natural Gas: The New Energy Crisis, "**The coming shortage of natural gas in the U**nited **S**tates and Canada, **compounded by the global oil peak and decline, will try the energy and economic system**s of both countries to their limits. **It will plunge** first **the U**nited **S**tates, then Canada, **into a carbon chasm**, a hydrocarbon hole, **from which they will be hard put to emerge unscathed**."0 Many alternative energy advocates have described natural gas as a "transition fuel" whose increased usage can enable the nation to buy time for a switch to renewable energy sources. However, in view of the precarious status of North American gas supplies, it seems more likely that **any attempt to shift to natural gas as a**n intermediate **fuel would simply waste time and capital** in the enlargement of an infrastructure that will soon be obsolete anyway — while also quickly burning up a natural resource of potential value to future generations.

### No solvency – substantial climate-warming

GARDINER ’11 (Beth. Staff Writer for The New York Times. “Is Natural Gas Good, or Just Less Bad?” <http://www.nytimes.com/2011/02/21/business/energy-environment/21iht-renogas21.html>. February 22, 2011)

LONDON — Natural gas is billed by its supporters, including President Barack Obama, as a clean fuel that could play a big role in a low-carbon future. But others are questioning the environmental credentials of an energy source that, while easier on the atmosphere than coal and oil, is still a fossil fuel that causes sizable emissions of climate-warming gases. Its backers say it emits only half as much carbon as coal when burned, and some environmentalists agree that it could bridge the gap until cleaner sources slowly come into use. But opponents see the push for natural gas as a distraction from more pressing priorities, like improving efficiency and generating renewable power. “We really have to be quite careful about the language we use to frame things,” said Kevin Anderson, a professor at the Tyndall Center for Climate Change Research at the University of Manchester in England. “If we call things green, we start to feel positive about it.” Natural gas, he said, “is not a positive thing, it’s just less negative.” In fact, he called it “a very bad fuel,” with “very high emissions indeed.” “They’re not as high as some other fossil fuels, but given where we need to be, to compare it with the worst that’s out there is very dangerous,” he added. Others are less critical. The Natural Resources Defense Council, an influential environmental group based in New York, wants to see U.S. coal plants converted to natural gas, said Kate Sinding, a senior attorney with the council. Reducing energy demand and promoting renewables come first, she said, “but we do see that as we get there, there is inevitably going to be a role for natural gas to play.” In addition to the carbon dioxide savings, natural gas also emits far lower levels of pollutants like nitrogen and sulfur oxides, mercury and particulate matter. Eventually, Ms. Sinding said, natural gas plants could be paired with solar and wind farms, which generate intermittent supply and need backup. Still, even if gas burns more cleanly than coal and oil, its production is often so dirty that it undermines the environmental gains, she said. U.S. and state regulators must tighten rules that have failed to reduce the serious problem of methane leaks and protect the quality of air and drinking water, Ms. Sinding said. Natural gas is composed largely of methane, which, if leaked unburned, is a powerful greenhouse gas. Also, poorly built gas wells can contaminate nearby aquifers. “In theory it can be reasonable, but we’re just falling far short of what we need to be doing for it to realize its promise,” she said. Much of the enthusiasm in the United States and Europe for natural gas comes from its relative abundance, and its location in places friendly to the West. The United States in particular has plentiful supplies, now that extraction from shale rock has boomed into a big industry. “Gas is much better distributed around the world than oil,” said Michael Webber, associate director of the Center for International Energy and Environmental Policy at the University of Texas at Austin. “We keep finding it.” Many environmentalists are not convinced, noting that a growing number of new finds are in hard-to-reach areas or require unconventional forms of extraction, making exploitation riskier, more expensive and more energy-intensive. Still, Mr. Webber said, “If we can really produce gas in a safe, clean way and it’s as abundant as people say, it doesn’t take us all the way to a zero-carbon future, but it’s clearly a big step in the right direction.” The advantages of gas, which include the low capital cost and short turnaround time for building new plants, make it essential for reducing carbon emissions quickly, said Beate Raabe, director of European Union affairs at the International Association of Oil and Gas Producers, a trade group based in Brussels. In the longer term, she said, carbon-capture technology could make gas plants part of a green future. Mr. Obama appeared to share such optimism when he mentioned natural gas in his State of the Union speech last month, surprising environmentalists by listing it along with solar, wind, nuclear and so-called clean coal power as key parts of a national clean-energy strategy. But some remain skeptical of the idea that natural gas can serve as a bridge to a cleaner renewable energy future. “How long and how wide is this bridge?” asked Ms. Sinding, of the Natural Resources Defense Council. “The more we put into natural gas, the greater the concern that we lock ourselves into burning natural gas and not substituting for it.”

### No solvency – shifts international conflict over to gas

**Heinberg ’11** (Richard Heinberg, American journalist and educator who has written extensively on ecological issues, including oil depletion. He is the author of at least ten books. “Rising Cost of Fossil Fuels and the Coming Energy Crunch” http://oilprice.com/Energy/Energy-General/Rising-Cost-of-Fossil-Fuels-and-the-Coming-Energy-Crunch.html. July 12, 2011)

During the past century, **world economic growth has depended largely on ever-expanding use of hydrocarbon energy sources**: oil for transportation, coal and natural gas for electricity generation, oil and gas for agricultural production. It is no exaggeration to say that the health of the global economy currently hinges on increasing rates of production of these fuels. However, **oil, gas, and coal are non-renewable resources that are typically extracted using the “low-hanging fruit” principle**. That is, large concentrations of high-quality and easily accessed fuels tend to be depleted first. Thus, while the world is in no danger of running out of hydrocarbon energy sources anytime soon, oil, **gas**, and coal **extraction efforts are increasingly directed toward low-quality, hard-to-produce fuels that require higher up-front investment and** entail **increasing environmental costs and risks**. These trends are easily demonstrated in the case of oil. Dependency: The dependence of the world economy on oil is illustrated by the close correlation between oil price spikes and US economic recessions that has been noted by several analysts. Declining resource quality: The pace of world oil discoveries has been declining since 1964. Oilfields found during the past decade have tended to be smaller, on average, than those located decades earlier, and tend to require expensive new technologies (including horizontal drilling, deepwater drilling, and hydrofracturing) for their development. As Jeremy Gilbert, former chief petroleum engineer for BP, has put it, “The current fields we are chasing we’ve known about for a long time in many cases, but they were too complex, too fractured, too difficult to chase. Now our technology and understanding [are] better, which is a good thing, because these difficult fields are all that we have left.” Increasing upstream production costs: The cost of developing a new barrel of oil’s worth of production capacity has increased dramatically in recent years. In 2000, the oil industry remained profitable with prices pivoting around $20 per barrel. Today it is estimated that oil prices of $60 to $80 per barrel are required in order to incentivize new exploration and production in many prospective regions. Increasing environmental risks and costs: As drillers operate in ever more hostile and fragile environments, accidents can have far worse consequences on ecosystems and human economies that depend on ecosystem services. This trend was forcibly illustrated by the Deepwater Horizon blowout in the Gulf of Mexico in 2010. Lower-quality hydrocarbon resources typically also entail higher carbon emissions per unit of energy produced. Coal and **natural gas** likewise **exemplify these trends**, though in somewhat different ways. While global coal reserves estimates have been used to justify the oft-repeated assertion that the world has hundreds of years of supplies, recent studies suggest world coal production could peak and begin to decline within the next 20 years. **The** most heralded recent **development in natural gas industry** is the application **of hydraulic fracturing technology** to production from low-porosity formations to boost reserves; however, this new technology **poses increased environmental risks while entailing higher production costs**. Together, coal, oil, and gas contribute to the overall societal cost of anthropogenic climate change. The ultimate burden of climate change on the world economy has been variously estimated; in the worst-case scenario (a global average temperature increase of five or more degrees Celsius), the economy simply would not survive. On the other hand, however, action by governments to limit climate change will almost certainly directly or indirectly increase the price of fossil fuels, adding to price increases resulting from depletion. **As fossil fuels become more scarce and expensive, international conflict over remaining supplies,** especially of oil and gas, **is likely to become more heated—a trend already clear in the South China Sea and Central Asia.** The replacement of fossil fuels with alternative sources of energy is clearly necessary, but presents the world with an unprecedented technical challenge. Transport systems (autos, buses, trucks, trains, aircraft, and ships) can in some cases be electrified; in other cases, petroleum-based liquid fuels can be replaced with biofuels. Electricity can be produced from sunlight and wind rather than coal and gas. However, **alternative energy sources currently provide only a tiny portion of current world energy, so a build-out will require enormous investment over several decades**. Moreover, when the prospects of alternative energy sources are evaluated using all important criteria (including the amount of energy returned on the energy invested in energy production, or EROEI; environmental impacts; size of the resource; and variability in flow rates), it is difficult to identify a realistic scenario in which total world energy supplies can continue to grow—or even remain constant—as fossil fuels deplete. Thus, even if governments act wisely now to develop energy alternatives at maximum possible rates, the world faces a nearly inevitable energy crunch during the next few decades. **Governments must** therefore **develop strategies for energy conservation**. Not only must much greater efficiency be brought to energy production and usage, but essential and non-essential uses of energy must be differentiated, with essential uses prioritized and non-essential uses discouraged.

### And case is a DA to the CP – only SBSP can solve for resource wars, warming, and global conflict

## 2AC Prizes (not totally completed)

### 1. Solvency Deficits –

**A. NASA never implements any of the technology used in Prize competitions**

**B. Google is already developing a category for SSP in the x-prize competitions**

**C. Prize would require time to initiate and determine the winner, now is the key time in order to implement the plan, CP waits until prize competition is over**

**D. Only NASA can solve for the plan-that’s Costa**

E. Kills Us heg- Presidential top-down mandate key to space leadership.

**Logsdon 11** (John, former Director-Space Policy Institute, and member-NASA Advisory Council, “Chapter 27: Emerging Domestic Structures: Organizing the Presidency for Spacepower,” http://www.ndu.edu/press/space-Ch27.html)

**If there is to be a national strategy for space informed by a comprehensive theory of spacepower, it must come from the center of government**: "The bureaucracy is no more equipped to manufacture grand designs for Government programs than carpenters, electricians, and plumbers are to be architects. But if an architect attempted to build a house, the results might well be disastrous."3 **The White House must act as the "architect" for a U.S. space strategy and must persuade the various centers of spacepower within and outside the Federal Government that it is in their mutual interest to work together in turning that strategy into action**. How best to achieve Presidential control over executive branch agencies is a classic problem of government organization, and it is basically no different in the space sector than in other areas of government activity.

### 2. Prizes are bad – Goal of Prize, Open Judging - Wrong Decisions, Financial Difficulties, also a reason why it links to the NB

COSA 04 (Committee on Space Aeronautics, Hearing: NASA CONTESTS AND PRIZES: HOW CAN THEY HELP ADVANCE SPACE EXPLORATION?, http://commdocs.house.gov/committees/science/hsy94832.000/hsy94832\_0.HTM, grubbs)

What are the pitfalls of using prizes to spur technology development. Prize contests can be less clear-cut than they first appear. Problems can develop in the design of the contest, the selection of a winner, and in the aftermath. First, NASA would have to be careful in its design of prize contests. The goal for which the prize was being awarded would have to be clearly enough described that contestants (and NASA) had a firm sense of what NASA was seeking and why. On the other hand, too detailed a description by NASA would limit the kinds of ideas that a contest could yield. A very detailed description would not end up being much different than contract specifications. The selection of a prize winner can also be difficult. Judges need to be open to unexpected ideas. **There are historical examples of revolutionary ideas losing prize contests because the judges were not open to unexpected ways of achieving the stated goals.** (See below.) On the other hand, NASA would also have to be careful to test prize entries carefully to ensure that there were no safety or other problems that might not be initially apparent. Finally, in terms of the aftermath, NASA would have to decide how to put a winning idea into actual use. A prize winner might not have the financial wherewithal or even the technical capacity to actually turn their winning idea into a viable product.

### 3. Perm do both

### A. Solely private space industry fails---government involvement’s a key insurance policy

**PM 10** – Popular Mechanics, March 9, 2010, “What Happens If NASA's Constellation Program Dies?,” online: http://www.popularmechanics.com/science/space/nasa/4343791

President **Obama is selling** the idea of bringing **private space** into NASA's fold **as a** whole **new way of thinking, but NASA under** the **Bush** administration **already got the ball rolling** with ISS resupply contracts to the private space companies Orbital and SpaceX. But **the Bush team hedged their bets by keeping a government program functional.** What will happen if private space fails to create a reliable launch vehicle? So far they are doing well, but **a small engineering flaw or a mishap could** grind the effort to a halt. Also, **as private space companies morph into large contractors, will the risk of bureaucratic lethargy increase,** **as seen in the defense industry among prime contractors?**

**B. Only the perm solves- Prizes are not a substitute for R&D**

**Lampson 04** (Nick, Congressman From Texas, Hearing: NASA CONTESTS AND PRIZES: HOW CAN THEY HELP ADVANCE SPACE EXPLORATION?, http://commdocs.house.gov/committees/science/hsy94832.000/hsy94832\_0.HTM, grubbs)

 However, the establishment of incentive prizes should not be viewed as a substitute for adequate and sustained investment by the Federal Government in aeronautics and space R&D. **We need to support a robust NASA budget this year and in the years to come**. I hope that today's focus on prizes will not divert from the importance of continuing that critical federal involvement in space exploration and utilization.

### 4. Perm Do the CP: Normal means the USFG would create a prize competition

### 5. Perm Do the plan and use NASA’S status quo funding to fund the plan

### 6. CP links harder to the Spending DA – Their Cohn evidence indicates that republicans hate any form of spending; the prizes CP probably spends more than the plan because NASA they give prize money and then fund the winner’s idea and end up funding the entire project amplifying the initial cost

**Lampson 04** (Nick, Congressman From Texas, Hearing: NASA CONTESTS AND PRIZES: HOW CAN THEY HELP ADVANCE SPACE EXPLORATION?, http://commdocs.house.gov/committees/science/hsy94832.000/hsy94832\_0.HTM, grubbs)

We are here today to examine the role that government-sponsored prizes might play in promoting the development of needed space technologies and, equally important, how such prize programs would need to be structured to be both effective and efficient. While there are numerous precedence for prizes offered by individuals and organizations in the private sector, there has been little experience today with governmentally-supported incentive prizes or contests. The often-sited Longitude Prize, first offered by the British Government in 1714, provides a historical example of the potential value of incentive prizes. On the other hand, it took decades and some politics for that prize finally to be awarded to the inventor of the first accurate marine chronometer. In addition, the winning inventor was, in fact, ''sustained for many years by research grants from the group administering the prize.'' That is a quote from a 1999 National Academy's report. And that is a fact that is not often acknowledged.

**? 7. Double Bind- either the CP is either exclusionary which stifles the innovation it claims to induce, or it promotes the suicide of the poor people who want to win the money but don’t have the resources**

**COSA 04** (Committee on Space Aeronautics, Hearing: NASA CONTESTS AND PRIZES: HOW CAN THEY HELP ADVANCE SPACE EXPLORATION?, http://commdocs.house.gov/committees/science/hsy94832.000/hsy94832\_0.HTM, grubbs)

Other prize contests of this type have included privately sponsored prizes for feats of aviation in the early part of the 20th century. In 1919, Raymond Orteig, a New York hotel owner, offered $25,000 to the first aviator to cross the Atlantic from New York to Paris (or vice versa) without a stop. Charles Lindbergh, an unknown airmail pilot, won the Orteig prize on May 28, 1927, 33 b hours after taking off from Roosevelt Field on Long Island. **During this period, many skilled, famous aviators died attempting to win the prize. In fact, the study of aviation prizes (and early aviation in general) illustrates that fatalities were highly likely in the attempts at such prizes.** This raises the issue of whether fatalities can be expected in the area of prizes associated with space. If such prizes are conducted and a fatality does occur, it is important to determine if this could impede the development of such contests and stifle the potential innovation that could result from inducement prize programs.

### 8a. Turn - only the plan saves the aerospace industry.

NSSO, ‘7 (National Security Space Office [10/10/07, “Space-Based Solar Power as an Opportunity for Strategic Security: Report to the Director, National Security Space office Interim Assessment Release 0.1,” http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf, DS)

An SBSP program as outlined in this report is remarkably consonant with the findings of this commission, which stated: The United States must maintain its preeminence in aerospace research and innovation to be the global aerospace leader in the 21st century. This can only be achieved through proactive government policies and sustained public investments in long‐term research and RDT&E infrastructure that will result in new breakthrough aerospace capabilities. Over the last several decades, the U.S. aerospace sector has been living off the research investments made primarily for defense during the Cold War…Government policies and investments in long‐term research have not kept pace with the changing world. Our nation does not have bold national aerospace technology goals to focus and sustain federal research and related infrastructure investments. The nation needs to capitalize on these opportunities, and **the federal government needs to lead the effort.** Specifically, it needs to invest in long‐term enabling research and related RDT&E infrastructure, establish national aerospace technology demonstration goals, and create an environment that fosters innovation and provide the incentives necessary to encourage risk taking and rapid introduction of new products and services. The Aerospace Commission recognized that Global U.S. aerospace leadership can only be achieved through investments in our future, including our industrial base, workforce, long term research and national infrastructure, and that government must commit to increased and sustained investment and must facilitate private investment in our national aerospace sector. The Commission concluded that the nation will have to be a space‐faring nation in order to be the global leader in the 21st century—that our freedom, mobility, and quality of life will depend on it, and therefore, recommended that the United States boldly pioneer new frontiers in aerospace technology, commerce and exploration. They explicitly recommended that the United States create a space imperative and that NASA and DoD need to make the investments necessary for developing and supporting future launch capabilities to revitalize U.S. space launch infrastructure, as well as provide Incentives to Commercial Space. The report called on government and the investment community must become more sensitive to commercial opportunities and problems in space. Recognizing the new realities of a highly dynamic, competitive and global marketplace, the report noted that the federal government is dysfunctional when addressing 21st century issues from a long term, national and global perspective. It suggested an increase in public funding for long term research and supporting infrastructure and an acceleration of transition of government research to the aerospace sector, recognizing that government must assist industry by providing insight into its long‐term research programs, and industry needs to provide to government on its research priorities. It urged the federal government must remove unnecessary barriers to international sales of defense products, and implement other initiatives that strengthen transnational partnerships to enhance national security, noting that U.S. national security and procurement policies represent some of the most burdensome restrictions affecting U.S. industry competitiveness. Private‐public partnerships were also to be encouraged. It also noted that without constant vigilance and investment, vital capabilities in our defense industrial base will be lost, and so recommended a fenced amount of research and development budget, and significantly increase in the investment in basic aerospace research to increase opportunities to gain experience in the workforce by enabling breakthrough aerospace capabilities through continuous development of new experimental systems with or without a requirement for production. Such experimentation was deemed to be essential to sustain the critical skills to conceive, develop, manufacture and maintain advanced systems and potentially provide expanded capability to the warfighter. A top priority was increased investment in basic aerospace research which fosters an efficient, secure, and safe aerospace transportation system, and suggested the establishment of national technology demonstration goals, which included reducing the cost and time to space by 50%. It concluded that, “America must exploit and explore space to assure national and planetary security, economic benefit and scientific discovery. At the same time, the United States must overcome the obstacles that jeopardize its ability to sustain leadership in space.” An SBSP program would be a powerful expression of this imperative.

### b. Aerospace key to the economy

Eisele, 3/7 [Stephen Eisele, US congress, march 7th 2011 “on the issues” http://www.votestephenforcongress.com/Issues.html]

I am a strong supporter of our US defense and aerospace industry and believe in fostering continued commercialization and incentivizing innovation through competition. The aerospace industry plays an important role in our economy and is critical to technological innovations, national security, and helps elevate our industrial base, education, and keeps jobs in the district. Having worked in the Space industry for many years, I am a strong advocate of Space exploration and its benefits to humanity. The space industry is helping lead our economy into its next great leap through advancements in telecommunications, weather observation/monitoring, scientific advancements, and exploration of space which could reap major benefits to improving life on our Planet. Space exploration exemplifies the American spirit and our innate desire to discover and unravel the mysteries of the universe;it inspires us to push the envelope of human thinking, and benefits all Americans through technological spin-offs/breakthroughs as well as the incredible promise of resources that could save our planet and preserve our livelihood. Government can help propel US aerospace excellence by scaling back some of the export controls that have made many US companies less competitive. The US should also promote the use of prizes as an incentive to help achieve the next technological breakthrough through competition. This model was successfully tested at the X PRIZE Foundation.

### c. Economic collapse causes war

Mead 9 – Walter Russell Mead, the Henry A. Kissinger Senior Fellow in U.S. Foreign Policy at the Council on Foreign Relations, 2-4, 2009, “Only Makes You Stronger,” The New Republic, http://www.tnr.com/politics/story.html?id=571cbbb9-2887-4d81-8542-92e83915f5f8&p=2

If financial crises have been a normal part of life during the 300-year rise of the liberal capitalist system under the Anglophone powers, so has war. The wars of the League of Augsburg and the Spanish Succession; the Seven Years War; the American Revolution; the Napoleonic Wars; the two World Wars; the cold war: The list of wars is almost as long as the list of financial crises. Bad economic times can breed wars. Europe was a pretty peaceful place in 1928, but the Depression poisoned German public opinion and helped bring Adolf Hitler to power. If the current crisis turns into a depression, what rough beasts might start slouching toward Moscow, Karachi, Beijing, or New Delhi to be born? The United States may not, yet, decline, but, if we can't get the world economy back on track, we may still have to fight.

## 2AC Synthetic Fuels CP

1. **Counterplan doesn’t solve –there are limited resources to produce synfuels and only plan is key to completely solve for oil dependence, warming, and leadership. Only SBSPs can eliminate the global dependence of oil and allow military flexibility. Synfuels have spills and carbon/gas emissions that would only further global warming and are harder to provide for the energy consumption.**

### Turn -Carbon Capture fails –high energy needs and gas leaks

LA Times ‘11

(Los Angeles Times, news agency, “A carbon dioxide escape hatch,” [http://www.latimes.com/news/opinion/opinionla/la-ed-ccs-20110720,0,344961.story](http://www.latimes.com/news/opinion/opinionla/la-ed-ccs-20110720%2C0%2C344961.story), 7/20/11, DA: 7/31/11, MadSu)

Among the more speculative of the proposed solutions to global warming is the notion of capturing the carbon dioxide emissions from coal-fired power plants and pumping them underground. Still, the collapse last week of one of the nation's most high-profile experiments with so-called carbon capture and sequestration technology is bad news for future generations and further evidence of the need for climate legislation. American Electric Power, one of the biggest utilities in the U.S., announced Thursday that it was tabling its plans to complete a commercial-scale carbon capture system at a coal-fueled plant in West Virginia — despite the fact that up to half of the project's $668-million cost would have been covered by the U.S. Department of Energy. It's a decision that's likely to be repeated by other U.S. investors studying the technology, because in the absence of a climate bill that puts a price on carbon, it doesn't make much financial sense to pursue it. Although small-scale demonstration projects have shown that carbon dioxide can be safely stored in underground repositories, it's still very unclear whether this is a realistic way to dispose of the vast amounts of carbon emitted by power plants, the nation's biggest source of greenhouse gas emissions. Subterranean reservoirs are hard to map and gases could leak to the surface, with potentially deadly consequences. Further, it takes a lot of power to capture carbon, which means the industry would have to burn even more coal (up to 35% by some estimates) than it does today to generate the same amount of electricity. That would worsen the non-climate-related negative impacts of burning coal, such as mercury pollution and the environmental damage wrought by coal mining. But just because the technology isn't ready doesn't mean it is without potential. Over the long term, the energy penalty of carbon capture might be reduced or eliminated and the geological questions might be resolved. American Electric Power's experiment at its Mountaineer plant, which would have captured 90% of the emissions from the generation of 235 megawatts of electricity, was among the most advanced projects of its kind in the world. Its demise represents a serious setback for an idea that's worth further study. We can't fault executives at the company for giving up. State regulators refused to allow them to raise electricity rates to pay for the Mountaineer project. The "cap-and-trade" climate bill, which would have funded such clean-power projects by allowing utilities that reduced their emissions to sell carbon credits, died in 2009 and stands little chance of being revived in the current political and economic environment.

1. **Perm –do both. Implement SBSPs and further develop the synthetic fuels industry with carbon capture tech.**

### Synfuels bad-pollution and too more expensive

Sailor ‘11

(Matt Sailor, How Things Work, “Top 8 Synthetic Fuels,” <http://auto.howstuffworks.com/fuel-efficiency/biofuels/8-synthetic-fuels.htm>, 2011, DA: 7/31/11, MadSu)

National governments and energy companies have been paying more attention to synthetic fuels in recent years, as rising oil prices and political instability in oil-producing countries have created incentives to seek out alternatives. The main benefit of synfuels is that they can be produced using substances like coal, natural gas and even plant waste, which are widely available. Many synfuels also burn cleaner than conventional fuel. But there are also disadvantages. While they can burn cleaner, producing synthetic fuels often causes just as much, if not more, pollution than traditional gasoline. Synfuels still remain more expensive to produce than conventional fuels, mostly because more research, development and investment are necessary to make production economically viable.

### MTBE in synfuels spoil water and hurts supply

Democratic Underground ‘4

(Progressive and liberal online community, “When Synthetic Fuels go bad: MTBE,” <http://www.democraticunderground.com/discuss/duboard.php?az=view_all&address=115x4984>, 2/17/04, DA: 7/31/11, MadSu)

MTBE became a very common additive in gasoline, and laws were passed that encouraged the use of MTBE. Then MTBE showed its ugly side. The undergraound storage tanks of the gasoline business turned out to be far leakier than anyone suspected, and MTBE started showing up in our water. Old style gasolines did not dissolve in water to any great extent, and whenever gasoline leaked, natural processes tended to keep it segregated. And surprisingly, certain species of soil bacteria were discovered to be consuming many components of spilled fuels. This was not the case with MTBE. MTBE dissolves quickly in water, and it is very difficult to remove. That is why there has been such outcries against MTBE. We don't want it in our drinking water. A few days ago the Bush administration very clearly stated they did not support the banning of MTBE. Some people here at DU have framed this as a Chemical Industry vs. Ethanol Producers argument, or as a Bush vs. The Environment argument, but I don't buy that. I believe the Bush administration is afraid there will be gasoline shortages this summer. If there are serious shortages voters will blame Bush and he will be thrown out of office. Therefore the Bush administration hopes to use MTBE, a sort of synthetic gasoline, to increase the gasoline supply. And it certainly doesn't hurt Bush that he has friends in the MTBE business. Nevertheless, I think there is a broader lesson here, whenever we talk about "alternative" or synthetic fuels, be they biodiesel, DME, ethanol, or so on...

### SSP solves inevitable global water conflict

Tobisaka and Slane 09 (Kent, Space Environment Specialist Ogle Enterprises, Fred, Space Infrastructure Foundation, The Vision for Producing Fresh Water Using Space Power, pdf, JG)

There is an escalating climate crisis that is stressing the Earth’s environment. It is partially a result of the increasing accumulation of carbon dioxide and methane greenhouse gases in the lower atmosphere. One area that is significantly affected is the water infrastructure around the planet including hydropower, flood defense, drainage, and irrigation systems. The effect of adverse climate change on freshwater systems aggravates population growth, weakening economic conditions, land‐use changes, and urbanization. In the western U.S., for example, **reduced water supplies plus increased demand are likely to provoke more interstate and urban–rural competition for over‐allocated water resources.** Seawater desalination has existed for decades and is a proven technology for supplying water in coastal areas. Continued population growth in coastal areas makes it economically feasible to begin considering seawater desalination as a larger source for metropolitan water supplies. Fresh water reclaimed from seawater is 15‐50% efficient depending upon the production process, which can be osmosis, distillation, or a hybrid of both. Offshore oil and gas platforms already use seawater desalination to produce fresh water for platform personnel and equipment. We propose, as California coastal oil and gas platforms come to the end of their productive lives, that they be re‐commissioned for use as large‐scale fresh water production facilities. Solar arrays, mounted on the platforms, are able to provide the power needed for seawater desalination during the daytime. However, for efficient fresh water production, including on oil platforms, a facility must be operated 24 hours a day. We propose the use of solar power transmitted from orbiting satellites (Solar Power Satellites – SPS) to substantially augment the solar array power generated from natural sunlight. The advantage of a SPS in geosynchronous orbit (GEO) is that it is able to produce power at nighttime, thus enabling 24 hours a day operations. A SPS would be conceptually similar to existing commercial communication satellites but with a much larger solar array. A single satellite could power at least one seawater distillation plant on a converted offshore oil platform during the night and supplement the power during the day to provide clean energy and water for urban or agricultural on‐shore areas. The center beam power from a SPS received at Earth’s surface is about ½ Sun. Production of industrial quantities of fresh water on re‐commissioned oil and gas platforms, using energy transmitted from solar power satellites, is a breakthrough concept for addressing the pressing climate, water, and economic issues of the 21st Century. It is a novel combination of mature technologies that provides new solutions. As such, we recommend sponsored, expert team feasibility studies to evaluate this vision for producing fresh water using space power.

### Water scarcity causes global war- most likely scenario for future conflict.

IRIN 06 (Humanitarian news and Analysis, In-depth: Running Dry: the humanitarian impact of the global water crisis, GLOBAL: Water is running out: How inevitable are international conflicts?, http://www.irinnews.org/InDepthMain.aspx?InDepthId=13&ReportId=61029, JG)

The world’s population is growing and water consumption is increasing, but water resources are decreasing. “The world is running out of water,” stated Tony Clarke and Maude Barlow, activists and experts on water issues, in their article ‘Water Wars’, published by the Polaris Institute in 2003. They said that by 2025, world population would increase to 2.6 billion more than the present day and water demands would exceed availability by 56 percent. **People will live in water-scarcity areas, and disputes over resources are inevitable.** There are currently 263 rivers and countless aquifers that either cross or demarcate international political boundaries, according to the Atlas of International Freshwater Agreement, and 90 percent of countries in the world must share these water basins with at least one or two other states. The Global Policy Forum, a United States-based nonprofit organisation with consultative status at the United Nations, uses the term ‘water-stress’ to describe situations in which each person in a country has access to less than 1,500 cubic meters of water each year. The term ‘water scarcity’ refers to situations in which each person in a country has access to less than 1,000 cubic meters of water per year. It is estimated that two-thirds of the world’s population will live in areas of acute water stress or water scarcity by 2025. Nowadays, tensions and disputes between countries are rising due to increasing problems of water scarcity, rapid population growth, degradation in water quality and uneven economic growth. “If current trends continue, we could be faced with a very grave situation,” said former Soviet Union President Mikhail Gorbachev, who is now president of the Green Cross International, an organisation that provides analysis and expertise in environmental and economic issues. The issue of water and the sharing of water has always been a key concern in the Middle East. Across watersheds of Jordan to the Tigris and Euphrates rivers, the potential for strife today is even higher than before, as the regions are running out of water as political insecurities increase. Since 1950, approximately 80 percent of all violent disputes over water resources globally have occurred in the Middle East. According to Aaron Wolf of the Transboundry Freshwater Dispute Database at Oregon University in the US, people living in the region for generations have taken for granted the availability of water. Only recently have they started to realise the shortage of this vital resource… …Two-thirds of the world’s population will live in an area of acute water scarcity In Southeast Asia, the nations of Bangladesh, India and Nepal dispute the best uses of water from the Ganges-Brahmaputra Basin. Tensions and disagreements over water are also erupting along the Mekong River in Indochina as well as around the Aral Sea in Eastern Europe. There have been longstanding disputes between Ethiopia, Sudan and Egypt over the Nile River: The vast majority of the river’s flows are used by Egypt, even though it originates in Ethiopia. “We generate about 85 percent of the total Nile waters,” said Misfinta Genny, Ethiopia’s deputy minister of water. “We have not utilised this resource at all so far. […] We must develop these resources, basically for the benefit of our people.” Egypt’s main concern is that Ethiopia would deplete the water supply before it reached Egypt, with serious implications for agriculture and small industries along the banks of the Nile. Competition for water is also on the rise within countries. Increasingly, **experts have cautioned that if certain countries do not improve water management and cooperation in the future, water wars are inevitabl**e. Former UN Secretary-General Boutros Boutros Ghali threatened that, **“The next war among countries will not be for oil or territorial borders, but only for the problem of water.”** According to the World Water Organization, a humanitarian network based in Montreal, Canada, there is a lengthy history of conflicts and tensions over water resources. The Pacific Institute for Studies in Development, Environment and Security began a project in the 1980s to trace all incidents and tensions originating from water issues. Water-related conflicts are chronologically presented from 3000 BC until the present day. The different categories and types of conflict based on the severity of the event include: • Control of water resources (state and nonstate actors): where water supplies or access to water is at the root of tensions; • Military tool (state actors): where water resources or water systems themselves are used by a nation or a state as a weapon during a military action; • Political tool (state and nonstate actors): where water resources or water systems themselves are used by a nation, state, or nonstate actor for a political goal; • Terrorism (nonstate actors): where water resources or water systems are either targets or tools of violence or coercion by nonstate actors; • Military target (state actors): where water resources or systems are targets of military actions by nations or states; • Development disputes (state and nonstate actors): where water resources or can be caused by using water as military tool, water systems are a major source of contention and dispute in the context of economic and social development. Water resources are crucial for domestic, industrial, agricultural, and environmental use. By controlling water resources, a country has the ability to control the economy and population. For instance, upstream regions or countries enjoy the benefit of using water flows firsthand, while downstream areas might receive lesser amounts of many watersheds across state borders. Cooperation between riparian states can be highly problematic. Industrial development or the expansion of agriculture can also cause water conflicts when the excessive use of water by one state affects the water supply of another. In India and China in particular, the massive and unregulated use of private pumps is depleting underground aquifers at unsustainable and unprecedented rates. Urbanisation has also disproportionately increased the demand for water for urban populations, when it is arguably their rural counterparts, with farms and livestock, who need more water. The problem of uneven water distribution and the deterioration in water quality due to pollution and chemical contamination all contribute to the emergence of tensions and conflicts both within and between states.

## Commission CP 2AC

### 1. CP can’t solve the case

### A. Certainty- there’s no 100% guarantee that NASA will develop SBSP after they consult the commission, means you vote aff on certainty of solvency

### B. Delay-The commission process and scientists take too long, prefer the immediacy of the aff only way to solve:

### OIL- Kohl 11 says demand is increasing and resources are depleting-we’ve already passed peak oil, we have to act now

### WARMING- Stein 11 indicates we have to act now or face inevitable extinction via the runaway effect

### LEADERSHIP- CP doesn’t set clear leadership on space policy.

Logsdon 11 (John, former Director-Space Policy Institute, and member-NASA Advisory Council, “Chapter 27: Emerging Domestic Structures: Organizing the Presidency for Spacepower,” http://www.ndu.edu/press/space-Ch27.html)

A second observation is that a separate White House space policy organization, such as a space council, has not been successful in demonstrating its superiority as an organizational approach. Although the National Aeronautics and Space Council existed from 1958 to 1973, it never became the major, much less the sole, means for developing a national approach to what would now be called spacepower. With only a few exceptions, other Executive Office organizations, particularly the Office of Science and Technology Policy and the National Security Council, not to mention the White House budget office, and the heads of the executive branch space agencies were not willing to defer to the council as the primary forum for developing space policy options for the President. Reestablishing the National Space Council in 1989 was an initiative forced on a reluctant White House by Congress. In its 4 years of operation, an activist council staff managed to alienate most executive agencies. Its major policy proposal, the Space Exploration Initiative, was stillborn; the council did not prove an effective mechanism for rallying broad support for a Presidential space initiative or for convincing the NASA leadership that the initiative was the proper course of action to follow. One possible reason for the space council's lack of influence is that it has been headed during most of its history by a Vice President who was not a close ally of the President, who had no strong Washington political base of his own, and thus could not call on either the President's or his own power to back up the guidance provided by the council and its staff. In addition, by operating outside of the National Security Council structure, the space council found it very difficult to exert influence on national security space issues.

### 2. Solvency deficits-

### A. Presidential top-down leadership key to spacepower

Logsdon 11 (John, former Director-Space Policy Institute, and member-NASA Advisory Council, “Chapter 27: Emerging Domestic Structures: Organizing the Presidency for Spacepower,” http://www.ndu.edu/press/space-Ch27.html)

If there is to be a national strategy for space informed by a comprehensive theory of spacepower, it must come from the center of government: "The bureaucracy is no more equipped to manufacture grand designs for Government programs than carpenters, electricians, and plumbers are to be architects. But if an architect attempted to build a house, the results might well be disastrous."3 The White House must act as the "architect" for a U.S. space strategy and must persuade the various centers of spacepower within and outside the Federal Government that it is in their mutual interest to work together in turning that strategy into action. How best to achieve Presidential control over executive branch agencies is a classic problem of government organization, and it is basically no different in the space sector than in other areas of government activity.

### And, Space Hegemony is key to overall US leadership

Stone 11 (Christopher Stone, space policy analyst and strategist at The Space Review, “American leadership in space: leadership through capability”, http://www.thespacereview.com/article/1797/1, 3/14/2011) SV

Finally, one other issue that concerns me is the view of the world “hegemony” or “superiority” as dirty words. Some seem to view these words used in policy statements or speeches as a direct threat. In my view, each nation (should they desire) should have freedom of access to space for the purpose of advancing their “security, prestige and wealth” through exploration like we do. However, to maintain leadership in the space environment, space superiority is a worthy and necessary byproduct of the traditional leadership model. If your nation is the leader in space, it would pursue and maintain superiority in their mission sets and capabilities. In my opinion, space superiority does not imply a wall of orbital weapons preventing other nations from access to space, nor does it preclude international cooperation among friendly nations. Rather, it indicates a desire as a country to achieve its goals for national security, prestige, and economic prosperity for its people, and to be known as the best in the world with regards to space technology and astronautics. I can assure you that many other nations with aggressive space programs, like ours traditionally has been, desire the same prestige of being the best at some, if not all, parts of the space pie. Space has been characterized recently as “congested, contested, and competitive”; the quest for excellence is just one part of international space competition that, in my view, is a good and healthy thing. As other nations pursue excellence in space, we should take our responsibilities seriously, both from a national capability standpoint, and as country who desires expanded international engagement in space. If America wants to retain its true leadership in space, it must approach its space programs as the advancement of its national “security, prestige and wealth” by maintaining its edge in spaceflight capabilities and use those demonstrated talents to advance international prestige and influence in the space community. These energies and influence can be channeled to create the international space coalitions of the future that many desire and benefit mankind as well as America. Leadership will require sound, long-range exploration strategies with national and international political will behind it. American leadership in space is not a choice. It is a requirement if we are to truly lead the world into space with programs and objectives “worthy of a great nation”

### B. Delay- scientists would take too long to decide

### C. Commissions cost too much and there’s no guarantee Congress will take the recommendation

**Glassman & Strauss 11** (Matthew Eric Glassman, Jacob R. Straus, Analysts on the Congress at the Congressional Research Services, “Congressional Commissions: Overview, Structure, and Legislative Considerations”, http://www.wise-intern.org/orientation/documents/CRS%20commissions.pdf , February 2, 2011

A third criticism of commissions is that they have high costs and low returns. Congressional commission costs vary widely, ranging from several hundred thousand dollars to over $10 million. Coupled with this objection is the problem of congressional response to the work of a commission; in most cases, Congress is under no obligation to act, or even respond to the work of a commission. If legislators disagree with the results or recommendations of a commission’s work, they may simply ignore it. In addition, there is no guarantee that any commission will produce a balanced product; commission members may have their own agendas, biases, and pressures. Or they may simply produce a mediocre work product.46 Finally, advisory boards create economic and legislative inefficiency if they function as patronage devices, with Members of Congress using commission positions to pay off political debts.47

### 3. The CP links to politics and/or spending just as much as the plan

### 4. Non-unique- Labs and Research Groups are already conducting scientific research on the best way to approach SBSP

**NSS ’07** (National Space Society, “Report to the Director, National Security Space Office Interim Assessment” http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf. October 10, 2007)

For those applications that favor or rely upon liquid hydrocarbon fuels, America’s national labs are pursuing several promising avenues of research to manufacture carbon‐neutral synthetic fuels (synfuels) from direct solar thermal energy or radiated/electrical SBSP. The lab initiatives are developing technologies to efficiently split energy‐neutral feedstocks or upgrade lower‐grade fuels (such as biofuels) into higher energy density liquid hydrocarbons. Put plainly, SBSP could be utilized to split hydrogen from water and the carbon monoxide (syngas) from carbon dioxide which can then be combined to manufacture any desired hydrocarbon fuel, including gasoline, diesel, kerosene and jet fuel. This technology is still in its infancy, and significant investment will be required to bring this technology to a high level of technical readiness and meet economic and efficiency goals. This technology enables a carbon‐neutral (closed carbon‐cycle) hydrocarbon economy driven by clean renewable sources of power, which can utilize the existing global fuel infrastructure without modification. This opportunity is of particular interest to traditional oil companies. The ability to use renewable energy to serve as the energy feedstock for existing fuels, in a carbon neutral cycle, is a “total game changer” that deserves significant attention.

### 5. No Major Policy Churn-Continuity of purpose

**Buenneke et al 9** ( Richard H. Buenneke, senior policy analyst at The Aerospace Corporation, Richard Dal Bello, R. Cargill Hall and Roger D. Launius, The Washington Roundtable on Science and Public policy, “ National Space Policy: Does it Matter?”, <http://www.marshall.org/pdf/materials/439.pdf>, 12/19/2009) SV

There was broad continuity of purpose across the government and I guess this shouldn’t be too surprising, as there is actually broad continuity thinking on the space program. I had worked peripherally with the Reagan SIG (Senior Interagency Group) process, then run by Col. (soon to be General) Roger DeCook. I worked briefly with them and actually held a position in the first Bush administration and then ran space policy for the Clinton administration. There are probably a dozen other people I could name – some of them in this room – that have worked on space issues across admini-strations. Because there has been a lot of continuity in human beings, it is not surpris-ing that there has been policy stability.

### 6. Even if there were major policy churn, plans top down mandates solve

Correll 5 – Randall R. Correll, national security consultant with Science Applications International Company, and Nicholas Peter, 2005, “Odyssey: Principles for enduring space exploration,” Space Policy, Vol. 21, p. 251-258

The most debilitating obstacle would be lack of compelling purpose. The human instinct to explore is, in itself, not sufficient to justify the public treasure that will be required. Neither is scientific gain, in itself, commensurate with the anticipated cost of publicly funded human space flight. NASA has not yet articulated how it will develop the objectives and purpose of lunar and Martian missions, laboratories, observatories and bases. Many of these decisions do not need to be made immediately and, following the metaprinciples of open-systems architectures, should not be forced prematurely. However, the process should begin among NASA, academia, industry, the public and the international community to debate the specific activities that will define the content of the program. Without visible progress in the development of compelling purpose, the exploration vision is not likely to endure, nor should it.

### 7. Perm do the plan then the CP- mandates NASA do the plan, means there’s no risk SBSP won’t be developed, then have an external, independent review body determine how NASA should do the plan. Solves 100% of the case with the net-benefit of the CP. The CP introduced the notion of timeframe, justifies delay permutations.

