# AAC Case Negative

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## Topicality

### No Air Power – Alt Causes 1nc

#### Overall aging air force overwhelms the benefits of airborn aircraft carriers

Robert Morley, Columnist, 1-26-10, “Gray Hairs: America’s Aging Air Force”, The Trumpet. http://www.thetrumpet.com/index.php?q=6919.5430.0.0

The U.S.’s transport and refueling tankers are also earning a reputation as flying death traps. Old flying behemoths such as the C-130 and KC-135 are regular causes of concern for the Air Force. After cracks were discovered in the wing boxes of older C-130s, the Air Force grounded many of those transports. In fact, many planes on Air Force inventories are considered too risky to fly at all except in emergencies. In these cases, once a month the engines are fired up and the planes are pulled around the tarmac to keep the tires from going flat. All told, only two thirds of the service’s aging fleet is available to go up in the air at any time. For the F-15s and F-16s, the mission-capable rate stands at only 74 and 76 percent respectively. “This can’t go on,” Air Force Secretary Michael Wynne warned back in 2007. “At some time in the future, they will simply rust out, age out, fall out of the sky. We need, somehow, to re-capitalize this force.” And as America’s Air Force ages and wears out, it is sucking in greater and greater amounts of resources to keep it flying. Maintenance costs increased by 38 percent from 1996 to 2006, and maintenance man-hours increased 50 percent compared to hours of flying time. The workload for heavy repairs at aircraft depots was up a whopping 41 percent. Wynne says that when you add up the rate at which the fleet is aging, the rising maintenance costs, personnel cutbacks and the prices of new equipment, it means one thing: Air Force America is “going out of business. It is simply a matter of time.”

#### More ev.- Current forces can’t actually operate at combat capacity

Robert Morley, Columnist, 1-26-10, “Gray Hairs: America’s Aging Air Force”, The Trumpet. http://www.thetrumpet.com/index.php?q=6919.5430.0.0

At the outbreak of World War ii, Britain was shocked to find its air force inferior to Germany’s. Churchill reported that British leaders had critically underestimated the number, production rate and technological advancement of Germany’s military aircraft industry. While Germany had stealthily built a completely modern air force, Britain was in large part still relying upon old World War i models. Along with other neglectful nations, Britain saw its air fleet cut apart at the onset of the war. The United States could soon find itself in a similarly dangerous position. On January 12, the Air Force revealed that the midair collision of two F-16s last year was due to a combination of pilot error and equipment malfunction. A radar failure distracted Capt. Nicholas Giglio, diverting his attention from correcting his mistakes, leading to his death. Although pilot error was found to be the primary cause, the tragedy highlights a perilous problem facing the country. America’s Air Force is rapidly aging. The situation is so critical that America’s entire F-15 fleet was grounded during parts of 2007 and 2008 due to a spate of problems. The current U.S. Air Force is the oldest in usaf history. According to the Air Force Times, the average plane age in the fleet is 24 years old. Many transport and refueling tankers are in excess of 40 years old, and current plans don’t provide for replacements until they are 70 to 80 years old. By 2013, the average fleet age is expected to rise to 29 years. Contrast those numbers with the air fleet’s average age of only 8.5 years in 1967. Lt. Gen. David Deptula, a former fighter pilot who now serves as the head of intelligence for the Air Force, reported in 2007 that his son flies the exact same F-15 as he flew back in the late 1970s. Deptula warns that the graying Air Force may be facing a “crisis.” usaf former Chief of Staff Michael Moseley concurred. “The F-15s and F-16s were designed and built in the late ’60s and ’70s. Some of them were produced up until the early ’80s. But they’ve led a pretty hard life. … In the F-15 case, we’ve got the airplane restricted to 1.5 Mach. It was designed to be a 2.5 Mach airplane. We’ve got it limited on maneuvering restrictions because we’ve had tail cracks, fuselage cracks, [and] cracks in the wings” (Defense Industry Daily, March 30, 2008). Moseley says the maneuvering restrictions are affecting unit preparedness, and likens it to practicing for the Indy 500 by driving at 60 miles per hour—then accelerating the car to 200 miles an hour on the day of the race. “It is not the time to be doing that on game day,” he says. Moseley worries about the health of the aging fleet and feels that the seriousness of this issue is “not well understood by those our airmen protect.”

### Ext – No Air Power

#### Internal analysis of the USAF reveals degradation of authority and lack of excellence

Donna Miles, American Forces Press Service, 6-5-2008, Top Air Force Leaders Resign Following Nuclear Component Mishandling, American Forces Press Service, http://www.defenselink.mil/news/newsarticle.aspx?id=50117

Defense Secretary Robert M. Gates today announced the resignations of Air Force Secretary Michael W. Wynne and Chief of Staff Gen. T. Michael Moseley following an investigation revealing a decline in the Air Force's nuclear program focus, performance and effective leadership. Gates announced the resignations in the wake of a report detailing the accidental shipment of four non-nuclear ballistic missile nose-cone assembly components rather than the intended helicopter batteries to Taiwan in August 2006. The report, prepared by Navy Adm. Kirkland H. Donald, director of naval nuclear propulsion, detailed what Gates called a shift of the Air Force leadership’s focus from, and degraded performance related to, its most sensitive mission. Air Force leaders focused on the problem only after two internationally sensitive incidents -- one involving Taiwan and another in which an Air Force B-52 bomber flew across the United States carrying six armed nuclear cruise missiles, Gates said. Both incidents could have been prevented if the Air Force had applied proper inspection and oversight, he said. He blamed a “lack of a critical self-assessment culture” within the Air Force nuclear program that might have identified and fixed systemic weaknesses. Gates noted that he had to intervene personally to ensure a thorough investigation of what went wrong and how. In the nose-cone incident, the secretary blamed the Air Force and Defense Logistics Agency for using supply system procedures designed to move large amounts of low-value material for shipping the sensitive classified parts. “The specific cause of this event was the Air Force and Defense Logistics Agency’s sole reliance on, and lack of compliance with, existing supply system procedures to provide positive control of the four forward-section assemblies,” he said. But Gates said the incident signals far deeper problems. “During the course of the investigation, other issued indicating a decline in the Air Force’s nuclear mission focus and performance became apparent,” he said. “Rather than an isolated occurrence, the shipment… was a symptom of a degradation of the authority, standards of excellence and technical competence within the nation’s ICBM (intercontinental ballistic missile) force.” At a broader level, Gates cited declining expertise in the entire Air Force nuclear program – the result, he said, of lack of top-level focus and emphasis. None of these problems happened overnight and some have root problems dating back a decade, he said. But Gates cited “contemporary failures and lack of effective oversight.”

#### Due to the last surge, the USAF was not able to divert funds to modernize the fleet for 2008

Mackenzie Eaglen, Senior Policy Analyst for National Security in the Douglas and Sarah Allison Center for Foreign Policy Studies, 5-18-2007, Airmen vs. Modernization: The Air Force Budget Dilemma, The Heritage Foundation, http://www.heritage.org/Research/NationalSecurity/bg2037.cfm

The primary mission of the U.S. Air Force is to fly and fight in defense of U.S. global interests in air, space, and cyberspace.[1] To continue fulfilling this mission, the Air Force must modernize its rapidly aging fleet while simultaneously maintaining robust personnel levels to meet current missions. As Air Force Chief of Staff General T. Michael Moseley recently commented: The fight we're waging in Iraq and Afghanistan is not our only concern. It is not the only challenge to this country. We cannot--cannot--afford to become target-fixated on counterterrorism or in­surgency. We cannot completely focus on Iraq or Afghanistan and forget about the potentially glo­bal complexities in competitions in the future.[2] Air Force leaders advocate maintaining a strong air fleet today to hedge against countries such as China and Iran, which are significantly building up their militaries. The Department of Defense and Congress's contin­ued focus on providing resources for immediate oper­ations is beginning to come at the expense of the long-term health of the services. This is evident particularly as the Navy and Air Force continue to provide person­nel and resources to relieve stress on U.S. ground forces. This cycle is unsustainable, and all of the ser­vices will need to achieve the following while major combat operations persist: Modernize and recapitalize their fleets, Invest substantially in personnel to retain and recruit the future forces necessary to meet U.S. stra­tegic defense objectives, and Purchase new systems and platforms after years of procurement underfunding. According to its leaders, budgetary concerns are forcing the Air Force to choose between moderniza­tion and the size of its force as the fleet wears out and the personnel are in higher demand. While the U.S. Army and Marine Corps are growing, the Air Force's original budget request for fiscal year (FY) 2008 envisioned reducing endstrength by an addi­tional 20,000 airmen for a total reduction of nearly 60,000 by 2009. However, increased deployments of ground forces to Iraq and the projected growth of the Army and Marine Corps will likely require addi­tional airlift and support from airmen, and this has caused Air Force leaders to reconsider the end­strength reductions. The current growth of America's ground forces means that the Air Force can no longer afford to reduce personnel levels further to pay for equally important modernization efforts. Doing so would force the Air Force to accept dangerous levels of risk to achieve all of its global missions and to hedge against future threats.

### Topicality – No Military 1nc

#### “Transportation infrastructure” is strictly defined as facilities of transport --- this excludes military support

Nathan Musick, Microeconomic and Financial Studies Division – United States Congressional Budget Office, 2010, “Public Spending on Transportation and Water Infrastructure,” p. 2

Although different definitions of "infrastructure" exist, this report focuses on two types that claim a significant amount of federal resources: transportation and water. Those types of infrastructure share the economic characteristics of being relatively capital intensive and producing services under public management that facilitate private economic activity. They are typically the types examined by studies that attempt to calculate the payoff, in terms of benefits to the U.S. economy) of the public sector's funding of infrastructure.

For the purposes of CBO's analysis, "transportation infrastructure" includes the systems and facilities that support the following types of activities:

■ Vehicular transportation: highways, roads, bridges, and tunnels;

■ Mass transit subways, buses, and commuter rail;

■ Rail transport primarily the intercity service provided by Amtrak;\*

■ Civil aviation: airport terminals, runways, and taxi-ways, and facilities and navigational equipment for air traffic control: and

■ Water transportation: waterways, ports, vessel\*, and navigational systems.

The category "water infrastructure" includes facilities that provide the following:

■ Water resources: containment systems, such as dams, levees, reservoirs, and watersheds; and sources of fresh water such as lakes and rivers; and

■ Water utilities: supply systems for distributing potable water, and wastewater and sewage treatment systems and plants.

Consistent with CBO'% previous reports on public spending for transportation and water infrastructure, this update excludes spending that is associated with such infrastructure but does not contribute directly to the provision of infrastructure facilities or certain strictly defined infrastructure services. Examples of excluded spending are federal outlays for homeland security (which are especially pertinent to aviation), law enforcement and military functions (such as those carried out by the Coast Guard), and cleanup operations (such as those conducted by the Army Corps of Engineers following Hurricane Katrina in 2005).

#### Voting issue ---

#### 1. Limits --- they multiple every existing Aff by four: military, policy, homeland security, or cleanup --- and, they allow unique new areas of the topic like military aerospace or troop transport --- overstretches Neg research burdens

#### 2. Ground --- military Affs change core ground --- politics and “private sector” generics don’t apply --- and it artificially inflates advantage ground --- undermining fairness

### Ext – Excludes Military

#### “Infrastructure” must be available for public use --- military equipment is excluded

Johan Fourie, Chief Operating Officer – ArcelorMittal South Africa, “Economic Infrastructure: A Review of Definitions, Theory, and Empirics”, South African Journal of Economics, 74(3), September 2006, Wiley Online Library

One way to define infrastructure is to describe it in terms of its characteristics. A perhaps sufficiently succinct definition of infrastructure, also called ‘social overhead capital’, is provided by Hirschman (1958). He defines infrastructure as “capital that provides public services”. In essence, infrastructure therefore consists of two elements –‘capitalness’ and ‘publicness’. The first element is used to distinguish between infrastructure (defined as a stock variable) and public goods (defined as a flow variable) (Rietveld and Bruinsma, 1998:18). The latter element involves the general properties of non-rivalry and non-excludability. A distinction can, thus, be made between infrastructure and public capital where infrastructure would include goods that have a capital character, but are not necessarily public. Such goods could include privately owned telecommunications, but would exclude publicly owned military equipment (which are public capital, but does not provide public services). Thus, a common feature of infrastructure seems to be that there is at least a strong public involvement in the use thereof (Rietveld and Bruinsma, 1998:19). Economists label such goods physical infrastructure, or infrastructure capital, while urban planners might refer to them as transportation modalities and utilities.”

#### Their interpretation unlimits --- narrow definitions exclude military assets

A. El Makhloufi, University of Amsterdam, “Economics Effects of Infrastructure Investment on Output and Productivity: A Meta-Analysis”, April 2011, http://www.sesric.org/imgs/news/image/541-full.pdf

2. Infrastructure investment and economic growth: A review of the literature Existing literature concerned with the study of the relationship between infrastructure investment and economic growth show a wide variety of point of view concerning the definition of the concept 'infrastructure' (Lakshmanan, 1989).

Although the literature is generally clear in the way in which specific public goods are categorized, the general tendency is the association of infrastructure to particular characteristics of physical features (e.g. large and costly installations) or public services (educational buildings, hospitals, information flows, water and power supply, etc.). Some authors define infrastructure in a broader way without making any distinction between physical and non-physical infrastructure (Hirschman, 1958 for example). Others restrict the definition of infrastructure to core infrastructure consisting of railways, airports, and utilities such as sewerage and water facilities, information flows and particular cases of externalities of public goods (Aschauer, 1990; Anderson, 1991). Gramlich (1994, p. 1177) for example, defines infrastructure capital from an economic point of view as "large capital intensive natural monopolies such as highways, other transportation facilities, water and sewer lines, and communications systems."

More generally, most studies employ a *narrow definition* of public capital that includes the tangible capital stock owned by the public sector, excluding military structures and equipment and infrastructure capital based on private ownership. Other studies use a *broad definition* of public capital by including human capital investment (e.g., Garcia-Mila and McGuire 1992) or health and welfare facilities (e.g., Mera 1973). The latter components are hard to measure, which explains why most authors focus on narrowly defined public capital.

### Topicality – No Vehicles 1nc

#### “Transportation infrastructure” is transport networks

GC, Global Cargo & Commodities Limited, 2012, “Haulage & Transport”, http://www.globalcargogh.com/index.php?option=com\_content&view=article&id=44&Itemid=132)

The field of transport has several aspects; loosely they can be divided into a kind of infrasture, vehicles, and operations. Infrastructure includes the transport networks (roads, railways, airways, waterways, canals, pipelines, etc) that are used, as well as the nodes or terminals (such as airports, railway stations, bus stations and seaports). The vehicles generally ride on the networks, such as automobiles, bicycles, buses, trains, aircrafts. The operations deal with the way the vehicles are operated on the network and the procedures set for this purpose including the legal environment (Laws, Codes, Regulations, etc) Policies, such as how to finance the system (for e.g. the use of tolls or gasoline taxes) may be considered part of the operations.

#### That Excludes Vehicles

GAO ‘98 – U.S. General Accounting Office (“Best Practices: Elements Critical to Successfully Reducing Unneeded RDT&E Infrastructure: Report to Congressional Requesters,” GAO Website, Jan. 1998, http://www.gao.gov/assets/160/156058.pdf)//RD

DoD generally defines infrastructure as “all fixed and permanent, installations, fabrications, or facilities for the support and control of military forces." It consists of mission supporting property, plant, equipment, and personnel, including contractor manpower, DoD excludes the equipment and personnel necessary to perform directly critical technical and acquisition functions, DoE defines infrastructure as "all real property and installed equipment and personal property that is not solely supporting a single program mission." NASA defines infrastructure as “the supporting a single program mission." NASA defines infrastructure as “the underlying foundation for NASA operations, including its people, facilities, equipment, business systems, institutional information systems, and technical infrastructure." Facilities are the land, buildings, structures, permanently located trailers, and other real property improvements, including utility systems and collateral equipment that essentially is integrated into the facility. Business systems are business processes and business tools. Institutional information systems include NASA computers, networks, and general purpose application software. Technical infrastructure includes mission/project/technology/science implementation tools and processes, such as equipment and instrumentation, processes and procedures, and software tools.

#### Voting issue ---

#### Limits --- there are hundreds of types of existing vehicles and nearly infinite new innovations possible --- expanding beyond networks makes Neg preparation impossible and undermines clash and depth of discussion

#### Ground --- vehicles change the link direction to politics, rob core trade-off DAs, and have multiple uses so they artificially inflate advantage ground --- core ground is key to fairness

### Ext – TI Excludes Vehicles

#### Vehicles are a distinct field. “Infrastructure” is exclusively transportation networks.

CSFT 6 (“Aboard Transportation”, http://www.cfst.org/transportation.html)

Transportation Transportation or transport is the carrying of people and goods from one destination to another. The term comes from the Latin trans meaning “across” and portare meaning “to carry”. Transportation can be divided into three distinct fields: 1. Infrastructure - When we refer to infrastructure it includes our transport networks such as roads, railways, airways, canals, and pipeline. This also includes the terminals or nodes such as airports, railway stations, bus stations, and seaports. 2. Vehicle – These comprises of the vehicles that we regularly ride in the networks for instance automobiles (buses, cars, taxis, and etc.), trains and airplanes. 3. Operations – They are the control of the whole transport system including traffic lights/signals on roads, ramp meters, railroad switches, air traffic control, and etc.

#### “Infrastructure” and “vehicles” are distinct --- their interpretation unlimits

Array 12 (Array Systems Computing Inc., “Array's World-Class Transportation Expertise”, http://www.array.ca/applications/its/)

On today's crowded roadways, traffic congestion is a fact of life. Congestion results in extended travel times, increased air pollution and additional fuel consumption. Information technology may be employed in order to better manage the highway infrastructure and reduce the adverse effects of congestion. Intelligent Transportation Systems (ITS) refers to the application of communications and information technology to transport infrastructure and / or to vehicles to improve the efficiency of transportation networks. In a typical ITS application, software is employed for traffic simulation, for real-time control and for communications. Transportation Systems projects may be broadly divided into infrastructure projects and vehicle-orientated applications. Typical infrastructure projects include the installation of Dynamic Message Sign (DMS) along a freeway or the implementation of intelligent traffic light control for city streets. Vehicle-orientated projects include applications such as as automated vehicle location and scheduling. Vehicular ITS applications are frequently applied to transit vehicles and corporate fleets. Intelligent Transportation Infrastructure Traffic Signal Sequencing and Control Vehicle Detection and Monitoring Dynamic Message Signs Ramp Metering Systems Queue-End Warning Systems Intelligent Transit Systems / Vehicle Fleet Management Computer Aided Dispatch Automated Vehicle Location Automatic Voice Annunciation Automatic Passenger Counting Navigation Systems Fare Payment Systems

#### Transportation infrastructure and vehicles are distinct --- different ground applies to each

AMOS Web 12 (“A Pedestrian’s Guide to the Economy – Taking a Ride on Transportation Infrastructure”, http://www.amosweb.com/cgi-bin/awb\_nav.pl?s=pdg&c=dsp&k=47)

Every Car Needs A Road We usually think about transportation in terms of vehicles -- like cars, trucks, trains, airplanes, and boats. Vehicles, however, are only part of any transportation system. You usually need depots, roadbeds, and other such capital goods that we refer to as infrastructure. Cars need streets and highways, trains need tracks, airplanes need airports, and boats need docks and ports. There are two important things to note about transportation infrastructure: First, infrastructure has many features of a public good, meaning it's very difficult to keep nonpayers from using them and there's often little reason to do so because there's no opportunity cost for extra users. Second, infrastructure includes a whole bunch of capital that often takes years if not decades to produce. While a factory that makes the Master Sprocket's Universal do-it-yourself all-purpose spark plug tool and ice cream scoop might require a year to construct, the interstate highway system used to ship these fine utensils around the country takes several decades to complete.