### 8. Perm do both- have the United States Federal Government develop and deploy space based solar power as soon as possible and establish an external, independent review body to consult over the deployment and development of space based solar power.

### 9. Perm consult the commission, but do the plan anyway

### Aerospace net benefit:

### 10. SBSP key to the aerospace industry-

NSSO, ‘7 – National Security Space Office [10/10/07, “Space-Based Solar Power as an Opportunity for Strategic Security: Report to the Director, National Security Space office Interim Assessment Release 0.1,” http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf, DS]

An SBSP program as outlined in this report is remarkably consonant with the findings of this commission, which stated: The United States must maintain its preeminence in aerospace research and innovation to be the global aerospace leader in the 21st century. This can only be achieved through proactive government policies and sustained public investments in long‐term research and RDT&E infrastructure that will result in new breakthrough aerospace capabilities. Over the last several decades, the U.S. aerospace sector has been living off the research investments made primarily for defense during the Cold War…Government policies and investments in long‐term research have not kept pace with the changing world. Our nation does not have bold national aerospace technology goals to focus and sustain federal research and related infrastructure investments. The nation needs to capitalize on these opportunities, and **the federal government needs to lead the effort.** Specifically, it needs to invest in long‐term enabling research and related RDT&E infrastructure, establish national aerospace technology demonstration goals, and create an environment that fosters innovation and provide the incentives necessary to encourage risk taking and rapid introduction of new products and services. The Aerospace Commission recognized that Global U.S. aerospace leadership can only be achieved through investments in our future, including our industrial base, workforce, long term research and national infrastructure, and that government must commit to increased and sustained investment and must facilitate private investment in our national aerospace sector. The Commission concluded that the nation will have to be a space‐faring nation in order to be the global leader in the 21st century—that our freedom, mobility, and quality of life will depend on it, and therefore, recommended that the United States boldly pioneer new frontiers in aerospace technology, commerce and exploration. They explicitly recommended that the United States create a space imperative and that NASA and DoD need to make the investments necessary for developing and supporting future launch capabilities to revitalize U.S. space launch infrastructure, as well as provide Incentives to Commercial Space. The report called on government and the investment community must become more sensitive to commercial opportunities and problems in space. Recognizing the new realities of a highly dynamic, competitive and global marketplace, the report noted that the federal government is dysfunctional when addressing 21st century issues from a long term, national and global perspective. It suggested an increase in public funding for long term research and supporting infrastructure and an acceleration of transition of government research to the aerospace sector, recognizing that government must assist industry by providing insight into its long‐term research programs, and industry needs to provide to government on its research priorities. It urged the federal government must remove unnecessary barriers to international sales of defense products, and implement other initiatives that strengthen transnational partnerships to enhance national security, noting that U.S. national security and procurement policies represent some of the most burdensome restrictions affecting U.S. industry competitiveness. Private‐public partnerships were also to be encouraged. It also noted that without constant vigilance and investment, vital capabilities in our defense industrial base will be lost, and so recommended a fenced amount of research and development budget, and significantly increase in the investment in basic aerospace research to increase opportunities to gain experience in the workforce by enabling breakthrough aerospace capabilities through continuous development of new experimental systems with or without a requirement for production. Such experimentation was deemed to be essential to sustain the critical skills to conceive, develop, manufacture and maintain advanced systems and potentially provide expanded capability to the warfighter. A top priority was increased investment in basic aerospace research which fosters an efficient, secure, and safe aerospace transportation system, and suggested the establishment of national technology demonstration goals, which included reducing the cost and time to space by 50%. It concluded that, “America must exploit and explore space to assure national and planetary security, economic benefit and scientific discovery. At the same time, the United States must overcome the obstacles that jeopardize its ability to sustain leadership in space.” An SBSP program would be a powerful expression of this imperative.

11. Fiat solves- there’s no stop and start because fiat is durable

12. Aerospace Decline inevitable- workforce retiring- The AE industry will become too inexperienced soon

 Anselmo Aviation Week & Space Technology February 5, 2007, Joseph C Anselmo, Baby Boomer retirements could trigger A&D engineering crisis http://integrator.hanscom.af.mil/2007/February/02082007/02082007-17.htm

The alarming truth is that the A&D industry is not attracting nearly enough skilled workers, particularly engineers, to replace those getting ready to retire. The looming shortfall, underscored in two workforce studies undertaken for Aviation Week & Space Technology by Bain & Co. and Deloitte Consulting, threatens to sap the industry's vitality and could make it harder for the U.S. military to maintain its enviable technological edge over the long run.  The long shadow of an aging workforce is cast across the entire industry, from military scientists to commercial pilots to maintenance, repair and overhaul technicians. But the danger is most acute in engineering. "Engineering is the core of what makes companies successful, and it is by far the function that is most constrained by supply," says Michael Goldberg, lead partner in Bain's A&D practice. By next year, an estimated one-in-four U.S. aerospace workers will be eligible to retire; nearly one-in-three civilian scientific and technical workers in the Defense Dept. have already reached that milestone (see p. 48). And the full impact of the graying workforce hasn't hit yet. In 2011, an 18-year-long wave of baby boomers will start collecting Social Security and Medicare benefits. Another problem: massive layoffs during the consolidations of the 1990s that left the defense industry with a shortage of middle-aged talent. This means the tasks of many retirees could fall to younger, less-experienced workers. "We need to go out and basically generate a new workforce of knowledge workers to replace those experienced people who are going out the door," says Clay Jones, president/CEO of Rockwell Collins. Finding those workers will be a daunting challenge. U.S. students show an alarmingly low interest in science and math. And for those that do go into engineering, aerospace doesn't have the cachet it did during the Cold War and Apollo program. Today's engineering graduates rank A&D low--if not dead last--on their list of industries providing desirable employment, far behind high tech and professional services (AW&ST Jan. 15, p. 72). Just 7% of students at 15 top engineering schools interviewed for the Bain study expect to pursue a career in A&D. "It was not even in my consciousness as an engineering graduate in 1968 that I had an opportunity to make a lot of money," says Lester L. Lyles, a retired four-star U.S. Air Force general who is now a technology consultant. "The young people today have so much more available to them and so many other opportunities to make money quickly. Silicon Valley sort of galvanized that. I don't think the interest in coming up to be a pure engineer is there anymore."

### 13. Alt Cause- almost anything, such as the current status of the debt ceiling, could be decreasing investor confidence, SBSP is not a unique cause of aerospace decline

### 14. Not reverse causal- just because the aerospace industry contributes to the economy, doesn’t mean it’s collapse directly collapses the economy

### 15. No impact to aerospace:

### A. Economic decline doesn’t cause war

**Miller** **2k** [Morris Miller, economist, adjunct professor in the University of Ottawa’s Faculty of Administration, consultant on international development issues, former Executive Director and Senior Economist at the World Bank, Winter 2000, Interdisciplinary Science Reviews, Vol. 25, Iss. 4, “Poverty as a cause of wars?” p. Proquest]

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

### B. Economy resilient

Zakaria 9 [Fareed Zakaria is editor of Newsweek International “The Secrets of Stability,” 12/12 http://www.newsweek.com/id/226425/page/2]

One year ago, the world seemed as if it might be coming apart. The global financial system, which had fueled a great expansion of capitalism and trade across the world, was crumbling. All the certainties of the age of globalization—about the virtues of free markets, trade, and technology—were being called into question. Faith in the American model had collapsed. The financial industry had crumbled. Once-roaring emerging markets like China, India, and Brazil were sinking. Worldwide trade was shrinking to a degree not seen since the 1930s. Pundits whose bearishness had been vindicated predicted we were doomed to a long, painful bust, with cascading failures in sector after sector, country after country. In a widely cited essay that appeared in The Atlantic this May, Simon Johnson, former chief economist of the International Monetary Fund, wrote: "The conventional wisdom among the elite is still that the current slump 'cannot be as bad as the Great Depression.' This view is wrong. What we face now could, in fact, be worse than the Great Depression." Others predicted that these economic shocks would lead to political instability and violence in the worst-hit countries. At his confirmation hearing in February, the new U.S. director of national intelligence, Adm. Dennis Blair, cautioned the Senate that "the financial crisis and global recession are likely to produce a wave of economic crises in emerging-market nations over the next year." Hillary Clinton endorsed this grim view. And she was hardly alone. Foreign Policy ran a cover story predicting serious unrest in several emerging markets. Of one thing everyone was sure: nothing would ever be the same again. Not the financial industry, not capitalism, not globalization. One year later, how much has the world really changed? Well, Wall Street is home to two fewer investment banks (three, if you count Merrill Lynch). Some regional banks have gone bust. There was some turmoil in Moldova and (entirely unrelated to the financial crisis) in Iran. Severe problems remain, like high unemployment in the West, and we face new problems caused by responses to the crisis—soaring debt and fears of inflation. But overall, things look nothing like they did in the 1930s. The predictions of economic and political collapse have not materialized at all. A key measure of fear and fragility is the ability of poor and unstable countries to borrow money on the debt markets. So consider this: the sovereign bonds of tottering Pakistan have returned 168 percent so far this year. All this doesn't add up to a recovery yet, but it does reflect a return to some level of normalcy. And that rebound has been so rapid that even the shrewdest observers remain puzzled. "The question I have at the back of my head is 'Is that it?' " says Charles Kaye, the co-head of Warburg Pincus. "We had this huge crisis, and now we're back to business as usual?" This revival did not happen because markets managed to stabilize themselves on their own. Rather, governments, having learned the lessons of the Great Depression, were determined not to repeat the same mistakes once this crisis hit. By massively expanding state support for the economy—through central banks and national treasuries—they buffered the worst of the damage. (Whether they made new mistakes in the process remains to be seen.) The extensive social safety nets that have been established across the industrialized world also cushioned the pain felt by many. Times are still tough, but things are nowhere near as bad as in the 1930s, when governments played a tiny role in national economies. It's true that the massive state interventions of the past year may be fueling some new bubbles: the cheap cash and government guarantees provided to banks, companies, and consumers have fueled some irrational exuberance in stock and bond markets. Yet these rallies also demonstrate the return of confidence, and confidence is a very powerful economic force. When John Maynard Keynes described his own prescriptions for economic growth, he believed government action could provide only a temporary fix until the real motor of the economy started cranking again—the animal spirits of investors, consumers, and companies seeking risk and profit. Beyond all this, though, I believe there's a fundamental reason why we have not faced global collapse in the last year. It is the same reason that we weathered the stock-market crash of 1987, the recession of 1992, the Asian crisis of 1997, the Russian default of 1998, and the tech-bubble collapse of 2000. The current global economic system is inherently more resilient than we think. The world today is characterized by three major forces for stability, each reinforcing the other and each historical in nature.

## Privatization CP 2AC

### 1. Can’t solve case:

### 2. Solvency deficits-

A. Can’t solve heg-NASA key to US leadership

Sterner 10

[Eric R. Sterner, April 2010, George C. Marshall Institute, “Worthy of a Great Nation? NASA’s Change of Strategic Direction,” http://www.marshall.org/pdf/materials/797.pdf]

The United States can only continue to set a global agenda in space by challenging countries to work together in pursuit of a unifying purpose. It took decades after the Apollo program and the stunning loss of seven astronauts aboard the space shuttle Columbia for U.S. policymakers to establish a bipartisan, bicameral consensus on the future of the human exploration program. The fiscal year 2011 budget proposal has already undone that consensus, dividing proponents of a forwardleaning civil space program from advocates of space commercialization, human spaceflight from robotic exploration, and one state from another. In retreating from an exploration program focused on establishing a permanent presence on the moon and reaching Mars within a specific timeframe, the United States will create uncertainty about its plans, leaving others to take the initiative, lay moral claims to a leadership role, and increase their influence in establishing the formal and informal norms that will govern human space exploration for decades. Leadership requires the reverse.

### US leadership prevents escalation of ground regional wars and failed states.

Cynamon 09

[Charles H. Cynamon, USAF Colonel, 12 February 2009, “Defending America’s Interests in Space,” https://www.afresearch.org/skins/rims/display.aspx?rs=enginespage&ModuleID=be0e99f3-fc56-4ccb-8dfe-670c0822a153&Action=downloadpaper&ObjectID=236c0cec-26d6-4053-ab82-19a783259606]

In the future, the primary sources of trans-regional, interstate and intra-state conflict are non-globalized, failed nations and ideologically motivated non-state actors. Even though sporadic tensions between major globalized nations have occurred, the resulting violent clashes have not lead to high-intensity conflicts. US conventional military power supported by well-protected space systems has remained the key deterrent against major power war. In space, the United States retains preeminence for support to the world’s sole global expeditionary military. Over the course of 20 years, the United States bolstered its commercial and civil space industrial base with foreign space system exports and international cooperative programs. Joint ventures in manned space flight with the major spacefaring nations returned mankind to the moon for scientific exploration investigating extraction of key minerals, energy sources, and launch bases for more ambitious space travel opportunities. Despite orbiting US anti-ballistic missile systems, a space arms race never materialized with respect to ASAT weapons. The confluence of interagency efforts shaped the strategic environment in which the world perceives the United States as the enforcer of peaceful uses of space.

### B. Private sector fails-

### No expertise or unity

NSSO, ‘7 – National Security Space Office [10/10/07, “Space-Based Solar Power as an Opportunity for Strategic Security: Report to the Director, National Security Space office Interim Assessment Release 0.1,” http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf, DS]

A similar problem exists in the private sector. US space companies are used to small launch markets with the government as a primary customer and advocate, and do not have a developed business model or speak in a common language with the energy companies. The energy companies have adequate capital and understand their market, but do not understand the aerospace sector. One requires a demonstrated market, while the other requires a demonstrated technical capability. Without a trusted agent to mediate the collaboration and serve as an advocate for supportive policy, progress is likely to be slow.

### No motivation

NSSO, ‘7 – National Security Space Office [10/10/07, “Space-Based Solar Power as an Opportunity for Strategic Security: Report to the Director, National Security Space office Interim Assessment Release 0.1,” http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf, DS]

When to Transition to Commercial Sector C - 3 At this stage is important to ask why SBSP is not yet being done by the commercial sector. What needs to happen for them to develop a credible interest? There are at least two private entities which are working on making SBSP a reality at the moment. One is actively looking both for investors and pre‐purchase agreements for the future sale of the power (primarily to India at this stage). Another is proposing a Congressionally chartered corporation (Sunsat Corporation) to create a public/private corporation such as when Comsat (for the development of communications satellites) was created in 1962. Elon Musk, one of the founders of PayPal, while still an undergraduate asked himself “Well, what are the most significant problems humanity faces?” “The three that [came to mind] were space exploration, the internet and clean energy. Just, you know, in terms of what would affect the world the most.” He became wealthy through the internet companies he created. When he was later looking at space businesses to start, he considered SBSP but eliminated it as an option as the necessary inexpensive launch capability did not exist. Instead he decided to work on the issue of cheap launch first, through the creation of SpaceX. (Also concerned about clean energy and the issues of CO2 emissions and global warming, he became a major investor in Tesla Motors, the new electric car company.) Investors and the commercial sector have concerns that still need to be addressed. They need to believe that SBSP is technically possible and that the necessary technologies to make it economically viable are at a sufficient stage of readiness that they can go out and purchase them, should they choose to become involved with SBSP. Intellectual property rights and frequencies for power beaming must be protected. Demonstrations and proofs of concepts are needed. Until business is confident this is practical and doable (and not just technically feasible assuming that various technologies mature) and that it can buy or make the components necessary, it will likely just watch but not act. Incentives would help. These could include loan guarantees, availability of balloon loans (where interest payments are deferred until the SBSP system is operational), transferable tax credits, subsidies similar to those already in existence for other alternative energy sources, energy pre‐purchase agreements, and/or tax holidays on the sale of the power. The commercial sector needs to see profit potential within a reasonable time frame. Electric utilities understand the need for large amounts of capital for infrastructure development. This can be acceptable as long as the payback is large and for an extended period. The payback period and rate of returns must be attractive after the amortization of the infrastructure costs.

### 3. NASA Key

### A. Corporations do not have a distinct technological advantage over NASA.

**Whittington 11** (Mark, “Private Research Experiments a New Market for Commercial Space,” Yahoo News, 26 March. [Online] http://news.yahoo.com/s/ac/20110326/en\_ac/8150670\_private\_research\_experiments\_a\_new\_market\_for\_commercial\_space) Accessed 06.17.11 jfs

In any event, when this commercial revolution will take off is uncertain. **Commercial space projects, whether totally private or government subsidized, have been subject to the same kinds of delays as have high profile NASA projects and for much the same reason. Mastering new technology is just as difficult for a nimble, entrepreneurial corporation as it is for a bureaucratic, government space agency**. But sooner or later, private space craft will begin to fly and with them private passengers and payloads.

### B. NASA key to further space development – private corporations will be unable to go any further unless NASA continues its work.

Hickam 07

[Homer Hickam, former NASA designer and astronaut trainer, 3 October 2007, "NASA vs. the far-out space nuts,” www.latimes.com/la-op-dustup3oct03,0,4382440.story)

What I'm getting at is that even with my libertarian tendencies, I see a place for federal agencies like NASA to use public funds to accomplish great technological things that are necessary to keep us a great and modern country but that private enterprise simply can't do. Energy is one of those areas (fusion energy and clean-burning coal technology should be national priorities). Another is transportation (the interstate and high-speed rail), and so is pure scientific research in areas that help us understand our planet and ourselves even if they never have any commercial application (e.g. studying the fumaroles at the bottom of the ocean). In NASA's case, the few coins of the public purse the agency gets are for the express purpose of building the machines that will allow us to go into, explore and ultimately live in space. Private enterprise has some interest in seeing that dream accomplished, but the technology to make it happen — beyond brief Rutan-like jumps into space — is currently beyond its capability or interest. NASA has to prime the commercial pump by creating big technology and then handing it over. We have a history of doing that kind of thing, so we know it works. The old Army arsenal system, for instance, invented new ordnance for decades using knowledge and craftsmen not available to normal commerce. An example is the famous World War II-era M-1 Garand, which was a federal arsenal design. So rather than being an impediment, NASA can and should be the driver of commerce, the provider of the technology necessary to make some big money in space. The truth is that private enterprise already has a huge presence up there. It's not NASA but commercial companies that send all those communications satellites rocketing aloft to the tune of billions of dollars of profits every year. Boeing, LockMart and hundreds of other companies, large and small, work in the space business, and they also create new techniques and technology; but they'd be nowhere if NASA and the Department of Defense hadn't shown the way by funding the first big rockets andsatellites**.** And commercial companies will stay where they are unless these same agencies build the big, new machines to take us farther out. In other words, as far as science and technology are concerned, government and commerce have a symbiotic relationship. Of course, it's best when you have a government that knows when to get out of the way. That sometimes requires a little bureaucratic head-knocking, but I'm sure Congress is up to the task. Well, I'm not sure, considering who's running that show in Washington; but I'm ever hopeful anyway. I guess that's why they call me the Rocket Boy.

### 4. Perm do both- Solely private space industry fails---government involvement’s a key insurance policy

**PM 10** – Popular Mechanics, March 9, 2010, “What Happens If NASA's Constellation Program Dies?,” online: http://www.popularmechanics.com/science/space/nasa/4343791

President **Obama is selling** the idea of bringing **private space** into NASA's fold **as a** whole **new way of thinking, but NASA under** the **Bush** administration **already got the ball rolling** with ISS resupply contracts to the private space companies Orbital and SpaceX. But **the Bush team hedged their bets by keeping a government program functional.** What will happen if private space fails to create a reliable launch vehicle? So far they are doing well, but **a small engineering flaw or a mishap could** grind the effort to a halt. Also, **as private space companies morph into large contractors, will the risk of bureaucratic lethargy increase,** **as seen in the defense industry among prime contractors?**

### 5. Perm do the CP- avoids link to net-benefit

### 6. Perms solves better – government key to private sector will

NSSO, ‘7 – National Security Space Office [10/10/07, “Space-Based Solar Power as an Opportunity for Strategic Security: Report to the Director, National Security Space office Interim Assessment Release 0.1,” http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf, DS]

FINDING: The SBSP Study Group found that adequate capital exists in the private sector to finance construction, however private capital is unlikely to develop this concept without government assistance because the timeframe of reward and degree of risk are outside the window of normal private sector investment. Capital in the energy and other sectors is available on the level needed for such a large project, but capital flows under fairly conservative criteria, and SBSP has not yet experienced a suitable demonstration, nor have the risks been adequately characterized to make informed business plan decisions.

### 7. Privatization causes space debris.

Gagnon 03

[Bruce Gagnon, former coordinator of the Florida Coalition for Peace and Justice and coordinator of the Global Network Against Weapons and Nuclear Power in Space, 26 July 2003, “Space Privatization: Road to Conflict,” http://www.space4peace.org/articles/road\_to\_conflict.htm]

We've all probably heard about the growing problem of space junk where over 100,000 bits of debris are now tracked on the radar screens at NORAD in Colorado as they orbit the earth at 18,000 m.p.h.  Several space shuttles have been nicked by bits of debris in the past resulting in cracked windshields.  The International Space Station (ISS) recently was moved to a higher orbit because space junk was coming dangerously close.  Some space writers have predicted that the ISS will one day be destroyed by debris. As we see a flurry of launches by private space corporations the chances of accidents, and thus more debris, becomes a serious reality to consider.  Very soon we will reach the point of no return, where space pollution will be so great that an orbiting minefield will have been created that hinders all access to space.  The time as certainly come for a global discussion about how we treat the sensitive environment called space before it is too late.

For every piece of space debris launched into orbit, the risk of collision increases.

Tan 00 (David, Ph.D. in Law from Melbourne University and Master of Laws from Harvard, "Towards A New Regime for the Protection of Outer Space", Yale Journal of International Law, http://wenku.baidu.com/view/dc28328a84868762caaed551.html, lexis) OP

In recent years, man-made space debris n2l or space refuse has been an environmental hazard whose seriousness is a shared concern of many scientists and policy-makers in the international community. n22 The deployment of an ever-increasing number of man-made objects into outer space has created a potential for malfunctioning and decay. It has also resulted in a concomitant rise in the number of defunct, damaged, or abandoned objects, which, together with other debris caused by explosions and collisions, has fast become a threat to space activities. It has been estimated that there are over 7000 trackable man-made objects in space and a substantially larger number of untraceable objects. n23 Most of the trackable objects are located in low-earth-orbit (LEO) n24 with a significant number in geosynchronous orbit (GEO) an area of intense space activity. n25The limited empirical data reveal 1\*1521 that objects of sizes between 0.01 and I centimeter can cause significant damage upon impact Objects larger than 1 centimeter can produce catastrophic effects. n26 Present spacecraft systems are particularly vulnerable as they have not been designed with these threats in mind, n27 If the growth in numbers is permitted to continue without adequate measures to safeguard active space objects from damage caused by explosion, collision, or harmful radiation, it could easily result in serious accidents involving the loss of human lives or substantial property damage. Collision and interference are the major risks space debris poses to human life and active payloads. Perhaps the most serious consequence of collisions with space debris is the cascade effect: (1) As the number of space objects in earth-orbit increases, the probability of collisions between them also increases: (2) collisions would produce new orbiting fragments (secondary debris), each of which would heighten the risk of further collisions: (3) collisions and any ensuing cascading would lead to an exponential increase of debris flux and could lead to the formation of a debris belt around the Barth by the end of this century: and (4) the near earth environment could become so populated with space debris that portions of |\*153| LEO would be unusable. n28 Moreover the majority of NPS satellites reside in the most densely populated regions of LEO, thereby enhancing the danger of collision with space debris. n29 The impact of a spent NPS fuel core colliding with a space station could cause devastating radioactive contamination in addition to structural damage, because the half-life of uranium-235 is in excess of 700,000 years.

Russian satellites are unable to detect the difference between an accidental collision and a deliberate one- means a collision would inevitably result in nuclear miscalculation.

Lewis 04 (Jeffrey, postdoctoral fellow in the Advanced Methods of Cooperative Security Program at the Center for International and Security Studies at the University of Maryland School of Public Policy, “What if Space Were Weaponized? Possible Consequences for Crisis Scenarios”, Center for Defense Information (D.C.), July 2004, http://www.cdi.org/PDFs/scenarios.pdf) OP

This is the second of two scenarios that consider how U.S. space weapons might create incentives for America's opponents to behave in dangerous ways. The previous scenario looked at the systemic risk of accidents that could arise from keeping nuclear weapons on high alert to guard against a space weapons attack. This section focuses on the risk that a single accident in space, such as a piece of space debris striking a Russian early-warning satellite, might be the catalyst for an accidental nuclear war. As we have noted in an earlier section, the United States canceled its own ASAT program in the 1980s over concerns that the deployment of these weapons might be deeply destabilizing. For all the talk about a "new relationship" between the United States and Russia, both sides retain thousands of nuclear forces on alert and configured to fight a nuclear war. When briefed about the size and status of U.S. nuclear forces, President George W. Bush reportedly asked "What do we need all these weapons for?"" The answer, as it was during the Cold War, is that the forces remain on alert to conduct a number of possible contingencies, including a nuclear strike against Russia. This fact, of course, is not lost on the Russian leadership, which has been increasing its reliance on nuclear weapons to compensate for the country's declining military might. In the mid-1990s, Russia dropped its pledge to refrain from the "first use" of nuclear weapons and conducted a series of exercises in which Russian nuclear forces prepared to use nuclear weapons to repel a NATO invasion. In October 2003, Russian Defense Minister Sergei Ivanov reiterated that Moscow might use nuclear weapons "preemptively" in any number of contingencies, including a NATO attack.44 So, it remains business as usual with U.S. and Russian nuclear forces. And business as usual includes the occasional false alarm of a nuclear attack. There have been several of these incidents over the years. In September 1983, as a relatively new Soviet early-warning satellite moved into position to monitor U.S. missile fields in North Dakota, the sun lined up in just such a way as to fool the Russian satellite into reporting that half a dozen U.S. missiles had been launched at the Soviet Union. Perhaps mindful that a brand new satellite might malfunction, the officer in charge of the command center that monitored data from the early-warning satellites refused to pass the alert to his superiors. He reportedly explained his caution by saying: "When people start a war, they don't start it with only five missiles. You can do little damage with just five missiles."4,1 In January 1995, Norwegian scientists launched a sounding rocket on a trajectory similar to one that a U.S. Trident missile might take if it were launched to blind Russian radars with a high altitude nuclear detonation. The incident was apparently serious enough that, the next day, Russian President Boris Yeltsin stated that he had activated his "nuclear football" - a device that allows the Russian president to communicate with his military advisors and review his options for launching his arsenal. In this case, the Russian early-warning satellites could clearly see that no attack was under way and the crisis passed without incident.46 In both cases, Russian observers were confident that what appeared to be a "small" attack was not a fragmentary picture of a much larger one. In the case of the Norwegian sounding rocket, space-based sensors played a crucial role in assuring the Russian leadership that it was not under attack. The Russian command system, however, is no longer able to provide such reliable, early warning. The dissolution of the Soviet Union cost Moscow several radar stations in newly independent states, creating "attack corridors" through which Moscow could not see an attack launched by U.S. nuclear submarines.47 Further, Russia's constellation of early-warning satellites has been allowed to decline - only one or two of the six satellites remain operational, leaving Russia with early warning for only six hours a day. Russia is attempting to reconstitute its constellation of early-warning satellites, with several launches planned in the next few years. But Russia will still have limited warning and will depend heavily on its space-based systems to provide warning of an American attack48 As the previous section explained, the Pentagon is contemplating military missions in space that will improve U.S. ability to cripple Russian nuclear forces in a crisis before they can execute an attack on the United States. Anti-satellite weapons, in this scenario, would blind Russian reconnaissance and warning satellites and knock out communications satellites. Such strikes might be the prelude to a full-scale attack, or a limited effort, as attempted in a war game at Schriever Air Force Base, to conduct "early deterrence strikes" to signal U.S. resolve and control escalation.4'\* By 2010, the United States may, in fact, have an arsenal of ASATs (perhaps even on orbit 24/7) ready to conduct these kinds of missions to coerce opponents and, if necessary, support preemptive attacks. Moscow would certainly have to worry that these ASATs could be used in conjunction with other space-enabled systems for example, long-range strike systems that could attack targets in less than 90 minutes - to disable Russia's nuclear deterrent before the Russian leadership understood what was going on. What would happen if a piece of space debris were to disable a Russian early-warning satel- lite under these conditions? Could the Russian military distinguish between an accident in space and the first phase of a U.S. attack? Most Russian early-warning satellites are in elliptical Molniya orbits (a few are in GEO) and thus difficult to attack from the ground or air. At a minimum, Moscow would probably have some tactical warn- ing of such a suspicious launch, but given the sorry state of Russia’s warning, optical imaging and signals intelligence satellites there is reason to ask the question. Further, the advent of U.S. on-orbit ASATs, as now envisioned50 could make both the more difficult orbital plane and any warning systems moot. The unpleasant truth is that the Russians likely would have to make a judgment call.

## 2AC EU CP

### Counterplan can’t solve case –

### Can’t solve warming – no EU modeling – only the US can change the energy economy and force a transition – that’s 1AC Roberts

### Can’t solve hegemony – EU solar power doesn’t beam to US troops and doesn’t solve the fuel tether

### Can’t solve oil – EU acquisition of solar energy does nothing to address US dependencies

### Perm – do both

### ESA disunity kills solvency

Selding 10 (Peter B. de Selding, Staff Writer at Space News, “Mistrust Dilutes Goodwill at Global Space Exploration Conference”, http://www.spacenews.com/civil/101021-mistrust-global-exploration-conference.html, 10/22/2010) SV

PARIS — An Oct. 21 conference of the world’s spacefaring nations to discuss space exploration featured a heavy dose of good feelings but also highlighted the mistrust that will slow the effort: Germany’s suspicions of France, France’s fear of being dominated by the United States, Russia’s distrust of long-term U.S. government policy, the U.S. distaste for new international bureaucracies and many governments’ refusal to start multibillion-dollar investments. Organized by the European Union, of which Belgium holds the six-month rotating presidency, the second International Conference on Space Exploration in Brussels, Belgium, confirmed the results of the first conference, held in Prague, Czech Republic, a year ago: It is difficult to discuss a space exploration strategy in the absence of one. The meeting ended with an agreement to meet in Italy in 2011 to pursue discussions, and to consider the creation of a group of experts to guide the effort. But alongside the statements that space exploration is of necessity a global enterprise calling for global cooperation, individual governments used the conference to raise less-noble issues that lurk beneath the surface. Peter Hintze, state secretary in the German Ministry of Economics, which leads German space policy, said Germany wanted Europe’s Ariane 5 rocket to be center stage in Europe’s exploration strategy. But he also threw a dart at France: “If the Ariane 5 is needed for an institutional mission and is not available, then this is a major problem in terms of cooperation. If it is required for an institutional mission, it should be available for that mission,” Hintze said, referring to the fact that the Ariane 5 launch of Europe’s Automated Transfer Vehicle-2 (ATV-2) to the international space station scheduled for December has been moved to February to permit the vehicle to conduct three commercial launches.

1. ESA implementation fails – lacks market, regulation, and workforce

Hollanders, ’08 (Hugo, UNU Maastricht Economic and Social Research Institute on Innovation and Technology, “Sectoral Innovation Systems in Europe: The Case of the Aerospace Sector”, Europe Innovation Watch, 4/2008, <http://archive.europe-innova.eu/docs/SIW_SR_Aerospace_20080509.pdf>, LH)

The Aerospace industry is one of the few sectors where it may be claimed that military purposes are still a driver for technological development. The European problem is that on the defence side of the sector, Europe is spending only one-eighth of the US R&D budget and, even worse, these funds are not centralized but national. The US is thus capable of financing and executing larger and more focused programs. The major challenges for the European Aerospace industry include: the development of one single European internal market, in particular for the defence sector; the need to open up the world market, in particular the US market; the requirement for stricter environmental regulations by developing new technologies and pan-European policies; the need for higher skill level of the workforce; the requirement to meet increased need for safety and security in civilian aviation by developing new technologies and pan-European policies; and the development of a more coherent approach to public funding in both the defence and space sectors.

### Only NASA has the tech and expertise to implement SPS – that’s 1AC Costa

### External disad to the CP – space arms race

Synon 8 (Mary Ellen Synon, Freelance Journalist, “EU military space policy could lead to expensive 'Star Wars' arms drive, say experts”, http://www.dailymail.co.uk/news/article-1087939/EU-military-space-policy-lead-expensive-Star-Wars-arms-drive-say-experts.html#ixzz1QscopyGY, 11/20/2008) SV

The European Union is pursuing a secretive military space policy which could lead to a costly 'Star Wars' arms drive, a report warned yesterday. It accused Brussels of using the European Space Agency to develop technologies - including a multimillion- pound EU Satellite Centre in Spain - for use by military as well as civilian authorities. The Transnational Institute, a Dutch think-tank, said: 'EU-financed communication and spy satellites are slowly becoming reality and in the long term the inclusion of space-based missile defence and other more offensive uses of space are real options for an increasingly ambitious EU military space policy.' Next week, ministers from all ESA member states will meet in The Hague to implement a new European space policy which identifies military 'security' as a priority. A driving force behind the switch in policy is President Nicolas Sarkozy of France, which holds the European presidency until December 31. In July, he said the space agenda was one of his priorities. The think-tank report also said French ambitions for the militarisation of space have caused rows with Britain - particularly over Galileo, the much-delayed European global positioning system.

### Perm – do the plan and then do the counterplan

### 8. And international actor counterplans are bad – they’re infinitely regressive and unpredictable due to thousands of actors, create an unfair research burden, and create a false judicial dichotomy

## NB – Soft Power

### Non-unique - ESA already pursuing space policy

### A. Rocket launches

Space Daily 11 (Staff Writers at Space Daily, “ESA announces 2011 launch plans”, <http://www.spacedaily.com/reports/ESA_announces_2011_launch_plans_999.html>, 1/14/2011) SV

The head of the European Space Agency says rocket launch "traffic will be much heavier" in 2011 at its French Guiana spaceport. Jean-Jacques Dordain says the ESA's workhorse Ariane rocket will be joined by the Russian Soyuz vehicle and a new small launch vehicle called the Vega, the BBC reported Friday. This represents a major change in the way ESA will conduct its space activities, previously centered on the Ariane, Dordain said. "From this year, we will exploit three launchers in parallel -- Ariane, Soyuz and Vega," he said. "It will introduce some constraints because the traffic will be much heavier from [the spaceport], and I'm not so sure we've yet totally understood the constraints which are linked to the exploitation of three launchers instead of one." At the French Guiana spaceport, a completely new launch facility has been constructed for Soyuz, allowing the Russian-built vehicle to shift some of its operations to the ESA's South American spaceport from its traditional home of the Baikonur Cosmodrome in Kazakhstan. With three different rockets operating, the ESA spaceport is going to be extremely busy and launches could be occurring at the rate of about one a month in future, ESA officials said.

### B. Lunar landings

Amos 10 (Jonathan Amos, BBC News science correspondent, “Europe plans large lunar lander”, <http://www.bbc.co.uk/news/science-environment-11305553>, 9/16/2010) SV

EADS Astrium has been awarded a 6.5m-euro contract by the European Space Agency (Esa) to do further detailed design work on the mission. The 700-800kg robot would be aimed at the lunar south pole, using automated systems to guide itself into a gentle, precision landing. Once down, it would release a small rover to trundle across the surface. "The lander will have a set of scientific instruments onboard but the science will be geared towards human exploration," said Simonetta Di Pippo, the director of human spaceflight at Esa. "We will be looking for minerals and, hopefully, water in the soil, to see if we can prepare for a sustainable presence on the surface of the Moon," she told BBC News. Recent spacecraft observations have indicated that some polar craters on the Moon probably hide vast reserves of ice deep in their shadows. The new study is being led by the German division of EADS Astrium. Michael Menking from the company observed: "This is an important technology project. For sure, it's dedicated to the Moon but if you can make a soft, precision landing on the lunar surface you can also do it on other planetary bodies as well."

### Their Ischinger evidence is terrible – it says that the EU is poised to solve these issues in the status quo

### European soft power fails

Kramer 08 (Steven, PhD, Professor of National Security Studies at the National Defense University’s Industrial College of the Armed Forces, previous Policy Advisor to the Assistant Secretary of State for European Affairs, “The Absence of Europe: Implications for International Security?” October 2008, <http://libweb.uoregon.edu/ec/e-asia/read/SF235.pdf>, YS)

As the IISS report states, behind the issue of budgets and capabilities is the question of will. Robert Kagan has pointed out that Europe and America were diverging, the former moving in a Kantian direction, the latter in a Hobbesian. According to Judy Dempsey, who chronicled Europe’s stumbling efforts to end Balkan conflict in the 1990s, the problem is not that the Europeans criticized the U.S. tendency to prefer hard power to soft power but that they are unwilling to accept that in some situations soft power alone is not sufficient. European efforts to apply soft power in Afghanistan have failed. Europeans were content so long as the United States opposed creation of a vigorous European Security and Defense Policy (ESDP). Now that the United States accepts its value, “Europeans are not intellectually—let alone militarily—prepared to go down that road.” Taking into account Europe’s limited willingness to invest in hard power, one is struck by the almost mythic quality of the 20-year debate over ESDP, which proved so divisive to Europeans and so damaging to transatlantic relations even before Iraq.

### [These impact D cards potentially also take out your advantages depending on which scenarios you read, so be careful]

### Middle East war won’t go nuclear

Rowley and Webb 2007 [Charles, The Locke Institute, and Michael, Regulatory Economics Group, Public Choice, “Israel and Palestine: the slow road to peace or the fast track to mutual annihilation?” Vol. 132, Iss. 1-2, p. 25]

Israel would never deploy nuclear devices over the Holy Land, not least because such deployment would threaten religious sites and contaminate the Jew as well as the Arab. As we have noted, it is fully prepared to deploy such devices elsewhere, as a last resort means of avoiding total military defeat. The threat of such action has proved sufficient to maintain the peace, if peace is defined as the absence of major war. Saudi Arabia and Egypt, likewise, are unlikely to deploy nuclear weapons over the Holy Land for reasons identical to those of Israel. Arabs would be loath to sacrifice the Old City of Jerusalem, and their own ethnic brothers, simply to eliminate the State of Israel. In this sense, a nuclear stalemate would be the expected outcome. Iran, on the other hand, poses a more serious threat, as a non-Arab Shia Muslim, nation, historically at odds with its Sunni Arab neighbors, and currently ruled by Islamic fundamentalists. Central to all three religious branches of the Abrahamic tree, is the notion of the ‘end of days’ (Judaism), the ‘day of judgment and the Mahdi’ (Islam) and ‘Armageddon’ (Christianity). Each religion describes this event in apocalyptic terms, as a period of great conflict between God and Satan, resulting in the Resurrection of believers and great suffering for non-believers. The current Islamic fundamentalist government of Iran openly glorifies in the prospect of the coming of the Mahdi, the restorer of religion and justice who will rule before the end of the world. If such leaders envision nuclear holocaust as a route to sitting in Paradise at the right hand of the Prophet, the certainty of a nuclear second-strike by Israel may not deter an Iranian first-strike against the Infidel. Knowing this provides both Israel and Palestine with an increased incentive to formulate a true peace, to open their borders to each other in competitive trade, to reduce corruption and to reduce tensions in the Middle East (Dershowitz 2005). For both nations, prosperous survival is much more attractive than a nuclear holocaust. Thus, ironically, the threat of nuclear proliferation may be the necessary incubus to renewed pursuit of a peace settlement between Israel and Palestine, which will require the suppression of religious extremism in both nations and a radical reorganization and reduction in the size of the public sector. In our judgment, therefore, Armageddon, though not out of the question, remains extremely unlikely. Even in a Middle East consumed with mutual malevolence among nations, the genetic and kinship instinct not to wipe out one’s own, will surely dominate the passion for personal immortality. At least, that is the position on which we choose to rest, in drawing this analytic historical narrative to a close.

### No risk of war—deterrence checks

**Waltz 03** [Kenneth N. Waltz, Adjunct Professor of Political Science at Columbia University, “More May Be Better” The Spread of Nuclear Weapons: A Debate Renewed, W.W. Norton, 2003]

Fourth, while some worry about nuclear states coming in hostile pairs, others worry that they won’t come in hostile pairs. The simplicity of relations when one party can concentrate its anxieties on a single other, and the ease of calculating forces and estimating the dangers they pose, may be lost. Early in the cold war, the United States deterred the Soviet Union, and in due course, the Soviet Union deterred the United States. As soon as additional states joined the nuclear club, however, the question of who deterred whom could no longer be easily answered. The Soviet Union had to worry lest a move made in Europe might cause France and Britain to retaliate, thus possibly setting off American forces as well. Much worries at once complicated calculations and strengthened deterrence. Somebody might have retaliated, and that was all a would-be attacker needed to know. Nuclear weapons restore the clarity and simplicity lost as bipolar situations are replaced by multipolar ones.

## NB – Economy/Aerospace

### [Given that the two scenarios are virtually the same, this block should function perfectly well for both]

### Non-unique - ESA already pursuing space policy

### A. Rocket launches

Space Daily 11 (Staff Writers at Space Daily, “ESA announces 2011 launch plans”, <http://www.spacedaily.com/reports/ESA_announces_2011_launch_plans_999.html>, 1/14/2011) SV

The head of the European Space Agency says rocket launch "traffic will be much heavier" in 2011 at its French Guiana spaceport. Jean-Jacques Dordain says the ESA's workhorse Ariane rocket will be joined by the Russian Soyuz vehicle and a new small launch vehicle called the Vega, the BBC reported Friday. This represents a major change in the way ESA will conduct its space activities, previously centered on the Ariane, Dordain said. "From this year, we will exploit three launchers in parallel -- Ariane, Soyuz and Vega," he said. "It will introduce some constraints because the traffic will be much heavier from [the spaceport], and I'm not so sure we've yet totally understood the constraints which are linked to the exploitation of three launchers instead of one." At the French Guiana spaceport, a completely new launch facility has been constructed for Soyuz, allowing the Russian-built vehicle to shift some of its operations to the ESA's South American spaceport from its traditional home of the Baikonur Cosmodrome in Kazakhstan. With three different rockets operating, the ESA spaceport is going to be extremely busy and launches could be occurring at the rate of about one a month in future, ESA officials said.

### B. Lunar landings

Amos 10 (Jonathan Amos, BBC News science correspondent, “Europe plans large lunar lander”, <http://www.bbc.co.uk/news/science-environment-11305553>, 9/16/2010) SV

EADS Astrium has been awarded a 6.5m-euro contract by the European Space Agency (Esa) to do further detailed design work on the mission. The 700-800kg robot would be aimed at the lunar south pole, using automated systems to guide itself into a gentle, precision landing. Once down, it would release a small rover to trundle across the surface. "The lander will have a set of scientific instruments onboard but the science will be geared towards human exploration," said Simonetta Di Pippo, the director of human spaceflight at Esa. "We will be looking for minerals and, hopefully, water in the soil, to see if we can prepare for a sustainable presence on the surface of the Moon," she told BBC News. Recent spacecraft observations have indicated that some polar craters on the Moon probably hide vast reserves of ice deep in their shadows. The new study is being led by the German division of EADS Astrium. Michael Menking from the company observed: "This is an important technology project. For sure, it's dedicated to the Moon but if you can make a soft, precision landing on the lunar surface you can also do it on other planetary bodies as well."

### Uniqueness overwhelms the link – EU space industries are the strongest they’ve ever been

Selding 7/21 (Peter, staff writer for Space Policy, “Government Spending Boosts European Space Hardware Sales,” Space News, 7/21/11. <http://www.spacenews.com/civil/110721-govt-boosts-euro-space-sales.html>)

Europe’s space industry manufacturing revenue grew by 9.3 percent in 2010 over the previous year, with direct space-sector employment rising by 5.5 percent, on the strength of a big increase in sales to European government customers, the Eurospace space industry association said. Revenue from European government customers, led by the European Space Agency (ESA), accounted for 52 percent of the 6.2 billion euros ($8.4 billion) in 2010 sales. European government contract revenue booked in 2010 was up 13 percent over 2009, helped by several large contracts including the Galileo navigation constellation. Some 23 percent of the revenue came from private-sector customers, including Europe’s two biggest satellite fleet operators, SES of Luxembourg and Eutelsat of Paris, and also the regular business from Europe’s Arianespace launch services consortium, which orders Ariane 5 rocket components from European manufacturers. The revenue figure is a record for European space manufacturers, Eurospace said in its annual report on the industry’s health, released the week of July 15. With 34,334 full-time direct employees, Europe’s space sector is approaching the peak levels reached in the mid-1990s.

### Perm solves – two unilateral actions still increase EU space policy and spur economic growth

## Addon – US Aerospace

### The plan saves the aerospace industry.

NSSO, ‘7 – National Security Space Office [10/10/07, “Space-Based Solar Power as an Opportunity for Strategic Security: Report to the Director, National Security Space office Interim Assessment Release 0.1,” http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf, DS]

An SBSP program as outlined in this report is remarkably consonant with the findings of this commission, which stated: The United States must maintain its preeminence in aerospace research and innovation to be the global aerospace leader in the 21st century. This can only be achieved through proactive government policies and sustained public investments in long‐term research and RDT&E infrastructure that will result in new breakthrough aerospace capabilities. Over the last several decades, the U.S. aerospace sector has been living off the research investments made primarily for defense during the Cold War…Government policies and investments in long‐term research have not kept pace with the changing world. Our nation does not have bold national aerospace technology goals to focus and sustain federal research and related infrastructure investments. The nation needs to capitalize on these opportunities, and the federal government needs to lead the effort**.** Specifically, it needs to invest in long‐term enabling research and related RDT&E infrastructure, establish national aerospace technology demonstration goals, and create an environment that fosters innovation and provide the incentives necessary to encourage risk taking and rapid introduction of new products and services. The Aerospace Commission recognized that Global U.S. aerospace leadership can only be achieved through investments in our future, including our industrial base, workforce, long term research and national infrastructure, and that government must commit to increased and sustained investment and must facilitate private investment in our national aerospace sector. The Commission concluded that the nation will have to be a space‐faring nation in order to be the global leader in the 21st century—that our freedom, mobility, and quality of life will depend on it, and therefore, recommended that the United States boldly pioneer new frontiers in aerospace technology, commerce and exploration. They explicitly recommended that the United States create a space imperative and that NASA and DoD need to make the investments necessary for developing and supporting future launch capabilities to revitalize U.S. space launch infrastructure, as well as provide Incentives to Commercial Space. The report called on government and the investment community must become more sensitive to commercial opportunities and problems in space. Recognizing the new realities of a highly dynamic, competitive and global marketplace, the report noted that the federal government is dysfunctional when addressing 21st century issues from a long term, national and global perspective. It suggested an increase in public funding for long term research and supporting infrastructure and an acceleration of transition of government research to the aerospace sector, recognizing that government must assist industry by providing insight into its long‐term research programs, and industry needs to provide to government on its research priorities. It urged the federal government must remove unnecessary barriers to international sales of defense products, and implement other initiatives that strengthen transnational partnerships to enhance national security, noting that U.S. national security and procurement policies represent some of the most burdensome restrictions affecting U.S. industry competitiveness. Private‐public partnerships were also to be encouraged. It also noted that without constant vigilance and investment, vital capabilities in our defense industrial base will be lost, and so recommended a fenced amount of research and development budget, and significantly increase in the investment in basic aerospace research to increase opportunities to gain experience in the workforce by enabling breakthrough aerospace capabilities through continuous development of new experimental systems with or without a requirement for production. Such experimentation was deemed to be essential to sustain the critical skills to conceive, develop, manufacture and maintain advanced systems and potentially provide expanded capability to the warfighter. A top priority was increased investment in basic aerospace research which fosters an efficient, secure, and safe aerospace transportation system, and suggested the establishment of national technology demonstration goals, which included reducing the cost and time to space by 50%. It concluded that, “America must exploit and explore space to assure national and planetary security, economic benefit and scientific discovery. At the same time, the United States must overcome the obstacles that jeopardize its ability to sustain leadership in space.” An SBSP program would be a powerful expression of this imperative.

### Aerospace key to the economy

Eisele, 3/7 [Stephen Eisele, US congress, march 7th 2011 “on the issues” http://www.votestephenforcongress.com/Issues.html]

I am a strong supporter of our US defense and aerospace industry and believe in fostering continued commercialization and incentivizing innovation through competition. The aerospace industry plays an important role in our economy and is critical to technological innovations, national security, and helps elevate our industrial base, education, and keeps jobs in the district. Having worked in the Space industry for many years, I am a strong advocate of Space exploration and its benefits to humanity. The space industry is helping lead our economy into its next great leap through advancements in telecommunications, weather observation/monitoring, scientific advancements, and exploration of space which could reap major benefits to improving life on our Planet. Space exploration exemplifies the American spirit and our innate desire to discover and unravel the mysteries of the universe;it inspires us to push the envelope of human thinking, and benefits all Americans through technological spin-offs/breakthroughs as well as the incredible promise of resources that could save our planet and preserve our livelihood. Government can help propel US aerospace excellence by scaling back some of the export controls that have made many US companies less competitive. The US should also promote the use of prizes as an incentive to help achieve the next technological breakthrough through competition. This model was successfully tested at the X PRIZE Foundation.

### Economic collapse causes war

Mead 9 – Walter Russell Mead, the Henry A. Kissinger Senior Fellow in U.S. Foreign Policy at the Council on Foreign Relations, 2-4, 2009, “Only Makes You Stronger,” The New Republic, http://www.tnr.com/politics/story.html?id=571cbbb9-2887-4d81-8542-92e83915f5f8&p=2

If financial crises have been a normal part of life during the 300-year rise of the liberal capitalist system under the Anglophone powers, so has war. The wars of the League of Augsburg and the Spanish Succession; the Seven Years War; the American Revolution; the Napoleonic Wars; the two World Wars; the cold war: The list of wars is almost as long as the list of financial crises. Bad economic times can breed wars. Europe was a pretty peaceful place in 1928, but the Depression poisoned German public opinion and helped bring Adolf Hitler to power. If the current crisis turns into a depression, what rough beasts might start slouching toward Moscow, Karachi, Beijing, or New Delhi to be born? The United States may not, yet, decline, but, if we can't get the world economy back on track, we may still have to fight.

## 2AC Land-Based Solar CP

### Counterplan can’t solve case –

### Can’t solve hegemony – land-based power still needs supply lines and infrastructure and cripples readiness

### Can’t solve warming and oil – land solar takes up too much space and has too unreliable an output to actually replace oil – that’s 1AC Hsu and NSSO

### Can’t solve water – land solar can’t instantly beam to areas without infrastructure – that’s 1AC Tobisaka and Slane

### Perm – do both – having two sources of alternative energy gives double solvency

### SBSP is cost-effective and cheaper than land-based in the long term – that’s Hsu

### Only SBSP is large enough to merit changes in the energy economy – that’s Hsu

### Politics isn’t a net benefit – Congress only passes renewable energy if the military advocates it

Kaplan, ’10 – Senior Fellow at the New America Foundation [Fred, 10/6/2010, Slate Magazine, “The Marines Go Green,” http://www.slate.com/id/2270165/pagenum/all/#p2, DS]

Two other factors increase the chances that the military's renewable-energy projects might have commercial spinoffs. First, as with the microchip and the computer, these projects are adapting products that private companies have already developed and built. In other words, the military is bypassing its normal procurement process, with its bureaucratic hassles and excessive "requirements," which have resulted in the unwieldy designs and exorbitant costs of so many U.S. weapons systems. Second, Congress is more likely to fund these projects precisely because they're related to the national defense. The United States has an elaborate nationwide highway system today because, back in 1956, President Dwight Eisenhower sold the program to Congress by calling it the National Interstate and Defense Highway Act (italics added). The Army, Eisenhower said, would need solid highways to move troops or evacuate citizens in the event of a foreign invasion or a nuclear war. Similarly, after the Soviet Union launched the Sputnik satellite in 1957, state governments across the United States spent scads of money to create, or improve, high-school science and math programs in order to "catch up" with the Russians. (This impulse wasn't limited to science and math. At the high school I attended in Kansas, money was even appropriated to buy books for a course on the modern novel. The course was still around in the early 1970s, and thus was I exposed at an early age to Conrad, Crane, Hawthorne, and Hemingway.) Congress today has little appetite for spending billions of dollars on solar power generators or biofuel labs under the rubric of energy independence or "going green." But to serve the war mission, and especially to protect the troops, no sum is too lavish—and that's why the road to going green, and to achieving energy independence, might very well be paved through the fighting fields and villages of Afghanistan.

# Disads

## 2AC NASA Tradeoff DA (Climate Impact)

### Case o/w

### Timeframe – the 1AC accesses short term impacts for extinction like the Kohl 11 evidence indicates about peak oil causing economic collapse, Middle East war, and resource wars. The DA’s impacts are long term – GW won’t cause extinction as fast as war.

### TF outweighs mag and prob because any risk of extinction coming in the short term means that nothing else can happen in the long term – default on TF

### 2. N/U – science cuts now

Fox News 7/16 [7/16/11, " US Science Community Suffers Setbacks Despite Obama's Push for More Investing ", http://www.foxnews.com/politics/2011/07/16/us-science-community-suffers-setbacks-despite-obamas-push-for-more-investing/, DS]

As President Obama pushes for more spending on science education and research to keep America globally competitive, the nation’s scientific community continues to suffer a number of setbacks that appears to undermine the president’s goal. The U.S. is abandoning its space shuttle program, closing the Tevatron, considering defunding the James Webb Space Scope (Hubble’s replacement) and could possibly reject a cutting-edge underground research lab that would restore some prestige to the field of U.S. science. More than 140 scientific societies and universities sent a letter this week warning U.S. policymakers not to target specific science research programs in their negotiations to cut government spending in exchange for raising the debt limit. “Everyone understands that legislators face tremendous challenges related to the deficit and the national economy,” said Joanne Carney, director of the Office of Government Relations at the American Association for the Advancement of Science. “But recently, selected research areas have been unfairly trivialized based on misinformation intended to challenge the scientific review process.” In the letter, the group warned that cutting support for key fields of research “could have a chilling effect on scientists and young people considering a future in science.” The group argued that social, behavioral and economic research sheds light on U.S. demographic trends, criminal behaviors, decision-making processes crucial to military and national security operations, among other things. “Simply put, we need all scientists and scientific disciplines working -- alone and together -- to advance our knowledge base,” the group said. “Allocating federal investments competitively through scientific merit review is the very process that has led this country to be a world leader in science.” But the past few months have been filled with setbacks for science advocates.  Earlier this month, NASA launched its final space shuttle mission after its 30-year program ended, leaving Russia’s space capsules as the sole option for astronauts heading to and from the International Space Station.  The U.S. Energy Department announced earlier this year that it was shutting down by the end of September the Tevatron, the nation’s largest particle accelerator located outside of Chicago, because the agency could no longer count on the annual $35 million to keep it running until 2014.  Late last year, the oversight board of the National Science Foundation dropped out of a planned $875-million underground science lab in South Dakota, leaving the future of the Deep Underground Science and Engineering Laboratory (DUSEL) in doubt. The National Science Board rejected requests from the lab’s designers for more money after burning through the $19 million allocated. And the board didn’t like its proposed role in the project that would have made the foundation part of a stewardship program to run the lab.  Last week, the House Appropriations Committee released its funding bill for Commerce, Justice and Science for the next fiscal year that begins Oct. 1. The bill eliminates funding for the James Webb Space Telescope, NASA’s next-generation space telescope which would be the successor to Hubble and is the space agency’s biggest post-shuttle project. The committee says the project is billions of dollars over budget and plagued by poor management. “This legislation includes funding for some of the most critical aspects of government,” House Appropriations Chairman Hal Rogers said in a statement. “However, given this time of fiscal crisis, it is also important that Congress make tough decisions to cut programs where necessary to give priority to programs with broad national reach that have the most benefit to the American people.”

### 3. LT/ No trade-offs – only a win-win situation – empirics prove

Landis, ‘95 [Geoffrey, NASA John Glenn Research Center, “ Footsteps to Mars: An incremental approach to Mars exploration,” Journal of the British Interplanetary Society, Vol. 48, pp. 367-342 (1995); http://www.geoffreylandis.com/Footsteps.pdf]

Recently there has been an alarming tendency in the scientific and space advocacy communities for advocates to attack one project, in the belief that if that project could be canceled, the money saved would be used for their own, more desirable projects. This is false. Quoting from senate staffer Steve Palmer [17]: “What space station and ASRM [advanced solid rocket motor] add up to is a drop in the bucket. If Congress cuts out both space station and ASRM, will the money be used for other programs of interest to the space industry? The short answer is no”. Arguments to cancel space projects are eagerly picked up in Congress, by people who have agendas and pet projects that have nothing to do with space. Further, attacking space projects has the result of making enemies out of allies. When we attack someone else’s project, we can count on having them attack ours. The result is that the arguments against both projects will be remembered by a money-starved Congress. It is not true that manned missions eclipse funds for unmanned science missions. In fact, there is an excellent case to be made for precisely the opposite correlation: the presence of large manned missions increases the funding and opportunities for unmanned science missions. Historically, the science budget of NASA has been a roughly constant fraction of the total budget; any major new initiative which increases the overall space budget is likely to increase the funding for science. If Mars advocates adopt the approach of pushing our initiatives by tearing down other space programs, the likely result is that nothing, neither Mars nor other programs, will be accomplished.

### 4. No link – 4 scenarios

### A. Won’t trade off – budget internally flexible

Moskowitz 4/15 - senior writer at Space [Clara, 4/15/2011, SPACE, “NASA’s 2011 Budget Should Allow Flexibility Despite Cuts,” http://www.space.com/11411-nasa-2011-budget-cuts-constellation-funding.html, DS]

A new federal spending bill represents a cut to NASA's funding, but a lessening of restrictions on how the agency spends that money for the rest of this year. The new measure is a political compromise between democrats and republicans, and includes significant spending cuts in the 2011 federal budget. NASA will have to make do with about $18.5 billion, putting its budget roughly $240 million below last year's funding level. NASA and the rest of the federal government had been in limbo while lawmakers haggled over the budget. But on Thursday (April 14), Congress passed a spending measure called a continuing resolution that will cover the last five months of the year 2011. The new budget compromise followed a series of stopgap measures Congress had used to fund the government in lieu of agreeing on an official fiscal year 2011 budget. Experts said NASA will likely be able to accomplish most of the plans on the table under the new bill. "NASA will be able to do what it has to do until the next budget," space policy expert Roger Handberg, a political science professor at the University of Central Florida, told SPACE.com. "NASA has been survival mode since last fall when the first continuing resolution was put in place." The new budget at least frees NASA from a stifling provision under its 2010 budget that prevented it from cutting funding to the moon-bound Constellation program. Yet that program was canceled by President Barack Obama in early 2010, and NASA has been targeting new goals ever since. [NASA's Shuttle Program in Pictures] Now the space agency will finally be free to stop spending money on canceled Constellation projects. "The elimination of the Constellation provision will free up resources otherwise committed," Handberg said, saving NASA some of the money that it loses in the reduction of its annual budget. NASA leaders expressed gratitude that the agency can now move forward fully toward its new direction. "This bill lifts funding restrictions **that limited our flexibility** to carry out our shared vision for the future," NASA administrator Charles Bolden said in a statement. "With this funding, we will continue to aggressively develop a new heavy lift rocket, multipurpose crew vehicle and commercial capability to transport our astronauts and their supplies on American-made and launched spacecraft." Overall, Bolden admitted the need for spending cuts, and was optimistic that the agency would be able to do a lot with what it's given. "We are committed to living within our means in these tough fiscal times - and we are committed to carrying out our ambitious new plans for exploration and discovery," Bolden said.

### B. Earth science won’t be cut – the James Webb telescope’s on the chopping block and could free up funds

Pachal 7/14 – PCMag News Director [Peter, 7/14/2011, PCMag, “Congress Comes Closer to Killing NASA’s James Webb Telescope,” http://www.pcmag.com/article2/0,2817,2388502,00.asp, DS]

The James Webb space telescope, the successor to Hubble, just came one step closer to being thrown in the trash bin over budget cuts. Yesterday the House Committee on Appropriations approved a plan to slash NASA's budget for next year and explicitly kill the project. The House and Senate still need to vote on the measure before it becomes law, but it's not looking good for expensive Webb. The cost of developing the telescope has ballooned over the years as NASA has had to invent whole new technologies in order to make it work properly. Unlike the Hubble, the Webb will be much further from Earth in order to shield itself from infrared radiation, and its systems will need to function at extremely cold temperatures. Adapting to those conditions has proved pricey for NASA. It's already spent $3 billion on the Webb, and the total cost is projected to be about $6.8 billion (it was initially budgeted at $1.6 billion total). However, once launched and put into place, the Webb will be so far from Earth that it will be impossible to service, so subsequent costs would involve only operating the telescope and analyzing its data (estimated at $1 billion over 10 years). On Tuesday, NASA Administrator Charles Bolden made an appeal to the House Science, Space, and Technology Committee to save the Webb. "I have tried to explain what I think is the importance of James Webb, in terms of opening new horizons far greater than we got from Hubble," Discovery News reported Bolden as saying. "I would only say that for about the same cost as Hubble in real-year dollars, we'll bring James Webb into operation." His words apparently had little effect. Neither did an attempt to restore partial funding of the Webb with a eleventh-hour amendment from Rep. Adam Schiff, a Democrat from California. The Republican-dominated committee shot down the measure with a voice vote, Nature reported.

### C. Their evidence isn’t specific to SBSP, just talks about spending on “exploration” – prefer our link work

### D. The link is N/U – plutonium should have triggered the link

Foust 6/15 – freelance writer who runs Space Politics [Jeff, 6/15/2011, Space Politics, ‘Another push for Pu-238 funding,” http://www.spacepolitics.com/2011/06/15/another-push-for-pu-238-funding/, DS]

Plutonium 238 (Pu-238), the radioactive isotope used in the radioisotope thermoelectric generators (RTGs), is essential to a number of spacecraft missions, particularly those bound for the outer solar system. However, getting the relatively modest funding (no more than a few tens of millions of dollars a year) needed to restart Pu-238 production in the US to ensure that a supply of the isotope is available for future missions has been difficult in recent years. The latest push is taking place this week. The Obama Administration included $10 million each for NASA and the Department of Energy (DOE) to restart Pu-238 production, but a draft version of the Energy and Water appropriations bill in the House does not include that funding. The full House Appropriations Committee is scheduled to markup the bill in a hearing today. Emily Lakdawalla of The Planetary Society reported yesterday that the American Geophysical Union (AGU) is making a last-minute push to get the money added to the appropriations bill. In an email, the AGU said that Rep. Adam Schiff (D-CA), whose district includes JPL, plans to introduce an amendment to the bill to include the Pu-238 funding. (The AGU alert is not included in its list of “Science Policy Alerts” on its web site; it apparently went out to AGU members whose representatives are on the committee.) The AGU asked its members to contact their congressmen and ask them to support the Schiff amendment, providing a variety of talking points to use in those calls.

### 5. DA is intrinsic – NASA can do the plan and fund for earth science – c/a Moskowitz – NASA’s internal budget is very flexible

### 6. No I/L – 2 scenarios

### A. NASA doesn’t have the authority to do SBSP anyways

Dinerman 08 [Taylor - a well-known and respected space writer regarding military and civilian space activities. “NASA and space solar power”. May 19, 2008 ayc http://www.thespacereview.com/article/1130/1]

NASA is not the US Department of Spatial Affairs: it does not have the statutory authority to control, regulate, or promote commercial space activities such as telecommunications satellites, space tourism, space manufacturing, or space solar power. Such powers are spread throughout the government in places like the FAA’s Office of Commercial Space Transportation, the Department of Commerce, and elsewhere. Even if NASA were somehow to get the funds and the motivation to do space solar power, these other institutions would resist what they would recognize as an encroachment on their turf.

### B. Uniqueness overwhelms the internal link – earth sciences will focus on climate change regardless of the plan

Space Ref 7/15 (Space Ref, 7/15/2011, "AIP Number 90: FY 2012 House Funding Bill: NASA ", http://www.spaceref.com/news/viewsr.html?pid=37728, DS)

The full text of the committee report follows: "Earth Science missions. - The Committee recommendation includes a reduction of $100,000,000 below the request for Earth Science activities. While the Committee supports Earth Science functions, this area has rapidly grown over the past few fiscal years, and the current constrained fiscal environment simply cannot sustain the spending patterns envisioned by NASA in this field. The Committee has not included detailed, line-item reductions within the Earth Science portfolio. Instead, NASA should propose such reductions as part of the spending plan required by section 537 of this Act. "In proposing reductions, NASA should take care to protect, to the extent possible, high priority missions of the Earth Science decadal survey, including Ice, Cloud, and land Elevation Satellite-2, the Soil Moisture Active-Passive mission, and the Deformation, Ecosystem Structure and Dynamics of Ice mission, as well as missions with near-term launch readiness dates. In addition, NASA should be careful to propose a funding portfolio that maintains an essential balance between actual spaceflight projects and the critical mission-enabling activities (research and data analysis, data application, etc.) that support and enhance the value of those projects.

### 7. And, they can’t access the impact –

### Climate monitoring is doomed – the previous failures caused a loss of funding and interest

Borenstein 3/4 [Seth – writer for the Associated Press, MSNBC. “Lost satellite deals heavy blows to climate research”. 3/4/2011 ayc]

For the second time in two years, a rocket glitch sent a NASA global warming satellite to the bottom of the sea Friday, a $424 million debacle that couldn't have come at a worse time for the space agency and its efforts to understand climate change. Years of belt-tightening have left NASA's Earth-watching system in sorry shape, according to many scientists. And any money for new environmental satellites will have to survive budget-cutting, global warming politics — and now, doubts on Capitol Hill about the space agency's competence. The Taurus XL rocket carrying NASA's Glory satellite lifted off from Vandenberg Air Force Base in California and plummeted to the southern Pacific several minutes later. The same thing happened to another climate-monitoring probe in 2009 with the same type of rocket, and engineers thought they had fixed the problem. "It's more than embarrassing," said Syracuse University public policy professor Henry Lambright. "Something was missed in the first investigation and the work that went on afterward." Lambright warned that the back-to-back fiascos could have political repercussions, giving Republicans and climate-change skeptics more ammunition to question whether "this is a good way to spend taxpayers' money for rockets to fail and for a purpose they find suspect." Used to failure NASA's environmental division is getting used to failure, cuts and criticism. In 2007, a National Academy of Sciences panel said that research and purchasing for NASA Earth sciences had decreased 30 percent in six years and that **the climate-monitoring system was at "risk of collapse**." Just last month, the Obama administration canceled two major satellite proposals to save money.

## 2AC NASA Tradeoff DA (Climate Impact)

### Case o/w

### Timeframe – the 1AC accesses short term impacts for extinction like the Kohl 11 evidence indicates about peak oil causing economic collapse, Middle East war, and resource wars. The DA’s impacts are long term – disease won’t cause extinction as fast as war.

### TF outweighs mag and prob because any risk of extinction coming in the short term means that nothing else can happen in the long term – default on TF

### 2. N/U – science cuts now

Fox News 7/16 [7/16/11, " US Science Community Suffers Setbacks Despite Obama's Push for More Investing ", http://www.foxnews.com/politics/2011/07/16/us-science-community-suffers-setbacks-despite-obamas-push-for-more-investing/, DS]

As President Obama pushes for more spending on science education and research to keep America globally competitive, the nation’s scientific community continues to suffer a number of setbacks that appears to undermine the president’s goal. The U.S. is abandoning its space shuttle program, closing the Tevatron, considering defunding the James Webb Space Scope (Hubble’s replacement) and could possibly reject a cutting-edge underground research lab that would restore some prestige to the field of U.S. science. More than 140 scientific societies and universities sent a letter this week warning U.S. policymakers not to target specific science research programs in their negotiations to cut government spending in exchange for raising the debt limit. “Everyone understands that legislators face tremendous challenges related to the deficit and the national economy,” said Joanne Carney, director of the Office of Government Relations at the American Association for the Advancement of Science. “But recently, selected research areas have been unfairly trivialized based on misinformation intended to challenge the scientific review process.” In the letter, the group warned that cutting support for key fields of research “could have a chilling effect on scientists and young people considering a future in science.” The group argued that social, behavioral and economic research sheds light on U.S. demographic trends, criminal behaviors, decision-making processes crucial to military and national security operations, among other things. “Simply put, we need all scientists and scientific disciplines working -- alone and together -- to advance our knowledge base,” the group said. “Allocating federal investments competitively through scientific merit review is the very process that has led this country to be a world leader in science.” But the past few months have been filled with setbacks for science advocates.  Earlier this month, NASA launched its final space shuttle mission after its 30-year program ended, leaving Russia’s space capsules as the sole option for astronauts heading to and from the International Space Station.  The U.S. Energy Department announced earlier this year that it was shutting down by the end of September the Tevatron, the nation’s largest particle accelerator located outside of Chicago, because the agency could no longer count on the annual $35 million to keep it running until 2014.  Late last year, the oversight board of the National Science Foundation dropped out of a planned $875-million underground science lab in South Dakota, leaving the future of the Deep Underground Science and Engineering Laboratory (DUSEL) in doubt. The National Science Board rejected requests from the lab’s designers for more money after burning through the $19 million allocated. And the board didn’t like its proposed role in the project that would have made the foundation part of a stewardship program to run the lab.  Last week, the House Appropriations Committee released its funding bill for Commerce, Justice and Science for the next fiscal year that begins Oct. 1. The bill eliminates funding for the James Webb Space Telescope, NASA’s next-generation space telescope which would be the successor to Hubble and is the space agency’s biggest post-shuttle project. The committee says the project is billions of dollars over budget and plagued by poor management. “This legislation includes funding for some of the most critical aspects of government,” House Appropriations Chairman Hal Rogers said in a statement. “However, given this time of fiscal crisis, it is also important that Congress make tough decisions to cut programs where necessary to give priority to programs with broad national reach that have the most benefit to the American people.”

### 3. LT/ No trade-offs – only a win-win situation – empirics prove

Landis, ‘95 [Geoffrey, NASA John Glenn Research Center, “ Footsteps to Mars: An incremental approach to Mars exploration,” Journal of the British Interplanetary Society, Vol. 48, pp. 367-342 (1995); http://www.geoffreylandis.com/Footsteps.pdf]

Recently there has been an alarming tendency in the scientific and space advocacy communities for advocates to attack one project, in the belief that if that project could be canceled, the money saved would be used for their own, more desirable projects. This is false. Quoting from senate staffer Steve Palmer [17]: “What space station and ASRM [advanced solid rocket motor] add up to is a drop in the bucket. If Congress cuts out both space station and ASRM, will the money be used for other programs of interest to the space industry? The short answer is no”. Arguments to cancel space projects are eagerly picked up in Congress, by people who have agendas and pet projects that have nothing to do with space. Further, attacking space projects has the result of making enemies out of allies. When we attack someone else’s project, we can count on having them attack ours. The result is that the arguments against both projects will be remembered by a money-starved Congress. It is not true that manned missions eclipse funds for unmanned science missions. In fact, there is an excellent case to be made for precisely the opposite correlation: the presence of large manned missions increases the funding and opportunities for unmanned science missions. Historically, the science budget of NASA has been a roughly constant fraction of the total budget; any major new initiative which increases the overall space budget is likely to increase the funding for science. If Mars advocates adopt the approach of pushing our initiatives by tearing down other space programs, the likely result is that nothing, neither Mars nor other programs, will be accomplished.

### 4. No link – 4 scenarios

### A. Won’t trade off – budget internally flexible

Moskowitz 4/15 - senior writer at Space [Clara, 4/15/2011, SPACE, “NASA’s 2011 Budget Should Allow Flexibility Despite Cuts,” http://www.space.com/11411-nasa-2011-budget-cuts-constellation-funding.html, DS]

A new federal spending bill represents a cut to NASA's funding, but a lessening of restrictions on how the agency spends that money for the rest of this year. The new measure is a political compromise between democrats and republicans, and includes significant spending cuts in the 2011 federal budget. NASA will have to make do with about $18.5 billion, putting its budget roughly $240 million below last year's funding level. NASA and the rest of the federal government had been in limbo while lawmakers haggled over the budget. But on Thursday (April 14), Congress passed a spending measure called a continuing resolution that will cover the last five months of the year 2011. The new budget compromise followed a series of stopgap measures Congress had used to fund the government in lieu of agreeing on an official fiscal year 2011 budget. Experts said NASA will likely be able to accomplish most of the plans on the table under the new bill. "NASA will be able to do what it has to do until the next budget," space policy expert Roger Handberg, a political science professor at the University of Central Florida, told SPACE.com. "NASA has been survival mode since last fall when the first continuing resolution was put in place." The new budget at least frees NASA from a stifling provision under its 2010 budget that prevented it from cutting funding to the moon-bound Constellation program. Yet that program was canceled by President Barack Obama in early 2010, and NASA has been targeting new goals ever since. [NASA's Shuttle Program in Pictures] Now the space agency will finally be free to stop spending money on canceled Constellation projects. "The elimination of the Constellation provision will free up resources otherwise committed," Handberg said, saving NASA some of the money that it loses in the reduction of its annual budget. NASA leaders expressed gratitude that the agency can now move forward fully toward its new direction. "This bill lifts funding restrictions **that limited our flexibility** to carry out our shared vision for the future," NASA administrator Charles Bolden said in a statement. "With this funding, we will continue to aggressively develop a new heavy lift rocket, multipurpose crew vehicle and commercial capability to transport our astronauts and their supplies on American-made and launched spacecraft." Overall, Bolden admitted the need for spending cuts, and was optimistic that the agency would be able to do a lot with what it's given. "We are committed to living within our means in these tough fiscal times - and we are committed to carrying out our ambitious new plans for exploration and discovery," Bolden said.

### B. Earth science won’t be cut – the James Webb telescope’s on the chopping block and could free up funds

Pachal 7/14 – PCMag News Director [Peter, 7/14/2011, PCMag, “Congress Comes Closer to Killing NASA’s James Webb Telescope,” http://www.pcmag.com/article2/0,2817,2388502,00.asp, DS]

The James Webb space telescope, the successor to Hubble, just came one step closer to being thrown in the trash bin over budget cuts. Yesterday the House Committee on Appropriations approved a plan to slash NASA's budget for next year and explicitly kill the project. The House and Senate still need to vote on the measure before it becomes law, but it's not looking good for expensive Webb. The cost of developing the telescope has ballooned over the years as NASA has had to invent whole new technologies in order to make it work properly. Unlike the Hubble, the Webb will be much further from Earth in order to shield itself from infrared radiation, and its systems will need to function at extremely cold temperatures. Adapting to those conditions has proved pricey for NASA. It's already spent $3 billion on the Webb, and the total cost is projected to be about $6.8 billion (it was initially budgeted at $1.6 billion total). However, once launched and put into place, the Webb will be so far from Earth that it will be impossible to service, so subsequent costs would involve only operating the telescope and analyzing its data (estimated at $1 billion over 10 years). On Tuesday, NASA Administrator Charles Bolden made an appeal to the House Science, Space, and Technology Committee to save the Webb. "I have tried to explain what I think is the importance of James Webb, in terms of opening new horizons far greater than we got from Hubble," Discovery News reported Bolden as saying. "I would only say that for about the same cost as Hubble in real-year dollars, we'll bring James Webb into operation." His words apparently had little effect. Neither did an attempt to restore partial funding of the Webb with a eleventh-hour amendment from Rep. Adam Schiff, a Democrat from California. The Republican-dominated committee shot down the measure with a voice vote, Nature reported.

### C. Their evidence isn’t specific to SBSP, just talks about spending on “exploration” – prefer our link work

### D. The link is N/U – plutonium should have triggered the link

Foust 6/15 – freelance writer who runs Space Politics [Jeff, 6/15/2011, Space Politics, ‘Another push for Pu-238 funding,” http://www.spacepolitics.com/2011/06/15/another-push-for-pu-238-funding/, DS]

Plutonium 238 (Pu-238), the radioactive isotope used in the radioisotope thermoelectric generators (RTGs), is essential to a number of spacecraft missions, particularly those bound for the outer solar system. However, getting the relatively modest funding (no more than a few tens of millions of dollars a year) needed to restart Pu-238 production in the US to ensure that a supply of the isotope is available for future missions has been difficult in recent years. The latest push is taking place this week. The Obama Administration included $10 million each for NASA and the Department of Energy (DOE) to restart Pu-238 production, but a draft version of the Energy and Water appropriations bill in the House does not include that funding. The full House Appropriations Committee is scheduled to markup the bill in a hearing today. Emily Lakdawalla of The Planetary Society reported yesterday that the American Geophysical Union (AGU) is making a last-minute push to get the money added to the appropriations bill. In an email, the AGU said that Rep. Adam Schiff (D-CA), whose district includes JPL, plans to introduce an amendment to the bill to include the Pu-238 funding. (The AGU alert is not included in its list of “Science Policy Alerts” on its web site; it apparently went out to AGU members whose representatives are on the committee.) The AGU asked its members to contact their congressmen and ask them to support the Schiff amendment, providing a variety of talking points to use in those calls.

### 5. DA is intrinsic – NASA can do the plan and fund for earth science – c/a Moskowitz – NASA’s internal budget is very flexible

### 6. No I/L – 2 scenarios

### A. NASA doesn’t have the authority to do SBSP anyways

Dinerman 08 [Taylor - a well-known and respected space writer regarding military and civilian space activities. “NASA and space solar power”. May 19, 2008 ayc http://www.thespacereview.com/article/1130/1]

NASA is not the US Department of Spatial Affairs: it does not have the statutory authority to control, regulate, or promote commercial space activities such as telecommunications satellites, space tourism, space manufacturing, or space solar power. Such powers are spread throughout the government in places like the FAA’s Office of Commercial Space Transportation, the Department of Commerce, and elsewhere. Even if NASA were somehow to get the funds and the motivation to do space solar power, these other institutions would resist what they would recognize as an encroachment on their turf.

### B. Uniqueness overwhelms the internal link – earth sciences will focus on climate change regardless of the plan

Space Ref 7/15 (Space Ref, 7/15/2011, "AIP Number 90: FY 2012 House Funding Bill: NASA ", http://www.spaceref.com/news/viewsr.html?pid=37728, DS)

The full text of the committee report follows: "Earth Science missions. - The Committee recommendation includes a reduction of $100,000,000 below the request for Earth Science activities. While the Committee supports Earth Science functions, this area has rapidly grown over the past few fiscal years, and the current constrained fiscal environment simply cannot sustain the spending patterns envisioned by NASA in this field. The Committee has not included detailed, line-item reductions within the Earth Science portfolio. Instead, NASA should propose such reductions as part of the spending plan required by section 537 of this Act. "In proposing reductions, NASA should take care to protect, to the extent possible, high priority missions of the Earth Science decadal survey, including Ice, Cloud, and land Elevation Satellite-2, the Soil Moisture Active-Passive mission, and the Deformation, Ecosystem Structure and Dynamics of Ice mission, as well as missions with near-term launch readiness dates. In addition, NASA should be careful to propose a funding portfolio that maintains an essential balance between actual spaceflight projects and the critical mission-enabling activities (research and data analysis, data application, etc.) that support and enhance the value of those projects.

### 7. And, they can’t access the impact –

### Climate monitoring is doomed – the previous failures caused a loss of funding and interest

Borenstein 3/4 [Seth – writer for the Associated Press, MSNBC. “Lost satellite deals heavy blows to climate research”. 3/4/2011 ayc]

For the second time in two years, a rocket glitch sent a NASA global warming satellite to the bottom of the sea Friday, a $424 million debacle that couldn't have come at a worse time for the space agency and its efforts to understand climate change. Years of belt-tightening have left NASA's Earth-watching system in sorry shape, according to many scientists. And any money for new environmental satellites will have to survive budget-cutting, global warming politics — and now, doubts on Capitol Hill about the space agency's competence. The Taurus XL rocket carrying NASA's Glory satellite lifted off from Vandenberg Air Force Base in California and plummeted to the southern Pacific several minutes later. The same thing happened to another climate-monitoring probe in 2009 with the same type of rocket, and engineers thought they had fixed the problem. "It's more than embarrassing," said Syracuse University public policy professor Henry Lambright. "Something was missed in the first investigation and the work that went on afterward." Lambright warned that the back-to-back fiascos could have political repercussions, giving Republicans and climate-change skeptics more ammunition to question whether "this is a good way to spend taxpayers' money for rockets to fail and for a purpose they find suspect." Used to failure NASA's environmental division is getting used to failure, cuts and criticism. In 2007, a National Academy of Sciences panel said that research and purchasing for NASA Earth sciences had decreased 30 percent in six years and that **the climate-monitoring system was at "risk of collapse**." Just last month, the Obama administration canceled two major satellite proposals to save money.

### 8. Disease doesn’t cause extinction – empirics prove

Peters and Chrystal 03 [Dr. Clarence-Director of Biodefense and Emerging Infectious Diseases at the University of Texas. Dr. Ronald-Chairman of Genetics Medicine at Cornell University, FDCH Political Transcripts, “U.S. REPRESENTATIVE CHRISTOPHER COX (R-CA) HOLDS HEARING ON COUNTERING THE BIOTERRORISM THREAT”, 3-15, L/N]

PETERS: I think we have one example from the movement of the Conquistadors to the New World. They brought measles, smallpox and a variety of other diseases with them. They didn't wipe out the Indians, but they destroyed their civilization and were instrumental in the Spaniards being able to conquer the New World with relatively few people. I think we have something going on right now with SARS that we don't know exactly what the end of it's going to be, but we already know that Asian economies are suffering tremendously. My prediction is that they will not be able to control it in China. If that's true, then we will be dealing with repeated introductions in this country for the indefinite future so that we may see a change in our way of life where we are taking temperatures in airports, in addition to taking your shoes off and putting them through the X-ray machine. And we may see emergency rooms rebuilt so that if you have a cough you go in one entrance and go into a negative pressure cubicle until your SARS test comes back. So I think that while wiping out human life is extremely unlikely, we have unengineered examples of bugs that have made great impacts on civilizations. COX: Dr. Crystal? CRYSTAL: The natural examples of what you suggested were, as hundreds of years ago, with smallpox and also with the plague. The plague wiped out one-third of the civilization. We now have treatments for ordinances (ph) like the plague because they were engineered to be resistant. And if they infected a number of people and had the capability of being spread rapidly from individual to individual, it would cause enormous havoc. I agree with the panel **-- I don't think it would wipe out civilization**, but the consequences to our society would be enormous.

## 2AC Russian Aerospace Tradeoff DA

## Uniqueness

### NASA has not given Russia aerospace lead- announcement of future projects

Saavedra, 7/10 [Simon Saavedra, Christian Post Correspondent, “NASA After Atlantis: Mars, James Webb Space Telescope,” July 10, 2011, <http://www.christianpost.com/news/nasa-after-atlantis-mars-james-webb-space-telescope-52106/>, DA 7/16/11]//RS

NASA has boldly announced that the end of the shuttle program does not mean the end of NASA or better yet the end of NASA-manned missions to space. The space agency communicated its high ambitions for space explorations, saying it will be "designing and building the capabilities to send humans to explore the solar system, working toward a goal of landing humans on Mars," reads its website. NASA landed a spacecraft named the Mars Pathfinder on Mars in 1997 carrying the Sojourner rover which analyzed Mars' atmosphere, climate and geology. But now, NASA is hoping to land man resembling robots it has developed and has been testing it in order to improve the testing limitations of machines such as rovers. NASA, in cooperation with private companies, will also start building a new space vehicle called the Multi-Purpose Crew Vehicle designed for four astronauts in 21-day missions. NASA has reported that this space vehicle is just part of the next generation fleet it will start using for traveling beyond Low Earth Orbit (LEO). The agency also plans to direction its research in order for it to immediately benefit society such as building greener, quieter and simply better aircrafts or helping create better systems for today's hectic traffic – a move to garner more national interest? Perhaps. With these and other additional projects in development, NASA appears to be running under a full agenda and although it has suffered some setbacks such as the budget cut, it announced its commitment to stay in the lead for space exploration.

### Russian aerospace weak- lack personnel and funds

BBC, 3/30 [British Broadcasting Company, BBC Monitoring Former Soviet Union, “Personnel shortage hurts Russian aerospace sector's output,” March 30, 2011, DA 7/19/11]//RS

Moscow, 30 March: Russian aircraft sector enterprises are unable to fulfil large customer orders because of a shortage of personnel, the chairman of the Russian Trade and Industry Chamber's committee for developing the aerospace sector, Aleksandr Belousov, said today. "According to the most serious experts with an insider's knowledge of the situation, today not a single existing design bureau would be able not only to recreate a new modern airplane or an air engine but even simply reissue one of its own basic designs of the end of the 1970s-the start of the 1980s," Belousov said in his report to the second InfoSpace forum of innovation technologies. He said that if they were to get large orders serial production enterprises would not be able to fulfil them primarily because of a shortage of skilled personnel.

### Russian aerospace industry is stagnant now

De Carbonnel, 4/10 [Alissa de Carbonnel, contributing writer for the Moscow Tiimes, “Analysis: Stagnation Fears Haunt Russian Space Program,” April 10, 2011, Reuters, <http://www.reuters.com/article/2011/04/10/us-russia-space-gagarin-idUSTRE73910C20110410>, DA 7/17/11]//RS

As it celebrates the pioneering flight on April 12, 1961 that made Gagarin the first man in space, Russia nears another milestone: with the retirement of the U.S. shuttle program this year, it will be the only nation fit to provide rides to the International Space Station. It is a distinction for a country with a history of space firsts, beginning with the 1957 launch of the satellite Sputnik. U.S. space agency NASA pays a newly raised price of nearly $63 million each time it sends an astronaut to the orbital station aboard a Russian Soyuz craft from Russia's Baikonur Cosmodrome in Kazakhstan -- the launch pad for Gagarin's flight. But half a century after Gagarin's 108-minute voyage put the Soviet Union ahead in the Cold War space race, critics charge that reliance on Soviet designs as cash cows has stunted innovation, and that Russia has irretrievably lost its edge. "While we bask in the glory of having the only operating spacecraft, we are only making money off old rockets," said Vladimir Gubarev, the Soviet spokesman for the 1975 Apollo-Soyuz program, which achieved the first docking of U.S. and Russian spacecraft.