### Topicality – No R & D

#### Infrastructure investment is capital spending and excludes programs and R&D.

Congressional Budget Office/Joint Committee on Taxation, October 2009, “Subsidizing Infrastructure Investment with Tax-Preferred Bonds,” p. 2-3

In this analysis, investment in infrastructure is defined as capital spending on transportation, utilities (for example, water and power supply), environmental projects, and schools. 1 In addition, because they account for a significant share of the tax-exempt debt issued, health care facilities and hospitals are treated as infrastructure in this study, although they might not be classified as such for many other types of analyses. Capital spending under this study’s definition consists of investment in physical capital, such as structures and facilities, rather than intangible capital, which is formed by spending on educational programs or on research and development.

#### Infrastructure investment covers constructing and renovating by using direct expenditures and tax incentives.

Congressional Budget Office/Joint Committee on Taxation, October 2009, “Subsidizing Infrastructure Investment with Tax-Preferred Bonds,” p. 1

Investment in the nation’s infrastructure each year amounts to roughly a half-trillion dollars. Both government and the private sector fund that investment, which covers the costs of constructing and renovating such facilities as highways and airports, water and energy utilities, dams, waste-disposal and other environmental sites, schools, and hospitals. The federal government makes a significant contribution to that investment through its direct expenditures and the subsidies it provides indirectly through the tax system. Direct expenditures comprise what the federal government spends on infrastructure (for example, by funding construction of dams and other water resources by the Army Corps of Engineers) and what it provides as grants and loan subsidies to states and localities (primarily for transportation projects). Because infrastructure facilities typically provide a stream of benefits (and revenues for repayment) well into the future, their construction is often financed by borrowing. States and localities issue debt to finance projects undertaken by government and, in some cases, by the private sector (bonds issued by states and localities to finance either government operations or certain private-sector activities are known as municipal bonds). The federal government subsidizes the issuance of municipal bonds by offering tax preferences that lower the cost of debt incurred for those projects.

## Disad Links

### A2: Defense Spending Shields the Link

#### The plan saps capital – costs are now viewed as a threat to national security

Debra Werner, Defense News Reporter, 9-1-2011, “Automatic intelligence,” http://www.defensenews.com/apps/pbcs.dll/article?AID=2011109010319

With America's deficit now counted as a national security issue, the budget noose is tightening around defense and intelligence agencies, and the hiring spree is nearing an end. Faced with the question of how to cope, intelligence officials and their industry counterparts are pointing to automation and other advances that they said will make analysis less labor intensive. "The real trick in the analyst's area is automation," said U.S. Air Force Gen. Norton Schwartz, whose service collects and analyzes the lion's share of video collected over global hot spots. (See Interview, Page 38). "At the moment," Schwartz said, "we have a person watching every soda straw that is operating. That works and it has worked." But, he added, "It is a manpower-intensive way to do this, and there is a better way. We are certainly pursuing that." Intelligence officials are attaching new urgency to the automation issue. Top Air Force officials are re-examining collection requirements and the service's intelligence workforce with an eye toward possible cuts. "Given that the new secretary and the president and Congress are having to make some tough belt-tightening decisions, that flows down to us," said Air Force Brig. Gen. Scott Bethel, deputy commander of the Air Force Intelligence, Surveillance and Reconnaissance Agency. "In the context that we will have at least somewhat less than we have today, where are we going to go find the cuts?" Figuring that out "is a rigorous process, partly because intelligence is not like widget production," Bethel said. "I can't simply show that this system produced 17 reports [that] led to the capture of four bad guys. It's a collaborative environment." Part of the answer is training. In a Las Vegas casino, Bethel said, security guards who watch several video feeds at once have been thoroughly trained to look for specific behaviors in a broader context. "They are able to parse that data so the casino owner can get a lot of leverage out of a smaller manpower pool," he said. But automated data processing could provide similar results. The Air Force already uses automated tools to help analysts sort through surveillance and reconnaissance data for target detection and tracking, said Air Force Lt. Gen. Craig Koziol, director of the Defense Department's ISR Task Force. "Given ongoing advancements in techniques such as machine learning and artificial intelligence, the ability of analysts to discover actionable information will continue to grow," Koziol said in an email. "This expansion of analytic capacity is essential in order to effectively leverage the capabilities of next-generation sensors." The National Security Agency, National Geospatial Intelligence Agency, National Reconnaissance Office and CIA rely heavily on automated search tools to comb through their collections and identify valuable information. "The challenge facing our analysts today is the volume of information," said CIA spokesman Preston Golson. "Strong search tools are necessary because the signal-to-noise ratio is very high." The hiring spree will not come to a screeching halt, however. NGA spokeswoman Muridith Winder said the agency does not expect any net growth in the number of analysts after fiscal 2012, although analysts will still be hired "in anticipation of attrition and changing mission requirements." Looming budget cuts Yet the government officials who need increasingly powerful search tools and additional analysts may find it harder to pay for them in the years ahead. Opinions vary about how tight the budget noose will get, but most experts expect intelligence spending to at least level off and possibly decline, based on comments earlier this year by top intelligence officials and lawmakers. Retired Air Force Lt. Gen. James R. Clapper, who oversees the intelligence community, told a House panel that he understands the community is "in for some belt tightening," according to wire reports. The deficit reduction plan approved in early August caps discretionary spending to reduce defense and domestic spending by $917 billion over 10 years. A group of 12 lawmakers on the deficit reduction panel are tasked with identifying by Nov. 23 at least $1.5 trillion in additional spending cuts over 10 years. If that panel, called the Joint Select Committee on Deficit Reduction, fails to identify those cuts or to win congressional approval of the plan by Dec. 23, government agencies will face across-the-board spending cuts of $1.2 trillion equally divided between domestic programs and national security accounts, including intelligence agencies, the Defense and Veterans Affairs departments and the Department of Homeland Security. "Flush intelligence budgets of the past decade are over," said Andy Johnson, former staff director for the Senate Intelligence Committee. "It's safe to assume that intelligence, as well as the larger defense budget, will be either flat or experience modest growth at the rate of inflation."

### Politics Link – Spending

#### In the current Congressional climate, the controversy over costs outweighs the political benefits of expanded military investment

William Matthews, Defense News Reporter, 5-1-2012, “Deflated: America’s Airship Revolution is Threatened by Mishaps, Delays, Funding Cuts,” http://www.defensenews.com/apps/pbcs.dll/article?AID=2012305010009

Whether any of the other airships make it to war looks increasingly questionable since the Iraq War has ended and withdrawal from Afghanistan is scheduled for 2014. “All the urgency and willingness to take the risk and spend the money [on airships] came out of Iraq and Afghanistan,” Buerge said. But as the wars wind down, the urgency is subsiding and the money is drying up. A shift in the National Military Strategy also clouds the future for airships. The absence of air defenses and opposing air forces in Iraq and Afghanistan provided the “permissive” environment airships need to operate. But the new strategy focuses on Asia and the Pacific, where permissive environments are less likely. “If you’re operating in someone else’s sovereign airspace, an airship is not ideal,” Buerge said.

### Politics Link – Navy Backlash

#### The Navy views sea-based aircraft carriers as essential and will fight to protect it

Lt. Commander Steve Rowe, U.S. Naval Reserve, September 2000, “Saving Naval Aviation,” http://www.combatreform.org/airborneaircraftcarriers.htm

The Navy has unbalanced the carrier air group's support and force-protection capabilities in favor of decks jammed with strike aircraft, essentially duplicating the Air Force's role. If naval aviation is to survive, it must be able to perform unique missions with forces based entirely at sea. Ask any naval aviator or naval flight officer (NFO) why the Navy bases its tactical aviation at sea, and he will tell you that Navy air is a vital and unique national capability. He will say that only carrier-based aviation can provide powerful combat power without the need for overseas airfields, basing rights, and overflight permissions, and regardless of the sensibilities of other nations. Navy aircrew will say that every aircraft carrier is little piece of sovereign U.S. territory from which the United States can defend its vital interests--with allies if desired; alone if required. Until very recently, the Navy pilot or NFO would have been right.

### Spending Links

#### AACs technology doesn’t exist – investment requires massive spending

Bruce D. Cox, Air & Space Power Journal, Winter 2010, “Global power requires a global, persistent air-to-air capability,” Online

Airborne Aircraft Carrier Over the years, proposals to build airborne aircraft carriers have resulted in the Navy airships of the 1930s and the F-84 and F-85 parasite fighter programs, which attained various levels of operational capability. (30) These carrier initiatives envisioned large, long-range aircraft that transported fighter-sized aircraft to a launch position and then recovered them after they flew operational sorties. A slightly different concept involves a "mother ship" that would rearm the fighter and switch pilots but would not normally carry the smaller aircraft to and away from the target area. Such a mother ship could service numerous fighters, which would depend on air refueling and their own engines to fly most of the distance to the target area. Essentially, this entails the next step from air-to-air refueling: air-to-air repiloting and rearming. Unfortunately, neither the airborne aircraft carrier nor the mother ship exists. Modifying existing aircraft or designing and building new ones would incur considerable expense.