### Terminally non unique- Russia’s defense industry has no future- no investment, low morale, outdated equipment

Grove, 7/12 [Thomas Grove, Reuters correspondent to Russia, “UPDATE 1-Russia's Medvedev urges army to import weapons,” July 12, 2011, <http://www.reuters.com/article/2011/07/12/russia-medvedev-arms-idUSLDE76B1FI20110712>, DA 7/17/11]//RS

GORKI, Russia, July 12 (Reuters) - President Dmitry Medvedev, leader of the world's second largest arms exporter, urged the Russian military on Tuesday to buy weapons from abroad in order to ensure its forces are properly armed. The comments highlight increasing concern over Russia's decrepit arms industry and raise doubts that Moscow can complete an ambitious military modernisation programme. "You shouldn't buy junk," Medvedev told Defence Minister Anatoly Serdyukov and Deputy Prime Minister Sergei Ivanov, who oversees the defence sector for the government, at his residence just outside of Moscow. "If they (domestic arms makers) offer equipment which does not satisfy you, place your orders with other firms, or, ultimately, import them," Medvedev said. Russia signed an agreement last month to buy two Mistral class helicopter carriers from France in a 1.2 billion euro ($1.72 billion) deal, the first major foreign arms purchase in the two decades since the fall of the Soviet Union. Serdyukov was due to present the findings of a probe into arms contract failures after a top weapons designer said this year's contracts were doomed to fall short of targets . Russia's once - proud defence industry that armed Soviet satellites and allies during the Cold War has stagnated due to lack of financing and corruption. "I think Russia's defence industry doesn't have much of a future strategically. There are pockets of excellence or competance that will survive, but in general there is no energy there to sustain any steady growth or development," defence expert Pavel Podvig said . Prime Minister Vladimir Putin has promised to spend nearly 20 trillion roubles to rearm Russia's army, suffering from years of lack of investment, low morale and outdated equipment. Serdyukov said poor quality and overpricing of domestic arms were among the obstacles stopping the ministry from buying a remaining 230 billion roubles ($8.21 billion) worth of weapons out of a planned 750 billion in expenditures this year. A top weapons designer said last week that procurement failures were due to a lack of cooperation with the Defence Ministry. Analysts say the row stems from unaccountable price rises for key armaments, which the ministry refuses to approve. "You need to buy quality equipment at transparent prices, and not those put forward by certain companies," Medvedev said. Medvedev has repeatedly warned Russia's notoriously corrupt defence sector to clean up its act and this year sacked several industry chiefs over what the Kremlin said were unfulfilled contracts.

[Russia’s defense industry is also a part of the aerospace sector and therefore affects it as well.]

## Link

### No link- Russian aerospace will collapse inevitably- safety concerns

Reuters, 6/21 [Reuters, “Russia’s Civil and Military Aerospace Industry,” <http://www.reuters.com/article/2011/06/21/us-russia-aerospace-idUSTRE75K34D20110621>, DA 7/17/11]//RS

SAFETY CONCERNS Russian planes have been involved in two fatal crashes in the past 18 months, most notably the incident that killed Polish President Lech Kaczynski and 95 other passengers in April 2010. The most recent crash occurred when a passenger jet caught fire while trying to land in north-western Russia on Monday, killing 44 people and leaving eight survivors badly hurt. Both planes were Soviet-era Tupolev models. Russian President Dmitry Medvedev has swapped his Tupolev Presidential plane for a French-made executive jet.

### No link- Other rising countries will challenge Russia’s aerospace- Europe, China and Japan

Cook, 90 [Carol L. Cook, Professor of Aerospace Sciences at Yale University, “The Aerospace Industry: Its History and How it Affects the U.S. Economy,” <http://teachers.yale.edu/curriculum/search/viewer.php?id=new_haven_90.07.06_u>, DA 7/17/11]//RS

And, when Europe is unified, its Aerospace Industry is going to gain new impetus. Part of this will come from the gradual trend away from nationalistic rivalries toward a more perceptive and aggressive leadership. France has been advocating this sort of approach for many years, but could not implement it in the multi-national world that has been Western Europe. Leadership of the new and economically more powerful pan-European Aerospace Industry is almost certainly going to devolve onto French shoulders. Britain, West Germany, and Italy will all play key roles in the fields of technology, finance and marketing, but France alone among the major European powers has displayed the necessary combination of imagination, planning capacity and foresight to provide effective leadership in the world market. The French have been instrumental in establishing a proto-European Aerospace Industry--The Airbus Industry Consortium--that has demonstrated it can compete technologically with the U.S. The French also showed early on that they had the courage of their convictions in pulling out of NATO to avoid what they considered a too-great and too-long dependence on U.S. technology. The Chinese are also getting more into the Aerospace Industry. The People's Liberation Army Air Force of China is pursuing aircraft update projects and the phased development of two new designs in a forced modernization program that is structured to fit government-imposed austerity constraints. The Ministry of Aerospace Industry in China is coordinating a fundamental shift from military to commercial and export-oriented production in its factories throughout China as part of a plan to modernize the China industrial base with Western assistance. Ten years of political "openness" in China have created a strong environment for Aerospace manufacturing. Chinese factories build more than 20 types of bombers, fighters, trainers, and helicopters. This is a very strong base for the design and production of future aircraft for world markets. To increase efficiency, safety and aircraft comfort, Chinese design bureaus, factories and sub-system manufacturers are beginning to compete for projects. Joint ventures with foreign companies have helped introduce Western manufacturing equipment, technology and procurement philosophy in China. Japan is equally becoming strong in the Aerospace market. Japan is set to launch its first spacecraft to the Moon, a mission indicative of both Japan's interest in future lunar exploration and the maturing of space program capacities in the Pacific Basin. Large Japanese engineering companies have begun to spend millions of dollars of their own funds to develop technology that could be used for a manned lunar base. The Japanese companies hope these technology efforts will enable them to participate with the U.S. in the development of a manned lunar base early in the 21st Century.

### Turn—Plan causes investment in Russian Aerospace

Bernstein ’99 [David Bernstein, member of the Center for International Security and Cooperation at Stanford University, “Commercialization of Russian Technology in Cooperation with American Companies,” June 1999, <http://iis-db.stanford.edu/pubs/10230/bernstein99.pdf>, DA 7/31/11]//RS

Access to Technology In selected fields where the Russians possess superior technologies or the background technology to do cutting-edge R&D, U.S. companies have sought access to this technology to improve their own products’ performance and/or cost. In most of these cases the program evolves into R&D that produces still more advanced technology. The potential for the Russian partner to form a sustainable business can range from virtually zero to quite high. A sustained research relationship and a sustainable business do not always coincide, however. The long-term business depends on both the sharing of rights in the research and the involvement of the Russian partner in aspects of commercialization beyond the research work itself. Cost-effective R&D This overlaps the previous category in that some key background capability is necessary to perform cost-effective R&D; however, there need not be unique or superior technology resident in the Russian organization. In addition to the wage differential, the Russian organization may have a testing facility, for example, that would be costly to replicate and/or that can be operated at significantly lower cost than existing similar facilities in other countries, including the United States. Here too the potential for the Russian partner to form a sustainable business varies widely. Access to Qualified Personnel This overlaps the previous two categories. There are fields in which there is a shortage of qualified personnel in the United States. The primary example in the cases studied herein is software engineers and programmers. Groups of these personnel in Russia often have skills not found in their American counterparts and/or have the advantage of having worked together in teams for several years. The potential to develop a sustainable business is again variable, but can be high if the Russian partner becomes increasingly indispensable and/or of proven value to other possible U.S. partners. The population of potential U.S. partners may be very large in this case. Utilization of Proven Systems There is one sector in this study, rocket propulsion, in which the Russians have highly developed and proven systems that can have a major impact on the competitiveness of U.S. spacebased telecommunications systems. In this field the dollar volume of both sales and projects as well as the potential for building a sustainable business are high. In these ventures the U.S. partner sought to commercialize existing technology which was already embodied in working systems, even though it has also supported additional R&D. Nonproliferation and Demilitarization Private U.S. companies do not have a business motivation to inhibit proliferation and military production. The U.S. government, however, does work toward this end, and endeavors to involve private U.S. companies by providing financial and other incentives. U.S. companies interested in investing for other reasons often view U.S. government programs as a means to reduce costs and risks. Other U.S. government-sponsored programs are operated by enterprise funds and international financial institutions. The government’s objective may be economic development as opposed to or in addition to nonproliferation and demilitarization, but the concept of shared cost and risk is essentially the same. This study does not deal specifically with cases of such shared risk, although some of the cases do involve such projects. The concept is extremely important, however, and whether the U.S. government should use such mechanisms to pursue its policy objectives, and, if it should, how best to make these programs effective is a subject of considerable controversy.

### Empirically proven- Boeing deal

Bernstein ’99 [David Bernstein, member of the Center for International Security and Cooperation at Stanford University, “Commercialization of Russian Technology in Cooperation with American Companies,” June 1999, <http://iis-db.stanford.edu/pubs/10230/bernstein99.pdf>, DA 7/31/11]//RS

Both Boeing’s Commercial Airplane Group (BCAG) and the Boeing Information, Space and Defense Group (BISDG) have many projects in Russia.1 In 1993–1997 Boeing funded over $1 billion worth of contracts with the Russian aerospace industry. Though it is not easy to estimate the labor effect of these programs, there is reason to believe that it is measured in tens of thousands of jobs, not counting the multiplication effect. Many of these are well-paid jobs for technical personnel. The share of Russian programs in Boeing’s outsourcing network is still relatively low, however, and does not create any dependency on either side. Boeing’s operating approach to date has been to work by contract with the Russian enterprises. In general Boeing has not taken the approach of hiring individual scientists or engineers directly and has not encouraged any of them to leave their institutes to seek employment with Boeing. Neither has Boeing encouraged any of them to start their own companies. In addition, Boeing has not hired Russian engineers to bring them to the United States. Boeing believes that its approach is the best way to help Russia maintain its core capabilities and to ensure Boeing’s access to the best technology and cooperation available without contributing to the brain drain of top Russian scientists and engineers. At every step of the way Boeing has kept the Russian government informed of its activities and plans in Russia. This, and a clear demonstration of long-term commitment, has resulted in good cooperation from the government as well as the institutes on the research projects. Fundamental differences in the activities of BCAG and BISDG lead to very different operational practices in their respective cooperative ventures. The cooperative ventures of BCAG are primarily R&D or material-certification activities that are not initially on critical paths for the design or production of Boeing aircraft, although they may achieve that status in the future. In addition, most of these activities are relatively small and do not require complex integration of the work of the two partners. BISDG’s cooperative ventures are generally large system-development projects, with critical dependence on the work of both partners. As a result, a systems-integration management approach is used. This has a profound impact on the working relationship between the partners. This situation is complicated further by the fact that some programs are commercial, and others are funded by the U.S. government and therefore have a host of different contractual requirements which Boeing (as prime contractor) must impose on its Russian partners (as subcontractors).

**Plan solves Russian aerospace industry**

**Bernstein ’99** (David, member of the Center for International Security and Cooperation at Stanford University, http://scholar.google.com/scholar?q=American+Aerospace+hiring+of+Russian+engineers&hl=en&btnG=Search&as\_sdt=1%2C23&as\_sdtp=on, AM)

This can be illustrated by comparing subsectors of aerospace. Cooperative technology commercialization in aviation and space are very different. In the latter, **American partners are utilizing major systems, such as Proton boosters, designed and manufactured in Russia**. In aviation, there are two types of ventures. In the first, American companies (e.g., Boeing) are contracting for diverse elements of research, engineering, and testing, which they then incorporate into aircraft manufactured outside of Russia. **In these cases, the technology transfer is largely, but not completely, from Russia to the United States**. There are also projects, such as the IL96, in which U.S. companies (e.g., Pratt &Whitney, Collins) have entered into a joint venture for the production of Russian airliners utilizing U.S.-developed engines and avionics. The ultimate plan is that many of these components will be manufactured in Russia. In this case, the main technology transfer is from the United States to Russia. The financial viability of the IL96 is not yet assured as sales have been very low. **The international space ventures have been a major factor in the revitalization of the Russian space industry whereas the civil aviation industry is still in a precarious financial condition with very few sales of aircraft.**

## Internal Link

### No internal link- US-Russia economic relations will always fail- bureaucratic obstacles, corruption, and uneven democratic development in Russia

Good, 6/21 [Allison Good, correspondent for the Times Picayune, “U.S. and Russia are strengthening their relationship, Ambassador says,” June 21, 2011, <http://www.nola.com/business/index.ssf/2011/06/us_and_russia_are_strengthenin.html>, DA 7/18/11]//RS

Beyrle, however, noted that there are still significant obstacles overshadowing the U.S.-Russia economic relationship. "Russia is still a tough place to do business because there are bureaucratic obstacles and corruption is an enormous problem," he continued. "For example, the United States is constantly fighting protectionist lobbies that want to keep American beef and poultry out of Russia." American initiatives to improve trade relations with Russia include working to support Russia's membership in the World Trade Organization. According to Beyrle, this will "allow the United States to benefit from the free movement of goods and services." The United States is also concerned with the uneven democratic development in post-Soviet Russia and popular calls for more governmental accountability. "

### Russian aerospace not key to their economy- Russia is not competitive in aerospace

Crane and Usanov, 10 [Keith, director of the RAND Corporation’s Environment, Energy and Economic Development Program, and Artur, completing his doctorate in Policy Analysis at the Pardee RAND School, “Role of High-Technology Industries,” Peterson Institute for International Economics]

Space is not a dynamic industry in the global economy. Commercial satellite launches have been fewer than expected as fiber optic cables have satisfied most of the increased demand for communications capacity despite the extraordinary growth of the internet. Most launches are still purchased by governments. The space program in the United States appears to be in a period of retrenchment, and in Europe it also faces budgetary pressures. Although China and India have expanding programs, they tend to favor their own manufacturers. Russia's good track record and budgetary pressures in the United States provide room for continued sales of launches and rockets as demand for observation satellites remains, but the industry does not show signs of dynamic growth. New rocket designs appear to be keeping Russia competitive. Civilian aviation presents a different story Within Russia, there is a debate about whether the Russian industry will be able to maintain stand-alone capacity to assemble civilian aircraft or would be better off collaborating with Western manufacturers. ‘Western companies have complimented Russian capabilities in design, precision engineering, especially turbine blades, and sophisticated materials but have difficulty in acquisitions or greenfield investments, in part because of security concerns and high levels of corruption. In our view, despite the concerns of Russia's military establishment, the answer is clear: Russian companies have done well collaborating with the international industry but have failed when they have attempted to go it alone. Russia’s successes with joint ventures and the failure of former Soviet products on international markets show the future of the industry.

## Impact

### No timeframe- Russia has already announced it will maintain its aerospace projects at least through 2015

Augustine Commission, 9 [The Augustine Commission, “Seeking a Human Spaceflight Program Worthy of a Great Nation,” October 2009, Review of US Human Spaceflight Plans Committee, p. 55-56, <http://www.docstoc.com/docs/13564673/Review-of-US-Human-Spaceflight-Plans-Committee---Final-Report>, DA 7/19/11]//RS

Our ISS international partners issued a joint statement at a July 2008 Heads of Agency meeting calling for continuation of ISS operations beyond 2015. Russia has declared publicly that it intends to continue operations after 2015, independent of the U.S., if necessary. NASA believes that this is not technically feasible, but the comment is illustrative of the international reaction to the current ISS plan. Projected lifetime of major International Space Station elements indicating the need for recertifying many elements if the International Space Station is extended to 2020. The commitment to use commercial vehicles for the ISS resupply is one of the more innovative aspects of the current program. The prospect of an ISS resupply market is already stimulating risk-taking industries to develop new launch vehicles and capsules. However, termination of ISS would abruptly end that market in 2015 after fewer than five years of commercial resupply operations. This may not provide enough opportunity for the new industries to grow to maturity, and in some cases would likely threaten the survival of their efforts in this area.

## AT Russia Democracy Scenario

### Turn- Democratization of Russia empirically further destroys our relations and makes the DA terminally nonunique- Our “help” is perceived as antagonistic

Mooney, 5 [Colonel Frederick W. Mooney, “US Russia Policy: Time to Put the Brakes on Democratic Reform,” March 18, 2005, <http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA434880>, p. 14, DA 7/19/11]//RS

US/Russia relations have deteriorated since the fall of the Soviet Union in 1991. Much of the antagonism between the two countries has come from US criticism of Russian policies. While some of this criticism was justified by US national interests—the security of nuclear weapons, arms sales, and nuclear assistance to Iran—much was the result of US insensitivity to the Russian situation and impatience with the pace of Russian reform. The Russian people, under the progressive leadership of Mikhael Gorbachev, Boris Yeltsin, and Vladimir Putin, have demonstrated a bold, brave commitment to freedom, democracy and free enterprise, despite lacking the essential ingredients for successful reform. History shows that without these essential ingredients, Russia’s chances of succeeding in this endeavor are not good. History also shows that people need security, both physical and economic, before the luxury of democratic civil liberties. A prosperous middle class, with a stake in a free-market social order, both facilitates democratic reform in autocratic societies and works against reversion to authoritarian rule in democratic societies. President George H. W. Bush understood this, as demonstrated in his policies encouraging evolutionary, vice revolutionary, economic reform in both Poland and China. Russia’s success in implementing reform is vital to US national interests. This paper recommends a new, constructive policy to encourage slower, deliberately planned, evolutionary reform in Russia, focusing on internal security first, then prosperity, then full democratic reform. Without such a measured approach, Russia will surely remain on the brink. Thrice since 1989, it has survived a reversion to authoritarian rule. Russia could very soon find itself in the same situation as Spain in 1936, with a grim choice between communist victory at the polls or nationalist dictatorship, and the real possibility of civil war.

### No impact- Russia won’t become a failed state

Tarlton, 8 [Lt Col Michael Tarlton, USAF, “A RESURGENT RUSSIA IN 2030? A STUDY OF THE PAST, PRESENT, AND POSSIBLE FUTURE POLITICAL SITUATION WITH THE RUSSIAN FEDERATION.”, February 7, 2008, AIR WAR COLLEGE AIR UNIVERSITY, Research Report Submitted to the Faculty, <https://www.afresearch.org/skins/rims/display.aspx?moduleid=be0e99f3-fc56-4ccb-8dfe-670c0822a153&mode=user&action=researchproject&objectid=74bdbda7-1439-4054-bc3b-0ae57a386cc3>, DA 7/31/11]//RS

The least likely scenario is a failed state. Russia has vast economic resources in her oil, gas, and precious metals. Thus, even faced with rampant corruption and large demographic issues, save the improbable collapse of oil prices, it is highly unlikely the Russian economy will collapse. Given the current Putin style of power consolidation and sovereign democracy, there is very little chance his power base will allow Russia to spiral into a failed state. There is too much money at stake and the available domestic resources are prevalent enough to prevent such a catastrophic event. However, it is interesting to note that Putin himself used the threat of a Russian Federation collapse in order to justify his current political power consolidation.87

## AT Russian Aerospace good- Authors biased

### Their authors were paid off to portray the program as safe and cooperative to get information out of NASA or its Russian counterpart

Cowing, 2 [Keith Cowing, journalist for NASAWatch, “Space Station Tensions,” American Scientist: Volume 90, p288, May-June 2002, <http://www.jstor.org/stable/27857673>, DA 7/19/11]//RS

But much of that experience was acquired too late to affect the ISS. This is unfortunate, since it contains equipment nearly identical to that used on Mir. Oberg describes in detail the ways in which Russian hardware did not meet the operational and safety specifications of the ISS, standards that NASA regularly waived. As a result, astronauts risk permanent hearing damage from noisy Russian modules, which lack sufficient protection from micrometeoroids and orbital debris. Both sides sought to keep as much detail as possible about the operation of Mir and the tensions of joint tenancy out of the public eye, portraying the program as safe, cooperative and meaningful, although as Oberg chronicles here, it was anything but that. As editor of NASA Watch during this period, I can vouch that this penchant for secrecy bordered on an obsession. Getting information out of NASA or its Russian counterpart was exceedingly difficult.

## AT Russia- Iran Prolif Scenario

### Non unique link- Iranian prolif is inevitable

Gladkyy, 3 [Oleksandr Gladkyy, is an Edmund S. Muskie Fellow in international affairs at Southwest Missouri State University, “American Foreign Policy and U.S. Relations with Russia and China after 11 September,” World Affairs, Vol. 166, No. 1 (SUMMER 2003), pp. 3-23, http://www.jstor.org/stable/20672674, DA 7/19/11]//RS

Russia and Iran. Moscow's provisional agreement with Iran, signed in the 1990s, to help build five nuclear reactors in Iran irritates the United States greatly because the United States strongly believes that Iranians are not just interested in the peaceful use of the atom but are working on a weapons program, too. Therefore, the United States strongly opposes the spread of WMD and nuclear technologies from Russia to U.S. rivals. 99 However, the Russian Federation continues its nuclear assistance to Iran and is currently building a nuclear reactor in Bushehr. Not surprisingly, the United States is pressuring Russia to terminate the project or to take strict measures to contain the proliferation risk. To make matters worse, in August 2002 Russia announced that it had approved a new ten year nuclear cooperation program with Tehran, which would include the building of another nuclear power plant in Ahwaz, one hundred kilometers from the Iraqi border.100 The announcement stunned Washington, coming less than a month after it agreed to a confidence-building $20 billion aid package to help Russia dismantle its weapons of mass destruction. Furthermore, Russia has not stopped the construction of another four reactors, and there is some evidence that "[s]ome Russian specialists are still helping the Iranians obtain the know-how for other parts of the nuclear cycle," said U.S. ambassador to Moscow Alexander Vershbow. Consequently, the United States wants Russia "[t]o crack down more effectively on other transfers of technology to Iran, both for WMD and for ballistic missiles."101 One of Secretary of Defense Donald Rumsfeld's highest priorities has been ending Russian arms and technology sales to states that support terrorism, particularly Iran.102 Similar ly, according to Colin Powell, one of the biggest disagreements between the United States and Russia "[h]as to do with our very strong concern about Russian nuclear weapons and ballistic missile technology that is still finding its way to Iran. Solvency Takeouts No solvency- NASA will not have adequate funds to sustain the plan Hotz, 7/9 [Robert Lee Hotz, correspondent for the Wall Street Journal, “One Last Spin Around the Planet,” July 9, 2011, Wall Street Journal, DA 7/17/11]//RS Despite the celebratory mood surrounding Friday's launch, NASA faces major political and budgetary hurdles in Washington. There is growing bipartisan criticism on Capitol Hill of the agency's leadership, prompted by nagging disputes over the design of next-generation crew capsules and heavy-lift rockets. With the retirement of its shuttles, NASA plans to rely on Russia to transport American astronauts and cargo to the space station until 2016 or so. After that, U.S. commercial space-taxis are slated to take over the job. But there is still no consensus on what technology and manned missions NASA will focus on beyond the space station, particularly to probe deeper into the solar system. As a result, many experts fear there could be a stalemate, in which NASA tries to keep open a variety of options but ends up without adequate funds to aggressively pursue any of them. Lockheed Martin CP In particular, Lockheed Martin has been a leader among the U.S. aerospace industry in developing partnerships with Russia, 8 and "Lockheed Martin's pitch to promote its space partnerships with Russia is based on the need to make the world safer by engaging thousands of highly skilled Russian aerospace engineers and scientists in commercial pursuits, thereby fulfilling cooperative threat reduction objectives. Moreover, because this is being done on a company-to-company basis, there is no expenditure of public funds and the presence of meaningful opportunities to affect real change in the way business is carried out in Russia. . . . This commercial cooperation promotes accountability and adherence to the international export control regimes. Lockheed Martin's business may be more effective than U.S. diplomatic efforts and sanctions in persuading Russia to steer clear of cooperation with rogue countries."

## 2AC Russian Relations/Aerospace DA

## Uniqueness

### 1. Relations low- Tensions rise over the visa ban

Rogin, 7/29 [Josh Rogin, Foreign Policy correspondent for The Cable, “Russia threatens to wreck the reset,” <http://thecable.foreignpolicy.com/posts/2011/07/26/russia_threatens_to_wreck_the_reset>, DA 7/31/11]//RS

Russia has threatened the Obama administration that it will end cooperation on Iran and prevent the transfer of material to Afghanistan if Congress passes a law criticizing Russian human rights practices. The White House argues that the U.S.-Russian "reset" of relations has had three positive results: the New START nuclear reductions treaty, Moscow's cooperation in sanctioning Iran, and approval (for a price) for U.S. military goods to transit Russian territory on the way to Afghanistan. But Russia is now using two of those three points as leverage to pressure the administration to get Congress not to pass a bill that would ban visas for Russian officials implicated in human rights crimes. The legislation, called the Sergei Magnitsky Rule of Law Accountability Act of 2011, is named after the anti-corruption lawyer who was tortured and died in a Russian prison in 2009. The bill targets his captors, as well as any other Russian officials "responsible for extrajudicial killings, torture, or other gross violations of human rights." The administration admitted the Russian threats in its official comments on the bill, obtained by the The Cable. "Senior Russian government officials have warned us that they will respond asymmetrically if legislation passes," the document stated. "Their argument is that we cannot expect them to be our partner in supporting sanctions against countries like Iran, North Korea, and Libya, and sanction them at the same time. Russian officials have said that other areas of bilateral cooperation, including on transit Afghanistan, could be jeopardized if this legislation passes." "The Russian Duma has already proposed legislation that would institute similar travel bans and asset freezes for U.S. officials whose actions Russia deems in violations of the rights of Russian citizens arrested abroad and brought to the United States for trial," the administration said. "We have no way to judge the scope of these actions, but note that other U.S. national security interests will be affected by the passage of the S. 1039." The Washington Post first reported the existence of the administration's comments today and led with the news that the State Department has quietly put Russian officials connected with the Magnitsky killing on a visa blacklist. The blacklist appears to be a way for the administration to preempt further legislation. "Secretary Clinton has taken steps to ban individuals associated with the wrongful death of Sergey Magnitskiy from traveling to the United States. The Administration, therefore, does not see the need for this additional legislation," the administration said in its comments

### 2. Relations failing- Missile defense agreements must come first

Kosyrev, 5/3 [Dmitry Kosyrev, RIA Novosti political commentator, “U.S.-Russian relations have been reset. What next?,” RIA

Novosti Russian News publication, http://en.rian.ru/analysis/20110530/164310228.html, DA 7/31/11]//RS

Both countries' media write that the United States and Russia want two different things from missile defense. Washington wants absolute security from any missile attack, whereas Moscow wants to know for sure whether Americans have stopped preparing for a nuclear war against Russia. The two countries simply think differently and are talking about two different things, **and they are unlikely to ever understand each other**. Medvedev and Obama, who have been working tenaciously to cut strategic and offensive weapons over the past two years, clearly have the stamina to reach an agreement on missile defense as well. Moreover, Russia has said more than once that the New START Treaty is worthless without an agreement on missile defense.

### 3. Russian relations are resilient – mutual deterrence

Fenenko 6/21 [Alexei, Leading Research Fellow, Institute of International Security Studies of RAS, “The cyclical nature of Russian-American relations,” June 21, 2011, <http://en.rian.ru/valdai_op/20110621/164739508.html>, DA 7/31/11]//RS

There is nothing special or unusual about the current difficulties. Over the past twenty years, both Russia and the United States have experienced several cycles of convergence and divergence in their bilateral relations. It seems that Moscow and Washington are doomed to repeat these cycles time and again. Such changes in bilateral relations are no mere coincidence. Russia and the United States base their relations on mutual nuclear deterrence. The material and technical foundations for Russian-American relations differ little from those underpinning the Soviet-American relations of the 1980s. Thus, these cycles of Russian-American rapprochement are due to two factors. First comes the desire to consistently reduce aging nuclear systems so that during disarmament neither party risked destroying the military-strategic parity. Second, the reaction to a major military-political crisis after which the parties seek to reduce confrontation and update the rules of conduct in the military-political sphere. After confronting these tasks, Russia and the United States returned to a state of low intensity confrontation.

### 4. US-Russian relations low- Russia’s alliance with Venezuela and threats of station bombers in Cuba

Carpenter & Logan, 7 [Ted Galen Carpenter and Justin Logan, “Cato Handbook for Policymakers,” p. 557, CATO Institute, March 26, 2007, <http://www.cato.org/pubs/handbook/hb111/hb111-53.pdf>, DA 7/18/11]//RS

Both governments need to adopt more cautious policies. Secretary of State Condoleezza Rice once famously dismissed the concept of spheres of influence as an obsolete notion, and that view has become all too common among America’s foreign policy elite. But that doctrine is very much alive, and U.S. and Russian leaders ignore that reality at their peril. If a new cold war emerges, Washington will have done much to invite it. But Russia has become needlessly provocative as well. The dark hints in summer 2008 that it might station bombers in Cuba were reckless. For Americans, even the possibility that Moscow might deploy a nuclear capable weapon system in Cuba brings back memories of the most nightmarish episode of the cold war—the Cuban missile crisis. No American government would tolerate such a move—nor should it. Moscow’s growing flirtation with Venezuela’s Hugo Chavez, an obnoxious nemesis of the United States, is also creating gratuitous tensions. Moscow’s joint air and naval exercises with Venezuelan military forces in September 2008 especially did not improve relations with America. Those moves likely reflect mounting Russian anger at U.S. policies that seem calculated to undermine Russia’s influence in its own backyard and even humiliate Moscow. Washington’s ‘‘in your face’’ approach is not a recent development. U.S. officials took advantage of Russia’s economic and military disarray during the 1990s to establish a dominant position in central and eastern Europe. Washington successfully engineered the admission of Poland, Hungary, and the Czech Republic to NATO in 1998—over the Yeltsin government’s objections. That expansion of the alliance was nonprovocative, though, compared with the second round earlier this decade that incorporated Latvia, Estonia, and Lithuania, entities that had been part of the Soviet Union

## Link

XA Roberts 4— US action on SBSP would not be perceived negatively by Russia—they would model our action and this would boost our cooperation.

### No link- Other issues kill US-Russian relations- Arm sales to Iran, Iraq and North Korea

Gladkyy, 3 [Oleksandr Gladkyy, is an Edmund S. Muskie Fellow in international affairs at Southwest Missouri State University, “American Foreign Policy and U.S. Relations with Russia and China after 11 September,”

World Affairs, Vol. 166, No. 1 (SUMMER 2003), pp. 3-23, http://www.jstor.org/stable/20672674, DA 7/19/11]//RS

The most dangerous threats to U.S.-Russia and U.S.-China relations are the disagreements over rogue states and Taiwan. The United States desperately wants to keep Iran, Iraq, and North Korea away from WMD and nuclear technologies, while Russia and China try to promote their economic interests by selling those countries arms and building nuclear reactors there. In a similar manner, the United States sells weapons to Taiwan, which China opposes. Because Iraq, Iran, and North Korea are of such special interest, and because the United States, Russia, and China have such different views on dealing with the rogue states, any further action is likely to aggravate relations. U.S. war against Iraq, U.S. arms sale to Taiwan, Russia's help to build four more nuclear reactors in Iran, or China's sale of materials for making chemical and nuclear weapons to North Korea will likely have negative consequences, similar to those after Kosovo, for bilateral relations. The United States, Russia, and China need to consider the interests of other nations while promoting their own interests. Otherwise, selfish behavior may ruin recent achievements in bilateral cooperation. The crises over North Korea and Iraq are going to be real tests of U.S.-Russia and U.S. China relations. If the countries manage to resolve these issues and further develop relations, it will be evidence that relations have changed substantially since the cold war.

### Link turn- Russia likes the plan

NSSO, 7[National Security Space Office, Report to the Director, “Space-Based Solar Power As an Opportunity for Strategic Security; Phase 0 Architecture Feasibility Study” October 10, 2007, <http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf>]

The SBSP Study Group concluded that should the U.S. begin a coordinated national program to develop SBSP, it should expect to find that broad interest in SBSP exists outside of the US Government, ranging from aerospace and energy industries; to foreign governments such as Japan, the EU, Canada, India, China, Russia, and others; to many individual citizens who are increasingly concerned about the preservation of energy security and environmental quality.   While the best chances for development are likely to occur with US Government support, it is entirely possible that SBSP development may be independently pursued by other capable and ambitious nations or partnerships without U.S. leadership.

## Internal Link

### No internal link- US-Russia economic relations will always fail- bureaucratic obstacles, corruption, and uneven democratic development in Russia

Good, 6/21 [Allison Good, correspondent for the Times Picayune, “U.S. and Russia are strengthening their relationship, Ambassador says,” June 21, 2011, <http://www.nola.com/business/index.ssf/2011/06/us_and_russia_are_strengthenin.html>, DA 7/18/11]//RS

Beyrle, however, noted that there are still significant obstacles overshadowing the U.S.-Russia economic relationship. "Russia is still a tough place to do business because there are bureaucratic obstacles and corruption is an enormous problem," he continued. "For example, the United States is constantly fighting protectionist lobbies that want to keep American beef and poultry out of Russia." American initiatives to improve trade relations with Russia include working to support Russia's membership in the World Trade Organization. According to Beyrle, this will "allow the United States to benefit from the free movement of goods and services." The United States is also concerned with the uneven democratic development in post-Soviet Russia and popular calls for more governmental accountability. "

## Impact

### Soft power solves the impact- It overcomes international obstacles

NSSO, 7[National Security Space Office, Report to the Director, “Space-Based Solar Power As an Opportunity for Strategic Security; Phase 0 Architecture Feasibility Study” October 10, 2007, http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf]

FINDING:  The SBSP Study Group found that no outright policy or legal showstoppers exist to prevent the development of SBSP. Full‐scale SBSP, however, will require a permissive international regime, and construction of this new regime is in every way a challenge nearly equal to the construction of the satellite itself.  The interim review did not uncover any hard show‐stoppers in the international legal or regulatory regime. Many nations are actively studying Space‐Based Solar Power. Canada, the UK, France, the European Space Agency, Japan, Russia, India, and China, as well as several equatorial nations have all expressed past or present interest in SBSP. International conferences such as the United Nations‐connected UNISPACE III are continually held on the subject and there is even a UN‐affiliated non‐governmental organization, the Sunsat Energy Council, that is dedicated to promoting the study and development of SBSP. The International Union of Radio Science (URSI) has published at least one document supporting the concept, and a study of the subject by the International Telecommunications Union (ITU) is presently ongoing.    There seems to be significant global interest in promoting the peaceful use of space, sustainable development, and carbon neutral energy sources, indicating that perhaps an open avenue exists for the United States to exercise “soft power” via the development of SBSP. That there are no show‐stoppers should in no way imply that an adequate or supportive regime is in place. Such a regime must address liability, indemnity, licensing, tech transfer, frequency allocations, orbital slot assignment, assembly and parking orbits, and transit corridors. These will likely involve significant increases in Space Situational Awareness, data‐sharing, Space Traffic Control, and might include some significant similarities to the International Civil Aviation Organization’s (ICAO) role for facilitating safe international air travel. Very likely the construction of a truly adequate regime will take as long as the satellite technology development itself, and so consideration must be given to beginning work on the construction of such a framework immediately.

### No impact- Russia won’t become a failed state

Tarlton, 8 [Lt Col Michael Tarlton, USAF, “A RESURGENT RUSSIA IN 2030? A STUDY OF THE PAST, PRESENT, AND POSSIBLE FUTURE POLITICAL SITUATION WITH THE RUSSIAN FEDERATION.”, February 7, 2008, AIR WAR COLLEGE AIR UNIVERSITY, Research Report Submitted to the Faculty, <https://www.afresearch.org/skins/rims/display.aspx?moduleid=be0e99f3-fc56-4ccb-8dfe-670c0822a153&mode=user&action=researchproject&objectid=74bdbda7-1439-4054-bc3b-0ae57a386cc3>, DA 7/31/11]//RS

The least likely scenario is a failed state. Russia has vast economic resources in her oil, gas, and precious metals. Thus, even faced with rampant corruption and large demographic issues, save the improbable collapse of oil prices, it is highly unlikely the Russian economy will collapse. Given the current Putin style of power consolidation and sovereign democracy, there is very little chance his power base will allow Russia to spiral into a failed state. There is too much money at stake and the available domestic resources are prevalent enough to prevent such a catastrophic event. However, it is interesting to note that Putin himself used the threat of a Russian Federation collapse in order to justify his current political power consolidation.87

## AT DA Turns Case

### Turn- US alliance with Russia will ensure oil use and production in the future

Barnes, 8 [Joe Barnes, Bonner means baker fellow, “US- Russia Relations: Recommendations for the Next Administration”]

The current economic downturn and decline in oil and gas prices make investment in future Russian production unattractive. But in the long term, increased Russian oil – and.we should not forget, natural gas- production will be critical in meeting world energy demand. Whatever the duration of the current global recession, economic growth will eventually return and, with it , rising demand for olil and gas. This is particularly true for China, where petroleum imports will rise as automobile use expands. Ironically, the current downturn may brighten the prospects for US private involvement in Russia’s hydrocarbon sector. Moscow has long been resistant to production as payment. This opposition may ease in an environment. of lower prices and higher borrowing cost.

## AT Russia Democracy Scenario

### Turn- Democratization of Russia empirically further destroys our relations and makes the DA terminally nonunique- Our “help” is perceived as antagonistic

Mooney, 5 [Colonel Frederick W. Mooney, “US Russia Policy: Time to Put the Brakes on Democratic Reform,” March 18, 2005, <http://www.dtic.mil/cgi-bin/GetTRDoc?Location=U2&doc=GetTRDoc.pdf&AD=ADA434880>, p. 14, DA 7/19/11]//RS

US/Russia relations have deteriorated since the fall of the Soviet Union in 1991. Much of the antagonism between the two countries has come from US criticism of Russian policies. While some of this criticism was justified by US national interests—the security of nuclear weapons, arms sales, and nuclear assistance to Iran—much was the result of US insensitivity to the Russian situation and impatience with the pace of Russian reform. The Russian people, under the progressive leadership of Mikhael Gorbachev, Boris Yeltsin, and Vladimir Putin, have demonstrated a bold, brave commitment to freedom, democracy and free enterprise, despite lacking the essential ingredients for successful reform. History shows that without these essential ingredients, Russia’s chances of succeeding in this endeavor are not good. History also shows that people need security, both physical and economic, before the luxury of democratic civil liberties. A prosperous middle class, with a stake in a free-market social order, both facilitates democratic reform in autocratic societies and works against reversion to authoritarian rule in democratic societies. President George H. W. Bush understood this, as demonstrated in his policies encouraging evolutionary, vice revolutionary, economic reform in both Poland and China. Russia’s success in implementing reform is vital to US national interests. This paper recommends a new, constructive policy to encourage slower, deliberately planned, evolutionary reform in Russia, focusing on internal security first, then prosperity, then full democratic reform. Without such a measured approach, Russia will surely remain on the brink. Thrice since 1989, it has survived a reversion to authoritarian rule. Russia could very soon find itself in the same situation as Spain in 1936, with a grim choice between communist victory at the polls or nationalist dictatorship, and the real possibility of civil war.

### No Russian democracy

Tarlton, 8 [Lt Col Michael Tarlton, USAF, “A RESURGENT RUSSIA IN 2030? A STUDY OF THE PAST, PRESENT, AND POSSIBLE FUTURE POLITICAL SITUATION WITH THE RUSSIAN FEDERATION.”, February 7, 2008, AIR WAR COLLEGE AIR UNIVERSITY, Research Report Submitted to the Faculty, <https://www.afresearch.org/skins/rims/display.aspx?moduleid=be0e99f3-fc56-4ccb-8dfe-670c0822a153&mode=user&action=researchproject&objectid=74bdbda7-1439-4054-bc3b-0ae57a386cc3>, DA 7/31/11]//RS

The least likely scenario is a failed state. Russia has vast economic resources in her oil, gas, and precious metals. Thus, even faced with rampant corruption and large demographic issues, save the improbable collapse of oil prices, it is highly unlikely the Russian economy will collapse. Given the current Putin style of power consolidation and sovereign democracy, there is very little chance his power base will allow Russia to spiral into a failed state. There is too much money at stake and the available domestic resources are prevalent enough to prevent such a catastrophic event. However, it is interesting to note that Putin himself used the threat of a Russian Federation collapse in order to justify his current political power consolidation.87 The likelihood of a fully democratic state is only slightly more probable. In order for Russia to transition into a democracy, much within the Russian Federation must change. Democracies require effective governance through free and fair election of representatives within a legal framework that guarantees representation without corruption. Democracies must allow freedom of speech and freedom of the press, as well as be governed by the rule of law with the attendant civil society. Further, a democracy must have a judicial system that guarantees the protection of private property, promotes free and fair global business practices, and most importantly, protects and promotes the rights of individual citizens. For Russia to become a democracy, it must forego 1,500 years of history and undergo radical reforms in the public sector and in the business community.

## AT Russian Aerospace good- Authors biased

### Their authors were paid off to portray the program as safe and cooperative to get information out of NASA or its Russian counterpart

Cowing, 2 [Keith Cowing, journalist for NASAWatch, “Space Station Tensions,” American Scientist: Volume 90, p288, May-June 2002, <http://www.jstor.org/stable/27857673>, DA 7/19/11]//RS

But much of that experience was acquired too late to affect the ISS. This is unfortunate, since it contains equipment nearly identical to that used on Mir. Oberg describes in detail the ways in which Russian hardware did not meet the operational and safety specifications of the ISS, standards that NASA regularly waived. As a result, astronauts risk permanent hearing damage from noisy Russian modules, which lack sufficient protection from micrometeoroids and orbital debris. Both sides sought to keep as much detail as possible about the operation of Mir and the tensions of joint tenancy out of the public eye, portraying the program as safe, cooperative and meaningful, although as Oberg chronicles here, it was anything but that. As editor of NASA Watch during this period, I can vouch that this penchant for secrecy bordered on an obsession. Getting information out of NASA or its Russian counterpart was exceedingly difficult.