#### The aff conservatively spends 12 billion

CBO, September 2005, Congressional Budget Office, “Options for Strategic Military Transportation Systems,” http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/66xx/doc6661/09-27-strategicmobility.pdf

Methods for Estimating the Costs of Airships For total costs of a little over $11 billion, the Department of Defense (DoD) could improve its airlift capacity by developing, buying, and operating 14 to 16 hybrid airships with a payload of 500 tons (Option 1B), CBO estimates. 1 That quantity range reflects ranges of estimates for development, procurement, and operation costs. As noted above, significant uncertainty exists about the capabilities and technologies associated with such a heavy-lift airship, which translates into significant cost risk. Research and Development Costs Analysts usually rely on previous analogous programs as the basis for estimating the cost of new systems. In this case, airships in operation today include various commercial blimps such as those of Goodyear and Fujifilm, and a handful of platforms from other countries. DoD’s recent experience with airships is limited to a dozen aerostats (tethered balloons) operated by the Air Force. Development costs for both the commercial and DoD programs averaged less than $100 million. One exception was a commercial program to develop a lighter-than-air cargo lifter (referred to as the CL-160) that would be capable of carrying 160 tons. The program never entered production, but development costs totaled about $400 million at the time work on the aircraft ceased. Existing blimps are smaller and less complex than the hybrid airship envisioned in Option 1B—the new airship would have 10 times the volume of those smaller platforms, significantly greater lift capability, and a different hull shape (designed to provide dynamic lift in addition to static lift). Lacking an appropriate analogous system, CBO had no basis on which to make an independent estimate of the costs to develop the new airship. Thus, for this study, CBO sought information from a variety of sources including aerospace industry contractors to guide its estimate of the costs for developing a 500-ton-payload airship. CBO factored into its estimate the costs of building prototypes, conducting a vigorous program of testing and evaluation, the costs of government activities such as systems engineering and program management, and past rates of cost growth in DoD’s aircraft programs. The costs to develop the hybrid airship would total between $3 billion and $4 billion, CBO estimates. Procurement Costs Similarly, CBO used information from contractors as a starting point to estimate procurement costs for Option 1B. As with the estimate of development costs, CBO included government costs and historical cost growth in its estimate. With those factors, CBO estimated that the first airship could be purchased in 2012 at a total cost of about $400 million and delivered three years later. Depending on the amount spent on research and development, CBO estimates that DoD could buy 14 to 16 airships within the spending target of roughly $11 billion set for these options. CBO assumed that the remaining airships would be bought in successive years—at a peak rate of three per year—and that the cost per airship would decline by 10 percent each time total purchases doubled, because annual buy quantities are small. The 14 to 16 airships would have an average cost of roughly $300 million apiece, CBO estimates. Operation Costs Lacking data on comparable airship operations, CBO estimated O&S costs for the new airships by using actual costs for C-17 and C-5B airlifters. Although some types of operating costs will be higher for conventional aircraft than for airships, others may be lower. For example, fuel costs are likely to be higher for conventional aircraft because of their need for greater power and speed, but some maintenance costs are apt to be higher for airships because of their more-fragile skin and their need for specialized maintenance facilities. Using information from the AFTOC database, CBO calculated that O&S costs per flight hour total about $9,000 for a C-17 and $26,000 for a C-5B, or an average of about $18,000 between the two. On the basis of that hourly cost, CBO estimated that operating one heavy-lift airship would cost about $8 million per year, assuming that the airship provided the same number of ton-miles of work (the payload carried times the distance moved) in that period as the average C-17. Thus, over 30 years, O&S costs for 14 to 16 hybrid airships would range from $3.0 billion to $3.4 billion.

#### Investments in new tech are risky – costs are likely to be significantly higher than current assessments

CBO, September 2005, Congressional Budget Office, “Options for Strategic Military Transportation Systems,” http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/66xx/doc6661/09-27-strategicmobility.pdf

The cost estimates for the options described in this analysis have two major components: one-time investment costs that would arise over the next decade or so when the airlift or sealift systems were being developed and built, and operation costs that would be incurred over 30 years once the first new system was delivered. This appendix describes the methods that the Congressional Budget Office (CBO) used to estimate the costs of development efforts, equipment purchases, and operations. The estimates represent incremental costs—the expenses that would occur in addition to the total cost of maintaining current strategic mobility capabilities. All of the cost estimates are in 2006 dollars; they are summarized in Table A-1. Significant uncertainty exists about the capabilities, technologies, and costs associated with developing, purchasing, and operating the airships and high-speed sealift ships envisioned in Options 1B and 2B, respectively. Programs such as those, which are either in the early stages of development or are conceptual in nature, entail a greater risk of cost and schedule overruns than do programs that are better defined and based on proven technologies. CBO’s cost estimates for those options represent one possible outcome, calculated under specific assumptions. Although the estimates take such risk into account to some extent, CBO expects that its estimates would change, perhaps significantly, as the design of a particular system was more fully defined.

## Solvency Answers

### Solvency 1nc – Airships

#### No solvency – the aff is experiencing technical difficulties

CBO, September 2005, Congressional Budget Office, “Options for Strategic Military Transportation Systems,” http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/66xx/doc6661/09-27-strategicmobility.pdf

Set against those positive features, there are potential disadvantages to pursuing large hybrid airships. Proponents argue that the technical risk inherent in developing such aircraft is lower than might be expected because the necessary component technologies have, for the most part, already been developed for other applications. However, a hybrid airship with a payload on the order of 500 tons and an approximate gas volume of 25 million to 35 million cubic feet would be much larger than any previous airship—four to five times larger than the biggest airships of the 1930s. Although the expertise to build individual components may already exist, integrating them into such a large structure could prove more difficult than expected.

#### Countermeasures and airspace denial make airships ineffective

CBO, September 2005, Congressional Budget Office, “Options for Strategic Military Transportation Systems,” http://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/66xx/doc6661/09-27-strategicmobility.pdf

Other possible disadvantages of an airship relative to conventional aircraft are its potential vulnerability both to military action, such as antiaircraft fire, and to political action, such as countries along its route refusing to let it fly through their airspace. Both of those vulnerabilities are increased because the hybrid airship would fly at a lower speed and altitude than aircraft such as the C-17: at 80 to 100 knots (versus more than 400 knots for the C-17) and at less than 10,000 feet (compared with more than 30,000 feet). Overflight rights might be more difficult to obtain for airships because their passage would be much more apparent than that of a conventional aircraft. Consequently, nations willing to quietly allow highaltitude overflights might be more reluctant to permit low, slow overflights by airships. (To capture the effect of possible restrictions on overflight rights, CBO’s deployment scenario assumes a transit distance of 8,500 nautical miles for airships, halfway between the values for conventional airlifters and surge sealift ships.)

### No Air Ships – Technical Obstacles

#### Technical obstacles are enormous – zero chance for an effective hybrid airship

William Matthews, Defense News Reporter, 5-1-2012, “Deflated: America’s Airship Revolution is Threatened by Mishaps, Delays, Funding Cuts,” http://www.defensenews.com/apps/pbcs.dll/article?AID=2012305010009

But the hybrid airship has its skeptics. Among them is Brandon Buerge, a Kansas-based aerospace engineer and former lead scientist for airship maker Guardian Flight Systems. A hybrid airship the size of the LEMV, which must keep moving to stay airborne, will run out for fuel long before 21 days, Buerge said. He estimates that it can fly for about seven days. Others say four or five. In a paper prepared for the American Institute of Aeronautics and Astronautics, Buerge contends that conventional lighter-than-air ships, not hybrids, which depend on aerodynamic lift, are better suited for long-endurance flights. “The lifting body hybrid airship model was capable of carrying more than twice the fuel load of the similarly sized conventional ship,” he said. But hybrids burn through fuel fairly fast. “The much lower average fuel burn predicted for the conventional ship resulted in generally superior loitering performance,” Buerge wrote. Peter Van Staagen also questions LEMV’s ability to stay aloft for three weeks. Vice president and chief technology officer of Information Systems Laboratories, a San Diego firm that focuses on ISR technologies among others, Van Staagen said, “Carrying that amount of payload and flying that duration at those altitudes — all of those are singularly difficult. Doing one is hard, doing two is very difficult, doing all three is impossible” with current technology. Van Staagen estimates that LEMV can stay aloft for about five days. The Army’s 21-day mission? “That’s a real stretch,” he said. But the skeptics’ evaluations “have fallen on deaf ears,” and a half-billion dollars has been spent on the LEMV, he said. When asked about flight duration doubts, Army officials responded with a prepared statement: “Flight durations will depend on each specific mission set and payloads, and cannot be discussed.” But LEMV’s endurance is being examined outside the Army. Complaints filed through the Government Accountability Office’s FraudNET charge the Army with “waste, fraud, abuse and mismanagement of federal funds” for proceeding with LEMV and ignoring claims that the LEMV could not meet the 21-day flight goal. GAO has begun examining the program, but a GAO official declined to provide details while the evaluation is underway.

### No Air Ships – Feasibility

#### Effective airships are simply not feasible

William Matthews, Defense News Reporter, 5-1-2012, “Deflated: America’s Airship Revolution is Threatened by Mishaps, Delays, Funding Cuts,” http://www.defensenews.com/apps/pbcs.dll/article?AID=2012305010009

Think back to 2008. Hundreds of U.S. troops were being killed and maimed each month by roadside bombs in Iraq and Afghanistan, and the Pentagon was pouring billions of dollars into technology to defeat the improvised explosive devices. The Army was buying mine-resistant, ambush-protected armored troop carriers by the tens of thousands, and Defense Secretary Robert Gates was browbeating his generals to field more surveillance unmanned aircraft.

The military launched ambitious efforts to build airships that would provide an unblinking eye over Afghanistan, and 2011 was supposed to be the year when the first efforts bore fruit. The Army and Air Force were vying to be first to fly football-field-length airships over Afghanistan, while a separate research team prepared to test the feasibility of a stratospheric airship.

Compared with standard unmanned planes, airships held the promise of staying aloft for days or weeks while carrying at least three times as much payload: infrared and high-definition optical video cameras, multiple radars, high-powered computers to process sensor data, and communications equipment to transmit the information on demand to users on the ground.

Plus, airship promoters promised they could do all that for a fraction of the cost of current unmanned aircraft.

“Everybody was chasing the Holy Grail of persistent surveillance, and airships promised to do it better and cheaper,” said a government analyst who is now examining airship programs. Cost, duplication and technical problems prompted some members of Congress to request a closer look.

The Defense Department has spent more than $1 billion on at least nine programs in recent years, yet the military owns just one working airship, a piloted Navy blimp called MZ-3A, which is used for research.

U.S. government watchdog agencies and independent engineers are beginning to ask tough questions because so far, the military doesn’t have much to show for its money:

• HALE-D, a $150 million “high-altitude, long-endurance demonstrator” built for the Army by Lockheed, crashed in July on its first flight, well before reaching its intended stratospheric altitude. The program is still on the books but has run out of money, the Army said.

• HiSentinel, a disposable Army airship designed to operate above 60,000 feet, has flown three times since 2005, but also has been plagued by problems. One flight was cut short when the airship sprang a leak; a second flight was aborted when the ship’s solar-powered propulsion system failed. HiSentinel, too, is out of money, and the shrinking defense budget makes future funding unlikely, the Army said.

• Blue Devil 2, an optionally piloted airship named for its “Blue Devil” multi-intelligence payload, is being canceled by the Air Force, effective in June, after multiple missed deadlines, technical setbacks and cost overruns.

• LEMV — or Long Endurance Multi-Intelligence Vehicle — an Army optionally piloted airship with an almost identical mission to Blue Devil 2’s, is struggling with missed deadlines and questions about its design. For months, government officials have been saying it is expected to fly soon, with the latest goal being April or May.

Three other high-altitude airship programs remain in early stages of development. They are the Navy’s balloonlike Star Light airship, which will have a detachable return vehicle; the Defense Advanced Research Projects Agency’s Integrated Sensor Is Structure, or ISIS, airship, whose radar will double as the ship’s airframe; and the Army’s High Altitude Shuttle System, which would have a detachable return vehicle and a disposable gas envelope.

Today, Blue Devil 2 (BD2) floats in a hangar in Elizabeth City, N.C., as work continues to complete construction of the 370-foot-long airship.

Started in early 2011 by 4-year-old aerospace company Mav6, BD2 was designed to fuse wide-area surveillance imagery with signals intelligence to rapidly spot and target bomb planters in Afghanistan. It would carry its 2,500-pound payload at about 20,000 feet and keep a round-the-clock watch over a 36-square-mile area for up to nine days at a time. Computers onboard would process the data collected by the airship’s sensors, rather than clogging bandwidth by transmitting vast volumes of raw data to the ground. Onboard data processing also was intended to permit Blue Devil 2 to operate with a smaller processing, exploitation and dissemination ground station.

The Joint Improvised Explosive Device Defeat Organization and the Pentagon’s ISR Task Force were keenly interested in the airship, which was supposed to arrive in Afghanistan by early this year.

But Mav6 said it encountered problems with suppliers. Overweight tail fins had to be redesigned and modified, causing delays. The most advanced camera had to be replaced because its proprietary data interface turned out to be incompatible with the Air Force distribution system. The avionics were more complicated than the vendor originally expected.

Mav6 has been urging the Air Force and Pentagon to push through the problems. Some technical issues were to be expected, the company said, because BD2 is the largest unmanned aircraft ever built and the largest airship hull built in 55 years. The technical troubles are far from unprecedented in scope for a groundbreaking intelligence project, it said. “For comparison, there is a space system that the [National Reconnaissance Office] director recently briefed that was 700 percent over timeline, and 300 percent over cost, but the DoD still pursued it,” retired Air Force Lt. Gen. David Deptula, now the CEO of Mav6, said by email.

The airship’s first flight was scheduled for October 2011 but has yet to occur. The deployment to Afghanistan has been canceled.

Funding for the program was conspicuously absent in February from the Air Force’s proposed 2013 research and development budget. After $66 million for 2011 and $63 million for 2012, there’s nothing for 2013.

Capt. Phillip Ventura, an Air Force spokesman, said in March that rising development costs, substantially higher sustainment costs and technical challenges prompted the Air Force to pull the plug on Blue Devil 2.

### Squo Solves Airships

#### Squo solves airships

Nick Adde, Defense News Reporter, 5-30-2011, “Air Giants,” http://www.defensenews.com/apps/pbcs.dll/article?AID=2011105300305

U.S. forces in Afghanistan get nervous when they have to reel down one of their tethered, video-camera-equipped aerostats for maintenance. "They want it up as long as they can have it - that persistent surveillance stare," said Army Lt. Col. Robert Helms, who oversees work on the aerostats, called the Persistent Threat Detection System (PTDS). Last year, the Army accepted 28 PTDS aerostats, adding to the nine it already owned. Now commanders want airships that stay up even longer, scan more terrain with radars and cameras, and serve as communications relays. That means they'll have to be bigger. The Army, the Defense Advanced Research Projects Agency (DARPA) and their contractors are moving forward with imminent plans to inflate and fly giant airships that would set new aviation standards for size, endurance and presence. The airships would provide detailed pictures of battlefield conditions for combat troops who need the information immediately. One, the Army's Long Endurance Multi-Intelligence Vehicle (LEMV), could be in Afghanistan by the end of 2011. Others are being prepared for key tests. Cracking the Stratosphere In June or July, Lockheed Martin plans to test-fly its High Altitude Long Endurance Demonstrator (HALE-D) airship at the company's Mission Systems and Sensors division airship facility in Akron, Ohio. At 70 feet in diameter, the test airship will carry a 50-pound payload - a camera and a communications repeater - at an altitude of between 60,000 and 70,000 feet for 10 to 14 days. HALE-D is big, but it is a scaled-down version of the airship originally envisioned under the dormant High Altitude Airship program. "This is very Wright Brothers-ish," said Eric Hofstatter, the program manager for another Lockheed airship effort, the Integrated Sensor is Structure (ISIS) airship project. Like HALE-D, ISIS is designed to fly extremely high, providing a wide-area view. "There are no stratospheric airships flying today, at all," Hofstatter said. Lockheed Martin Skunk Works, the company's Advanced Development Programs Division, is developing ISIS for DARPA. Developers and researchers want to use HALE-D to compare real performance to simulations conducted with models on the ground prior to launch and gather data on wind and air pressure. Though Hofstatter said HALE-D and ISIS are not directly linked, the results garnered from this summer's test flight could help develop ISIS in time for its projected 90-day flight test from Akron to Key West, Fla., beginning in April 2013. "Once we validate all the technology required for the stratospheric airship, whether from HALE-D or ISIS, it [will provide] a laundry list of capabilities everybody can use - from communications nodes to electro-optical IR sensors," Hofstatter said. During its test flight, the 500-foot-long ISIS demonstrator craft will stay on station at the same altitude range as HALE-D, carrying a smaller and more modest radar and communications package than developers plan to place on the final product. It will have a top cruise speed of just less than 100 feet per second - roughly twice as fast as the Goodyear blimp. Plans call for the construction of a second ISIS airship, incorporating changes as determined by the test demonstrator, for use by the Air Force and U.S. Northern Command. Ultimately, ISIS will carry very large, dual-band active electronically scanned array radars, capable of detecting air-, water- or land-borne moving targets at ranges from 15.5 to 373 miles, detect and track ballistic missiles at ranges greater than 932 miles, and penetrate foliage at ranges up to 105.5 miles. The second ISIS, with the complete ISR package and more powerful regenerative fuel-cell and electric propulsion, is projected for a 2018 deployment and should stay in operation for 10 years.

### Solvency 1ac - AACs

#### The aff is dreaming – AACs are science fiction not a feasible capability

TVT, 2012, “Airborne Aircraft Carrier,” http://tvtropes.org/pmwiki/pmwiki.php/Main/AirborneAircraftCarrier

Flight has always fascinated humanity. First came legends of Winged Humanoids and Floating Continents, then eventually zeppelins and actual airplanes. When the aircraft carrier was invented, its sheer awesome (and force projection) made the battleship a military relic. Considering this, is it any surprise that people have wanted to combine the awesome of the airplane, aircraft carrier, zeppelin and floating continent into one? Well, the result of this daydreaming is the Airborne Aircraft Carrier! This is a step above the simple boat most video games use to ferry the player around; it is a literal mobile floating fortress and airport, capable of raining Death from Above like few fictional Military Mashup Machines. At its most basic, it serves as a refueling station like an island in the sky; a carrier; add some guns to make it a combination battleship; and if you're into that sort of thing, robot transformations. A similar concept on a smaller scale is the usage of parasite aircraft piggybacking on larger ones. As listed below, this one was attempted several times in real life. So far, it's only really worked with airships, which can launch aircraft and recover them later, housing them in internal hangars, making them true Airborne Aircraft Carriers. Airplane aircraft "carriers" thus far have found it too difficult for the aircraft return to the mothership to be considered practical, often resulting in the deaths of test pilots that tried and/or damage to both airplanes.

### No AACs – Feasibility

#### AACs are not realistic and sea-based carriers solve the case

Jeremy Hsu, InnovationNewsDaily Senior Writer, 5-4-2012, “Could the Navy Ever Build a Flying Aircraft Carrier?,” http://www.livescience.com/20117-navy-flying-aircraft-carrier.html

Moviegoers can easily recognize flights of fancy when they see the Avengers assemble aboard the flying "Helicarrier" aircraft carrier in Hollywood's latest superhero blockbuster. But could the U.S. Navy ever build the fantastical military marvel if it wanted a flying air base? The Navy has experimented with less-ambitious flying aircraft carriers in the 1930s — its rigid airships such as the USS Macon and USS Akron could each carry up to five biplane fighter aircraft. But the modern military's budget would likely burst trying to build and operate a full-size flying aircraft carrier that weighs 100,000 tons and stretches the length of three football fields, according to a U.S. Navy official at Naval Air Systems Command. "We would want to minimize the weight and cost of a flying carrier itself in order to maximize the number and capability of the aircraft that could be carried on it," the Navy official said. "The number and size of the thrusters required to lift the carrier, the number and size of the engines to drive them, the fuel to keep the engines running, etc., all sum to make the system unrealistic." That reality rests upon the simple fact that it's much cheaper to float, rather than fly, the weight of a huge aircraft carrier containing dozens of military jets and more than 5,000 members of the ship's crew and air wing. An aircraft carrier designed without any flight assistance — such as wings — would require huge amounts of power for the thrusters in both lifting mode and in forward airborne flight. The fictional Helicarrier appears to use ducted rotors for its vertical takeoff and landing technology (or VTOL) — not too far off from real Navy aircraft such as the AV-8B Harrier fighter jet, the V-22 Osprey, and the upcoming carrier version of the F-35 Joint Strike Fighter. Such VTOL aircraft represent the "ultimate in operational flexibility," but also represent the most expensive air transport options for the U.S. military. For now, the U.S. Navy seems happy with the cost-efficiency and flexibility of its floating aircraft carriers — a naval weapon that has dominated the seas since World War II. U.S. taxpayers will likely feel equally happy to pay the movie ticket cost to see the flying Helicarrier, rather than fund one in real life. "The combination of a floating aircraft carrier, with the flexibility of the aircraft that are based on it (including rotary wing aircraft) offers a great balance of efficiency and flexibility," the Navy official said.