## AT Russia- Iran Prolif Scenario

### Non unique link- Iranian prolif is inevitable

Gladkyy, 3 [Oleksandr Gladkyy, is an Edmund S. Muskie Fellow in international affairs at Southwest Missouri State University, “American Foreign Policy and U.S. Relations with Russia and China after 11 September,” World Affairs, Vol. 166, No. 1 (SUMMER 2003), pp. 3-23, http://www.jstor.org/stable/20672674, DA 7/19/11]//RS

Russia and Iran. Moscow's provisional agreement with Iran, signed in the 1990s, to help build five nuclear reactors in Iran irritates the United States greatly because the United States strongly believes that Iranians are not just interested in the peaceful use of the atom but are working on a weapons program, too. Therefore, the United States strongly opposes the spread of WMD and nuclear technologies from Russia to U.S. rivals. 99 However, the Russian Federation continues its nuclear assistance to Iran and is currently building a nuclear reactor in Bushehr. Not surprisingly, the United States is pressuring Russia to terminate the project or to take strict measures to contain the proliferation risk. To make matters worse, in August 2002 Russia announced that it had approved a new ten year nuclear cooperation program with Tehran, which would include the building of another nuclear power plant in Ahwaz, one hundred kilometers from the Iraqi border.100 The announcement stunned Washington, coming less than a month after it agreed to a confidence-building $20 billion aid package to help Russia dismantle its weapons of mass destruction. Furthermore, Russia has not stopped the construction of another four reactors, and there is some evidence that "[s]ome Russian specialists are still helping the Iranians obtain the know-how for other parts of the nuclear cycle," said U.S. ambassador to Moscow Alexander Vershbow. Consequently, the United States wants Russia "[t]o crack down more effectively on other transfers of technology to Iran, both for WMD and for ballistic missiles."101 One of Secretary of Defense Donald Rumsfeld's highest priorities has been ending Russian arms and technology sales to states that support terrorism, particularly Iran.102 Similar ly, according to Colin Powell, one of the biggest disagreements between the United States and Russia "[h]as to do with our very strong concern about Russian nuclear weapons and ballistic missile technology that is still finding its way to Iran. Solvency Takeouts No solvency- NASA will not have adequate funds to sustain the plan Hotz, 7/9 [Robert Lee Hotz, correspondent for the Wall Street Journal, “One Last Spin Around the Planet,” July 9, 2011, Wall Street Journal, DA 7/17/11]//RS Despite the celebratory mood surrounding Friday's launch, NASA faces major political and budgetary hurdles in Washington. There is growing bipartisan criticism on Capitol Hill of the agency's leadership, prompted by nagging disputes over the design of next-generation crew capsules and heavy-lift rockets. With the retirement of its shuttles, NASA plans to rely on Russia to transport American astronauts and cargo to the space station until 2016 or so. After that, U.S. commercial space-taxis are slated to take over the job. But there is still no consensus on what technology and manned missions NASA will focus on beyond the space station, particularly to probe deeper into the solar system. As a result, many experts fear there could be a stalemate, in which NASA tries to keep open a variety of options but ends up without adequate funds to aggressively pursue any of them. Lockheed Martin CP In particular, Lockheed Martin has been a leader among the U.S. aerospace industry in developing partnerships with Russia, 8 and "Lockheed Martin's pitch to promote its space partnerships with Russia is based on the need to make the world safer by engaging thousands of highly skilled Russian aerospace engineers and scientists in commercial pursuits, thereby fulfilling cooperative threat reduction objectives. Moreover, because this is being done on a company-to-company basis, there is no expenditure of public funds and the presence of meaningful opportunities to affect real change in the way business is carried out in Russia. . . . This commercial cooperation promotes accountability and adherence to the international export control regimes. Lockheed Martin's business may be more effective than U.S. diplomatic efforts and sanctions in persuading Russia to steer clear of cooperation with rogue countries."

### Iranian Prolif doesn’t cause war-3 reasons

Utgoff 2K[Victor A. Utgoff, “The Coming Crisis: Nuclear Proliferation, U.S. Interests, and World Order,” Institute for Defense Analyses, MIT Press 2000, P. 114, DA 7/31/11]//RS

What if the Iranian porcupine grows nuclear quills? Three elements of the Iranian myth should figure prominently in any attempt to counter an Iranian nuclear strategy. First, Iran believes it is the center of the universe and the eventual seat of paradise; hence, it is culturally and morally stronger than any of its adversaries, especially the corrupt West. Moreover, its Zoroastrian and Shi’a traditions instill in Iran the confidence that it is destined, sooner or later, to defeat the forces of evil through the power of its righteousness and the favor of God. Therefore, it is not necessary or even desirable to pursue extremely risky strategies, especially ones in which the stakes are high (survival) and the chances of prevailing nearly nonexistent. Second, Iran will assume (as did Saddam Hussein) that the Great Satan does not have the mettle to stand up to pain and suffering – that the United States is unlikely to risk significant casualties in any conflict with Iran. Third, Iran’s concept of “victory” is driven by its sense of shame over past foreign domination and the determination to defend its territorial, cultural, and religious integrity. It is not necessary that Iran defeat its adversaries, merely that it prevent their violating Iran’s frontiers. Iran’s national myth will constrain its use of nuclear weapons. Because it sees the United States as the Great Satan that operates without moral constraints and with the aim of destroying the Islamic way of life, Iran has to assume that if it uses its nuclear weapons, the United States will not hesitate to retaliate in kind. The Iranians also contend that Iranian lives are expendable in the U.S. view, as demonstrated in its failure to condemn Iraqi gas attacks against Iran. Given these assumptions, Iran almost certainly will assume that U.S. retaliation would be far greater that the degree of damage Iran could inflict on the United States, Saudi Arabia, or Israel. Similarly, Iran (like its Arab neighbors) is acutely aware of Israel’s vast military superiority, and its ability and willingness to punish far in excess of any pain Iran could inflict on Israel. Iran is also aware of Israel’s national myth: that it will fight to the last Israeli to defend its right to exist and will be little constrained by international criticism.

## AT Proliferation Scenario

Proliferation won’t escalate to war

Pollard 09 [Justin, associate analyst at the University of California Berkeley, April, College of Letters and Science Department of Economics, “Nuclear Proliferation and the Detterence of Conventional War: A Proposal”]

Imagine a situation in which engaging in a dispute involved risking the possibility of such unbearable destruction that a participant would never enter that dispute in the first place. This explanation may be an equally convincing story when trying to describe the consequences of nuclear proliferation. The spread of these weapons could, in fact, could make the expected cost of conventional war so high (due to the potential for a nuclear strike) that no country would be willing to risk its consequences. If this logic is valid, the spread of nuclear arms could actually contribute to a more peaceful world.

Prolif impacts empirically denied – 13 countries have proliferated without war

Todd S. Sechser, Professor at the University of Virginia, Dec 30, 2008, “Nuclear Weapons,” http://www.faculty.virginia.edu/tsechser/Sechser-Haas-2009.pdf

The idea that the United States should aggressively pursue nuclear nonpro- liferation rests in part on a widespread belief that the spread of nuclear weapons would destabilize international relations. But this pessimistic view confronts one incontrovertible fact: nuclear weapons proliferated to thirteen states1during the six decades since the dawn of the nuclear age,yet the world has not witnessed a single preventive or preemptive nuclear war, accidental nuclear attack, or instance of nuclear terrorism. Motivated by this striking observation, scholars known as “proliferation optimists”have suggested that nuclear proliferation may,in fact,exert a stabilizing force on international pol- itics. They argue that nuclear states new and old will be highly motivated to avoid taking actions that might risk nuclear conflict. The core ofthe optimists’position is that the cost ofa nuclear war would be so grave that even the world’s most risk-prone leaders will find themselves reluctant to risk fighting one. As one prominent optimist, Kenneth N. Waltz, has argued,nuclear states quickly recognize that engaging in aggressive or risky behavior that could prompt nuclear retaliation is “obvious folly”(Sagan and Waltz 2003, 154). Because a nuclear conflict could place a state’s very survival at risk,national leaders have powerful incentives to manage their arsenals with care and caution. Moreover, according to this view,even a few nuclear weapons constitute such a powerful deterrent to aggression that they obviate the need for high levels of spending on conventional arms. According to the optimists, then, the spread of nuclear weapons is likely to deter large-scale wars, restrain conventional-arms races, and produce greater international stability.

Wars don't escalate - countries know the risks

John Mueller, Professor of political science and UNC Chapel Hill, " The Escalating Irrelevance of Nuclear Weapons," 'The absolute Weapon Revisted, 2000, p. 82

As this suggests, the belief in escalation may often be something of a myth. The Cuban missile crisis suggests that the major countries during the Cold War were remarkably good at carrying out - and working out - their various tangles and disagreements far below the level of major war. I think the trends with respect to major war are very favorable. However, since peace could be shattered by an appropriately fanatical, hyperskilled, and anachronistic leader who is willing and able to probe those parameters of restraint, it would be sensible to maintain vigilance. Still, as Robert Jervis has pointed out, "Hitlers are very rare." It may be sensible to hedge again the danger, but that does not mean the danger is a very severe one.

Proliferation predictions fail – no consistent methodology for prediction

Yusuf 09 (Moeed, Fellow at the Frederick S. Pardee Center for the Study of the Longer-Range Future at Boston University January, “Predicting Proliferation: The History of the Future of Nuclear Weapons,” Brookings Institute)

 Another striking fact is the methodological weakness of many forecasts. While the absence of details on data gathering is understandable in intelligence reports, even the public academic and think tank literature is practically devoid of any robust methodology to guide estimates of the nuclear future. Other than NPA’s 1960 and 1961 studies on Nth country proliferation, where various indices were used to conduct the analysis, no other work explicitly stated the basis for its projections. For the most part, broad overarching claims were made in highly deterministic tones. This is especially true for the 1965-1991 time periods, when a number of Nth powers were being identified as potential proliferators. For example, Beaton’s 1966 prediction of a 32-member strong nuclear club by 1995 seemed to be little more than conjecture. The lack of methodology in part explains the presence of a number of widely varying forecasts during the analyzed time frame

Prolif inevitable – Israel, Pakistan, India and North Korea

Hague 2008 **- Secretary of State for Foreign and Commonwealth Affairs** [William, “Preventing a new age of nuclear insecurity,” 7/23/2008, <http://docs.google.com/viewer?a=v&q=cache:ifY_CN58ovYJ:www.iiss.org/EasySiteWeb/getresource.axd%3FAssetID%3D18705%26type%3Dfull%26servicetype%3DAttachment+%22preventing+a+new+age+of+nuclear+insecurity%22&hl=en&gl=us&pid=bl&srcid=ADGEESggwwcd1dNzwYr0sVs8L49P-Zen38bV2jzNuIn7Acecz6rF98zeT34lPKbuDVKfLN0Yhe1M7jC30ulzKjNIKhqNhVl7bXR4JMd9bGadgJ46ej8887rS-ZuvBYgoO5aUlVbo-1Aq&sig=AHIEtbS0dU027xHWMsYloWkaipLrmCUilQ>, accessed 6/27/11]

The evidence for this is clear: more countries have acquired or attempted to acquire nuclear weapons technology despite progress that has already been made in reducing nuclear stockpiles worldwide. The US and Russia, which together possess 95% of the world‟s nuclear weapons, have destroyed over 13,000 warheads between them since 1987. It is a little-known and startling fact that one in ten homes, schools and businesses in the US receives electricity generated from dismantled Russian nuclear warheads, and that by 2013 the equivalent of 20,000 warheads will have been turned into nuclear fuel - enough to power the entire United States for about two years. Concrete and progressive steps to reduce arsenals have been taken, without denting the trend towards an increasing number of nuclear weapons states. Although some countries have renounced nuclear weapons programmes or given up nuclear weapons on their soil, there are many more nuclear weapons powers today than when the Non-Proliferation Treaty was created, which aimed to limit the possession of nuclear weapons to five recognised powers: the United States, Russia, China, Britain and France. Today the global picture is far more complex – with Israel an undeclared nuclear power which has not signed the NPT, Pakistan and India as declared nuclear powers also outside the Treaty, and North Korea which pulled out of the Treaty and declared itself a de-facto nuclear power. In the light of this, not only is achieving nuclear disarmament now far harder than it was even at the height of the Cold War, but the risks of nuclear confrontation and the spread of nuclear technology are greater. Furthermore, unilateral disarmament by one or more of the nuclear weapons states would not change the rationale which drives some countries to seek nuclear capability.

**\*\*\*A2—Saudi oil DA\*\*\***

### Saudi Arabia’s oil consumption is increasing—They Won’t be able to produce excess oil

### Kohl, 2011 (Keith, Editor in chief of the investment analysis Energy and Capital and weekly reports on oil and energy for his readers. “Energy and Capital: Peak oil: When Saidi Spare capacity falls short”, <http://www.energyandcapital.com/articles/peak-oil-saudis-spare-capacity/1672> July 27, 2011 [TL])

The last few nights have been restless, to say the least. And the worst part is I know exactly why I keep up my insomniac pacing. A single thought has been rushing to the forefront of my sleepless psyche: Let's hope it won't be us asking the Saudis for more oil. That's what we were left pondering after seeing firsthand how hungry China is for Canadian energy. Unfortunately, it's more likely a U.S. diplomat will be making that future phone call, apologizing to the Saudis for past grievances and promising we won't stray from their oil taps again... The real kicker is there's a good chance they'll say no. Their refusal won't come from some repressed anger, but rather the fact that all they can do is shrug their shoulders helplessly... Turns out the Saudis might not be able to feed our addiction any longer because they've fallen victim to their own racket. The Sight of Saudis Panic We've listed Saudi Arabia's varied issues countless times before. The panic, however, won't stem from the country's declining fields, or even the fact that the extra oil it can produce is heavier and more expensive to refine (that's also assuming that some European refineries can even handle the stuff)... The problem is the Saudis have gone from providing for the world's oil addiction to developing their own fix. Imagine a heroine dealer who can't sell any more of his product because he's too busy using it. And the Saudis' domestic oil consumption is heading higher — much higher. Right now, we believe they're producing about 9 million barrels per day (of course, the way they cook their books, it's hard to be sure of anything when it comes to OPEC). Last year, the Kingdom consumed approximately 2.4 million barrels per day — a 50% increase just within the last seven years. To give you a comparison, U.S. demand for crude oil and petroleum products declined by almost 4.5% during the same period. Although they have a long way to go before they reach our nation's level of dependence on the stuff, the fact that the Saudis are headed down a path to oil addiction should be alarming in itself. And think about this... If Saudi Arabia's domestic consumption is increasing by nearly 6% per year, its demand will exceed three million barrels per day by 2015 and four million barrels by 2020 — and that's in the unlikely scenario that demand growth remains steady. No Leftovers for Us Saudi Arabia is one of few countries left on a very short list that will be able to increase its domestic oil production. Depending on to whom you're listening, the Saudis can pump out an additional 2 to 3 million barrels per day. For now, let's give them the benefit of the doubt and assume they can push their output to 12 million barrels per day... Not only is that amount supposed to make up for any gaps between the world's supply and demand, but now it's practically guaranteed they'll have less available oil to export. And we've already seen those headlines. Anyone else recall last December, when Saudi oil exports fell 4.9% to around 6 million barrels per day? That's 20% less oil they're shipping than they were in 2005. We'll confess that this decline is not to blame on their rising consumption rates alone, but the Saudis themselves are expecting to see more of the same going forward. They're anticipating a decline in exports to 5.6 million barrels per day in 2020, and a fall below five million barrels per day in 2030. When the longtime kings of oil realize that the cheap, easy-to-get crude is long gone, they're going to have a difficult time subsidizing energy prices... We wince at the thought of $5 a gallon; imagine how we'd feel if we were paying only $0.60, as the Saudis are right now... Beating the Saudis to Oil Profits Even though the Saudis are headed for a Peak Oil disaster, there's certainly no shortage of revenue right now. Catching word of the $1 trillion paycheck OPEC will take home this year from its oil addicts is enough to make anyone's blood boil. That total is nearly 30% higher than 2010. And taking home the biggest purse, as we would expect, is Saudi Arabia. But no matter how indignant we are for the $228 billion Saudi payday, we'll have the last laugh... Because while they continue to rattle off unlikely production numbers and build a dependence on fossil fuels, we're busy securing our own oil wealth. As my colleague Christian DeHaemer recently explained to me with a wide-eyed grin, “Good oil is hard to find. But these guys, Keith... These guys stole $267 billion worth from right under the Saudis' noses.” So much for begging the Saudis for more oil... Perhaps they'll be asking us for a few extra barrels in the decades to come

### Now is key for renewable energy—Saudi Arabia is past peak oil, and the world is expected to pass next year.

Merchant, 2011 (Brian, Freelance writer covering energy and climate issues for Treehugger. “Treehugger: Peak Oil in 2012? Saudi Arabia’s oil overestimated by 40%, Wikileaks reveals” <http://www.treehugger.com/files/2011/02/peak-oil-2012-saudi-arabia-oil-overestimated-40-percent-wikileaks.php>, July 11, 2011 [TL])

Looks like peak oil might be even closer than we thought -- the most recent Wikileaks cable released by the Guardian has revealed that US diplomats are convinced that Saudi Arabia has overestimated its vaunted oil reserves by a stunning 40%. Saudi Arabia is the world's largest oil supplier, and is widely believed to be sitting atop the largest supply of the stuff in the world. But this revelation shows that the country may not have enough oil to keep prices from rising drastically over the next couple years. By the Saudi geologist's estimation, that means that the world may hit peak oil next year. This won't surprise many peak oilers who've long suggested we surpassed peak oil already, or those who've been predicting the event to occur this decade. Even the US military has openly predicted that the world may see severe oil shortages as soon as 2015. But hitting peak oil as soon as next year would have a momentous impact on the global economy, which is still extremely dependent on oil. As we speak, oil prices are creeping above the $100 a barrel mark. As usual, analysts have counted on the Middle Eastern nation to pump additional oil if the prices rise high enough, and threaten to choke off demand, as the Guardian notes. But this cable suggests the era when Saudi Arabia can stabilize oil demand is well past its twilight. There has never been a better and more urgent reason to begin a serious push for renewable energy and alternative fuels -- it's time to take serious action to eliminate our dependence on oil once and for all.

### SBSP would solve our energy crisis

### National Space Society, 2011 (“Space Solar Power: Limitless Clean Energy from Space” <http://www.nss.org/settlement/ssp/index.htm> January 23, 2011[TL])

The United States and the world need to find new sources of clean energy. Space Solar Power gathers energy from sunlight in space and transmits it wirelessly to Earth. Space solar power can solve our energy and greenhouse gas emissions problems. Not just help, not just take a step in the right direction, but solve. Space solar power can provide large quantities of energy to each and every person on Earth with very little environmental impact.

### US alternatives won’t kill Saudi economy or relations.

### AME Info, 03/11/07  (“Saudi economy becomes less dependent on oil” <http://www.ameinfo.com/113150.html> )

In just three years Saudi national income has almost doubled from $188 billion to $348 billion. Saudi GDP in 2006 was 4.2 per cent and even with reduced revenues is expected to be 3.5 per cent in 2007. Most observers say that even if there is a fall in oil output the country's economy will remain extremely robust. King Abdullah Economic City, a $26.6 billion project. King Abdullah Economic City, a $26.6 billion project.  related stories Dedicated Saudi Arabia Focus RSS feed  Saudi Arabia Non-oil private sector growth is expected to grow by around 6 per cent this year and be the Kingdom's main engine of economic expansion along with government spending.  Since joining the World Trade Organisation Saudi non-oil exports, mainly petrochemicals, have risen 13 per cent to a value of $20 billion. Significantly foreign direct investment in the Kingdom has more than doubled to $5.6 billion  There have been no sudden dramatic adverse effects on agency agreements and the trading sector as a result of membership of the World Trade Organisation. This is helping to underpin Saudi Arabia's economic reform programme.  Free trade Fawaz al-Alamy, who led negotiations for Saudi Arabia's accession to the WTO treaty states: 'We have always believed in free trade but we need to open up further. We found out after the previous boom and last decline that oil is a volatile commodity and we cannot keep a country hostage to it.'  Saudi Commerce and Industry Minister Hashim Yamani says that the Kingdom is focusing on development of an attractive investment environment pointing out that corporate tax on foreign-owned firms has been reduced from 45 per cent to 20 per cent.  The Kingdom is also encouraging consolidation of smaller domestic establishments and creating economic alliances within these to enhance efficiency and foster new industries. At the recent Jeddah Economic Forum the minister stated that the objective is to place the Kingdom within the first and foremost 10 competitive nations worldwide by the end of 2010.  This ambition is based on the Kingdom's comparative advantage in energy and potential for new industries. The Saudi investment body SAGIA points out that the Kingdom possesses 25 per cent of the world's oil reserves but only has 2 per cent of its energy-intensive industries such as aluminium.  Saudi production of the metal could account for 15 per cent of global supplies by 2020 predicts Fahd al-Rashid SAGIA's deputy governor.  New cities New cities built specifically to meet the needs of industry and the business community are also expected to attract investment, develop a much broader economy and not least provide the job opportunities the Kingdom's young population requires.  Initial works are already underway on King Abdullah Economic City on the Red Sea. The $26.7 billion development is one of six such city developments so far unveiled. When the new cities are up and running in the next 15 years they could have a total population of 4.5 million and generate income of $150 billion.  Brad Bourland chief economist of Saudi American Bank Financial Group believes that they will be quite viable commenting 'there will not be any white elephants built in the desert. Decisions will be driven by businessmen.'

###   High Prices threaten loss of Saudi customers- Saudi’s seek lower oil prices now

Steve Hargreaves, ’08 ([CNNMoney.com](http://CNNMoney.com/) staff writer 6/22/08 “Saudi summit aims at oil prices The world's largest oil producer, worried the escalating cost of crude will dampen demand, is convening a special meeting on Sunday to seek solutions.” <http://money.cnn.com/2008/06/19/news/international/saudi_oil/index.htm?postversion=2008061913> NEW YORK ([CNNMoney.com](http://CNNMoney.com/))

-- Saudi Arabia this weekend will convene a special summit on oil prices that could lead to cheaper crude on the world market.  But a Saudi decision to produce more crude likely won't come without a demand: The Kingdom is expected to press the U.S. government to impose greater controls on oil trading and take steps to strengthen the dollar.  The world's largest oil producer, stepping out of its usual role as de facto leader of OPEC, will host representatives of big oil producing nations, consumer countries and companies.  The Saudis are widely believed to be concerned that escalating oil prices - crude hovered around $134 a barrel Thursday, nearly double what it cost a year ago - will cause a permanent drop in demand as consumers get more efficient or, worse, the global economy slows.  One sign of the Saudi anxiety: The country's oil production decisions, usually left to its oil minister, appear to have been put back in the hands the Royal Family, according to Antoine Halff, deputy head of research at brokerage firm Newedge.  Fuzzy numbers  As a group, OPEC has been reluctant to raise production. Several states, enjoying the record prices, maintain there is no shortage of crude. It's a line the Saudis also touted - until recently.  Saudi Arabia now says it will pump more. The Kingdom, during a recent visit by President Bush, pledged to increase production by 300,000. Last week, they said they would boost it by another 200,000 barrels.  Those numbers are not set in stone, and Sunday's meeting may produce more details on the planned increases.  The Saudis will also seek to convince refineries and others to keep buying.  Recently, refiners worldwide have cut back in light of record prices. But that has only led to a drop in crude inventories - further pushing up the price of oil.  To inject more oil into the market, Halff said the Saudis may use the meeting to arrange for special deals with refiners and others that could bring crude to market at below-market prices. The exact nature of the deals, he noted, will probably never be disclosed.  At the very least, traders will be watching the Sunday meeting to see if those announced production increases fall closer to the 500,000 or 800,000 barrel a day mark.  Sunday showdown  The meeting holds high stakes for both Saudi Arabia and the United States. If prices don't respond, the country's credibility will suffer, and with it any notion that someone has control over these record oil prices.  "Riyadh is seen as running out of options to regain control of the market," said Halff. "Failure to do so, it is assumed, could cause prices to leap even higher."  The Saudis will also expect something from consumer nations in return.  The Kingdom has long held that oil markets are well supplied, and that speculative investing is the real culprit behind high prices.  To that end, the Saudis will likely seek more oversight of oil markets, and perhaps even limits on the amount of contracts speculators can hold.  That's something consuming counties may give them. Several proposals along those lines have bipartisan support in Congress.  More difficult to deliver, and probably more important to the Saudis, is a stronger dollar.  Like the currencies of many countries in the Middle East, the Saudi riyal is pegged to the U.S. dollar - it rises and falls with the greenback.  But while lower interest rates - and hence a lower dollar - may be what the U.S. economy needs to snap out of its slump, they have been disastrous for the red-hot Saudi economy. Inflation in Saudi Arabia has doubled in the last year and is projected to surge even higher.  "I think [Saudi Arabia] wants something from the West, particularly the U.S. ... a stronger monetary policy," Nauman Barakat, an energy trader at Macquarie Futures, wrote in a research note.  That will be hard to get.  The Federal Reserve is unlikely to raise interest rates anytime soon. And any other move by the U.S. government is likely to have little effect on the free-trading dollar.

## 2AC SKFTA

### KORUS won’t pass- TAA, unions, and delay kill passage

**AP 7-20** (Julie Pace, “AP sources: Obama delays final work on trade pacts”, 2011, http://www.google.com/hostednews/ap/article/ALeqM5jMahRgCgGhe4liCMqo01FaaJbETQ?docId=ad85d6179b2247ad8fc3f9cca094fda4)

The White House has insisted that lawmakers pass TAA alongside the trade deals. But Republicans oppose the administration efforts to link the retraining assistance program to the pacts. Even if the administration had been able to send the trade deals to Congress this summer, it is unclear whether there would have been a clear path to passage given the disagreements on TAA. But the future for the trade deals only becomes more uncertain this fall, as political considerations could make it difficult for Obama to push for their passage heading into an election year. Two core constituencies for Obama, unions and labor leaders, are largely opposed to the free trade agreements All three trade deals were signed during the George W. Bush administration, but none of them advanced in the Democratic-controlled Congress.

### Fiat solves the link- means we don’t have to examine other political processes

### Turn - Tea Party stars love the jobs

Hendin 7/8 – writer for CBS News [Robert, 7/8/11, CBS News, "Could NASA be on the chopping block? ", http://www.cbsnews.com/8301-503544\_162-20077757-503544.html, DS]

As NASA prepares for the final launch of the space shuttle, it finds itself in a potentially troubling spot. As Washington works to cut spending, without a storied space vehicle, one could ask: is the space program worth it? NASA has an annual budget of some $18 billion. That spending includes $4.5 billion on "science"; $3.7 billion on "exploration"; $3 billion on "cross-agency support" and $6.1 billion on "space operations." The agency has no replacement for the shuttle, so to continue manned space operations, including trips to the International Space Station, NASA will rely on its partnership with Russia to ferry astronauts into space, and potentially on commercial spacecraft. NASA predicts it will save over $2 billion by not operating the Space Shuttle, though that money will be allocated to other programs, including working with the private sector toward development of a shuttle replacement. At a time when the government faces annual deficits over a trillion dollars and a debt at $14 trillion and rising, should NASA's nearly $20 billion be on the chopping block? No, says Tea Party backed freshmen Senator Marco Rubio, who's home state of Florida is home to Cape Canaveral and the Kennedy Space Center, the birthplace and launching point of the space shuttle. "The impact of our space program is a global phenomenon," said Rubio speaking on the Senate floor today. "Our space program inspired young generations of Americans to pursue careers in the aerospace industry and other related fields. Satellite technologies developed and improved by NASA now connect the world in unprecedented ways and support our military reconnaissance missions and facilitate travel through G.P.S. devices. For others, it got them hooked on math and science and let them to other fields whose innovations make our lives better every single day." Rubio's Florida has seen a huge economic boom from the space program. According to the Congressional Research Service, the shuttle program employs over 2,000 civil servants with more than 15,000 people employed by contractors. The program has at least 4,000 suppliers located around the country. And according to a study conducted earlier this year by Florida State University, there are over 147,000 jobs related to the aerospace industry in Florida alone, 51,000 are direct jobs and 95,000 are indirect or induced jobs due to the industry. Those jobs bring in 8.3 billion in income. Though Rubio and many others ran for Congress on a pledge to cut government spending, even without the space shuttle, which has defined the American space program for over 30 years, the senator says NASA is an important investment, even if it too has to live within its means. "You see, whereas America once led the way to the moon, we now face the unacceptable prospect of limited options to simply get a human into orbit," Rubio said. "We know that our commercial space partners are working to fill some of the gap in our human space flight capabilities, and that is a promising development that we should encourage." "But we need NASA to lead," he added. "And I say this, I fully recognize that our nation faces a debt crisis because, quite frankly, politicians in both parties have spent recklessly for many decades, and it will require Washington to finally live within its means and for leaders to make tough choices about what our nation's priorities are. NASA is no exception. It will not be about spending more. It will be about spending wisely."

### The military’s key to the agenda— Defense spending overcomes Congress’ opposition to renewables

Kaplan, ’10 – Senior Fellow at the New America Foundation [Fred, 10/6/2010, Slate Magazine, “The Marines Go Green,” http://www.slate.com/id/2270165/pagenum/all/#p2, DS]

Two other factors increase the chances that the military's renewable-energy projects might have commercial spinoffs. First, as with the microchip and the computer, these projects are adapting products that private companies have already developed and built. In other words, the military is bypassing its normal procurement process, with its bureaucratic hassles and excessive "requirements," which have resulted in the unwieldy designs and exorbitant costs of so many U.S. weapons systems. Second, Congress is more likely to fund these projects precisely because they're related to the national defense. The United States has an elaborate nationwide highway system today because, back in 1956, President Dwight Eisenhower sold the program to Congress by calling it the National Interstate and Defense Highway Act (italics added). The Army, Eisenhower said, would need solid highways to move troops or evacuate citizens in the event of a foreign invasion or a nuclear war. Similarly, after the Soviet Union launched the Sputnik satellite in 1957, state governments across the United States spent scads of money to create, or improve, high-school science and math programs in order to "catch up" with the Russians**.** (This impulse wasn't limited to science and math. At the high school I attended in Kansas, money was even appropriated to buy books for a course on the modern novel. The course was still around in the early 1970s, and thus was I exposed at an early age to Conrad, Crane, Hawthorne, and Hemingway**.)** Congress today has little appetite for spending billions of dollars on solar power generators or biofuel labs under the rubric of energy independence or "going green." But to serve the war mission, and especially to protect the troops, no sum is too lavish—and that's why the road to going green, and to achieving energy independence, might very well be paved through the fighting fields and villages of Afghanistan**.**

### Winners win – victories multiply

Ornstein 2001[Norman, American Enterprise Institute, “Congress Inside Out,” September 10]

The compromise accomplished two ends. First, it changed the agenda base of the issue. Patients' rights went from an issue where the only viable proposal was from Democrats (with GOP co-sponsors), which the President vowed to veto - to one where both Democrats and Bush are for patients' rights and merely differ on the details. Two, it gave the President a victory on the House floor when all the pundits predicted defeat a major momentum builder. In a system where a President has limited formal power, perception matters. The reputation for success - the belief by other political actors that even when he looks down, a president will find a way to pull out a victory - is the most valuable resource a chief executive can have. Conversely, the widespread belief that the Oval Office occupant is on the defensive, on the wane or without the ability to win under adversity can lead to **disaster,** as individual lawmakers calculate who will be on the winning side and negotiate accordingly. In simple terms, **winners win** and losers lose more often than not. The set of presidential victories on energy was significant in other ways. The energy bill that emerged on the House floor was put together hurriedly by House Republican leaders who wanted to get one Bush priority on the agenda and give him at least a partial victory. But up until the day before the debate and votes, nearly everyone, including GOPleaders, expected the President to be rebuffed on drilling in ANWR; most thought he would lose on CAFE standards for SUVs.

### US-South Korea relations resilient.

Ireland 9 (Corydon, Harvard News Office, 9/14, http://news.harvard.edu/gazette/story/2009/09/firm-allies-past-and-present/#)

In a conversation in front of a capacity crowd at the forum, the two diplomats reflected on the historical strength of the alliance and what issues might put it at risk. Both agreed it would take a lot to shake a political relationship that dates back to the 19th century, and one that was forged in steel by the Korean War. It is an alliance “less brittle and far more resilient than it ever has been,” said Stephens. Han, who in 1984 earned a Harvard Ph.D. in economics, called the U.S.-South Korea alliance the foundation of his nation’s “economic growth, prosperity, and security.” It remains so firm and mutual today, he added, that it could be an international model of cooperation — “the exemplar alliance relationship of the future.” Moderating the public conversation between ambassadors was Graham Allison, a terrorism scholar who has studied the threat posed by a nuclear-armed North Korea. He is Douglas Dillon Professor of Government at Harvard Kennedy School (HKS) and director of the Belfer Center for Science and International Affairs. Skeptical and probing, Allison prompted the two diplomats to imagine a near future in which the traditional alliance enjoyed by the United States and South Korea goes sour. In sum, he asked, what could go wrong and what issues need attending to? Neither of the ambassadors budged much. In fact, said Han, “there is a very, very fundamental notion that U.S.-Korea relations cannot be swayed by one or two events.” It is and has been an alliance, he said, that has never been “underestimated or disregarded. It was always central.” But it is true, Han added, that the two nations share a set of 21st century problems — global issues that include terrorism, piracy, climate change, and the challenges of development and trade. U.S.-South Korea relations are resilient and strong, said Stephens, but three areas deserve a measure of vigilance: economic crisis, North Korea, and the continued presence of 26,000 American military personnel on Korean soil. “We need to be good neighbors, good friends” on the issue of that presence, she said

### 6. KORUS doesn’t solve global free trade

**Bhagwati, 7-24** – Jagdish, professor of Economics at Columbia University, co-author of “Offshoring of American Jobs: What Response From US Economic Policy”, 2011, “The Wrong Way to Free Trade”, <http://www.nytimes.com/2011/07/25/opinion/25bhagwati.html?_r=2>

LATE last week, a longstanding debate over free-trade agreements with South Korea, Colombia and Panama — deals that were negotiated under President George W. Bush but never finalized — stalled once again. President Obama supports the agreements, but only if more retraining for workers is part of the deal, a condition Republican leaders are resisting. Both sides claim to advance the trade agenda, but they are fighting over fairly minor points. Neither side shows the slightest interest in reinvigorating the nearly 10-year-old Doha round of global trade negotiations, which have far greater potential to create prosperity and help working Americans. Bilateral trade agreements are not the same as free trade. Yes, they liberalize trade for the parties involved, but outsiders then face a handicap. **The discrimination comes in the form of barriers like tariffs and antidumping charges, which countries impose on imports that they believe are priced artificially low. When the United States negotiates bilateral deals with other countries,** the unbalanced nature of the one-on-one negotiations also opens the way for all manner of lobbies to ram their self-serving demands **into the agreements. For example, when Washington negotiated free trade deals with Chile and Singapore, Wall Street lobbied to curtail those countries’ right to impose restrictions on capital flows at times of crisis** — even though the International Monetary Fund now admits that such restrictions often make sense. Business lobbies have also pressed for excessively favorable treatment on intellectual property rights. American labor unions have learned these same tricks, urging Democratic legislators and administrations to block bilateral trade deals unless their demands for labor protections are met, as they did with the three long-delayed agreements now pending. **But larger countries with more clout, like India and Brazil, will allow no such provisions. They correctly see these labor provisions as a form of anticompetitive protectionism**. And they point out that it takes chutzpah for the United States to argue for labor rights abroad that often exceed those at home. **Moreover, when powerful business and** labor interests can extract concessions in those bilateral deals, they have no reason to support a multilateral trade agenda. Mr. Obama’s trade representative, Ron Kirk, points out that business leaders press bilateral trade deals, not the Doha round. The **proponents of bilateral deals always complain that multilateralism is too slow. This surely confuses cause and effect.** Only presidential leadership can set our trade policy in the right direction: away from bilateral deals and toward Doha. First, Mr. Obama needs to bring the business lobbies on board. Here is one sweetener he can offer: Finish the Doha round on the basis of what has been negotiated and then declare a new round that will start right away and address unresolved issues. The Doha round, after all, was conceived to address the “unfinished agenda” of the preceding Uruguay round, which ended in 1995 with much accomplished but also much left undone. Next, the canard that Doha offers little gain for the United States must be put to rest. C. Fred Bergsten, director of the Peterson Institute for International Economics, has estimated that the annual economic gain to the United States from the Doha round would be only $6 billion to $7 billion — a figure widely cited by Doha’s opponents. But a policy must be judged not just by what it directly achieves but also by what would happen in its absence. The failure of Doha would cause immeasurable harm. It would undermine the credibility of the W.T.O. and its progress in promoting multilateral trade liberalization, and it would begin to erode the binding dispute settlement mechanism, an achievement unparalleled in other international institutions. The value of that mechanism was demonstrated just this month, when a W.T.O. panel ruled for the United States and the European Union in a case challenging China’s restrictions on exports of industrial raw materials. President Obama must persuade labor unions, core Democratic constituents, that they are wrong to buy into the fear-mongering that says trade with poor countries produces poverty in rich countries. In fact, what depresses workers’ wages are deep and continuing technological changes; cheap imports of consumer products help workers by offsetting that effect. The president should ask Democrats and Republicans to immediately add the Doha round, as it has been negotiated over 10 years, into the same all-or-nothing package as the three bilateral deals. Such a bold gesture has a precedent. After sitting on the fence his first year in office, President Bill Clinton embraced the cause of trade, despite the political costs, and fought fiercely, and against great odds, for the Uruguay round. Mr. Obama should do no less.

## 2AC Space Debris DA

### Case outweighs

### Our impacts are happening right now and only SBSPs can solve because it will sustain the entire energy demand and without these satellites, and we have several internal links to extinction. Through oil, warming, and heg, we have the fastest access to our impacts, and we’re already past the peak so we must do the plan otherwise we’ll be dead before space debris would even be a problem. Their Duncan ’10 evidence indicates that it will take 200 years before space debris will even be a problem.

### SBSP tech solves satellites and debris -

### Beaming

Grey 2k (Jerry, Director of Aerospace and Science Policy at the American Institute of Aeronautics and Astronautics, “Testimony of Jerry Grey before House Science Committee Hearings on Solar Power Satellites,” US House of Representatives Archives, September 7, 2000. <http://www.nss.org/settlement/ssp/library/2000-testimony-JerryGrey.htm>)

The AIAA assessment suggested a number of opportunities for multiple-use of the SSP-enabling technologies in terrestrial and space endeavors Of these, the following high-priority areas were identified: (1) Human space exploration. (a) Power systems for the Martian surface. If nuclear systems turn out not be available for use, large photovoltaic arrays in the 100 - 200 kWe range, coupled with wireless power transmission (WPT), become highly promising. These solar power systems are especially attractive if they can be combined with an Earth-Mars transportation system using solar-electric propulsion (SEP). (b) In-space transportation. SEP is generally considered a viable alternative to nuclear thermal propulsion for human Mars exploration. (c) Beamed power. WPT could be used for mobile extraction systems deployed in permanently-shadowed cold traps at the lunar poles and for in-situ resource utilization at various locations on Mars. Other applications include beamed power to communications and information-gathering stations on planetary surfaces or in orbit; e.g., high-power radar mappers; mobile robotic systems; remote sensing stations; dispersed habitation modules; human-occupied field stations; and supplementary power to surface solar power systems during periods when they are shadowed. (2) Science and robotic space exploration (a) Multi-asteroid sample return. Visit a significant number of belt asteroids in a 2-5 year period, collecting samples for return to Earth. (b) Asteroid/comet analysis. Determine the chemical content of comets and asteroids on rendezvous missions (enabled by solar-electric propulsion) by using deep-penetration imaging radar and by beaming laser and/or microwave power down to the surface to vaporize material for spectrographic analysis. (c) Orbital debris removal. Use beamed energy to rendezvous and grapple with a piece of space junk. Space-based lasers could also be used to vaporize smaller debris or to redirect the orbits of larger pieces to atmospheric reentry trajectories.

### Maneuverability – keeps satellites safe from debris

Ramos 2k (Kim, USAF Major and professor at the Air Command and Staff College Air University, “Solar Power Constellations Implications for the US Air Force.” April 2000. <https://www.afresearch.org/skins/rims/q\_mod\_be0e99f3-fc56-4ccb-8dfe-670c0822a153/q\_act\_downloadpaper/q\_obj\_73510976-ad5e-4d5d-a51c-a7103406f67d/display.aspx?rs=enginespage>)

Powering small satellites with energy beamed from a solar power satellite further reduces their size, cost, and launch requirements. Maneuver One of the vulnerabilities of satellites is that they lack maneuverability. Orbit changes are possible but the amount of station keeping fuel limits these maneuvers. Unscheduled orbital maneuvers for, supported warfighters, on-orbit station keeping, or avoiding an anti-satellite weapon, reduce the life expectancy of satellites. The New World Vistas study concluded, “technologies to substantially enhance survivability are …maneuvering technologies…enabled by the technologies of high generation power in space.” 25 Moreover, the report stated that electrical propulsion and solar power satellites would enable maneuvering for survivability, station keeping, and repositioning to meet warfighter requirements.

### Our evidence has specific warrants as to how SBSP increases military readiness once we get off oil and their internal link is based off GPS satellites. They have no terminal impact to lack of GPS satellites harming the military.

### Nonunique – collisions already happening

### Europe

Imburgia 11 (Joseph S. – Lt. Col. and Judge Advocate in Air Force, legal exchange officer to the Directorate of Operations and International Law, Defence Legal, Australian Defence Force, Canberra, Australia, 2011, “Space Debris and Its Threat to National Security: A Proposal for a Binding International Agreement to Clean Up the Junk,” Vanderbilt Journal of Transnational Affairs, <findarticles.com/p/articles/mi\_hb3577/is\_3\_44/ai\_n57583169/>)

 Other space debris collisions have also occurred. For example, in 1986 the third stage of an Arianne rocket, launched by the European Space Agency, exploded in outer space, “generating over 700 fist-sized debris fragments.”42 In 1996, ten years after that Arianne rocket exploded, debris from its explosion struck the French reconnaissance satellite Cerise43 and severed its stabilization boom.

### US

Imburgia 11 (Joseph S. – Lt. Col. and Judge Advocate in Air Force, legal exchange officer to the Directorate of Operations and International Law, Defence Legal, Australian Defence Force, Canberra, Australia, 2011, “Space Debris and Its Threat to National Security: A Proposal for a Binding International Agreement to Clean Up the Junk,” Vanderbilt Journal of Transnational Affairs, <findarticles.com/p/articles/mi\_hb3577/is\_3\_44/ai\_n57583169/>)

Another space debris collision occurred in 2005, when pieces from a U.S. rocket, used to launch a satellite in 1974, collided with debris from a Chinese launch vehicle\ that exploded in space in 2000. 46 The collision produced three new marble-sized pieces of debris.

### And, defer to the 1AC evidence, it’s more specific and more recent

### SBSP not susceptible to debris damage

Grey 2k (Jerry, Director of Aerospace and Science Policy at the American Institute of Aeronautics and Astronautics, “Testimony of Jerry Grey before House Science Committee Hearings on Solar Power Satellites,” US House of Representatives Archives, September 7, 2000. <http://www.nss.org/settlement/ssp/library/2000-testimony-JerryGrey.htm>)

Although the SSP configurations are large, their diaphanous nature and location in geostationary or geosynchronous halo orbits imply low susceptibility to serious damage by either natural or anthropogenic orbital debris. Moreover, since all the proposed concepts employ robotic inspection and maintenance, repairs of any such damage should be able to be accomplished.

**Non-unique - space debris is inevitable - we’re past the point of no return**

**David 5/9**(Leonard, Space.com’s Space Insider Columnist, “ Ugly Truth of Space Junk: Orbital Debris Problem to Triple by 2030,” 2011,<http://www.space.com/11607-space-junk-rising-orbital-debris-levels-2030.html>,  )

From a probability point of view, General Shelton added, smaller satellites, more debris, more debris is going to run into more debris, creating more debris. [Video: Fragmentation: Growing Threat of Space Junk] "It may be a pretty tough neighborhood," Shelton continued, in low-Earth orbit and geosynchronous Earth orbit "in the not too distant future." When asked if the U.S. Air Force plans on funding space debris mitigation capability, Shelton responded: "We haven’t found a way yet that is affordable and gives us any hope for mitigating space debris. The best we can do, we believe, is to minimize debris as we go forward with our operations. As we think about how we launch things, as we deploy satellites, minimizing debris is absolutely essential and we’re trying to convince other nations of that imperative as well." Shelton said that, unfortunately, with the duration of most things on orbit, "you get to live with the debris problem for many, many years and in some cases decades. So minimizing debris is important to us and it should be to other nations as well." Point of no return The concern over orbital debris has been building for several reasons, said Marshall Kaplan, an orbital debris expert within the Space Department at the Johns Hopkins University Applied Physics Laboratory in Laurel, Md. In Kaplan's view, spacefaring nations have passed the point of "no return," with the accumulation of debris objects in low-Earth orbits steadily building over the past 50 years. Add to the clutter, the leftovers of China’santi-satellite (ASAT) test in 2007. "The fact that this single event increased the number of debris objects by roughly 25 percent was not as important as the location of the intercept. The event took place at an altitude of 865 kilometers, right in the middle of the most congested region of low-orbiting satellites," Kaplan pointed out. Toss into the brew the collision of an Iridium satellite with an expired Russian Cosmos spacecraft in February 2009 -- at an altitude similar to that of China’s ASAT test. As a result of 50 years of launching satellites and these two events, the altitude band from about 435 miles (700 km) to a little over 800 miles (1,300 km) has accumulated possibly millions of debris objects ranging from a few millimeters to a few meters, Kaplan said.

### Nonunique – launches inevitable

### China

Richburg 7/5 (Keith, staff writer for the Washington Post, “As US halts space shuttle, others continue with launches and exploration,” Washington Post, 7/5/11. <http://www.washingtonpost.com/national/health-science/as-us-halts-space-shuttle-others-continue-with-launches-and-exploration/2011/06/27/gHQAmKe2yH\_story.html>)

After struggling in space for several years, experts said China this year appears poised for several significant breakthroughs that could cement its place as a leader in space exploration. Last October, China launched a robotic probe, the Chang’e 2 lunar orbiter, which completed its six months’ worth of tasks this spring. Because it still had fuel in reserve, the craft left its moon orbit last month for further exploration in space. This summer, China is scheduled to launch an unmanned space module, called Tiangong 1, or Heavenly Palace, and later this year will send up another unmanned vehicle, Shenzhou, which will try to dock with it. These will be crucial first steps in China’s goal to develop a manned space station.

### Commercial Launches

Clark 7/13 (Stephen, columnist for SpaceFlight Now, “Soyuz Rocket Launch beefs up Globalstar Satellite Fleet,” Spaceflight Now, 7/13/11. <http://www.spaceflightnow.com/news/n1107/13soyuzglobalstar/>)

Six fresh spacecraft for Globalstar's mobile communications satellite fleet were deployed Wednesday by a Russian Soyuz rocket, propping up the company's degraded two-way voice service for more than 400,000 subscribers around the world. The Soyuz rocket launched at 8:27 a.m. local time from the Baikonur Cosmodrome in Kazakhstan. Credit: Roscosmos The successful launch continued Globalstar's campaign to replace aging satellites launched more than a decade ago. The satellites, each weighing 1,543 pounds at launch, will enter Globalstar's constellation circling a few hundred miles above Earth. Thales Alenia Space assembled the satellites in Rome and built their communications equipment in Toulouse, France. U.S.-based Globalstar Inc. provides mobile satellite telephone and data transmission services to customers in more than 120 countries. The Soyuz 2-1a rocket launched at 0227 GMT Wednesday (10:27 p.m. EDT Tuesday) from the Baikonur Cosmodrome in Kazakhstan, where it was 8:27 a.m. local time. After soaring into a cloudless blue sky, the Soyuz rocket's three core stages accelerated the six satellites to nearly orbital velocity, then a Fregat upper stage took over for two firings to inject the payloads at the correct altitude. The mission featured an upgraded version of the Soyuz booster including a digital control system, which allows the rocket to fly a larger 13.4-foot-diameter nose conse for commercial flights. The Fregat stage finished deploying the six Globalstar spacecraft as programmed at 0427 GMT (12:07 a.m. EDT). Two satellites mounted on top of the specially-built dispenser separated first, followed by the four other craft moments later. "The report from the satellite operations center is that all the satellites have been acquired," said Jean-Yves Le Gall, chairman and CEO of Arianespace, which managed the commercial launch through Starsem, a subsidiary jointly owned by European and Russian companies. The Soyuz rocket and Fregat upper stage placed the satellites in a 572-mile-high orbit with an inclination of 52 degrees. "I'm very proud to share this great achievement with all of you," Le Gall said in a post-launch statement. "This success was made possible thanks to the venerable Soyuz launch vehicle, whose flawless performance enabled this launch." The launch was delayed two days after the countdown was halted seconds before liftoff Monday night. One of the launch pad's umbilical arms failed to retract, but workers repaired the system in time for launch two days later. One of the satellites orbited Wednesday will immediately raise its orbit to an altitude of 878 miles and join Globalstar's operational fleet within 30 days of launch. The other five satellites will remain at their current altitude until they drift to their planned position within the company's constellation. Globalstar satellites are divided among eight orbital planes to evenly spread the spacecraft across the globe. The Soyuz rocket's blastoff was timed to reach one of the orbital planes, where one of the satellites will enter service while the others drift to their ultimate locations. All six satellites will be in service within three-to-five months, according to Tony Navarra, Globalstar's president of global operations. Six other second-generation Globalstar satellites launched in October 2010 are now operational, Navarra said. Artist's concept of the second-generation Globalstar satellites. Credit: Thales Alenia Space One of the craft had to switch to a backup momentum wheel, triggering inspections of the next set of satellites, including a repair that caused a delay in the launch from the spring. The momentum wheel controls the satellite's orientation in space. Globalstar officials say the transition to the new satellite fleet will be seamless for the company's subscribers, except for a marked improvement in mobile two-way communications service. S-band antenna degradation on Globalstar's existing satellites has limited voice and duplex data communications since 2007. The problem has not affected Globalstar's simplex data relay and asset tracking product, according to the company. "We look forward to successfully orbit-raising these satellites so they can start improving the quality of our service, joining the rest of the six satellites from the previous launch in October and our first-generation satellites," said Vijaya Gallagher, the Globalstar 2 program manager. "We will start seeing immediate improvements in the duplex quality as well as simplex services for our existing customers as well as add new services very quickly." Globalstar subscribers use the satellite network to make mobile phone calls and data transmissions, especially in rural zones where terrestrial coverage is spotty or non-existent. Globalstar's existing constellation is mostly comprised of spacecraft launched between 1998 and 2000. Built by Space Systems/Loral and designed for a seven-and-a-half year orbital life, the satellites are aging and need to be replaced. Controllers are retiring the old satellites as fresh spacecraft enter service. The new satellites have a design life of 15 years. According to Navarra, two more Soyuz flights with six Globalstar satellites each are scheduled before the end of 2011. When the launch campaign is finished at the end of the year, Globalstar's satellite fleet will include 24 second-generation spacecraft and eight leftover first-generation satellites built as spares and launched in 2007.

## \*\*More\*\*

### Space launches inevitable:

### Space Tourism

Minard 9 (Anne, National Geographic Researcher, 4/14/09, “Rocket Launches Damage Ozone Layer, Study Says,” National Geographic News, http://news.nationalgeographic.com/news/2009/04/090414-rockets-ozone.html)

Increased international space launches and the potential commercial space travel boom could mean that rockets will **soon emerge** as the **worst offenders** in terms of ozone depletion, according to the study, published in the March issue of the journal Astropolitics. If the space tourism industry alone follows market projections, rocket launches are "going to run up against Montreal Protocol," said study co-author Darin Toohey of the University of Colorado at Boulder. The Montreal Protocol on Substances that Deplete the Ozone Layer, an international treaty, prescribes measures intended to hasten the recovery of Earth's depleted ozone layer.

### Russia

Englund 7/5 (Will, staff writer for the Washington Post, “As US halts space shuttle, others continue with launches and exploration,” Washington Post, 7/5/11. <http://www.washingtonpost.com/national/health-science/as-us-halts-space-shuttle-others-continue-with-launches-and-exploration/2011/06/27/gHQAmKe2yH\_story.html>)

The Russian space program, which suffered in the 1990s — remember the Mir space station, which was killed off in 2001 and allowed to fall into the sea? — is more robust today. But with a budget of about $3 billion, it still suffers from an aging workforce and struggles to hire talented staff. An ambitious plan to build a new launch center in eastern Siberia (Russia currently uses the Baikonur site, in Kazakhstan) and introduce a new line of rockets and a new spacecraft by 2018 looks as though it may be delayed. Russia is also working on developing a reusable rocket, which it believes would make it the leader in space for the next 50 years. Some Russian scientists believe that spaceflight can’t advance much further without new means of propulsion, most likely from nuclear-powered engines. Russia has always emphasized manned flight but is currently putting a satellite system in place to rival the GPS system.

### India

Lakshmi 7/5 (Rama, staff writer for the Washington Post, “As US halts space shuttle, others continue with launches and exploration,” Washington Post, 7/5/11. <http://www.washingtonpost.com/national/health-science/as-us-halts-space-shuttle-others-continue-with-launches-and-exploration/2011/06/27/gHQAmKe2yH\_story.html>)

In 2008, India launched its first unmanned moon mission, Chandrayaan-1, which catapulted the country into the big league. Spurred by China’s growing space ambitions, India has focused on launching its first manned space mission in 2016. India’s space program was dealt a setback in December, when a rocket carrying a communications satellite exploded soon after liftoff. This was India’s second launch failure in 2010. In addition to its dream of a manned mission to the moon, India is planning an unmanned lunar mission, Chandrayaan-2, in 2013 with collaboration from the Russian space agency. This will pick up samples of soil and rocks for chemical analysis

### Collisions already happening:

### Russia

Imburgia 11 (Joseph S. – Lt. Col. and Judge Advocate in Air Force, legal exchange officer to the Directorate of Operations and International Law, Defence Legal, Australian Defence Force, Canberra, Australia, 2011, “Space Debris and Its Threat to National Security: A Proposal for a Binding International Agreement to Clean Up the Junk,” Vanderbilt Journal of Transnational Affairs, <findarticles.com/p/articles/mi\_hb3577/is\_3\_44/ai\_n57583169/>)

 Unfortunately, the space debris problem is not limited to near misses. On February 10, 2009, five hundred miles above Siberia, a Russian communications satellite collided with a privately owned Iridium telecommunications satellite “in an unprecedented orbital accident that would have been visible from the Earth.”35 If defunct, the Russian satellite would be properly considered “space debris”36

### Cascade inevitable:

### ASAT tests

Broad 7 (William, columnist for the New York Times, “Orbiting Junk, Once a Nuisance, Is Now a Threat,” New York Times, 2/6/07. <http://www.nytimes.com/2007/02/06/science/space/06orbi.html?pagewanted=2>)

In the last decade or so, as scientists came to agree that the number of objects in orbit had surpassed a critical mass — or, in their terms, the critical spatial density, the point at which a chain reaction becomes inevitable — they grew more anxious. Early this year, after a half-century of growth, the federal list of detectable objects (four inches wide or larger) reached 10,000, including dead satellites, spent rocket stages, a camera, a hand tool and junkyards of whirling debris left over from chance explosions and destructive tests. Now, experts say, China’s test on Jan. 11 of an antisatellite rocket that shattered an old satellite into hundreds of large fragments means the chain reaction will most likely start sooner. If their predictions are right, the cascade could put billions of dollars’ worth of advanced satellites at risk and eventually threaten to limit humanity’s reach for the stars.

### Only removal solves

Imburgia 11 (Joseph S. – Lt. Col. and Judge Advocate in Air Force, legal exchange officer to the Directorate of Operations and International Law, Defence Legal, Australian Defence Force, Canberra, Australia, 2011, “Space Debris and Its Threat to National Security: A Proposal for a Binding International Agreement to Clean Up the Junk,” Vanderbilt Journal of Transnational Affairs, <findarticles.com/p/articles/mi\_hb3577/is\_3\_44/ai\_n57583169/>)

 “Today, next year or next decade, some piece of whirling debris will start the cascade, experts say.”63 According to Nicholas L. Johnson, NASA’s chief scientist for orbital debris, the cascade is now “inevitable” unless something is done to remove the debris. 64 Experts believe that if nothing is done to address the space debris problem, the amount of orbiting space debris greater than ten centimeters in size will increase to over 50,000 objects in the next fifty years. 65

### SBSP solves space debris:

### Satellites

Grey 2k (Jerry, Director of Aerospace and Science Policy at the American Institute of Aeronautics and Astronautics, “Testimony of Jerry Grey before House Science Committee Hearings on Solar Power Satellites,” US House of Representatives Archives, September 7, 2000. <http://www.nss.org/settlement/ssp/library/2000-testimony-JerryGrey.htm>)

From among these multiple-use opportunities, the AIAA assessment selected the following prospects for near-term demonstrations: (1) System flight demonstration. Use a solar array mounted in the Shuttle's payload bay to demonstrate power transmission to nearby (co-orbiting) targets. (2) Tether demonstration. Use the Shuttle to demonstrate a static tether by releasing a mass to a higher orbit (tether up) and releasing a mass to de-orbit it (tether down). (3) Robotic operations. Use robot platforms to demonstrate end-to-end transport of cargo and installation on the international space station. (4) Ground power conversion comparison. Demonstrate WPT using threeadjacent ground-based power systems employing (a) ground-based photovolaic arrays, (b) ground-based arrays supplemented by laser power at approximately one-sun brightness, and (c) ground-based arrays supplemented by microwave power. (5) Combined power/communications systems. Demonstrate microwave power transmission containing high data-rate information. (6) Power beaming to aerial platforms. Use magnetron directional amplifiers to transmit power to aircraft and/or airships for telecommunications, observation, and stratospheric/tropospheric science demonstrations. (7) High-power Mars-orbiting communication relay satellite. Demonstrate SSP technologies aboard a Mars-orbiting high-power communications satelliterelaying Mars probe information directly to Earth at very high data rates. (8) Orbital debris removal Maneuver a Shuttle-based or ISS-based small satellite, using beamed energy, to rendezvous and grapple with a piece of space junk and lower its orbit.

### Reconstitution – UAVs and relaunch stand in for lost satellites

Ramos 2k (Kim, USAF Major and professor at the Air Command and Staff College Air University, “Solar Power Constellations Implications for the US Air Force.” April 2000. <https://www.afresearch.org/skins/rims/q\_mod\_be0e99f3-fc56-4ccb-8dfe-670c0822a153/q\_act\_downloadpaper/q\_obj\_73510976-ad5e-4d5d-a51c-a7103406f67d/display.aspx?rs=enginespage>)

As outlined in Air University study Spacecast 2020, the rapid launch and deployment of satellites is required to comply with the United States National Military Strategy concept of reconstitution. Reconstitution for space is the ability to launch satellites for “unanticipated system failures … [due to hostile actions] and multiple area coverage requirements, [which] … require the immediate placement of satellites into orbit.” 21 Solar power satellites enable reconstitution with unmanned aerial vehicles performing the same functions as satellites, as mentioned previously, and through enabling smaller satellites. One of the difficulties in achieving small satellites is the fact that power generation takes up about 25% of the weight of a satellite. 22 Satellites launched without onboard power generation would be smaller and receive power on orbit from a solar power satellite.

### SBSP won’t get hit by debris

Powersat 11 (Powersat, SBSP research and development facility, “About Space Solar Power,” <http://www.powersat.com/faq.html>)

Collision with space junk is unlikely for a number of reasons. First, PowerSat reside in a geosynchronous orbit which is much higher than the low earth orbit debris band. Second, the surface area of the powersat is thin-film solar cells. Thus, a piece of space junk would go right through the thin film and would affect only a fraction of the output of that module, as there are many solar cells within a module. We could conceivably lose a module if a piece of junk collided with the core control system for that module, but the output of one module is only 1/300th the output of the entire satellite and can be easily replaced.

**Widespread debris is inevitable**

**Moskowitz 9** (Clara, Staff Writer @ Space.com, “ U.S. 'Decades Behind' on Space Debris Threat, Official Says,” 11/6, <http://www.space.com/7499-decades-space-debris-threat-official.html>,  )

The amount of junk floating in space is getting out of hand and the United States must step up its effort to control orbital trash, experts are saying. The chief of U.S. Strategic Command said Wednesday that America needs better tools to monitor the orbital debris that's up there and plan to avoid collisions with valuable satellites. "We are decades behind where we should be, in my view," said Air Force Gen. Kevin P. Chilton in a speech at Offutt Air Force Base, Neb. Chilton called for more personnel and more sensors and equipment to study and combat the threat. There are about 800 satellites in orbit now, and more than 20,000 pieces of debris in total, including bits of dead satellites and spent rockets, as well as more eccentric items like loose gloves and tools that slipped away from astronauts on spacewalks. And it's only likely to get worse as more satellites are launched into the increasingly crowded orbital corridors of space. "Space situational awareness is no different than the situational awareness that we demand in any other domain," Chilton said. "And we do not provide that in an adequate fashion to my component commander in charge of space operations for the United States of America." Just today NASA announced that astronauts onboard the station may have to board their Russian Soyuz spacecraft lifeboats Friday evening as a safety precaution in case they must evacuate because of a space junk impact. A small piece of debris appears poised to fly within 1,640 feet (500 meters) of the orbiting laboratory Friday night at 10:48 EST (0348 Saturday GMT). Though an actual impact is unlikely, the agency says, astronauts must be prepared when any debris comes too close for comfort. Crowded skies Scientists agree. A recent study calculated that "close encounters" between satellites and debris in orbit will rise by 50 percent in the next 10 years, and by 250 percent by 2059, to more than 50,000 a week, according to Reuters.

## 2AC Space Militarization

### Aff case outweighs

### a. Timeframe – We have to act by 2012, that’s Kohl ’11. The timeframe for WMD use is way longer we would have to boost military capability substantially before it even becomes a possibility. Timeframe for extinction begins next year and turns their impact – WMD’s can’t kill us if we’re already dead

###  b. Probability – Oil peaks in 2012 and resource wars following is inevitable – that’s Heinburg ’05. No intrinsic link between their impact and WMD use, left up to chance accident from countries.

###  c. Solves any risk – US heg prevents wars from breaking out – that’s Kagan ‘7

### Non-unique – weaponization and perception happening in the squo

Ross & Watt ’11 (Tim and Holly, Staff Writers for Telegraph, a global newswire. “WikiLeaks: US vs China in battle of the anti-satellite space weapons” <http://www.telegraph.co.uk/news/worldnews/wikileaks/8299491/WikiLeaks-US-vs-China-in-battle-of-the-anti-satellite-space-weapons.html>. 02 Feb 2011)

It was a conference call from the Air Force General, Kevin Chilton, the head of US Strategic Command, and Marine General James Cartwright, the vice-chairman of the Joint Chiefs of Staff. They told him the conditions were “ripe” to launch what can now be disclosed was a secret test of America’s anti-satellite weapons, Washington’s first such strike in space for 23 years. That night, the US navy’s Ticonderoga-class cruiser, USS Lake Erie, scored a direct hit on an American spy satellite, known as USA 193. The missile used, a highly sophisticated SM-3, took about three minutes to climb 150 miles above the Earth, where it flew past the satellite before turning back and destroying the target at an impact speed of 22,000mph. The strike came about a year after the Chinese government had launched its own satellithe attack, which started a secret “space war”, The Daily Telegraph can disclose. For months the two super powers had been engaged in a private and increasingly acrimonious row over China’s use of weapons in space – an international taboo since President Ronald Reagan abandoned the “star wars” programme in the 1980s. The clash began on Jan 11, 2007, when Beijing shocked the world – including George W Bush’s White House – by destroying a Chinese weather satellite with a ballistic missile. The strike, 530 miles above the Earth, dramatically demonstrated China’s new ability to destroy the satellites of enemy nations. The threat was obvious. Without navigation or spy satellites, much of America’s military would be vulnerable. Led by the White House, the West reacted with outrage. Leaked US embassy files disclose that Clark Randt, the American ambassador in Beijing, delivered a strongly worded protest to He Yefei, the Chinese assistant foreign minister, on Jan 15, 2007. The documents show that the scale of American concern over the test was far greater in private than was admitted publicly. By January 2008, Condoleezza Rice, the Secretary of State, raised the prospect of “military” action to protect American space systems. In a “secret” complaint to the Chinese, she said: “Any purposeful interference with US space systems will be interpreted by the United States as an infringement of its rights and considered an escalation in a crisis or conflict. The United States reserves the right, consistent with the UN Charter and international law, to defend and protect its space systems with a wide range of options, from diplomatic to military.” Washington was particularly concerned about the 2,500 pieces of debris – and 100,000 smaller fragments – from the destroyed Chinese craft. Some of the pieces would remain in orbit around the Earth for the next 100 years and pose a risk to the US Space Shuttle and the International Space Station, Miss Rice said. She also pointed out that America had not tested an anti-satellite weapon since 1985. Just a month later this had changed. In February 2008, Mr Gates – with the backing of Mr Bush – decided that diplomacy was not enough. The missile was fired. In public, the Bush administration denied that the strike, which cost an estimated $30 million, was anything except a safety measure. A broken US spy satellite was falling towards the Earth and posed a risk to human health from its toxic fuel tank, officials said. Destroying the craft in space was the safest option, they claimed. Most satellites are left to burn out as they re-enter the atmosphere. The leaked embassy cables disclose that Washington’s decision to shoot down spy satellite USA 193 caused private “anger” and anxiety in Beijing. The Chinese “repeatedly emphasised that the United States should provide information on the planned satellite interception prior to releasing the information to CNN”, according to a secret memo sent from the Beijing Embassy on Feb 22, 2008. Crucially, the cable also confirms that the US government always appeared to regard the strike as a military “test”. The file, marked “secret”, states: “On Feb 21 (Beijing time), Post received direct confirmation of the results of the anti-satellite test directly from PACOM [US Pacific command], and with Admiral Keating’s permission, Post immediately informed AFM [Assistant Foreign Minister] Liu Jieyi.” In January 2010, American intelligence detected a fresh Chinese anti-satellite test. This time Beijing destroyed one of its own missiles, rather than a satellite, 150 miles above Earth. The Americans regarded the move as an “anti-satellite test”. Hillary Clinton, President Barack Obama’s newly installed Secretary of State, sent a fresh protest to the Chinese government, demanding to know: “What is the direction of China’s BMD [Ballistic Missile Defence] programme?” The State Department told US diplomats in Beijing that the Obama administration shared President Bush’s fears over China’s plans. “US objections to China’s direct-ascent anti-satellite testing,” Mrs Clinton’s officials wrote, “are still valid and reflect the policy of the United States.”

### [ ] No-link - putting non-military satellites in space won’t matter

**Other countries perceive weaponization now – makes their impact inevitable.**

Trevor Brown, MSc, S. Rajaratnam School of International Studies, Nanyang Technological University, Spring **2009**, “Soft Power and Space Weaponization,” Air and Space Power Journal, http://www.airpower.au.af.mil/airchronicles/apj/apj09/spr09/brown.html

The problem for the United States is that other nations believe it seeks to monopolize space in order to further its hegemonic dominance. In recent years, a growing number of nations have vocally objected to this perceived agenda. Poor US diplomacy on the issue of space weaponization contributes to increased geopolitical backlashes of the sort leading to the recent decline in US soft power—the ability to attract others by the legitimacy of policies and the values that underlie them—which, in turn, has restrained overall US national power despite any gains in hard power (i.e., the ability to coerce).8

### No escalation – even if they win risk of militarization, it won’t lead to war

Steven **Lambakis**, senior analyst at the National Institute for Public Policy, February **2001**, “Space Weapons: Refuting the Critics,” Policy Review, pp.45-46

One such assumption is that military developments over the past 50 years have created a security environment in which certain tactical events or localized crises run an unacceptably high risk of triggering a general, possibly even nuclear, war. We are therefore more secure when we do nothing to upset the global military balance, especially in space -- where we station key stabilizing assets. Yet we have little experience in reality to ground this freely wielded and rather academic assumption. By definition, anything that causes instability in armed relationships is to be avoided. But would "shots" in space, any more than shots on the ground, be that cause? When we look at what incites war, history instructs us that what matter most are the character and motivation of the states involved, along with the general balance of power (i.e., are we in the world of 1914, 1945, or 2001?). Fluctuations in national arsenals, be they based on earth or in space, do not determine, but rather more accurately are a reflection of, the course of politics among nations. In other words, it matters not so much that there are nuclear weapons, but rather whether Saddam Hussein or Tony Blair controls them and in what security context. The same may be said for space weapons.

### AT: SBSP 🡪 Intl tension

### SBSP resolves tensions – assures nations of peaceful space

Flournoy et al ’10 (Don, Professor and Editor, Online Journal of Space Communication, Scripps College of Communication; Robert Bell, Executive Director, Society of Satellite Professionals International, The New York Information Technology Center; Mark Hopkins, Chairman, Executive Committee, National Space Society; Stephan Tennsel, Principal and CEO, Space Energy AG; Feng Hsu, Sr. VP of the Space Energy Group & Sr. Fellow of the Aerospace Technology Working Group. “International Cooperation in Space - Why Not Space Solar Power?” http://spaceenergy.com/AnnouncementRetrieve.aspx?ID=51945 July 13, 2010)

The case for international cooperation in Space Solar Power has been greatly strengthened by US National Space Policy 2010. This is, perhaps, a perfect setting and opportunity for humanity to advance peaceful applications of space as the fossil fuel era tapers off this century. To further strengthen the case for peaceful international applications of outer space please look at the "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies" available here. Largely at the urging of Raghavan Gopalaswami but also because the timing is right and the message is important to us all, the following letter has been drafted and signed by Don Flournoy, Professor and Editor of Online Journal of Space Communication, Stephan Tennsel, Chairman and CEO of Space Energy Group, Feng Hsu, Sr. VP of the Space Energy Group & Sr. Fellow of the Aerospace Technology Working Group, Robert Bell, Executive Director of Society of Satellite Professionals International, and Mark Hopkins, Chairman, Executive Committee, National Space Society, to be sent to Senator John Kerry who is currently working on the American Power Act. WHY NOT SPACE SOLAR POWER? In naming the 18 CEOs who will serve on his new advisory board on trade issues, President Obama noted on July 7, 2010, that the U.S. is on track to double exports in the next five years, and he pointed to some of the ways the American economy is being re-positioned to better compete abroad. Adding that announcement to the outcomes of the Canadian G20 meetings and recent federal policy statements encouraging international cooperation in space, it would appear that the U.S. is entering a new era of openness for business. As members of the National Space Society, the Society of Satellite Professionals International and the Space Energy Group, we believe space, as a shared resource, can best be explored and developed by a partnership of nations and businesses working together. Achieving success doing large-scale commercial innovation in space requires the pooling of financial resources, sharing of knowledge and expertise and framing an agenda that will earn the public trust. The new U.S. National Space Policy 2010, which supports a robust and competitive commercial space sector, is good news for those of us working to design and launch the new types of satellites that will collect solar energy in space and deliver it to earth as a non-polluting source of electrical power. Among the goals of this policy is expansion of international cooperation on mutually beneficial space activities to "broaden and extend the benefits of space" and "further the peaceful use of space." Since acquiring clean and abundant energy is a common requirement for economic growth and an eventual necessity for the health of all societies, harvesting solar power from space is a logical human endeavor when the high frontier is where energy is most plentiful. From our perspective, space solar power (SSP) is a meaningful science and engineering and commercial challenge that deserves our attention and investment. We would like to see some greater leadership and support given to SSP development by NASA, our space agency, and by our departments of Energy and Commerce. A helpful first step could be a US-led SSP Feasibility Study to which all interested nations are invited to contribute. In the context of the US National Space Policy 2010, an SSP Feasibility Study could lead the way in assessing and promoting “appropriate cost and risk sharing among participating nations in international partnerships." Such a study would demonstrate U.S. “tangible leadership in space,” leveraging the capabilities of allies while assuring continuing adherence to the UN Treaty on Exploration and Use of Outer Space – now signed by 125 states including China and India - that dictates “nuclear weapons and other weapons of mass destruction” shall not be placed in outer space. At the International Space Development Conference (ISDC-Chicago) in May 2010, multiple nations participated in the First NSS Solar Power Symposium to examine in depth opportunities and challenges for energy generation in near space. Former President of India A.P.J. Abdul Kalam, scientist, aeronautical engineer and proponent of SSP, addressing the conference via videoconference, spoke to the need for international cooperation in space. Dr. Kalam proposed a multi-lateral global initiative that could map out for us what yet needs to be done to bring SSP to operational reality. In the wake of the Gulf of Mexico oil disaster, we think it is now time for the U.S. to put Space Solar Power on our national energy and climate change agenda. At the same time, we must seek opportunities to learn from and participate with Canada, China, India, Japan, European Union and others taking their first tentative steps to bring space solar energy to earth. In a June 2010 Times of India commentary on Strategic International Diplomacy, U.S. Sen. John Kerry expressed support for a partnership with India that would include "the quest for new technologies and fresh ideas for economically viable ways to speed the shift to renewable energy sources." We believe that within the mainstream of global science, engineering and environmental management there are game-changing ideas and technologies that wait testing. It is time to see some SSP demonstration projects. Of all the possible alternative energy sources on the near horizon, we believe space solar power is our best chance for addressing the worldwide challenges of climate change, renewable energy and continued economic growth.

### SBSP causes good intl relations – resolves energy tensions

**NSS 7** (Joseph Rouge, SBSP Study Group Director, National Space Security Office, “Space Based Solar Power as an Opportunity or National Security”, http://www.nss.org/settlement/ssp/library/final-sbsp-interim-assessment-release-01.pdf, 10/9/2007) SV

FINDING: The SBSP Study Group found that when people are first introduced to this subject, the key expressed concerns are centered around safety, possible weaponization of the beam, and vulnerability of the satellite, all of which must be addressed with education. Because the microwave beams are constant and conversion efficiencies high, they can be beamed at densities substantially lower than that of sunlight and still deliver more energy per area of land usage than terrestrial solar energy. The peak density of the beam is likely to be significantly less than noon sunlight, and at the edge of the rectenna equivalent to the leakage allowed and accepted by hundreds of millions in their microwave ovens. This low energy density and choice of wavelength also means that biological effects are likely extremely small, comparable to the heating one might feel if sitting some distance from a campfire. The physics of electromagnetic energy beaming is uncompromising, and economies of scale make the beam very unsuitable as a “secret” weapon. Concerns can be resolved through an inspection regime and better space situational awareness capabilities. The distance from the geostationary belt is so vast that beams diverge beyond the coherence and power concentration useful for a weapon. The beam can also be designed in such a manner that it requires a pilot signal even to concentrate to its very weak level. Without the pilot signal the microwave beam would certainly diffuse and can be designed with additional failsafe cut‐off mechanisms. The likelihood of the beam wandering over a city is extremely low, and even if occurring would be extremely anti‐climactic. Certainly both the rectenna and satellite are vulnerable to attack, just like every other type of energy infrastructure. However, it takes significantly more resources and sophistication to attack an asset in geostationary orbit than it does to attack a nuclear power plant, oil refinery or supertanker on Earth. The satellite is also very large and constructed of a number of similar redundant parts, so the attack would need to be very precise. An attack on the receiving antenna would probably be the least value‐added attack, since it is a diffuse and distributed array of identical modular elements that can be quickly repaired while the receiving station continues to operate. Nevertheless, the best routes to security are a diversity and redundancy of clean energy sources, and a cooperative international regime where those who are capable of damaging a SBSP system also have an interest in preserving the new infrastructure for their own benefit.

### AT: SBSP as a weapon

### No military potential – cost, accuracy, and power

**Hornitschek et al 8** (Mike, Colonel and military researcher - USAF, Coyote Smith – colonel and scientist - USAF, Paul Demphouss – Lt. Colonel USMC, “Strategic Importance,” Ad Astra Spring 2008. <http://www.nss.org/adastra/AdAstra-SBSP-2008.pdf>)

When first confronted with the idea of gigawatts of coherent energy being beamed from a spacebased solar power (SBSP) satellite, people immediately ask, “wouldn’t that make a powerful weapon?” Depending on their bias that could either be a good thing: developing a disruptive capability to enhance U.S. power, or a bad thing: proliferating weapons to space. But the NSSO is not interested in spacebased solar power as a weapon. 1. The DoD is not looking to SBSP for new armaments capabilities. Its motivation for studying SBSP is to identify sources of energy at a reasonable cost anywhere in the world, to shorten the logistics lines and huge amount of infrastructure needed to support military combat operations, and to prevent conflicts over energy as current sources become increasingly costly. 2. SBSP does not offer any capability as a weapon that does not already exist in much less expensive options. For example, the nation already has working ICBMs with nuclear warheads should it choose to use them to destroy large enemy targets. 3. SBSP is not suitable for attacking ground targets. The peak intensity of the microwave beam that reaches the ground is less than a quarter of noon-sunlight; a worker could safely walk in the center of the beam. The physics of microwave transmission and deliberate safe-design of the transmitting antenna act to prevent beam focusing above a pre-determined maximum intensity level. Additionally, by coupling the transmitting beam to a unique ground-based pilot signal, the beam can be designed to instantly diffuse should pilot signal lock ever be lost or disrupted. 4. SBSP would not be a precision weapon. Today’s militaries are looking for more precise and lower collateral-damage weapons. At several kilometers across, the beam from geostationary Earth orbit is just too wide to shoot individual targets—even if the intensity were sufficient to cause harm.

# Kritiks

## 2AC Cap K

### 1. Framework—role of the ballot is plan vs. competitive policy option. It’s the best option

* 1. Competitive equity—discursive assumptions as a priori issues are unpredictable and jack aff ground
	2. Utopian thinking bad—policy focus is key—heg decline is inevitable absent the plan
	3. Vague alts bad – VI because they can always change the alt
	4. C/I—read your K as a counterplan—that avoids abusive individual and private fiat

### 2. Case outweighs –

### a. Timeframe – the neg’s impacts are empirically denied or at least have a really long timeframe. The aff’s timeframe for the impacts are short– the Kohl 11 evidence indicates the harms happen in 2012. The Aldren and Thomas 10 cards also show that the brink is now – we’re already facing the beginnings of the impacts. That means even if they win root cause arguments, we still win short-term extinction – that means you still vote aff because after short-term extinction, long-term conflicts don’t matter. This outweighs TF and probability

### 3. No link - Their evidence is not specific to SBSP, rather it cites “space humanization” capitalist instead of space based solar power. The aff doesn’t “humanize” space because the aff doesn’t send manned systems up

### 4. Cap good:

### a. Transition wars - the only way to get to the neg’s utopian world is to fully reject the capitalist system, and people will fight before the system is destroyed-empirics. These fights will result in extinction before we can reach their “utopian” world. C/A spending impact

### b. Capitalism key to environmental protection

Taylor, director of natural resource studies at CATO, Aprill 22, 2003

[Jerry, Happy Earth Day? Thank Capitalism, <http://www.cato.org/pub_display.php?pub_id=3073>]

Indeed, we wouldn't even have environmentalists in our midst were it not for capitalism. Environmental amenities, after all, are luxury goods. America -- like much of the Third World today -- had no environmental movement to speak of until living standards rose sufficiently so that we could turn our attention from simply providing for food, shelter, and a reasonable education to higher "quality of life" issues. The richer you are, the more likely you are to be an environmentalist. And people wouldn't be rich without capitalism. Wealth not only breeds environmentalists, it begets environmental quality. **There are dozens of studies showing that**, as per capita income initially rises from subsistence levels, air and water pollution increases correspondingly. But once per capita income hits between $3,500 and $15,000 (dependent upon the pollutant), the ambient concentration of pollutants begins to decline just as rapidly as it had previously increased. This relationship is found for virtually every significant pollutant in every single region of the planet. It is an iron law. Given that wealthier societies use more resources than poorer societies, such findings are indeed counterintuitive. But the data don't lie. How do we explain this?  The obvious answer -- that wealthier societies are willing to trade-off the economic costs of government regulation for environmental improvements and that poorer societies are not -- is only partially correct. In the United States, pollution declines generally predated the passage of laws mandating pollution controls. In fact, for most pollutants, declines were greater before the federal government passed its panoply of environmental regulations than after the EPA came upon the scene. Much of this had to do with individual demands for environmental quality. People who could afford cleaner-burning furnaces, for instance, bought them. People who wanted recreational services spent their money accordingly, creating profit opportunities for the provision of untrammeled nature. Property values rose in cleaner areas and declined in more polluted areas, shifting capital from Brown to Green investments. Market agents will supply whatever it is that people are willing to spend money on. And when people are willing to spend money on environmental quality, the market will provide it. Meanwhile, **capitalism rewards efficiency and punishes waste.** Profit-hungry companies found ingenious ways to reduce the natural resource inputs necessary to produce all kinds of goods0, which in turn reduced environmental demands on the land and the amount of waste that flowed through smokestacks and water pipes. As we learned to do more and more with a given unit of resources, the waste involved (which manifests itself in the form of pollution) shrank. This trend was magnified by the shift away from manufacturing to service industries, which characterizes wealthy, growing economies. The latter are far less pollution-intensive than the former. But the former are necessary prerequisites for the latter. Property rights -- a necessary prerequisite for free market economies -- also provide strong incentives to invest in resource health. Without them, no one cares about future returns because no one can be sure they'll be around to reap the gains. Property rights are also important means by which private desires for resource conservation and preservation can be realized. When the government, on the other hand, holds a monopoly on such decisions, minority preferences in developing societies are overruled (see the old Soviet block for details). Furthermore, only wealthy societies can afford the investments necessary to secure basic environmental improvements, such as sewage treatment and electrification. Unsanitary water and the indoor air pollution (caused primarily by burning organic fuels in the home for heating and cooking needs) are directly responsible for about 10 million deaths a year in the Third World, making poverty the number one environmental killer on the planet today. **Capitalism can save more lives threatened by environmental pollution than all the environmental organizations combined.**

### c. Capitalism increases competition which reverses its elitist effects

Taylor 4/8/11 (Paul, “Can Capitalism Save Space Travel?” The Globe and Mail http://www.theglobeandmail.com/news/technology/science/can-capitalism-save-space-travel/article1977191/)

Under Mr. Obama’s direction, the National Aeronautics and Space Administration has introduced financial incentives to entice companies to transport American astronauts into space, and both established and maverick aerospace companies are eager to get a piece of the action. There are already proposals for a half-dozen different designs, ranging from Boeing’s CST-100 seven-person space capsule to Sierra Nevada Corp.’s Dream Chaser, which looks like a mini-shuttle. The initiative, known as the commercial crew development program, or CCDev, may achieve what NASA could never do – bring down the sky-high cost of space flight. And in so doing, it could finally make the heavens available to a lot more people – not just professional astronauts and a handful of hyper-rich space tourists. “Our whole concept for this commercial crew program is that competition is good and the more competition you have, the better off you will be,” said Edward Mango, director of NASA’s space transportation planning office at the [Kennedy Space Center](http://www.theglobeandmail.com/news/technology/science/can-capitalism-save-space-travel/article1977191/) in Florida. Space travel has been a government-run enterprise since Soviet cosmonaut Yuri Gagarin became the first man in space 50 years ago this month. Only Russia, China and, at least for the next few months, the United States can put a human being into Earth orbit. It’s not simply faith in free-enterprise economics that is driving the Obama administration’s space policy. It’s also a matter of necessity. U.S. taxpayers and lawmakers are unwilling to finance NASA to the same extent that made it possible for America to land the first men on the moon in 1969. As Mr. Mango explains it, if NASA spends its limited funds building a new rocket system just to get a few hundred miles above the Earth, “there won’t be enough resources to do the exploration part.”

### 5. Utilitarianism is best:

### a. Maximizing all lives is the only way to affirm equality

Cummiskey 90’ (Professor of Philosophy, Bates,David, Kantian Consequentialism, Ethics 100.3, p 601-2, p 606, jstor)

We must not obscure the issue by characterizing this type of case as the sacrifice of individuals for some abstract "social entity." It is not a question of some persons having to bear the cost for some elusive "overall social good." Instead, the question is whether some persons must bear the inescapable cost for the sake of other persons. Nozick, for example, argues that "to use a person in this way does not sufficiently respect and take account of the fact that he is a separate person, that his is the only life he has."30 Why, however, is this not equally true of all those that we do not save through our failure to act? By emphasizing solely the one who must bear the cost if we act, one fails to sufficiently respect and take account of the many other separate persons, each with only one life, who will bear the cost of our inaction. In such a situation, what would a conscientious Kantian agent, an agent motivated by the unconditional value of rational beings, choose? We have a duty to promote the conditions necessary for the existence of rational beings, but both choosing to act and choosing not to act will cost the life of a rational being. Since the basis of Kant's principle is "rational nature exists as an end-in-itself' (GMM, p. 429), the reasonable solution to such a dilemma involves promoting, insofar as one can, the conditions necessary for rational beings. If I sacrifice some for the sake of other rational beings, I do not use them arbitrarily and I do not deny the unconditional value of rational beings. Persons may have "dignity, an unconditional and incomparable value" that transcends any market value (GMM, p. 436), but, as rational beings, persons alsohave a fundamental equality which dictates that some must sometimes give way for the sake of others. The formula of the end-in-itself thus does not support the view that we may never force another to bear some cost in order to benefit others. If one focuses on the equal value of all rational beings, then equal consideration dictates that one sacrifice some to save many. [continues] According to Kant, the objective end of moral action is the existence of rational beings. Respect for rational beings requires that, in deciding what to do, one give appropriate practical consideration to the unconditional value of rational beings and to the conditional value of happiness. Since agent-centered constraints require a non-value-based rationale, the most natural interpretation of the demand that one give equal respect to all rational beings lead to a consequentialist normative theory. We have seen that there is no sound Kantian reason for abandoning this natural consequentialist interpretation. In particular, a consequentialist interpretation does not require sacrifices which a Kantian ought to consider unreasonable, and it does not involve doing evil so that good may come of it. It simply requires an uncompromising commitment to the equal value and equal claims of all rational beings and a recognition that, in the moral consideration of conduct, one's own subjective concerns do not have overriding importance.