#### Couldn’t fly

Copernicus, Blog Alias of an Astrophysicist, 5-15-2012, “Copernicus On The Science Of THE AVENGERS (Part 1)!!,” http://www.aintitcool.com/node/55755

In the film, some of our heroes arrive on a seemingly nondescript aircraft carrier. But as any fan of the comics knows, SHIELD’s base of operations doesn’t just float -- it can fly. As a Marvel fan, I loved seeing the Helicarrier realized on-screen, and its dramatic rise out of the ocean brought a little bit of wonder to what could have been just a boring set. But could we ever do this? First, how much energy would it take to lift an aircraft carrier to the height of, say, a kilometer? From high school physics you might remember that the equation for potential energy is U=mgh, where m is mass, g is acceleration due to gravity (9.8 m/s2), and h is height. I’m not sure how much a Helicarrier weights, but a Nimitz-class aircraft carrier (which the movie Helicarrier was modeled on) weighs about 100,000 tons fully loaded, or 108 kg. Plugging in the numbers, we find that it would take about a trillion joules of energy to lift one a kilometer. Nimitz-class aircraft carriers are nuclear-powered, so that they can go for 20 years without refueling. Their reactors generate about 200 megawatts at peak output. Since a watt is a joule per second, we can divide a trillion joules by 200 million joules per second to find that it would take an aircraft carrier about 5000 seconds to generate enough energy to lift it a kilometer, assuming it was using all of its energy to do that. Being able to stay hovering is another thing, but hey, that’s in the ballpark. Maybe the Helicarrier has more powerful reactors, is much lighter, or they’ve figured out how to get energy out of the Tesseract. On energetics, I give them a pass. But the four engines of the Helicarrier look like pretty simple ducted fans. Could they generate enough thrust to lift it? Could anything? Thrust is a force. To make the carrier hover, we need to generate enough thrust to balance the force of gravity. We can calculate this from Newton’s second law: F=ma, where F is a force, m is mass, and a is acceleration. Here we use the acceleration due to gravity again, which is what we have to counterbalance. Plugging in the numbers, we get that we need a force (thrust) of about a billion Newtons. The world’s most powerful commercial jet engine (a turbofan, which is slightly different in design, but close enough), the GE90-115B on some versions of the Boeing 777, generates 569 kilo-Newtons of thrust. So would take a hell of a lot more than 4 of them to levitate an aircraft carrier -- you’d need about 1700 such engines. If you were using the Space Shuttle Solid Rocket Boosters instead, you’d still need about 70 of them. This makes sense -- an aircraft carrier is about 50 times heavier than a Space Shuttle. So modern engines aren’t able to lift an aircraft carrier. But in the Marvel universe they’ve got crazy materials like adamantium and vibranium. Maybe their engines are way better. The filmmakers had a choice -- they could have added a ton of engines to make the Helicarrier slightly more realistic to a few physicist nerds, or they could keep the classic design of the comics to appease the legions of comic book geeks. I think they made a wise choice! Besides, a lot of the drama depends on restarting one of the failed engines. That worked fairly well, if it did reek of the dreaded Whedon bespoke deathtrap (see Serenity).

### B2 Fails – Capacity

#### B-2 strikes fail – not enough of them

Hans M. Kristensen, Dir. FAS, Matthew McKinzie, Senior Scientist @ NRDC, and Ivan Oelrich, Pres FAS, Mar/Apr 2010, “Second Strike,” Foreign Affairs, p. pq

The United States has only 20 b-2 bombers, which are normally based in the continental United States. Destroying the 20 Chinese silos - taking into account defensive actions by China, U.S. operational failures, and the roughly 600 miles the aircraft would have to travel over Chinese territory - would require several attack waves in an assault that would last for hours and could not escape notice. Even if the U.S. attack were to get through, several of the silos would likely be empty, their missiles having been launched against the United States before the attack arrived. This dilemma is aggravated by China's deployment of dozens of mobile long-range missiles that, although highly vulnerable to conventional attacks if they can be found, nonetheless complicate U.S. planning against the silo-based missiles.

### A2: China (B-2s)

#### China can shoot down the B-2 – passive radar makes it vulnerable

Wendell Minnick, Defense News writer, 6-11-2007, “Beijing Is Developing Anti-Stealth Capabiltiies,” http://www.f-16.net/f-16\_forum\_viewtopic-t-8378-start-30.html

China is developing new radar and other sophisticated systems to find and target U.S. radar-evading stealth aircraft such as the F-22 Raptor, F-35 Lightning, F-117 Nighthawk and B-2 Spirit. China watchers in Asia and the United States have seen an increase in China’s anti-stealth research and development, and procurement and manufacturing of passive, bistatic high frequency and long-range radars. China’s efforts to defeat U.S. stealth technology also include espionage. From 2002 through 2005, China received sensitive data on the B-2 from Noshir Gowadia, a former Northrop Grumman engineer who helped design its exhaust cloaking system, according to FBI officials. The information likely helped China more easily detect not just the B-2, but the B-1, F-15 and air-launched cruise missiles as well. A former U.S. defense attaché who was assigned to Beijing said China’s anti-stealth programs may seriously threaten U.S. stealth aircraft. “I think it’s real and well within China’s reach. It’s been investing in research and development on counterstealth technologies for a decade or more,” he said. Michael Pillsbury, a Washington-based China military specialist, said, “China has a long record of open-source advocacy writings about both the critical importance of counterstealth for China and debates about the best mix of alternative approaches China needs to develop counterstealth.” Pillsbury said off-the-shelf technology could help in the near term. But perhaps more effective, he said, is Chinese authors’ suggestion that high-powered computers be used to gather up the extremely weak signals bounced off stealth aircraft by FM radio and TV stations. “This system would not need new transmitters, as it could rely on the national network in this frequency range,” Pillsbury said. Richard Fisher, vice president of the Washington-based International Assessment and Strategy Center, said China has been focused on meter-wave, passive over-the-horizon radar and infrared counters to U.S. stealth technologies. These include the acquisition of four Kolchuga passive sensor systems from Ukraine. “At the 2001 Moscow Airshow, a Russian radar engineer responsible for upgrading old meter-wave radar with advanced computer tech complained bitterly to me that China had stolen their technology via his Balkan customer,” Fisher said. “An upgraded Russian meter-wave radar is suspected of having played a major role in the Serbian shoot-down of the F-117 stealth fighter [over Kosovo in 19990. I suspect the Yagi-antenna meter-wave radar ... benefited from this ‘research.’” He said China began marketing a Kolchuga derivative at the 2005 IDEX International Defence Exhibition in Abu Dhabi, in the United Arab Emirates. “The radar is a three-receiver, triangulating passive detection system that officials claimed had a 300- to 400-kilometer range, vice the 600-kilometer range of Kolchuga. Like Kolchuga, it is meant to be integrated with other sensor data to produce a better air defense picture,” he said. The former U.S. military attaché said stealth only makes detection harder, not impossible. “There’s nothing magical about picking up ‘stealth’ aircraft,” he said. “For active radar technology, it’s a matter of being able to pick up low radar cross-section [RCS] targets at long ranges. Need lots of power, a fairly low frequency [ultra high frequency], and large arrays or power aperture.”

#### Passive radar means collapse of stealth

Arend Westra, Lt. Col USMC, 10-1-2009, ‘Radar versus stealth: passive radar and the future of U.S. military power,” All Business, http://www.allbusiness.com/government/government-bodies-offices-government/12963214-1.html