### b. Ethical policymaking requires calculation of consequences

Gvosdev 05’ (Rhodes scholar, PhD from St. Antony’s College, executive editor of The National Interest Nikolas, The Value(s) of Realism, SAIS Review 25.1, pmuse)

As the name implies, realists focus on promoting policies that are achievable and sustainable. In turn, the morality of a foreign policy action is judged by its results, not by the intentions of its framers. A foreign policymaker must weigh the consequences of any course of action and assess the resources at hand to carry out the proposed task. As Lippmann warned, Without the controlling principle that the nation must maintain its objectives and its power in equilibrium, its purposes within its means and its means equal to its purposes, its commitments related to its resources and its resources adequate to its commitments, it is impossible to think at all about foreign affairs.8 Commenting on this maxim, Owen Harries, founding editor of The National Interest, noted, "This is a truth of which Americans—more apt to focus on ends rather than means when it comes to dealing with the rest of the world—need always to be reminded."9 In fact, Morgenthau noted that "there can be no political morality without prudence."10 This virtue of prudence—which Morgenthau identified as the cornerstone of realism—should not be confused with expediency. Rather, it takes as its starting point that it is more moral to fulfill one's commitments than to make "empty" promises, and to seek solutions that minimize harm and produce sustainable results. Morgenthau concluded: [End Page 18] Political realism does not require, nor does it condone, indifference to political ideals and moral principles, but it requires indeed a sharp distinction between the desirable and the possible, between what is desirable everywhere and at all times and what is possible under the concrete circumstances of time and place.11 This is why, prior to the outbreak of fighting in the former Yugoslavia, U.S. and European realists urged that Bosnia be decentralized and partitioned into ethnically based cantons as a way to head off a destructive civil war. Realists felt this would be the best course of action, especially after the country's first free and fair elections had brought nationalist candidates to power at the expense of those calling for inter-ethnic cooperation. They had concluded—correctly, as it turned out—that the United States and Western Europe would be unwilling to invest the blood and treasure that would be required to craft a unitary Bosnian state and give it the wherewithal to function. Indeed, at a diplomatic conference in Lisbon in March 1992, the various factions in Bosnia had, reluctantly, endorsed the broad outlines of such a settlement. For the purveyors of moralpolitik, this was unacceptable. After all, for this plan to work, populations on the "wrong side" of the line would have to be transferred and resettled. Such a plan struck directly at the heart of the concept of multi-ethnicity—that different ethnic and religious groups could find a common political identity and work in common institutions. When the United States signaled it would not accept such a settlement, the fragile consensus collapsed. The United States, of course, cannot be held responsible for the war; this lies squarely on the shoulders of Bosnia's political leaders. Yet Washington fell victim to what Jonathan Clarke called "faux Wilsonianism," the belief that "high-flown words matter more than rational calculation" in formulating effective policy, which led U.S. policymakers to dispense with the equation of "balancing commitments and resources."12 Indeed, as he notes, the Clinton administration had criticized peace plans calling for decentralized partition in Bosnia "with lofty rhetoric without proposing a practical alternative." The subsequent war led to the deaths of tens of thousands and left more than a million people homeless. After three years of war, the Dayton Accords—hailed as a triumph of American diplomacy—created a complicated arrangement by which the federal union of two ethnic units, the Muslim-Croat Federation, was itself federated to a Bosnian Serb republic. Today, Bosnia requires thousands of foreign troops to patrol its internal borders and billions of dollars in foreign aid to keep its government and economy functioning. Was the aim of U.S. policymakers, academics and journalists—creating a multi-ethnic democracy in Bosnia—not worth pursuing? No, not at all, and this is not what the argument suggests. But aspirations were not matched with capabilities. As a result of holding out for the "most moral" outcome and encouraging the Muslim-led government in Sarajevo to pursue maximalist aims rather than finding a workable compromise that could have avoided bloodshed and produced more stable conditions, the peoples of Bosnia suffered greatly. In the end, the final settlement was very close [End Page 19] to the one that realists had initially proposed—and the one that had also been roundly condemned on moral grounds.

### **6. No impact- empirically denied – cap hasn’t caused great power wars and it’s been a major world system for a long time. The only great power wars in history were not caused by capitalism but rather by authoritarianism or a form if it.**

### **7. Conditionality Bad**

1. Interpretation: negative can read all dispositional - solves your offense – straight turning means they’re forced to go for it while still allowing substantial neg flex

2. Interpretation: negative gets one conditional advocacy – let’s them get away with enough abuse to win

3. Strategy skew – allows neg to cross apply arguments on other flows – undermines aff’s ability to utilize best offense – and severs ability to straight turn because counterplan captures offense

4. Argumentive irresponsibility – undermines advocacy skills by allowing neg to go for whichever advocacy is least covered

### **8. Capitalism inevitable- it’s a part of human rationale**

Wood 2 (Ellen M., Ph.D in political science from UCLA, *The Origin of Capitalism,* pg. 4-6)

These question-begging explanations have their origina in classical political economy and Enlightenment conceptions of progress. Together, they give an account of historical development in which the mergence and growth to maturity of capitalism are already prefigured in the earliest manifestations of human rationality, in the technological advances that began when Homo Sapiens first wielded a tool, and in the acts of exchange human beings have practised since time immemorial. History’s journey to that final destination, to ‘commercial society’ or capitalism, has, to be sure, been long and arduous, and many obstacles hace stood in its way. But its progress has nonetheless been natural and inevtiable. Nothing more is required, then, to explain the ‘rise of capitalism’ than an account of how many obstacles to its forward movement have been lifted- sometimes gradually, sometimes suddenly, with revolutionary violence. In more accounts of capitalism and its origin, there really *is* no origin. Capitalism seems always to be there, somehwere; and it only needs to be realeased from its chains- for instance, from the fetters of fuedalism- to be allowed to grow and mature. Typically, these fetters are political: the parasitic powers of lordship, or the restrictions of an autocratic state. Sometimes they are cultural or ideological: perhaps the wrong religion. These contraints confine the free movement of ‘economic’ actors, the free expression of econmic rationality. The ‘economic’ in these formulations is identified with exchange or markets; and it is here that we can detect the assumption that the seeds of capitalism are contained in the most primitive acts of exchange, in any form of trade or market activity. That assumption is typically connected With the other presupposition: that history has been an almost natural process of technological development. One way or another, capitalism more or less naturally appears when and where expanding markets and technological development reach the right level, allowing sufficient wealth to be accumulated so that is can be profitably reinvested. Many Marxist explanations are fundamentally the same- with the addition of bourgeois revolutions to help break the fetters. The effect of these explanation is to stress the continuity between non-capitalist and capitalist societies, and to deny the disguise of the specificity of capitalism. Exchange has existed more or less forever, and it seems that the capitalist market is just more of the same. In this kind of argument, because capitalism’s specific and unique need constantly to revolutionize the forces of production is just an extension and an acceleration of universal and transhistorical, almost natural, tendencies, industrialization is the inevitable outcome of humanity’s most basic inclinations. So the lineage of capitalism passes naturally from the earliest Babylonian merchant through the medieval burgher to the early modern bourgeois and finally to the industrial capitalist. There is similar logic in certain Marxist versions of this story, even though the narrative in more recent version often shifts from the town to the countryside, and merchants are replaced by rural commodity producers, small or ‘middling’ farmers waiting for the opportunity to blossom into full-blown capitalists. In this kind of narrative, petty commodity production, released from the bonds of feudalism, grows more or less naturally into capitalism, and petty commodity producers, just given the chance, will take the capitalist road. Central to these conventional accounts of history are certain assumptions, explicit or implicit, about human nature and about how human beings will behave, if only given the chance. They will, so the story goes, always avail themselves of the opportunity to maximize profits through acts of exchange, and in order to realize that natural inclination, they will always find ways of improving the organization and instruments of work in order to enhance the productivity of labor.

### 9. Perm: do both the plan and reject cap in all other instances

### 10. And, it’s a double bind--either the alt can overcome the aff's use of capitalism so the perm works, or the alt can't solve making the impacts of the k inevitable

### 11. Alt fails

a. In the world of the rejection of capitalism, the harms of the 1AC would be able to occur – those outweigh any risk of the terminal impacts of the K

- Magnitude – the ultimate impact of the affirmative is extinction – accessed in 5 ways. The impact for the K would be a global war – which is still survivable – as bad as it sounds, WW1 and WW2 prove

- Probability – the affirmative accesses 5 scenarios of extinction over the neg’s 1 – there’s more of a chance that one of the 5 would come true. also, low probability that the impacts of the neg could happen

## 2AC Frontier K

### Case outweighs the K - it’s try or die - utilization of space recourses is uniquely key to mitigate climate change

**Creola, ’96 –** Advisor for European Space Cooperation [Dr. Peter Creola; “Space and the fate of humanity;” keynoteaddress to the International Space University Symposium, Space for Service to Humanity; published 1996]

Let us turn, therefore, to those space resources I am convinced we will need so desperately in the next century in order to avoid chaos and misery on Earth. The most needed one will be energy, not only to equalise living standards, but also to produce more food for an ever-growing population and more drinking water in the face of dwindling reserves. Figure 3 shows the depletion of Planet Earth's fossil fuel reserves over a slightly longer time scale than usual. Compared to the Planet's age, compared to the time that humans has existed, this depletion happens practically in one single instant. We light them up - and they burn like 'one single match in the darkness of eternity'. People in the traditional energy business normally reassure us: oil and natural gas are still plentiful - you only have to look at current prices - new reserves are discovered at almost the same rate as old ones are depleted and new technology will allow us to exploit hitherto inaccessible reserves. So today's energy people are fine: as long as there is a lot of fuel, they earn a lot, because of rising consumption, and once it becomes scarce, they will obviously earn a lot as well. But the present projections are normally based on present consumption per capita and do not take into account phenomena like the economic awakening of entire regions such as China. To come to the point: it does not matter whether fossil fuels and uranium are depleted in 100 years or 500 years, one day we will have to live without them. And we will have to develop the technologies to tap other energy sources while there is still time. In the long run, we have no other choice than the massive exploitation of solar energy. We have to convert this planet's industry, this planet's society, this planet's lifestyle to solar power. For many years I opposed the concept of collecting that energy in space and beaming it back to Earth. After all, installing large photovoltaic farms on Earth would always be much cheaper than launching and assembling all those huge surfaces in orbit. I no longer believe this to be true. Let me give just three reasons. First, in the next century even desert land might become scarce, because we need it to house our exploding population. Second, the total surface of the Earth collects far less than one billionth of the Sun's total radiated energy. So if we need lots of solar energy, we have to get out to catch it. Third, why should we launch solar power stations from Earth, if we can construct them right where they belong: on the Moon - or easily accessible from the Moon. Figure 4 is David Criswell's famous Lunar Solar Power System Concept of 1993, which is surely familiar to some. It is to be seen in the wider context of the so-called space option promoted by my compatriots Marco Bernasconi and Arthur Woods. Actually building power stations on the Moon - easy once you have achieved a permanent robotic and/or human presence there and you have mastered the technology of self-replicating machinery - certainly makes a lot of sense and could be among the very few options for getting us out of the civilisationthreatening energy crunch. Well, time is running out. We are still on the Moon, constructing solar power stations. Do we have a chance to save the Earth? To do this, we will have to cut short further illustrations of large-scale integration of near-Earth space into the terrestrial economy. One is mining the asteroids to get at their precious raw materials. Another one is modifying the solar flux with a huge lens between our planet and our natural - fully operational and pollution-free - nuclear power plant in order to mitigate natural or man-made climate change. Think about the tantalising scientific, technological, ethical, political and regulatory questions! We have just begun to decipher a few phrases of the chapter 'life support system' in the operations manual of Spaceship Earth. We have a long way to go before we can model the regional and global effects of selectively heating or cooling certain areas with large space based structures. But we know already - I mentioned it at the beginning **-** that, within the great climatic cycles of the past, there have been brutal variations of several degrees centigrade up or down within two or three decades. We know now, for instance, that the Gulf Stream could suddenly change its course, plunging northern Europe into a second Ice Age ironically without changing the overall and probably man-induced global warming trend. Shall we have to try then to heat up that part of the globe? Once we have the means to influence climate in one region, other regions will inevitably ask for their share of a better climate in order to win new lands to house their ever-increasing population and to grow more food for starving masses. It is difficult to avoid the feeling that this might just be another one of the potential future horror scenarios resulting from the combined long-term effect of unmitigated overproduction of humans and relentless economic growth. I feel uneasy about this kind of space technology. When I was still a student writing my thesis on Space Law, I dreamed about exploring the pristine wonder of the Universe and not massive exploitation to the sole benefit of one single form of Earthlife calling itself intelligent while being too stupid to solve the problems it was sufficiently clever to create. Let's hope for one thing: that economic expansion into near-Earth space will buy us time! One hundred, one thousand, ten thousand years. Time to find out why we are incapable of stopping our cancerlike growth. Time to find out why we always start destroying before trying to save. Time to overcome the ill effects of our instincts without losing those that make us human beings: caring, loving and wondering where we came from and where we are going. Only then we can confidently venture beyond near-Earth space to the stars and discover why we are alone or find out where the others are and how they coped with their growth disease. But first, this is the overwhelming priority, we have to earn our wings as pilots of Spaceship Earth - otherwise, it will pretty soon sail without us.

### Reps don’t shape reality – empirical reality must come first

Rodwell 5 [Jonathan, PhD student at Manchester Met. researching U.S. Foreign Policy, “Trendy but empty: A Response to Richard Jackson”]

However, having said that, the problem is Jackson’s own theoretical underpinning, his own justification for the importance of language. If he was merely proposing that the understanding of language as one of many causal factors is important that would be fine. But he is not. The epistemological and theoretical framework of his argument means the ONLY thing we should look at is language and this is the problem.[[ii]](http://www.49thparallel.bham.ac.uk/back/issue15/rodwell1.htm#_edn2) Rather than being a fairly simple, but nonetheless valid, argument, because of the theoretical justification it actually becomes an almost nonsensical. My response is roughly laid out in four parts. Firstly I will argue that such methodology, in isolation, is fundamentally reductionist with a theoretical underpinning that does not conceal this simplicity.  Secondly, that a strict use of post-structural discourse analysis results in an epistemological cul-de-sac in which the writer cannot actually say anything. Moreover the reader has no reason to accept anything that has been written. The result is at best an explanation that remains as equally valid as any other possible interpretation and at worse a work that retains no critical force whatsoever. Thirdly, possible arguments in response to this charge; that such approaches provide a more acceptable explanation than others are, in effect, both a tacit acceptance of the poverty of force within the approach and of the complete lack of understanding of the identifiable effects of the real world around us; thus highlighting the contradictions within post-structural claims to be moving beyond traditional causality, re-affirming that rather than pursuing a post-structural approach we should continue to employ the traditional methodologies within History, Politics and International Relations.  Finally as a consequence of these limitations I will argue that the post-structural call for ‘intertextuals’ must be practiced rather than merely preached and that an understanding and utilisation of all possible theoretical approaches must be maintained if academic writing is to remain useful rather than self-contained and narrative. Ultimately I conclude that whilst undeniably of some value post-structural approaches are at best a footnote in our understanding.The first major problem then is that historiographically discourse analysis is so capacious as to be largely of little use. The process of inscription identity, of discourse development is not given any political or historical context, it is argued that it just works, is simply a universal phenomenon. It is history that explains everything and therefore actually explains nothing. To be specific if the U.S. and every other nation is continually reproducing identities through ‘othering’ it is a constant and universal phenomenon that fails to help us understand at all why one result of the othering turned out one way and differently at another time. For example, how could one explain how the process resulted in the 2003 invasion of Iraq but didn’t produce a similar invasion of Afghanistan in 1979 when that country (and by the logic of the Regan administrations discourse) the West was threatened by the ‘Evil Empire’. By the logical of discourse analysis in both cases these policies were the result of politicians being able to discipline and control the political agenda to produce the outcomes. So why were the outcomes not the same? To reiterate the point how do we explain that the language of the War on Terror actually managed to result in the eventual Afghan invasion in 2002? Surely it is impossible to explain how George W. Bush was able to convince his people (and incidentally the U.N and Nato) to support a war in Afghanistan without referring to a simple fact outside of the discourse; the fact that a known terrorist in Afghanistan actually admitted to the murder of thousands of people on the 11h of Sepetember 2001. The point is that if the discursive ‘othering’ of an ‘alien’ people or group is what really gave the U.S. the opportunity to persue the war in Afghanistan one must surly wonder why Afghanistan. Why not North Korea? Or Scotland? If the discourse is so powerfully useful in it’s own right why could it not have happened anywhere at any time and more often? Why could the British government not have been able to justify an armed invasion and regime change in Northern Ireland throughout the terrorist violence of the 1980’s? Surely they could have just employed the same discursive trickery as George W. Bush? Jackson is absolutely right when he points out that the actuall threat posed by Afghanistan or Iraq today may have been thoroughly misguided and conflated and that there must be more to explain why those wars were enacted at that time. Unfortunately that explanation cannot simply come from the result of inscripting identity and discourse. On top of this there is the clear problem that the consequences of the discursive othering are not necessarily what Jackson would seem to identify. This is a problem consistent through David Campbell’s original work on which Jackson’s approach is based[iii]. David Campbell argued for a linguistic process that ‘always results in an other being marginalized’ or has the potential for ‘demonisation’[iv]. At the same time Jackson, building upon this, maintains without qualification that the systematic and institutionalised abuse of Iraqi prisoners first exposed in April 2004 “is a direct consequence of the language used by senior administration officials: conceiving of terrorist suspects as ‘evil’, ‘inhuman’ and ‘faceless enemies of freedom creates an atmosphere where abuses become normalised and tolerated”[v]. The only problem is that the process of differentiation does not actually necessarily produce dislike or antagonism. In the 1940’s and 50’s even subjected to the language of the ‘Red Scare’ it’s obvious not all Americans came to see the Soviets as an ‘other’ of their nightmares. And in Iraq the abuses of Iraqi prisoners are isolated cases, it is not the case that the U.S. militarily summarily abuses prisoners as a result of language. Surely the massive protest against the war, even in the U.S. itself, is also a self evident example that the language of ‘evil’ and ‘inhumanity’ does not necessarily produce an outcome that marginalises or demonises an ‘other’. Indeed one of the points of discourse is that we are continually differentiating ourselves from all others around us without this necessarily leading us to hate fear or abuse anyone.[vi] Consequently, the clear fear of the Soviet Union during the height of the Cold War, and the abuses at Abu Ghirab are unusual cases. To understand what is going on we must ask how far can the process of inscripting identity really go towards explaining them? As a result at best all discourse analysis provides us with is a set of universals and a heuristic model Next, discourse analysis as practiced exists within an enormous logical cul-de-sac. Born of the original premise that each discourse and explanation has it’s own realities, what results is a theoretical approach in which a critique is actually impossible because by post-structural logic a critique can only operate within it’s own discursive structure and on it’s own terms. If things only exist within specific languages and discourse you must share the basic premises of that discourse to be able to say anything about it. But what useful criticisms can you make if you share fundamental assumptions? Moreover remembering the much argued for normative purposes of Jackson’s case he talks about the effects of naturalizing language and without blushing criticises the dangerous anti-terror rhetoric of George W. Bush. The only problem is Jackson has attempted to illustrate that what is moral or immoral depends on the values and structures of each discourse. Therefore why should a reader believe Richard Jackson’s idea of right and wrong any more than George W. Bush’s? Fundamentally if he wishes to maintain that each discourse is specific to each intellectual framework Jackson cannot criticise at all. By his own epistemological rules if he is inside those discourses he shares their assumptions, outside they make no sense What actually occurs then is an aporia - a logical contraction where a works own stated epistemological premises rob it of the ability to contain any critical force. Such arguments are caught between the desire to maintain that all discursive practices construct their own truths, in which case critiques are not possible as they are merely one of countless possible discursive truths with no actually reason to take then seriously, or an appeal to material reality, but again the entire premises of post structural linguistics rejects the idea of a material reality.[vii] In starting from a premise that it is not possible to neutrally describe the real world, the result is that without that real world, discourse analysis actually has nothing to say. The issue of the material real world, or ‘evidence’ is actually the issue at the heart of the weakness of post-structural discourse analysis, though it does hold the potential to at least rescue some of it’s usefulness. The problem is simple, in that the only way Jackson or any post-structuralist can operationalise their argument is with an appeal to material evidence. But by the logic of discourse analysis there is no such thing as neutral ‘evidence’. To square this circle many post-struturalist writers do seem to hint at complexity and what post-structural culturalists might call ‘intertextuality’, arguing for ‘favouring a complexity of interactions’ rather than ‘linear causality’[viii]. The implication is that language is just one of an endless web of factors and surely this prompts one to pursue an understanding of these links. However, to do so would dangerously undermine the entire post-structural project as again, if there are discoverable links between factors, then there are material facts that are identifiable regardless of language. Consequently, rather than seeking to understand the links between factors what seems to happen is hands are thrown up in despair as the search for complexity is dropped as quickly as it is picked up. The result is one-dimensional arguments that again can say little. This is evident in Jackson’s approach as he details how words have histories and moreover are part of a dialectic process in which ‘they not only shape social structures but are also shaped by them’.[ix] However we do not then see any discussion of whether, therefore, it is not discourse that is the powerful tool but the effect of the history and the social structure itself. Throughout Jackson’s argument it is a top down process in which discourse disciplines society to follow the desire of the dominant, but here is an instance of a dialectic process where society may actually be the originating force, allowing the discourse in turn to actually to be more powerful. However we simply see no exploration of this potential dialectic process, merely the suggestion it exists. Consequently because there is no interaction between the language the culture and the material then there is not much that can actually be done. All that is done is to repeatedly detail the instances where the same tropes occur time and time again and suggest they have an impact.[x] What cannot be explained however is why those tropes exist or how they have an influence. So, for example, Jackson is unable to explain how the idea that the members of the emergency services attending the scene at the World Trade Centre on 9/11 were heroes is a useful trope disciplining the populace via the tool of Hollywood blockbusters and popular entertainments heroes. All he is able to claim is that lots of films have heroes, lots of stories have heroes and people like heroes. All might be true but what exactly is the point? And how do we actually know the language has the prescribed effect? Indeed how do we know people don’t support the villain in films instead of heroes? The reason it there is no attempt to explore the complexity of causation is that this would clearly automatically undermine the concentration on discourse. Moreover it would require the admittance of identifiable evidence about the real world to be able to say anything about it! For if something historical changed the meaning of a word, or if something about society gave the word a different meaning and impact, then it would be an identifiable ‘something’. Moreover if the word is tied to and altered by an historical event or social impact, would it not be a case of assessing the effect of original event itself as well as the language? The larger problem is that without clear causal links between materially identifiable events and factors any assessment within the argument actually becomes nonsensical. Mirroring the early inability to criticise, if we have no traditional causational discussion how can we know what is happening? For example, Jackson details how the rhetoric of anti-terrorism and fear is obfuscating the real problems. It is proposed that the real world killers are not terrorism, but disease or illegal drugs or environmental issues. The problem is how do we know this? It seems we know this because there is evidence that illustrates as much – Jackson himself quoting to Dr David King who argued global warming is a greater that than terrorism. The only problem of course is that discourse analysis has established (as argued by Jackson) that King’s argument would just be self-contained discourse designed to naturalise another arguments for his own reasons. Ultimately it would be no more valid than the argument that excessive consumption of Sugar Puffs is the real global threat. It is worth repeating that I don’t personally believe global terrorism is the world’s primary threat, nor do I believe that Sugar Puffs are a global killer. But without the ability to identify real facts about the world we can simply say anything, or we can say nothing. This is clearly ridiculous and many post-structuralists can see this. Their argument is that there “are empirically more persuasive explanations.”[[xi]](http://www.49thparallel.bham.ac.uk/back/issue15/rodwell1.htm#_edn11) The phrase ‘empirically persuasive’ is however the final undermining of post-structural discourse analysis. It is a seemingly fairly obvious reintroduction of traditional methodology and causal links. It implies things that can be seen to be right regardless of perspective or discourse. It again goes without saying that logically in this case if such an assessment is possible then undeniable material factors about the word are real and are knowable outside of any cultural definition. Language or culture then does not wholy constitute reality. How do we know in the end that the world not threatened by the onslaught of an oppressive and dangerous breakfast cereal? Because empirically persuasive evidence tells us this is the case. The question must then be asked, is our understanding of the world born of evidential assessment, or born of discourse analysis? Or perhaps it’s actually born of utilisation of many different possible explanations.

### Perm do both

### Permutation – do the plan and reject the frontier mentality in all other instances – we have to stop real threats

Jones 99 [Richard, Director of Institute of Welsh Politics @ Univ. of Wales, Security, Strategy, and Critical Theory, pp. 109-110]

Politically speaking, Wæver's strategy of desecuritization has **real limitations**. What of those problems that *are* a **threat to survival**? Should groups abandon the mobilization potential that is undoubtedly generated by using the term “security”? One presumes not, but then are **existential threats** to security simply to be abandoned to traditional, zero-sum, militarized forms of thought and action? These questions highlight two significant weaknesses in Wæver's original formulation of the speech act approach: (1) its state-centrism and (2) the apparent unwillingess to question the content or meaning of security. State-centrism is the point at issue in the next section. Suffice it to say here that in his initial formulation of the speech act theory of security, Wæver attempted to yoke his insights concerning securitization to a thoroughgoing state-centrism (Wæver 1994, 1995). As we have seen, he was interested only in how states securitized issues in order to justify extraordinary measures by states: Wæver viewed the grammar of security as inherently statist. In doing so he actually undermined much of the usefulness of the speech act approach. Its (potential) great strength is that it encourages analysts to interrogate the politics of how particular threats are securitized in order to mobilize and legitimate particular responses to them. States, or even state elites, are not the only actors who use the grammar of security in this way. All kinds of social groups, at both sub- and suprastate levels, attempt to securitize many different types of issues, often with far-reaching sociocultural, political, and economic implications. Consider, for example, how the peace movement of the 1980s identified nuclearism as a threat to security (e.g., Falk and Lifton 1982; E. Thompson 1982b) and generated **massive public support** for its cause despite bitter opposition from governments. Or the way in which some Welsh-language activists have identified the flow of substantial numbers of so-called lifestyle migrants from England to rural Wales as a threat to the survival of the language and thus, in their view, to Welsh nationhood. Adopting a speech act approach to the politics of security as practiced by groups other than the state is a fruitful avenue for exploration. Yet Wæver's state-centrism initially led him to attempt to delegitimate any effort in this direction. Significantly, however, this position has now been reversed. In his collaborative study *Security: A New Framework for Analysis,* Wæver and his co-authors, Buzan and de Wilde, have decoupled the speech act approach from state-centrism, correctly acknowledging the distinction between “a state-centric approach and a state-dominated field [of study]” (Buzan, Wæver, and de Wilde 1998: 37). [1](http://www.questia.com/read/105822841)

### Dystopian scenarios mobilize coalitions and avert extinction

Kurasawa 4 Professor of Sociology, York University of Toronto [Fuyuki, “Cautionary Tales: The Global Culture of Prevention and the Work of Foresight,” *Constellations* 11.4, December, ebsco]

In the twenty-first century, the lines of political cleavage are being drawn along those of competing dystopian visions. Indeed, one of the notable features of recent public discourse and socio-political struggle is their negationist hue, for they are devoted as much to the prevention of disaster as to the realization of the good, less to what ought to be than what could but must not be. The debates that preceded the war in Iraq provide a vivid illustration of this tendency, as both camps rhetorically invoked incommensurable catastrophic scenarios to make their respective cases. And as many analysts have noted, the multinational antiwar protests culminating on February 15, 2003 marked the first time that a mass movement was able to mobilize substantial numbers of people dedicated to averting war before it had actually broken out. More generally, given past experiences and awareness of what might occur in the future, given the cries of ‘never again’ (the Second World War, the Holocaust, Bhopal, Rwanda, etc.) and ‘not ever’ (e.g., nuclear or ecological apocalypse, human cloning) that are emanating from different parts of the world, the avoidance of crises is seemingly on everyone’s lips – and everyone’s conscience. From the United Nations and regional multilateral organizations to states, from non-governmental organizations to transnational social movements, the determination to prevent the actualization of potential cataclysms has become a new imperative in world affairs. Allowing past disasters to reoccur and unprecedented calamities to unfold is now widely seen as unbearable when, in the process, the suffering of future generations is callously tolerated and our survival is being irresponsibly jeopardized. Hence, we need to pay attention to what a widely circulated report by the International Commission on Intervention and State Sovereignty identifies as a burgeoning “culture of prevention,”3 a dynamic that carries major, albeit still poorly understood, normative and political implications. Rather than bemoaning the contemporary preeminence of a dystopian imaginary, I am claiming that it can enable a novel form of transnational socio-political action, a manifestation of globalization from below that can be termed preventive foresight. We should not reduce the latter to a formal principle regulating international relations or an ensemble of policy prescriptions for official players on the world stage, since it is, just as significantly, a mode of ethico-political practice enacted by participants in the emerging realm of global civil society. In other words, what I want to underscore is the work of farsightedness, the social processes through which civic associations are simultaneously constituting and putting into practice a sense of responsibility for the future by attempting to prevent global catastrophes. Although the labor of preventive foresight takes place in varying political and socio-cultural settings – and with different degrees of institutional support and access to symbolic and material resources – it is underpinned by three distinctive features: dialogism, publicity, and transnationalism. In the first instance, preventive foresight is an intersubjective or dialogical process of address, recognition, and response between two parties in global civil society: the ‘warners,’ who anticipate and send out word of possible perils, and the audiences being warned, those who heed their interlocutors’ messages by demanding that governments and/or international organizations take measures to steer away from disaster. Secondly, the work of farsightedness derives its effectiveness and legitimacy from public debate and deliberation. This is not to say that a fully fledged global public sphere is already in existence, since transnational “strong publics” with decisional power in the formal-institutional realm are currently embryonic at best. Rather, in this context, publicity signifies that “weak publics” with distinct yet occasionally overlapping constituencies are coalescing around struggles to avoid specific global catastrophes.4 Hence, despite having little direct decision-making capacity, the environmental and peace movements, humanitarian NGOs, and other similar globally-oriented civic associations are becoming significant actors involved in public opinion formation. Groups like these are active in disseminating information and alerting citizens about looming catastrophes, lobbying states and multilateral organizations from the ‘inside’ and pressuring them from the ‘outside,’ as well as fostering public participation in debates about the future. This brings us to the transnational character of preventive foresight, which is most explicit in the now commonplace observation that we live in an interdependent world because of the globalization of the perils that humankind faces (nuclear annihilation, global warming, terrorism, genocide, AIDS and SARS epidemics, and so on); individuals and groups from far-flung parts of the planet are being brought together into “risk communities” that transcend geographical borders.5 Moreover, due to dense media and information flows, knowledge of impeding catastrophes can instantaneously reach the four corners of the earth – sometimes well before individuals in one place experience the actual consequences of a crisis originating in another. My contention is that civic associations are engaging in dialogical, public, and transnational forms of ethico-political action that contribute to the creation of a fledgling global civil society existing ‘below’ the official and institutionalized architecture of international relations. The work of preventive foresight consists of forging ties between citizens; participating in the circulation of flows of claims, images, and information across borders; promoting an ethos of farsighted cosmopolitanism; and forming and mobilizing weak publics that debate and struggle against possible catastrophes. Over the past few decades, states and international organizations have frequently been content to follow the lead of globally- minded civil society actors, who have been instrumental in placing on the public agenda a host of pivotal issues (such as nuclear war, ecological pollution, species extinction, genetic engineering, and mass human rights violations).

### Focus on hegemonic opportunity allows for deterrence and nationalism

Sadeh et. al., ’98 – professors at CEISS, Colorado State [[E. Sadeh](http://www.sciencedirect.com.proxy.lib.umich.edu/science?_ob=RedirectURL&_method=outwardLink&_partnerName=27983&_origin=article&_zone=art_page&_linkType=scopusAuthorDocuments&_targetURL=http%3A%2F%2Fwww.scopus.com%2Fscopus%2Finward%2Fauthor.url%3FpartnerID%3D10%26rel%3D3.0.0%26sortField%3Dcited%26sortOrder%3Dasc%26author%3DSadeh,%2520E.%26authorID%3D6603044842%26md5%3Dc4129a930e9af495c196253eda4d7c20&_acct=C000007678&_version=1&_userid=99318&md5=2b40b1be48fae7ebacb7990d9e15d192), [James P. Lester](http://www.sciencedirect.com.proxy.lib.umich.edu/science?_ob=RedirectURL&_method=outwardLink&_partnerName=27983&_origin=article&_zone=art_page&_linkType=scopusAuthorDocuments&_targetURL=http%3A%2F%2Fwww.scopus.com%2Fscopus%2Finward%2Fauthor.url%3FpartnerID%3D10%26rel%3D3.0.0%26sortField%3Dcited%26sortOrder%3Dasc%26author%3DLester,%2520J.%2520P.%26authorID%3D7202753646%26md5%3D139538a6ef5c7e5d9cab4b5af9975081&_acct=C000007678&_version=1&_userid=99318&md5=529fbf6c881a748a84f68ced6816a68b), and [W. Z. Sadeh](http://www.sciencedirect.com.proxy.lib.umich.edu/science?_ob=RedirectURL&_method=outwardLink&_partnerName=27983&_origin=article&_zone=art_page&_linkType=scopusAuthorDocuments&_targetURL=http%3A%2F%2Fwww.scopus.com%2Fscopus%2Finward%2Fauthor.url%3FpartnerID%3D10%26rel%3D3.0.0%26sortField%3Dcited%26sortOrder%3Dasc%26author%3DSadeh,%2520W.%2520Z.%26authorID%3D7003642062%26md5%3D702a184c09093e433957a64a808bc0e8&_acct=C000007678&_version=1&_userid=99318&md5=ccebf171139f75ea9c4ddbc50f486508), professors at the Center for Engineering Infrastructure and Sciences in Space at Colorado State University; “Modeling international cooperation in human space exploration for the twenty-first century;” published in [Acta Astronautica](http://www.sciencedirect.com.proxy.lib.umich.edu/science/journal/00945765), [Volume 43, Issues 7-8](http://www.sciencedirect.com.proxy.lib.umich.edu/science?_ob=PublicationURL&_tockey=%23TOC%235679%231998%23999569992%23255099%23FLA%23&_cdi=5679&_pubType=J&view=c&_auth=y&_acct=C000007678&_version=1&_urlVersion=0&_userid=99318&md5=f4391b98e38c73e008e2b59599f9b394), October 1998, Pages 427-435; Jay]

The pessimistic scenario is characterized by political and economic divisions. International cooperation (when and if it exists) is structured and dominated politically and economically by a powerful state (e.g., U.S.) *vis-à-vis* weaker states based on power asymmetries. This scenario envisions regional polarization politically and economically between the U.S.–Canada, European Community, Russia–Eastern Europe, Japan–Southeast Asia and China. Cooperation is dependent upon the structure of interstate power whereupon states compare the political costs of cooperation (reduced national autonomy) with the pragmatic benefits (economic and technological augmentation). In this scenario, science and technological variables are secondary to the more salient political and economic concerns. States are the dominant and exclusive political actor. The values on initial condition dynamics include asymmetric power patterns, national interests, coordination and augmentation policy preferences and minimum knowledge patterns. Four trends and events are identified that discern the pessimistic from the optimistic scenario: (1) enhanced importance of science and technology relative to politics and economics; (2) economic interdependencies between states to an extent that no one individual state possesses the financial wherewithal to independently develop large-scale human space exploration endeavors; (3) emergence of dramatic political events that shift state interests and policy preferences that are more conducive for cooperation; and (4) development of enabling technologies that reduces space mission costs to a level that matches the current trends in state funding for space. The greater the likelihood of occurrence of these factors, the less probable the pessimistic scenario. Thus, the probability of occurrence of the pessimistic scenario is very high if all factors are not present; high if only one factor is present; 50–50 if two factors are present; low if three factors are present; and zero if all four factors are present. The probability of each model emerging as the determinative political process is assessed and shown in [Table 4](http://www.sciencedirect.com.proxy.lib.umich.edu/science/article/pii/S0094576597001951#tbl4). Probable cooperative dynamics are limited to structural conditioning and convergence of norms. Structural conditioning implies that a powerful state and respective national space agency (e.g. U.S. and NASA) exploit power asymmetries to realize first and foremost their desired interests and policy preferences. Convergence of norms becomes possible if states emphasize the normative symbolic aspect of space exploration. In this case, symbolism rooted in national identity and international leadership and prestige is what provides the political will for space exploration. If other states reach the same conclusion, then cooperation becomes one vehicle for advancing these symbolic attributes. The pessimistic scenario of international cooperation is reinforced by the various reports that have been published regarding the future of the U.S. civilian space program[2, 3, 4, 5, 6, 7, 8, 9]. These reports take the position that international cooperation is of secondary importance. Future space program scenarios are conceived in primarily nationalistic terms whereby cooperation with other states is not fundamental to either program design or execution. For example, the space exploration initiative (SEI) was justified on a number of rationale factors—exploration ethos, national prestige, advancing science education, developing technologies, commercializing space and strengthening the U.S. economy—of which international cooperation was not included[6]. The Ride Report[3] provides a systematic analysis of the U.S. civilian space program to show how the U.S. has lost its leadership position in space especially as it relates to maintaining a human presence there. To this end, a space strategic development plan for the 21st century is developed based on restoring U.S. leadership status. This requires that the U.S. have capabilities that enable it to act independently and impressively when and where it chooses. In the NASA Strategic Plan[9] , international cooperation is not considered crucial in realizing four space strategic enterprises (Human Exploration and Development of Space (HEDS), Space Sciences, Earth Sciences, and Aeronautics and Space Transportation Technology). The strategic plan focuses on developing these enterprises to meet the goals of various governmental (President and Congress) and domestic public constituencies with the ultimate benefactors being policy makers, science communities, aeronautics industry, other governmental agencies, public sector and academic communities all within the U.S. Although, cooperation does emerge as part of the HEDS enterprise (e.g., ISS), it is viewed as an inevitable outcome of the current state of international relations that must be exploited to advance U.S. interests and policy preferences in space exploration.

### Our form of imperialism is less violent than the alt and deters conflicts

Shaw 2– Professor of International Relations and Politics at the University of Sussex (Martin, “Exploring *imperia*: Western-global power amidst the wars of quasi-imperial states,” <http://www.theglobalsite.ac.uk/press/212shaw.htm>, dml)

One question that arises today is whether the major successor-state to the Soviet bloc, the Russian Federation, has escaped the quasi-imperial mode of rule in which its predecessor was mired. It is difficult for anyone who examines post-Soviet Russia to argue that this 'nation-state' is not, in important respects, a truncated version of the historic Soviet and indeed Russian empires. As Chechnya shows, Russian rule over peripheral regions remains highly contested and repressive. However the same questions arise with the other major non-Western centres of 'national' state power that have been consolidated since 1945, not only China and other remaining Communist states, but also major non-Communist, often pro-Western 'nation-states' ranging from India and Pakistan to Indonesia and Turkey. Despite significant differences in their political regimes, and despite their different relations to the Cold War and the post-Cold War West, it is striking that in all cases there are highly unequal relations between centres and peripheries, mired in authoritarianism of different kinds. It is plausible to argue that contemporary non-Western state forms suffer from similar disadvantages, as forms of state power, compared to the West*, from which the Soviet Union suffered*. I have tried to summarise these differences in [Table 2](http://www.theglobalsite.ac.uk/press/212shawtable2.htm). What is particularly important to note is that the tendency in Western state entities is for quasi-imperial contradictions to be increasingly controlled in ways that prevent extensive violence. National/regional conflicts have been largely contained, with only limited violence, e.g. in Canada (Quebec), Belgium (Flanders/Wallonia), UK (N. Ireland, Scotland, Wales), Spain (Basque country, Catalonia), Italy, etc. If anything, the tendencies are for state and paramilitary leaders to seek political solutions, even if these are not always successful and criminalisation tends to reinforce low-level paramilitarism. In contrast, in what I am calling quasi-imperial nation-states, conflicts between state power and secessionist/autonomist movements in the peripheries are much more likely to become violent. There are some cases, in relatively prosperous and relatively pro-Western states, where there have been serious and partially attempts to manage these contradictions in political ways: e.g. the peaceful splitting of Czechoslovakia, and the avoidance of all-out war in South Africa between the ANC, the apartheid regime and Inkatha. It is possible now that the peace process between the new Fox administration and the Zapatistas will avoid continuing violence in Mexico; even that the long-standing war between Turkey and the PKK has come to a conclusion and will lead to genuine reform. However it is clear that the problem of empire is deep-rooted in many quasi-imperial nation-states, and not only the largest, as [Table 3](http://www.theglobalsite.ac.uk/press/212shawtable3.htm) shows: *many of these states are rooted in historic empires*, and conflicts have long histories; and *these are states in which earlier crises of empire, involving revolutionary change, have led to reproductions of imperial power* in new forms. Furthermore, it can be argued that because of deep-rooted, imperial and authoritarian modes of power (both Communist and anti-Communist) democratic change in quasi-imperial nation-states throws up contradictions that are often managed by state violence. In these states, rulers do not see democracy as involving real recognition of minority rights, still less the possibility of secession. Likewise, traditions of political struggle are often not democratic, but highly militarised, and oppositional movements often (but not always) look to violent means of change.

### The alternative cedes the political to elites – leads to extinction

Boggs 97 [Carl, National University, Los Angeles, Theory and Society, “The great retreat: Decline of the public sphere in late twentieth-century America”]

The decline of the public sphere in late twentieth-century America poses a series of great dilemmas and challenges. Many ideological currents scrutinized here – localism, metaphysics, spontaneism, post-modernism, Deep Ecology – intersect with and reinforce each other. While these currents have deep origins in popular movements of the 1960s and 1970s, they remain very much alive in the 1990s. Despite their different outlooks and trajectories, they all share one thing in common: a depoliticized expression of struggles to combat and overcome alienation. The false senseof empowerment that comes with such mesmerizing impulses is accompanied by a loss of public engagement, an erosion of citizenship and a depleted capacity of individuals in large groups to work for social change. As this ideological quagmire worsens, urgent problems that are destroying the fabric of American society will go unsolved – perhaps even unrecognized – only to fester more ominously in the future. And such problems (ecological crisis, poverty, urban decay, spread of infectious diseases, technological displacement of workers) cannot be understood outside the larger social and *global* context of internationalized markets, finance, and communications. Paradoxically, the widespread retreat from politics, often inspired by localist sentiment, comes at a time when agendas that ignore or sidestep these global realities will, more than ever, be reduced to impotence. In his commentary on the state of citizenship today, Wolin refers to the increasing sublimation and dilution of politics, as larger numbers of people turn away from public concerns toward private ones. By diluting the life of common involvements, we negate the very idea of politics as a source of public ideals and visions. 74 In the meantime, the fate of the world hangs in the balance. The unyielding truth is that, even as the ethos of anti-politics becomes more compelling and even fashionable in the United States, it is the vagaries of political power that will continue to decide the fate of human societies. This last point demands further elaboration. The shrinkage of politics hardly means that corporate colonization will be less of a reality, that social hierarchies will somehow disappear, or that gigantic state and military structures will lose their hold over people’s lives. Far from it: the space abdicated by a broad citizenry, well-informed and ready to participate at many levels, can in fact be filled by authoritarian and reactionary elites – an already familiar dynamic in many lesser-developed countries. The fragmentation and chaos of a Hobbesian world, not very far removed from the rampant individualism, social Darwinism, and civic violence that have been so much a part of the American landscape, could be the prelude to a powerful Leviathan designed to impose order in the face of disunity and atomized retreat. In this way the eclipse of politics might set the stage for a *reassertion* of politics in more virulent guise – or it might help further rationalize the existing power structure. In either case, the state would likely become what Hobbes anticipated: the embodiment of those universal, collective interests that had vanished from civil society. 75

## 2AC Security K

### Case outweighs the K - it’s try or die - utilization of space recourses is uniquely key to mitigate climate change

**Creola, ’96 –** Advisor for European Space Cooperation [Dr. Peter Creola; “Space and the fate of humanity;” keynoteaddress to the International Space University Symposium, Space for Service to Humanity; published 1996]

Let us turn, therefore, to those space resources I am convinced we will need so desperately in the next century in order to avoid chaos and misery on Earth. The most needed one will be energy, not only to equalise living standards, but also to produce more food for an ever-growing population and more drinking water in the face of dwindling reserves. Figure 3 shows the depletion of Planet Earth's fossil fuel reserves over a slightly longer time scale than usual. Compared to the Planet's age, compared to the time that humans has existed, this depletion happens practically in one single instant. We light them up - and they burn like 'one single match in the darkness of eternity'. People in the traditional energy business normally reassure us: oil and natural gas are still plentiful - you only have to look at current prices - new reserves are discovered at almost the same rate as old ones are depleted and new technology will allow us to exploit hitherto inaccessible reserves. So today's energy people are fine: as long as there is a lot of fuel, they earn a lot, because of rising consumption, and once it becomes scarce, they will obviously earn a lot as well. But the present projections are normally based on present consumption per capita and do not take into account phenomena like the economic awakening of entire regions such as China. To come to the point: it does not matter whether fossil fuels and uranium are depleted in 100 years or 500 years, one day we will have to live without them. And we will have to develop the technologies to tap other energy sources while there is still time. In the long run, we have no other choice than the massive exploitation of solar energy. We have to convert this planet's industry, this planet's society, this planet's lifestyle to solar power. For many years I opposed the concept of collecting that energy in space and beaming it back to Earth. After all, installing large photovoltaic farms on Earth would always be much cheaper than launching and assembling all those huge surfaces in orbit. I no longer believe this to be true. Let me give just three reasons. First, in the next century even desert land might become scarce, because we need it to house our exploding population. Second, the total surface of the Earth collects far less than one billionth of the Sun's total radiated energy. So if we need lots of solar energy, we have to get out to catch it. Third, why should we launch solar power stations from Earth, if we can construct them right where they belong: on the Moon - or easily accessible from the Moon. Figure 4 is David Criswell's famous Lunar Solar Power System Concept of 1993, which is surely familiar to some. It is to be seen in the wider context of the so-called space option promoted by my compatriots Marco Bernasconi and Arthur Woods. Actually building power stations on the Moon - easy once you have achieved a permanent robotic and/or human presence there and you have mastered the technology of self-replicating machinery - certainly makes a lot of sense and could be among the very few options for getting us out of the civilisationthreatening energy crunch. Well, time is running out. We are still on the Moon, constructing solar power stations. Do we have a chance to save the Earth? To do this, we will have to cut short further illustrations of large-scale integration of near-Earth space into the terrestrial economy. One is mining the asteroids to get at their precious raw materials. Another one is modifying the solar flux with a huge lens between our planet and our natural - fully operational and pollution-free - nuclear power plant in order to mitigate natural or man-made climate change. Think about the tantalising scientific, technological, ethical, political and regulatory questions! We have just begun to decipher a few phrases of the chapter 'life support system' in the operations manual of Spaceship Earth. We have a long way to go before we can model the regional and global effects of selectively heating or cooling certain areas with large space based structures. But we know already - I mentioned it at the beginning **-** that, within the great climatic cycles of the past, there have been brutal variations of several degrees centigrade up or down within two or three decades. We know now, for instance, that the Gulf Stream could suddenly change its course, plunging northern Europe into a second Ice Age ironically without changing the overall and probably man-induced global warming trend. Shall we have to try then to heat up that part of the globe? Once we have the means to influence climate in one region, other regions will inevitably ask for their share of a better climate in order to win new lands to house their ever-increasing population and to grow more food for starving masses. It is difficult to avoid the feeling that this might just be another one of the potential future horror scenarios resulting from the combined long-term effect of unmitigated overproduction of humans and relentless economic growth. I feel uneasy about this kind of space technology. When I was still a student writing my thesis on Space Law, I dreamed about exploring the pristine wonder of the Universe and not massive exploitation to the sole benefit of one single form of Earthlife calling itself intelligent while being too stupid to solve the problems it was sufficiently clever to create. Let's hope for one thing: that economic expansion into near-Earth space will buy us time! One hundred, one thousand, ten thousand years. Time to find out why we are incapable of stopping our cancerlike growth. Time to find out why we always start destroying before trying to save. Time to overcome the ill effects of our instincts without losing those that make us human beings: caring, loving and wondering where we came from and where we are going. Only then we can confidently venture beyond near-Earth space to the stars and discover why we are alone or find out where the others are and how they coped with their growth disease. But first, this is the overwhelming priority, we have to earn our wings as pilots of Spaceship Earth - otherwise, it will pretty soon sail without us.

### Discourse doesn’t shape reality – empirical reality must come first

Rodwell 5 [Jonathan, PhD student at Manchester Met. researching U.S. Foreign Policy, “Trendy but empty: A Response to Richard Jackson”]

However, having said that, the problem is Jackson’s own theoretical underpinning, his own justification for the importance of language. If he was merely proposing that the understanding of language as one of many causal factors is important that would be fine. But he is not. The epistemological and theoretical framework of his argument means the ONLY thing we should look at is language and this is the problem.[[ii]](http://www.49thparallel.bham.ac.uk/back/issue15/rodwell1.htm#_edn2) Rather than being a fairly simple, but nonetheless valid, argument, because of the theoretical justification it actually becomes an almost nonsensical. My response is roughly laid out in four parts. Firstly I will argue that such methodology, in isolation, is fundamentally reductionist with a theoretical underpinning that does not conceal this simplicity.  Secondly, that a strict use of post-structural discourse analysis results in an epistemological cul-de-sac in which the writer cannot actually say anything. Moreover the reader has no reason to accept anything that has been written. The result is at best an explanation that remains as equally valid as any other possible interpretation and at worse a work that retains no critical force whatsoever. Thirdly, possible arguments in response to this charge; that such approaches provide a more acceptable explanation than others are, in effect, both a tacit acceptance of the poverty of force within the approach and of the complete lack of understanding of the identifiable effects of the real world around us; thus highlighting the contradictions within post-structural claims to be moving beyond traditional causality, re-affirming that rather than pursuing a post-structural approach we should continue to employ the traditional methodologies within History, Politics and International Relations.  Finally as a consequence of these limitations I will argue that the post-structural call for ‘intertextuals’ must be practiced rather than merely preached and that an understanding and utilisation of all possible theoretical approaches must be maintained if academic writing is to remain useful rather than self-contained and narrative. Ultimately I conclude that whilst undeniably of some value post-structural approaches are at best a footnote in our understanding.The first major problem then is that historiographically discourse analysis is so capacious as to be largely of little use. The process of inscription identity, of discourse development is not given any political or historical context, it is argued that it just works, is simply a universal phenomenon. It is history that explains everything and therefore actually explains nothing. To be specific if the U.S. and every other nation is continually reproducing identities through ‘othering’ it is a constant and universal phenomenon that fails to help us understand at all why one result of the othering turned out one way and differently at another time. For example, how could one explain how the process resulted in the 2003 invasion of Iraq but didn’t produce a similar invasion of Afghanistan in 1979 when that country (and by the logic of the Regan administrations discourse) the West was threatened by the ‘Evil Empire’. By the logical of discourse analysis in both cases these policies were the result of politicians being able to discipline and control the political agenda to produce the outcomes. So why were the outcomes not the same? To reiterate the point how do we explain that the language of the War on Terror actually managed to result in the eventual Afghan invasion in 2002? Surely it is impossible to explain how George W. Bush was able to convince his people (and incidentally the U.N and Nato) to support a war in Afghanistan without referring to a simple fact outside of the discourse; the fact that a known terrorist in Afghanistan actually admitted to the murder of thousands of people on the 11h of Sepetember 2001. The point is that if the discursive ‘othering’ of an ‘alien’ people or group is what really gave the U.S. the opportunity to persue the war in Afghanistan one must surly wonder why Afghanistan. Why not North Korea? Or Scotland? If the discourse is so powerfully useful in it’s own right why could it not have happened anywhere at any time and more often? Why could the British government not have been able to justify an armed invasion and regime change in Northern Ireland throughout the terrorist violence of the 1980’s? Surely they could have just employed the same discursive trickery as George W. Bush? Jackson is absolutely right when he points out that the actuall threat posed by Afghanistan or Iraq today may have been thoroughly misguided and conflated and that there must be more to explain why those wars were enacted at that time. Unfortunately that explanation cannot simply come from the result of inscripting identity and discourse. On top of this there is the clear problem that the consequences of the discursive othering are not necessarily what Jackson would seem to identify. This is a problem consistent through David Campbell’s original work on which Jackson’s approach is based[iii]. David Campbell argued for a linguistic process that ‘always results in an other being marginalized’ or has the potential for ‘demonisation’[iv]. At the same time Jackson, building upon this, maintains without qualification that the systematic and institutionalised abuse of Iraqi prisoners first exposed in April 2004 “is a direct consequence of the language used by senior administration officials: conceiving of terrorist suspects as ‘evil’, ‘inhuman’ and ‘faceless enemies of freedom creates an atmosphere where abuses become normalised and tolerated”[v]. The only problem is that the process of differentiation does not actually necessarily produce dislike or antagonism. In the 1940’s and 50’s even subjected to the language of the ‘Red Scare’ it’s obvious not all Americans came to see the Soviets as an ‘other’ of their nightmares. And in Iraq the abuses of Iraqi prisoners are isolated cases, it is not the case that the U.S. militarily summarily abuses prisoners as a result of language. Surely the massive protest against the war, even in the U.S. itself, is also a self evident example that the language of ‘evil’ and ‘inhumanity’ does not necessarily produce an outcome that marginalises or demonises an ‘other’. Indeed one of the points of discourse is that we are continually differentiating ourselves from all others around us without this necessarily leading us to hate fear or abuse anyone.[vi] Consequently, the clear fear of the Soviet Union during the height of the Cold War, and the abuses at Abu Ghirab are unusual cases. To understand what is going on we must ask how far can the process of inscripting identity really go towards explaining them? As a result at best all discourse analysis provides us with is a set of universals and a heuristic model Next, discourse analysis as practiced exists within an enormous logical cul-de-sac. Born of the original premise that each discourse and explanation has it’s own realities, what results is a theoretical approach in which a critique is actually impossible because by post-structural logic a critique can only operate within it’s own discursive structure and on it’s own terms. If things only exist within specific languages and discourse you must share the basic premises of that discourse to be able to say anything about it. But what useful criticisms can you make if you share fundamental assumptions? Moreover remembering the much argued for normative purposes of Jackson’s case he talks about the effects of naturalizing language and without blushing criticises the dangerous anti-terror rhetoric of George W. Bush. The only problem is Jackson has attempted to illustrate that what is moral or immoral depends on the values and structures of each discourse. Therefore why should a reader believe Richard Jackson’s idea of right and wrong any more than George W. Bush’s? Fundamentally if he wishes to maintain that each discourse is specific to each intellectual framework Jackson cannot criticise at all. By his own epistemological rules if he is inside those discourses he shares their assumptions, outside they make no sense What actually occurs then is an aporia - a logical contraction where a works own stated epistemological premises rob it of the ability to contain any critical force. Such arguments are caught between the desire to maintain that all discursive practices construct their own truths, in which case critiques are not possible as they are merely one of countless possible discursive truths with no actually reason to take then seriously, or an appeal to material reality, but again the entire premises of post structural linguistics rejects the idea of a material reality.[vii] In starting from a premise that it is not possible to neutrally describe the real world, the result is that without that real world, discourse analysis actually has nothing to say. The issue of the material real world, or ‘evidence’ is actually the issue at the heart of the weakness of post-structural discourse analysis, though it does hold the potential to at least rescue some of it’s usefulness. The problem is simple, in that the only way Jackson or any post-structuralist can operationalise their argument is with an appeal to material evidence. But by the logic of discourse analysis there is no such thing as neutral ‘evidence’. To square this circle many post-struturalist writers do seem to hint at complexity and what post-structural culturalists might call ‘intertextuality’, arguing for ‘favouring a complexity of interactions’ rather than ‘linear causality’[viii]. The implication is that language is just one of an endless web of factors and surely this prompts one to pursue an understanding of these links. However, to do so would dangerously undermine the entire post-structural project as again, if there are discoverable links between factors, then there are material facts that are identifiable regardless of language. Consequently, rather than seeking to understand the links between factors what seems to happen is hands are thrown up in despair as the search for complexity is dropped as quickly as it is picked up. The result is one-dimensional arguments that again can say little. This is evident in Jackson’s approach as he details how words have histories and moreover are part of a dialectic process in which ‘they not only shape social structures but are also shaped by them’.[ix] However we do not then see any discussion of whether, therefore, it is not discourse that is the powerful tool but the effect of the history and the social structure itself. Throughout Jackson’s argument it is a top down process in which discourse disciplines society to follow the desire of the dominant, but here is an instance of a dialectic process where society may actually be the originating force, allowing the discourse in turn to actually to be more powerful. However we simply see no exploration of this potential dialectic process, merely the suggestion it exists. Consequently because there is no interaction between the language the culture and the material then there is not much that can actually be done. All that is done is to repeatedly detail the instances where the same tropes occur time and time again and suggest they have an impact.[x] What cannot be explained however is why those tropes exist or how they have an influence. So, for example, Jackson is unable to explain how the idea that the members of the emergency services attending the scene at the World Trade Centre on 9/11 were heroes is a useful trope disciplining the populace via the tool of Hollywood blockbusters and popular entertainments heroes. All he is able to claim is that lots of films have heroes, lots of stories have heroes and people like heroes. All might be true but what exactly is the point? And how do we actually know the language has the prescribed effect? Indeed how do we know people don’t support the villain in films instead of heroes? The reason it there is no attempt to explore the complexity of causation is that this would clearly automatically undermine the concentration on discourse. Moreover it would require the admittance of identifiable evidence about the real world to be able to say anything about it! For if something historical changed the meaning of a word, or if something about society gave the word a different meaning and impact, then it would be an identifiable ‘something’. Moreover if the word is tied to and altered by an historical event or social impact, would it not be a case of assessing the effect of original event itself as well as the language? The larger problem is that without clear causal links between materially identifiable events and factors any assessment within the argument actually becomes nonsensical. Mirroring the early inability to criticise, if we have no traditional causational discussion how can we know what is happening? For example, Jackson details how the rhetoric of anti-terrorism and fear is obfuscating the real problems. It is proposed that the real world killers are not terrorism, but disease or illegal drugs or environmental issues. The problem is how do we know this? It seems we know this because there is evidence that illustrates as much – Jackson himself quoting to Dr David King who argued global warming is a greater that than terrorism. The only problem of course is that discourse analysis has established (as argued by Jackson) that King’s argument would just be self-contained discourse designed to naturalise another arguments for his own reasons. Ultimately it would be no more valid than the argument that excessive consumption of Sugar Puffs is the real global threat. It is worth repeating that I don’t personally believe global terrorism is the world’s primary threat, nor do I believe that Sugar Puffs are a global killer. But without the ability to identify real facts about the world we can simply say anything, or we can say nothing. This is clearly ridiculous and many post-structuralists can see this. Their argument is that there “are empirically more persuasive explanations.”[[xi]](http://www.49thparallel.bham.ac.uk/back/issue15/rodwell1.htm#_edn11) The phrase ‘empirically persuasive’ is however the final undermining of post-structural discourse analysis. It is a seemingly fairly obvious reintroduction of traditional methodology and causal links. It implies things that can be seen to be right regardless of perspective or discourse. It again goes without saying that logically in this case if such an assessment is possible then undeniable material factors about the word are real and are knowable outside of any cultural definition. Language or culture then does not wholy constitute reality. How do we know in the end that the world not threatened by the onslaught of an oppressive and dangerous breakfast cereal? Because empirically persuasive evidence tells us this is the case. The question must then be asked, is our understanding of the world born of evidential assessment, or born of discourse analysis? Or perhaps it’s actually born of utilisation of many different possible explanations.

### Perm do both

### Permutation – do the plan and reject securitization in all other instances – we have to stop real threats

Jones 99 [Richard, Director of Institute of Welsh Politics @ Univ. of Wales, Security, Strategy, and Critical Theory, pp. 109-110]

Politically speaking, Wæver's strategy of desecuritization has **real limitations**. What of those problems that *are* a **threat to survival**? Should groups abandon the mobilization potential that is undoubtedly generated by using the term “security”? One presumes not, but then are **existential threats** to security simply to be abandoned to traditional, zero-sum, militarized forms of thought and action? These questions highlight two significant weaknesses in Wæver's original formulation of the speech act approach: (1) its state-centrism and (2) the apparent unwillingess to question the content or meaning of security. State-centrism is the point at issue in the next section. Suffice it to say here that in his initial formulation of the speech act theory of security, Wæver attempted to yoke his insights concerning securitization to a thoroughgoing state-centrism (Wæver 1994, 1995). As we have seen, he was interested only in how states securitized issues in order to justify extraordinary measures by states: Wæver viewed the grammar of security as inherently statist. In doing so he actually undermined much of the usefulness of the speech act approach. Its (potential) great strength is that it encourages analysts to interrogate the politics of how particular threats are securitized in order to mobilize and legitimate particular responses to them. States, or even state elites, are not the only actors who use the grammar of security in this way. All kinds of social groups, at both sub- and suprastate levels, attempt to securitize many different types of issues, often with far-reaching sociocultural, political, and economic implications. Consider, for example, how the peace movement of the 1980s identified nuclearism as a threat to security (e.g., Falk and Lifton 1982; E. Thompson 1982b) and generated **massive public support** for its cause despite bitter opposition from governments. Or the way in which some Welsh-language activists have identified the flow of substantial numbers of so-called lifestyle migrants from England to rural Wales as a threat to the survival of the language and thus, in their view, to Welsh nationhood. Adopting a speech act approach to the politics of security as practiced by groups other than the state is a fruitful avenue for exploration. Yet Wæver's state-centrism initially led him to attempt to delegitimate any effort in this direction. Significantly, however, this position has now been reversed. In his collaborative study *Security: A New Framework for Analysis,* Wæver and his co-authors, Buzan and de Wilde, have decoupled the speech act approach from state-centrism, correctly acknowledging the distinction between “a state-centric approach and a state-dominated field [of study]” (Buzan, Wæver, and de Wilde 1998: 37). [1](http://www.questia.com/read/105822841)

### Dystopian scenarios mobilize coalitions and avert extinction

Kurasawa 4 Professor of Sociology, York University of Toronto [Fuyuki, “Cautionary Tales: The Global Culture of Prevention and the Work of Foresight,” *Constellations* 11.4, December, ebsco]

In the twenty-first century, the lines of political cleavage are being drawn along those of competing dystopian visions. Indeed, one of the notable features of recent public discourse and socio-political struggle is their negationist hue, for they are devoted as much to the prevention of disaster as to the realization of the good, less to what ought to be than what could but must not be. The debates that preceded the war in Iraq provide a vivid illustration of this tendency, as both camps rhetorically invoked incommensurable catastrophic scenarios to make their respective cases. And as many analysts have noted, the multinational antiwar protests culminating on February 15, 2003 marked the first time that a mass movement was able to mobilize substantial numbers of people dedicated to averting war before it had actually broken out. More generally, given past experiences and awareness of what might occur in the future, given the cries of ‘never again’ (the Second World War, the Holocaust, Bhopal, Rwanda, etc.) and ‘not ever’ (e.g., nuclear or ecological apocalypse, human cloning) that are emanating from different parts of the world, the avoidance of crises is seemingly on everyone’s lips – and everyone’s conscience. From the United Nations and regional multilateral organizations to states, from non-governmental organizations to transnational social movements, the determination to prevent the actualization of potential cataclysms has become a new imperative in world affairs. Allowing past disasters to reoccur and unprecedented calamities to unfold is now widely seen as unbearable when, in the process, the suffering of future generations is callously tolerated and our survival is being irresponsibly jeopardized. Hence, we need to pay attention to what a widely circulated report by the International Commission on Intervention and State Sovereignty identifies as a burgeoning “culture of prevention,”3 a dynamic that carries major, albeit still poorly understood, normative and political implications. Rather than bemoaning the contemporary preeminence of a dystopian imaginary, I am claiming that it can enable a novel form of transnational socio-political action, a manifestation of globalization from below that can be termed preventive foresight. We should not reduce the latter to a formal principle regulating international relations or an ensemble of policy prescriptions for official players on the world stage, since it is, just as significantly, a mode of ethico-political practice enacted by participants in the emerging realm of global civil society. In other words, what I want to underscore is the work of farsightedness, the social processes through which civic associations are simultaneously constituting and putting into practice a sense of responsibility for the future by attempting to prevent global catastrophes. Although the labor of preventive foresight takes place in varying political and socio-cultural settings – and with different degrees of institutional support and access to symbolic and material resources – it is underpinned by three distinctive features: dialogism, publicity, and transnationalism. In the first instance, preventive foresight is an intersubjective or dialogical process of address, recognition, and response between two parties in global civil society: the ‘warners,’ who anticipate and send out word of possible perils, and the audiences being warned, those who heed their interlocutors’ messages by demanding that governments and/or international organizations take measures to steer away from disaster. Secondly, the work of farsightedness derives its effectiveness and legitimacy from public debate and deliberation. This is not to say that a fully fledged global public sphere is already in existence, since transnational “strong publics” with decisional power in the formal-institutional realm are currently embryonic at best. Rather, in this context, publicity signifies that “weak publics” with distinct yet occasionally overlapping constituencies are coalescing around struggles to avoid specific global catastrophes.4 Hence, despite having little direct decision-making capacity, the environmental and peace movements, humanitarian NGOs, and other similar globally-oriented civic associations are becoming significant actors involved in public opinion formation. Groups like these are active in disseminating information and alerting citizens about looming catastrophes, lobbying states and multilateral organizations from the ‘inside’ and pressuring them from the ‘outside,’ as well as fostering public participation in debates about the future. This brings us to the transnational character of preventive foresight, which is most explicit in the now commonplace observation that we live in an interdependent world because of the globalization of the perils that humankind faces (nuclear annihilation, global warming, terrorism, genocide, AIDS and SARS epidemics, and so on); individuals and groups from far-flung parts of the planet are being brought together into “risk communities” that transcend geographical borders.5 Moreover, due to dense media and information flows, knowledge of impeding catastrophes can instantaneously reach the four corners of the earth – sometimes well before individuals in one place experience the actual consequences of a crisis originating in another. My contention is that civic associations are engaging in dialogical, public, and transnational forms of ethico-political action that contribute to the creation of a fledgling global civil society existing ‘below’ the official and institutionalized architecture of international relations. The work of preventive foresight consists of forging ties between citizens; participating in the circulation of flows of claims, images, and information across borders; promoting an ethos of farsighted cosmopolitanism; and forming and mobilizing weak publics that debate and struggle against possible catastrophes. Over the past few decades, states and international organizations have frequently been content to follow the lead of globally- minded civil society actors, who have been instrumental in placing on the public agenda a host of pivotal issues (such as nuclear war, ecological pollution, species extinction, genetic engineering, and mass human rights violations).

### Focus on hegemonic opportunity allows for deterrence and nationalism

Sadeh et. al., ’98 – professors at CEISS, Colorado State [[E. Sadeh](http://www.sciencedirect.com.proxy.lib.umich.edu/science?_ob=RedirectURL&_method=outwardLink&_partnerName=27983&_origin=article&_zone=art_page&_linkType=scopusAuthorDocuments&_targetURL=http%3A%2F%2Fwww.scopus.com%2Fscopus%2Finward%2Fauthor.url%3FpartnerID%3D10%26rel%3D3.0.0%26sortField%3Dcited%26sortOrder%3Dasc%26author%3DSadeh,%2520E.%26authorID%3D6603044842%26md5%3Dc4129a930e9af495c196253eda4d7c20&_acct=C000007678&_version=1&_userid=99318&md5=2b40b1be48fae7ebacb7990d9e15d192), [James P. Lester](http://www.sciencedirect.com.proxy.lib.umich.edu/science?_ob=RedirectURL&_method=outwardLink&_partnerName=27983&_origin=article&_zone=art_page&_linkType=scopusAuthorDocuments&_targetURL=http%3A%2F%2Fwww.scopus.com%2Fscopus%2Finward%2Fauthor.url%3FpartnerID%3D10%26rel%3D3.0.0%26sortField%3Dcited%26sortOrder%3Dasc%26author%3DLester,%2520J.%2520P.%26authorID%3D7202753646%26md5%3D139538a6ef5c7e5d9cab4b5af9975081&_acct=C000007678&_version=1&_userid=99318&md5=529fbf6c881a748a84f68ced6816a68b), and [W. Z. Sadeh](http://www.sciencedirect.com.proxy.lib.umich.edu/science?_ob=RedirectURL&_method=outwardLink&_partnerName=27983&_origin=article&_zone=art_page&_linkType=scopusAuthorDocuments&_targetURL=http%3A%2F%2Fwww.scopus.com%2Fscopus%2Finward%2Fauthor.url%3FpartnerID%3D10%26rel%3D3.0.0%26sortField%3Dcited%26sortOrder%3Dasc%26author%3DSadeh,%2520W.%2520Z.%26authorID%3D7003642062%26md5%3D702a184c09093e433957a64a808bc0e8&_acct=C000007678&_version=1&_userid=99318&md5=ccebf171139f75ea9c4ddbc50f486508), professors at the Center for Engineering Infrastructure and Sciences in Space at Colorado State University; “Modeling international cooperation in human space exploration for the twenty-first century;” published in [Acta Astronautica](http://www.sciencedirect.com.proxy.lib.umich.edu/science/journal/00945765), [Volume 43, Issues 7-8](http://www.sciencedirect.com.proxy.lib.umich.edu/science?_ob=PublicationURL&_tockey=%23TOC%235679%231998%23999569992%23255099%23FLA%23&_cdi=5679&_pubType=J&view=c&_auth=y&_acct=C000007678&_version=1&_urlVersion=0&_userid=99318&md5=f4391b98e38c73e008e2b59599f9b394), October 1998, Pages 427-435; Jay]

The pessimistic scenario is characterized by political and economic divisions. International cooperation (when and if it exists) is structured and dominated politically and economically by a powerful state (e.g., U.S.) *vis-à-vis* weaker states based on power asymmetries. This scenario envisions regional polarization politically and economically between the U.S.–Canada, European Community, Russia–Eastern Europe, Japan–Southeast Asia and China. Cooperation is dependent upon the structure of interstate power whereupon states compare the political costs of cooperation (reduced national autonomy) with the pragmatic benefits (economic and technological augmentation). In this scenario, science and technological variables are secondary to the more salient political and economic concerns. States are the dominant and exclusive political actor. The values on initial condition dynamics include asymmetric power patterns, national interests, coordination and augmentation policy preferences and minimum knowledge patterns. Four trends and events are identified that discern the pessimistic from the optimistic scenario: (1) enhanced importance of science and technology relative to politics and economics; (2) economic interdependencies between states to an extent that no one individual state possesses the financial wherewithal to independently develop large-scale human space exploration endeavors; (3) emergence of dramatic political events that shift state interests and policy preferences that are more conducive for cooperation; and (4) development of enabling technologies that reduces space mission costs to a level that matches the current trends in state funding for space. The greater the likelihood of occurrence of these factors, the less probable the pessimistic scenario. Thus, the probability of occurrence of the pessimistic scenario is very high if all factors are not present; high if only one factor is present; 50–50 if two factors are present; low if three factors are present; and zero if all four factors are present. The probability of each model emerging as the determinative political process is assessed and shown in [Table 4](http://www.sciencedirect.com.proxy.lib.umich.edu/science/article/pii/S0094576597001951#tbl4). Probable cooperative dynamics are limited to structural conditioning and convergence of norms. Structural conditioning implies that a powerful state and respective national space agency (e.g. U.S. and NASA) exploit power asymmetries to realize first and foremost their desired interests and policy preferences. Convergence of norms becomes possible if states emphasize the normative symbolic aspect of space exploration. In this case, symbolism rooted in national identity and international leadership and prestige is what provides the political will for space exploration. If other states reach the same conclusion, then cooperation becomes one vehicle for advancing these symbolic attributes. The pessimistic scenario of international cooperation is reinforced by the various reports that have been published regarding the future of the U.S. civilian space program[2, 3, 4, 5, 6, 7, 8, 9]. These reports take the position that international cooperation is of secondary importance. Future space program scenarios are conceived in primarily nationalistic terms whereby cooperation with other states is not fundamental to either program design or execution. For example, the space exploration initiative (SEI) was justified on a number of rationale factors—exploration ethos, national prestige, advancing science education, developing technologies, commercializing space and strengthening the U.S. economy—of which international cooperation was not included[6]. The Ride Report[3] provides a systematic analysis of the U.S. civilian space program to show how the U.S. has lost its leadership position in space especially as it relates to maintaining a human presence there. To this end, a space strategic development plan for the 21st century is developed based on restoring U.S. leadership status. This requires that the U.S. have capabilities that enable it to act independently and impressively when and where it chooses. In the NASA Strategic Plan[9] , international cooperation is not considered crucial in realizing four space strategic enterprises (Human Exploration and Development of Space (HEDS), Space Sciences, Earth Sciences, and Aeronautics and Space Transportation Technology). The strategic plan focuses on developing these enterprises to meet the goals of various governmental (President and Congress) and domestic public constituencies with the ultimate benefactors being policy makers, science communities, aeronautics industry, other governmental agencies, public sector and academic communities all within the U.S. Although, cooperation does emerge as part of the HEDS enterprise (e.g., ISS), it is viewed as an inevitable outcome of the current state of international relations that must be exploited to advance U.S. interests and policy preferences in space exploration.

### Environmental securitization sparks better policies

Dabelko and Simmons 97 [Geoffrey and P.J., Environment and Security: Core Ideas and US Government Initiatives, a Ph.D. candidate at the University of Maryland, College Park and Associate Director of the Environmental Change and Security Project at the Woodrow Wilson International Center for Scholars and the founding Director of the Environmental Change and Security Project (WWICS) and Editor of the Environmental Change and Security Project Report, Project Muse]

Some proponents believe that framing environmental and population issues as security problems and raising international awareness of environmental "threats" might spur **collective solutions**, promote better compliance with international environmental agreements, and improve relations between [End Page 130] groups and nations. Environment and security rhetoric may also generate the funding, domestic public support, and action-oriented responses necessary to achieve sustainable development and population goals. Early writings in particular employed this rhetoric explicitly to gain support and reorder priorities.

### Our form of imperialism is less violent than the alt and deters conflicts

Shaw 2– Professor of International Relations and Politics at the University of Sussex (Martin, “Exploring *imperia*: Western-global power amidst the wars of quasi-imperial states,” <http://www.theglobalsite.ac.uk/press/212shaw.htm>, dml)

One question that arises today is whether the major successor-state to the Soviet bloc, the Russian Federation, has escaped the quasi-imperial mode of rule in which its predecessor was mired. It is difficult for anyone who examines post-Soviet Russia to argue that this 'nation-state' is not, in important respects, a truncated version of the historic Soviet and indeed Russian empires. As Chechnya shows, Russian rule over peripheral regions remains highly contested and repressive. However the same questions arise with the other major non-Western centres of 'national' state power that have been consolidated since 1945, not only China and other remaining Communist states, but also major non-Communist, often pro-Western 'nation-states' ranging from India and Pakistan to Indonesia and Turkey. Despite significant differences in their political regimes, and despite their different relations to the Cold War and the post-Cold War West, it is striking that in all cases there are highly unequal relations between centres and peripheries, mired in authoritarianism of different kinds. It is plausible to argue that contemporary non-Western state forms suffer from similar disadvantages, as forms of state power, compared to the West*, from which the Soviet Union suffered*. I have tried to summarise these differences in [Table 2](http://www.theglobalsite.ac.uk/press/212shawtable2.htm). What is particularly important to note is that the tendency in Western state entities is for quasi-imperial contradictions to be increasingly controlled in ways that prevent extensive violence. National/regional conflicts have been largely contained, with only limited violence, e.g. in Canada (Quebec), Belgium (Flanders/Wallonia), UK (N. Ireland, Scotland, Wales), Spain (Basque country, Catalonia), Italy, etc. If anything, the tendencies are for state and paramilitary leaders to seek political solutions, even if these are not always successful and criminalisation tends to reinforce low-level paramilitarism. In contrast, in what I am calling quasi-imperial nation-states, conflicts between state power and secessionist/autonomist movements in the peripheries are much more likely to become violent. There are some cases, in relatively prosperous and relatively pro-Western states, where there have been serious and partially attempts to manage these contradictions in political ways: e.g. the peaceful splitting of Czechoslovakia, and the avoidance of all-out war in South Africa between the ANC, the apartheid regime and Inkatha. It is possible now that the peace process between the new Fox administration and the Zapatistas will avoid continuing violence in Mexico; even that the long-standing war between Turkey and the PKK has come to a conclusion and will lead to genuine reform. However it is clear that the problem of empire is deep-rooted in many quasi-imperial nation-states, and not only the largest, as [Table 3](http://www.theglobalsite.ac.uk/press/212shawtable3.htm) shows: *many of these states are rooted in historic empires*, and conflicts have long histories; and *these are states in which earlier crises of empire, involving revolutionary change, have led to reproductions of imperial power* in new forms. Furthermore, it can be argued that because of deep-rooted, imperial and authoritarian modes of power (both Communist and anti-Communist) democratic change in quasi-imperial nation-states throws up contradictions that are often managed by state violence. In these states, rulers do not see democracy as involving real recognition of minority rights, still less the possibility of secession. Likewise, traditions of political struggle are often not democratic, but highly militarised, and oppositional movements often (but not always) look to violent means of change.

### The alternative cedes the political to elites – leads to extinction

Boggs 97 [Carl, National University, Los Angeles, Theory and Society, “The great retreat: Decline of the public sphere in late twentieth-century America”]

The decline of the public sphere in late twentieth-century America poses a series of great dilemmas and challenges. Many ideological currents scrutinized here – localism, metaphysics, spontaneism, post-modernism, Deep Ecology – intersect with and reinforce each other. While these currents have deep origins in popular movements of the 1960s and 1970s, they remain very much alive in the 1990s. Despite their different outlooks and trajectories, they all share one thing in common: a depoliticized expression of struggles to combat and overcome alienation. The false senseof empowerment that comes with such mesmerizing impulses is accompanied by a loss of public engagement, an erosion of citizenship and a depleted capacity of individuals in large groups to work for social change. As this ideological quagmire worsens, urgent problems that are destroying the fabric of American society will go unsolved – perhaps even unrecognized – only to fester more ominously in the future. And such problems (ecological crisis, poverty, urban decay, spread of infectious diseases, technological displacement of workers) cannot be understood outside the larger social and *global* context of internationalized markets, finance, and communications. Paradoxically, the widespread retreat from politics, often inspired by localist sentiment, comes at a time when agendas that ignore or sidestep these global realities will, more than ever, be reduced to impotence. In his commentary on the state of citizenship today, Wolin refers to the increasing sublimation and dilution of politics, as larger numbers of people turn away from public concerns toward private ones. By diluting the life of common involvements, we negate the very idea of politics as a source of public ideals and visions. 74 In the meantime, the fate of the world hangs in the balance. The unyielding truth is that, even as the ethos of anti-politics becomes more compelling and even fashionable in the United States, it is the vagaries of political power that will continue to decide the fate of human societies. This last point demands further elaboration. The shrinkage of politics hardly means that corporate colonization will be less of a reality, that social hierarchies will somehow disappear, or that gigantic state and military structures will lose their hold over people’s lives. Far from it: the space abdicated by a broad citizenry, well-informed and ready to participate at many levels, can in fact be filled by authoritarian and reactionary elites – an already familiar dynamic in many lesser-developed countries. The fragmentation and chaos of a Hobbesian world, not very far removed from the rampant individualism, social Darwinism, and civic violence that have been so much a part of the American landscape, could be the prelude to a powerful Leviathan designed to impose order in the face of disunity and atomized retreat. In this way the eclipse of politics might set the stage for a *reassertion* of politics in more virulent guise – or it might help further rationalize the existing power structure. In either case, the state would likely become what Hobbes anticipated: the embodiment of those universal, collective interests that had vanished from civil society. 75

### Realism inevitable – grounded in human nature

Thayer, 4 [Bradley, Ph.D, Fellow at the Belfer Center for Science and International Affairs at Harvard, “Darwin and International Relations: On the Evolutionary Origins of War and Ethnic Conflict”]

In chapter 2, I explain how evolutionary theory contributes to the realist theory of international relations and to rational choice analysis. First, realism, like the Darwinian view of the natural world, submits that international relations is a competitive and dangerous realm, where statesmen must strive to protect the interests of their state before the interests of others or international society. Traditional realist arguments rest principally on one of two discrete ultimate causes, or intellectual foundations of the theory. The first is Reinhold Niebuhr’s argument that humans are evil. The second, anchored in the thought of Thomas Hobbes and Hans Morgenthau, is that humans possess an innate animus dominandi - a drive to dominate. From these foundations, Niebuhr and Morgenthau argue that what is true for the individual is also true of the state: because individuals are evil or possess a drive to dominate so too do states because their leaders are individuals who have these motivations. argue that realists have a much stronger foundationfor the realist argument than that used by either Morgenthau or Niebuhr. My intent is to present an alternative ultimate cause of classical realism: evolutionary theory. The use of evolutionary theory allows realism to be scientifically grounded for the first time, because evolution explains egoism. Thus a scientific explanationprovides a better foundation for their arguments than either theology or metaphysics. Moreover, evolutionary theory can anchor the branch of realism termed offensive realism and advanced most forcefully by John Mearsheimer. He argues that the anarchy of the international system, the fact that there is no world government, forces leaders of states to strive to maximize their relative power in order to be secure. I argue that theorists of international relations must recognize that human evolution occurred in an anarchic environment and that this explains why leaders act as offensive realism predicts. Humans evolved in anarchic conditions, and the implications of this are profound for theories of human behavior. It is also important to note at this point that my argument does not depend upon “anarchy” as it is traditionally used in the discipline - as the ordering principle of the post-1648 Westphalian state system. When human evolution is used to ground offensive realism, it immediately becomes a more powerful theory than is currently recognized. It explains more than just state behavior; it begins to explain human behavior. It applies equally to non-state actors, be they individuals, tribes, or organizations. Moreover, it explains this behavior before the creation of the modern state system. Offensive realists do not need an anarchic state system to advance their argument. They only need humans. Thus, their argument applies equally well before or after 1648, whenever humans form groups, be they tribes in Papua New Guinea, conflicting city-states in ancient Greece, organizations like the Catholic Church, or contemporary states in international relations.

### Realism is inevitable – even if it’s bad, it frames political action

Guzzini,98 senior research fellow at the Copenhagen Peace Research Institute [Stefano, *Realism in International Relations and International Political Economy*, pp. 226-227]

When all has been said and done, what is left of realism? For all those who believe in general causal theories the straight forward answer is not much. Certainly there is not enough to keep it going (except as welcome strawman or nuIl-hypothesls for the artIcle industry). Yet despite all, realism is still around. Indeed, we **cannot** just get rid of realism by proclaiming it dead. The reason for its resiliency, however, is not that it is a generally shared common sense, ‘which goes without saying', nor that it is a well­ defended explanatory theory, although some of its assumptions can be fruitfully employed. Realism is part of the collective memory and self-definition of international actors, academlcs or politicians alike which order thought, suggest analogies, and empower attitudes to political action. Hence, it is necessary to engage with realism, although this is emphatically not all what needs to be done in International Relations, theory and practice. Only by doing so we can move beyond our main tradition and school of thought. One cannot study world politics without understanding the main frame of thought within which it has been consciously conducted. Very often the world realism depicts is not out there, but **realism is**. This does not mean that the critical thought developed in all these chap­ters can be forgotten. Indeed, the idea was to open realism up to discussion and to invite the practitioners to more self-criticism, so as to avoid the many possIble self-fulfilling prophecies of realism. This chapter has argued that there is no way back to an empiricist realism. Similarly, there is little justified hope in realism as a causal explanatory theory. Its continuing existence points to the thesis which framed this book, that we have to understand realism as a historical practice, academic and political, rather than only as a theory. Realism does not passively reflect the world; it does something to it. This line of thought has been proposed mainly by historical sociologists and materialists, as well as constructivist and poststructuralist theories. Realism as a practice has becomes a privileged object of study, not only for this book (George 1994). This section analyses some of the internal critiques, that is those which take realist concerns very seriously. Since we cannot just step out of our tradition, the critical emphasis comes from making realism visible as a practice, and from turning it against the many irresponsible claims committed in its name. The main line of critique can be summarized as follows: realism does not take its central concepts seriously enough. To start with, its critiques claim that realism is a sceptical practice which however, stops short of problema­tizing the inherent theory of the state. It is, second, a practice which informs an international community. Third, international politics is not power poli­tics because it resembles realist precepts, but because the international com­munity which holds a realist world-view acts in such a way as to produce power politics: it is a social construction. Realist expectations might hold, not because they objectively correspond to something out there, but because agents make them the maxims that **guide their actions**.

# Topicality

## AT: Exploration = Human

### A) C/I: The “and/or” of the resolution requires the affirmative to conduct either exploration *or* development to be topical. Colonies are irrelevant

### B) We meet through SBSP, we develop space by putting up satellites to get solar energy

### C) Prefer our interpretation

### First, offense

###  1. Logic – the slash means it can be either and the word “or” means we can choose between the two options

###  2. Education

###  a. Just exploration means we never get to debate the potential developments in space, less education when we learn less about the potential worlds of the topic

###  b. Limiting us to colonies mean we have the same debate over and over again – no education

###  3. More real world – we have already started developing space with satellites; to ignore this is to ignore the real world parts of space policy

###  4. Ground – the affirmative should be able to defend the entirety of the resolution, without that ability, we lose half the ground but the neg still has all their arguments

### Second, defense

###  1. No topic explosion – the literature checks abuse, no way that we can do anything for any reason, there are very few positions we can take that would be supported by authors

###  2. Ground is still fair – our job is to defend the whole resolution, we can’t do that if you limit us only to exploration in colonies. Human colonization isn’t core – they don’t give any warrants. They should check the literature for legit aff options, their fault for being lazy

## AT: Development = Pre-existing

### A) We meet

### 1. We have SBSP already in a smaller capacity – that’s 1AC Whitesides ’08

### 2. Plan just adds on to the existing tech

### B) C/I: Development is any significant change in space after the plan is fully implemented

### C) We meet our C/I - space has multiple solar satellites along with infrastructure post-plan

### D) Prefer our interpretation

### First, offense

###  1. Logic – if development was limited to pre-existing tech,

###  2. Education – Forces better spontaneous thinking – makes negative get better at debating new topics instead of relying on blocks they wrote weeks ago for every round

###  3. Fairness – They get to run non-topical counterplans and discrete DA’s that aren’t even limited by the topic, we should get to run any aff that significantly changes space

###  4. Real world – space development policies are often started with no pre-existing tech; that’s the reason new projects are created; ignoring this is to focus on a tiny aspect of real space policy

### Second, defense

###  1. No topic explosion – literature checks any abuse, we’re still limited to a finite number of affirmatives because good negative teams would hold us to our evidence

###  2. Ground is still fair – they still get politics b/c most links are generic anyway. Literature will support only the best affirmatives; lack of good evidence on our side should be exploited by good debating