Passive Radar A new paradigm is emerging, enabled by advances in networked computing and passive radar technology. Because of their potential to counter stealth-based airpower advantage, the use of these technologies by peer competitors is highly likely. That these systems are both low cost and, in part, based on commercialoff- the-shelf technology makes them attractive for nonpeer countries as well. Passive radars use transmitters of opportunity. Potential waveforms include FM and AM radio, television, digital audio/video broadcast, and cellular phone networks.38 Today, passive radar is often configured as a “multistatic” system using three or more transmitters and receivers. Passive radar locates and tracks targets through a combination of methods, greatly simplified here for the sake of discussion. First, the radar measures the time difference of arrival between the direct signal from the transmitter and the reflected signal from the target to determine the bistatic range. Bistatic range, expressed as an ellipse, is shown in figure 3. The radar uses the intersection of the receiver-to-target bearing and the bistatic range ellipse to estimate approximate target location. In a multistatic system, the radar refines target location based on intersecting bistatic range ellipses. The radar further measures Doppler shift—wavelength compression or expansion caused by relative motion—to determine target performing regular updates. Advanced signal processing allows passive radar to integrate data from multiple receivers, cancel signal interference, differentiate real targets from ghost returns and clutter, and establish a target track. Although such processing requires significant computing power, most passive radar systems operate on commercial DOS-based computing technology. The recent advances of passive radar arise from a confluence of digital processing technology, cheap, sophisticated hardware, and the demand for enhanced surveillance. 39 Moore’s law describes the doubling of computer processing speed every 18 months. Meanwhile, designers have made significant advancements in corresponding radar software. What was once thought impossible—that is, integrating signals from multiple receivers and detecting tiny echoes in high-clutter radar environments—has now become feasible.40 As a result of this confluence of technology, several systems are now either available off the shelf or are in development. Such systems include Lockheed Martin’s “Silent Sentry,”41 Roke Manor Research’s CELLDAR,42 Thales-Raytheon’s Homeland Alerter,43 and others, including French, Swedish, Chinese, and Russian systems. Certain commercial waveforms are more suitable for passive radar illumination than others. The most important parameters are frequency, bandwidth, and the presence of continuous wave, which provides Doppler shift for measurement of velocity.44 Also important is whether illuminators transmit continuously or with significant interruptions (for example, daytime only). Several waveforms in the HF, VHF, and UHF bands have shown potential for use in passive radar and also exhibit counterstealth properties. In the VHF band, FM radio is broadcast at high relative power and has multiple transmitters available in moderately to heavily populated regions. Analog television (VHF band) also provides useful illumination, as does digital audio broadcast, which is growing in usage worldwide. High-definition (HD) television is spreading globally as well and offers a wideband, high-power waveform in the low UHF band. In the HF band, Digital Radio Mondiale (DRM), a digital form of shortwave AM radio, also has passive radar potential. These waveforms offer differing levels of utility. Analog television and FM radio both offer strong illumination and medium detection ranges—FM out to roughly 120 kilometers (km).45 Analog television has a strong signal but suffers from interference, while FM is marked by interruptions, such as pauses during human speech.46 HD television provides an uninterrupted signal with a detection range of 120 km.47 DRM potentially offers over-the-horizon detection ranges; however, low resolution limits its use to early warning radar. Digital audio broadcast, while a useable waveform, emits at low power, offering only a short detection range of 36 km.48 Use of more than one waveform is possible, with existing systems touting accurate three-dimensional surveillance capabilities across multiple waveforms, to include FM radio and analogue and digital television. Most important to this discussion, all of the aforementioned waveforms fall between 3 and 450 megahertz. Based on their decimeter- to meter-wavelengths, these waveforms inherently increase RCS and also interact with an aircraft to create resonance. RCS induced by resonance is largely independent of fuselage shape. In short, radar in this spectrum is inherently counterstealth. While passive radar can perform detecting, locating, and tracking functions, it may also be able to perform target identification (ID). Under development are methods to conduct target imaging using multistatic UHF-band Inverse Synthetic Aperture Radar.49 Additionally, existing passive ID measures, such as DF/ESM, will likely augment passive radar. If successful at creating a target track and ID, passive radar could provide cueing for surface-to-air and airborne weapons systems in order to enable acquisition. Weapons system cueing requires communications infrastructure; for a covert system, this means a local area network for ground-based weapons and an LPI data link for airborne platforms. For SAMs with a command guidance mode, the passive radar could provide midcourse guidance via data link. In keeping with the passive radar system, a passive missile seeker—IR, EO, MMW, or perhaps multisensor—would likely be used for end-game guidance in order to complete the kill chain. Threat Employment A future adversary will look increasingly to counter the U.S. stealth advantage with passive radar, either as a stand-alone system or in conjunction with active surveillance radars. Passive radar is relatively cheap, and its covert stance lends itself to a strategy of striking from concealment. Moreover, our most likely future opponent—an authoritarian state—already possesses tight control over its commercial media, a situation that requires a relatively small step to optimize broadcasting parameters for passive radar use. This same adversary will build a passive multistatic receiver network in the VHF and UHF bands, blending the system into the vertical buildup of urban terrain.50 In remote areas not served by media broadcast, the adversary may disperse a network of inexpensive throw-away transmitters to function as the surveillance area illuminators. He will integrate passive radar and other sensors for rapid, efficient command and control. It is likely that such an adversary will make efforts to develop or acquire passive SAMs with low observable launch signatures and procure and deploy high- and mid-altitude unmanned aerial vehicles—“missile trucks”—to deny flight at those altitudes. Countering Passive Radar Countering passive radar will prove difficult. What are the signs that an opponent is using passive radar? Forehand knowledge of the threat may provide an idea of general capabilities. Are friendly air forces losing aircraft to ground fire with little or no threat warning indications? With no radio frequency electronic intelligence available, locating the passive radar receivers will be challenging. Intelligence will face a difficult task of using indirect methods—human intelligence, ground surveillance, computer network operations, and nodal analysis—to collect on sparse information.

### A2: Counter-radar

#### Can’t beat passive radar – don’t know where it is

Arend Westra, Lt. Col USMC, 10-1-2009, ‘Radar versus stealth: passive radar and the future of U.S. military power,” All Business, http://www.allbusiness.com/government/government-bodies-offices-government/12963214-1.html

Countering passive radar will prove difficult. What are the signs that an opponent is using passive radar? Forehand knowledge of the threat may provide an idea of general capabilities. Are friendly air forces losing aircraft to ground fire with little or no threat warning indications? With no radio frequency electronic intelligence available, locating the passive radar receivers will be challenging. Intelligence will face a difficult task of using indirect methods--human intelligence, ground surveillance, computer network operations, and nodalanalysis--to collect on sparse information. If the command and control nodes and receivers cannot be found, targeting planners could focus on destroying suspected transmitters--for example, FM radio, television, and HD television networks. Depending on their location and the potential for collateral damage, however,destroying these targets may result in undesirable strategic c onsequences, particularly in urban areas.

Jamming fails

Arend Westra, Lt. Col USMC, 10-1-2009, ‘Radar versus stealth: passive radar and the future of U.S. military power,” All Business, http://www.allbusiness.com/government/government-bodies-offices-government/12963214-1.html

Moreover, deception jamming may be of limited use against passive radar, also due to the unknown receiver location. (52) Other types ofjamming, however, may prove highly effective. Overall, the lack of known threat location bolsters the argument for a robust EW capabilitythat is integral to friendly multirole aircraft. Advocacy for or against a dedicated EW platform, however, is beyond the scope of this article.

## Heg Advantage Answers

### Squo Solves Heg

#### The combination of defense spending, economic dominance, and geographic isolation ensure the stability of US heg

Stephen Brooks, Assistant Prof of Govt at Dartmouth, and William Wohlforth, Associate Prof, Dept Govt Dartmouth College, August, 2002, Foreign Affairs, Vol. 81, Issue 4, ebsco

To understand just how dominant the United States is today, one needs to look at each of the standard components of national power in succession. In the military arena, the United States is poised to spend more on defense in 2003 than the next 15-20 biggest spenders combined. The United States has overwhelming nuclear superiority, the world's dominant air force, the only truly blue-water navy, and a unique capability to project power around the globe. And its military advantage is even more apparent in quality than in quantity. The United States leads the world in exploiting the military applications of advanced communications and information technology and it has demonstrated an unrivaled ability to coordinate and process information about the battlefield and destroy targets from afar with extraordinary precision. Washington is not making it easy for others to catch up, moreover, given the massive gap in spending on military research and development (R&D), on which the United States spends three times more than the next six powers combined. Looked at another way, the United States currently spends more on military R&D than Germany or the United Kingdom spends on defense in total. No state in the modern history of international politics has come close to the military predominance these numbers suggest. And the United States purchases this preeminence with only 3.5 percent of its GDP. As historian Paul Kennedy notes, "being Number One at great cost is one thing; being the world's single superpower on the cheap is astonishing." America's economic dominance, meanwhile -- relative to either the next several richest powers or the rest of the world combined -- surpasses that of any great power in modern history, with the sole exception of its own position after 1945 (when World War II had temporarily laid waste every other major economy). The U.S. economy is currently twice as large as its closest rival, Japan. California's economy alone has risen to become the fifth largest in the world (using market exchange-rate estimates), ahead of France and just behind the United Kingdom. It is true that the long expansion of the 1990s has ebbed, but it would take an experience like Japan's in that decade -- that is, an extraordinarily deep and prolonged domestic recession juxtaposed with robust growth elsewhere -- for the United States just to fall back to the economic position it occupied in 1991. The odds against such relative decline are long, however, in part because the United States is the country in the best position to take advantage of globalization. Its status as the preferred destination for scientifically trained foreign workers solidified during the 1990s, and it is the most popular destination for foreign firms. In 1999 it attracted more than one-third of world inflows of foreign direct investment. U.S. military and economic dominance, finally, is rooted in the country's position as the world's leading technological power. Although measuring national R&D spending is increasingly difficult in an era in which so many economic activities cross borders, efforts to do so indicate America's continuing lead. Figures from the late 1990s showed that U.S. expenditures on R&D nearly equaled those of the next seven richest countries combined. Measuring the degree of American dominance in each category begins to place things in perspective. But what truly distinguishes the current international system is American dominance in all of them simultaneously. Previous leading states in the modern era were either great commercial and naval powers or great military powers on land, never both. The British Empire in its heyday and the United States during the Cold War, for example, each shared the world with other powers that matched or exceeded them in some areas. Following the Napoleonic Wars, the United Kingdom was clearly the world's leading commercial and naval power. But even at the height of the Pax Britannica, the United Kingdom was outspent, outmanned, and outgunned by both France and Russia. And its 24 percent share of GDP among the six leading powers in the early 1870s was matched by the United States, with Russia and Germany following close behind. Similarly, at the dawn of the Cold War the United States was clearly dominant economically as well as in air and naval capabilities. But the Soviet Union retained overall military parity, and thanks to geography and investment in land power it had a superior ability to seize territory in Eurasia. Today, in contrast, the United States has no rival in any critical dimension of power. There has never been a system of sovereign states that contained one state with this degree of dominance. The recent tendency to equate unipolarity with the ability to achieve desired outcomes single-handedly on all issues only reinforces this point; in no previous international system would it ever have occurred to anyone to apply such a yardstick. CAN IT LAST? Many who acknowledge the extent of American power, however, regard it as necessarily self-negating. Other states traditionally band together to restrain potential hegemons, they say, and this time will be no different. As German political commentator Josef Joffe has put it, "the history books say that Mr. Big always invites his own demise. Nos. 2, 3, 4 will gang up on him, form countervailing alliances and plot his downfall. That happened to Napoleon, as it happened to Louis xiv and the mighty Hapsburgs, to Hitler and to Stalin. Power begets superior counterpower; it's the oldest rule of world politics." What such arguments fail to recognize are the features o America's post-Cold War position that make it likely to buck the historical trend. Bounded by oceans to the east and west and weak, friendly powers to the north and south, the United States is both less vulnerable than previous aspiring hegemons and also less threatening to others. The main potential challengers to its unipolarity, meanwhile -- China, Russia, Japan, and Germany -- are in the opposite position. They cannot augment their military capabilities so as to balance the United States without simultaneously becoming an immediate threat to their neighbors. Politics, even international politics, is local. Although American power attracts a lot of attention globally, states are usually more concerned with their own neighborhoods than with the global equilibrium. Were any of the potential challengers to make a serious run at the United States, regional balancing efforts would almost certainly help contain them, as would the massive latent power capabilities of the United States, which could be mobilized as necessary to head off an emerging threat. When analysts refer to a historical pattern of balancing against potentially preponderant powers, they rarely note that the cases in question -- the Hapsburg ascendancy, Napoleonic France, the Soviet Union in the Cold War, and so forth -- featured would-be hegemons that were vulnerable, threatening, centrally located, and dominant in only one or two components of power. Moreover, the would-be hegemons all specialized in precisely the form of power -- the ability to seize territory -- most likely to scare other states into an antihegemonic coalition. American capabilities, by contrast, are relatively greater and more comprehensive than those of past hegemonic aspirants, they are located safely offshore, and the prospective balancers are close regional neighbors of one another. U.S. power is also at the command of one government, whereas the putative balancers would face major challenges in acting collectively to assemble and coordinate their military capabilities. Previous historical experiences of balancing, moreover, involved groups of status quo powers seeking to contain a rising revisionist one. The balancers had much to fear if the aspiring hegemon got its way. Today, however, U.S. dominance is the status quo. Several of the major powers in the system have been closely allied with the United States for decades and derive substantial benefits from their position. Not only would they have to forego those benefits if they tried to balance, but they would have to find some way of putting together a durable, coherent alliance while America was watching. This is a profoundly important point, because although there may be several precedents for a coalition of balancers preventing a hegemon from emerging, there is none for a group of subordinate powers joining to topple a hegemon once it has already emerged, which is what would have to happen today. The comprehensive nature of U.S. power, finally, also skews the odds against any major attempt at balancing, let alone a successful one. The United States is both big and rich, whereas the potential challengers are all either one or the other. It will take at least a generation for today's other big countries (such as China and India) to become rich, and given declining birth rates the other rich powers are not about to get big, at least in relative terms. During the 1990s, the U.S. population increased by 32.7 million -- a figure equal to more than half the current population of France or the United Kingdom.

#### No risk of multipolarity – prefer our evidence predictions about the state of geopolitics in 2030

Stephen Walt, Prof at Harvard, 6-18-2009, “What I told the Navy,” http://walt.foreignpolicy.com/posts/2009/06/18/what\_i\_told\_the\_navy

This view is at odds with a lot of contemporary writing about America's international position. Over the past several years, for example, several prominent books and studies have concluded that America's position is deteriorating and that a new MP world is rapidly emerging. For example, both Fareed Zakaria's [The Post-American World](http://www.fareedzakaria.com/books/index.html) and the National Intelligence Council's [Global Trends 2025](http://www.dni.gov/nic/PDF_2025/2025_Global_Trends_Final_Report.pdf) study argue that the rise or resurgence of Russia, China, the EU, Brazil, and India are recreating a multipolar world, and that this will have profound implications for U.S. foreign policy. This prediction is mistaken, or at least premature. To begin with, the U.S. economy still dwarfs the other major powers. According to the [World Bank](http://siteresources.worldbank.org/DATASTATISTICS/Resources/GDP.pdf), US GDP was $13.9 trillion in 2007, compared with $4.3 bn. for Japan, $3.3 bn. for Germany, $3.2 bn. for China, and $2.8 bn. for Great Britain. In 2007, therefore, the US economy was bigger than next four powers combined.  It’s true that the U.S. economy took a big hit in 2008, but so did everyone else, including China. Second, U.S. military power dwarfs all others, despite our difficulties in Iraq and Afghanistan. Not only does the United States spend more on national security than the rest of the world [combined](http://en.wikipedia.org/wiki/List_of_countries_by_military_expenditures), but no other major power spends as large a percentage of its GDP on national security as the United States does. Not surprisingly, no country has the global reach of the United States or the capacity to operate with near-impunity over most of the world's [common spaces.](http://belfercenter.ksg.harvard.edu/files/posen_summer_2003.pdf) Third, this situation isn't going to change very much, because the United States is the only advanced industrial power whose population will grow significantly over the next few decades. Most European countries have low birth rates, which means their populations are both shrinking and getting older. This trend is especially evident in Russia and also in Japan. China's population will projected to increase slightly over the next twenty years and then begin to decrease, as the effects of the "one-child" policy kick in. China will also have a very large demographic bulge of retirees, which will be an increasingly costly burden over time. The United States, by contrast, is going to continue to grow, in part because U.S. birth rates are higher and also because legal (and illegal) immigration to the United States will almost certainly continue. The United States will have the [youngest population](http://www.census.gov/ipc/www/idb/pyramids.html) of any major power in 2030, therefore, which is good news for our long-term strength. If you project out to where these various economies are going to be in 2030, U.S. prospects look good and the chances for true multipolarity seem remote. My Harvard colleague Richard N. Cooper projects that by 2030 the US share of world economy will decline only slightly--from 28 percent today to 26 percent -- while China will rise from 5 percent today to roughly 14 percent. The shares controlled by Britain, France, Germany, Japan, Russia, Brazil, or India will remain in the low single digits. So we aren't going to see a true multipolar world anytime soon. We might see a bipolar world in 20 or 30 years, but it will still be a fairly lopsided bipolarity with the United States still leading China by a wide margin.  Moreover, the United States will continue to enjoy a highly favorable geopolitical position. It is the only major power in the Western hemisphere, while the other major powers share the Eurasian landmass. This situation means these states tend to worry more about each other than they do about the United States -- even though the United States is a lot stronger -- and it gives many of these states a powerful incentive to try to stay on good terms with us in case they need help to deal with one of their neighbors. So in addition to being materially stronger than anyone in Eurasia, the United States also has long-standing alliances in Europe and Asia and new strategic partnerships emerging with countries like India. This is not to deny that states like China, Russia or Iran have been acquiring a somewhat greater capacity to defend their interests near their own borders, especially when compared with what they could do back when unipolarity first emerged in the early 1990s. This trends will constrain U.S. freedom of action slightly, give other states additional options, and complicate U.S. diplomacy somewhat. But in no case do these trends pose a mortal threat to vital US interests. Even in 2030, none of these states is going to want or be able to take the United States on in a direct test of strength.

### Heg Bad – No Impact

#### US withdraw doesn’t cause war.

Eugene Gholz, Daryl Press were doctoral candidates in the Dept of Political Science at MIT, AND Harvey Sapolsky is Prof of Public Policy and Organization in the Dept of Political Science at MIT. Spring 1997. International Security.

Several prominent analysts favor a policy of selective engagement.[70] These analysts fear that American military retrenchment would increase the risk of great power war. A great power war today would be a calamity, even for those countries that manage to stay out of the fighting. The best way to prevent great power war, according to these analysts, is to remain engaged in Europe and East Asia. Twice in this century the United States has pulled out of Europe, and both times great power war followed. Then America chose to stay engaged, and the longest period of European great power peace ensued. In sum, selective engagers point to the costs of others' great power wars and the relative ease of preventing them. The selective engagers' strategy is wrong for two reasons. First, selective engagers overstate the effect of U.S. military presence as a positive force for great power peace. In today's world, disengagement will not cause great power war, and continued engagement will not reliably prevent it. In some circumstances, engagement may actually increase the likelihood of conflict. Second, selective engagers overstate the costs of distant wars and seriously understate the costs and risks of their strategies. Overseas deployments require a large force structure. Even worse, selective engagement will ensure that when a future great power war erupts, the United States will be in the thick of things. Although distant great power wars are bad for America, the only sure path to ruin is to step in the middle of a faraway fight. Selective engagers overstate America's effect on the likelihood of future great power wars. There is little reason to believe that withdrawal from Europe or Asia would lead to deterrence failures. With or without a forward U.S. presence, America's major allies have sufficient military strength to deter any potential aggressors. Conflict is far more likely to erupt from a sequence described in the spiral model. The danger of spirals leading to war in East Asia is remote. Spirals happen when states, seeking security; frighten their neighbors. The risk of spirals is great when offense is easier than defense, because any country's attempt to achieve security will give it an offensive capability against its neighbors. The neighbors' attempts to eliminate the vulnerability give them fleeting offensive capabilities and tempt them to launch preventive war.[71] But Asia, as discussed earlier, is blessed with inherent defensive advantages. Japan and Taiwan are islands, which makes them very difficult to invade. China has a long land border with Russia, but enjoys the protection of the East China Sea, which stands between it and Japan. The expanse of Siberia gives Russia, its ever-trusted ally, strategic depth. South Korea benefits from mountainous terrain which would channel an attacking force from the north. Offense is difficult in East Asia, so spirals should not be acute. In fact, no other region in which great powers interact offers more defensive advantage than East Asia. The prospect for spirals is greater in Europe, but continued U.S. engagement does not reduce that danger; rather, it exacerbates the risk. A West European military union, controlling more than 21 percent of the world's GDP, may worry Russia. But NATO, with 44 percent of the world's GDP, is far more threatening, especially if it expands eastward. The more NATO frightens Russia, the more likely it is that Russia will turn dangerously nationalist, redirect its economy toward the military, and try to re-absorb its old buffer states.[72] But if the U.S. military were to withdraw from Europe, even Germany, Europe's strongest advocate for NATO expansion, might become less enthusiastic, because it would be German rather than American troops standing guard on the new borders. Some advocates of selective engagement point to the past fifty years as evidence that America's forward military presence reduces the chance of war. The Cold War's great power peace, however, was over determined. Nuclear weapons brought a powerful restraining influence.[73] Furthermore, throughout the Cold War, European and Asian powers had a common foe which encouraged them to cooperate. After an American withdrawal, the Japanese, Koreans, and Russians would still have to worry about China; the Europeans would still need to keep an eye on Russia. These threats can be managed without U.S. assistance, and the challenge will encourage European and Asian regional cooperation.

#### Heg can’t collapse and great power wars won’t occur – no industrialization, no economic benefits, and nuclear weapons.

Stephen Evera, Prof of Poli Sci at MIT, 2008, “A Farewell to Geopolitics,” p. 13-14.

The Danger that a Eurasian hegemon might appear and threaten the United States largely disappeared after the Soviet Union collapsed in 1991. There is now no plausible candidate for Eurasian hegemony on the horizon. China comes closest, but not very close. Someday China may rival the United States in military power, but that day is decades away.4 And even then China will pose little geopolitical threat to the United States for four reasons. First, geography makes China a markedly less plausible candidate for Eurasian hegemony than was Germany in 1917 and 1941 or the Soviet Union in 1947. Germany and the Soviet Union were adjacent to large industrial regions of Europe that they could invade over land. in contrast, China is not adjacent to large, vulnerable industrial regions. Europe’s industrial areas are very far from China. Japan is a major industrial region near China, hut it lies across a vast water barrier from the Asian mainland. A conventional Chinese invasion of Japan across this imposing- water barrier would be nearly impossible. China therefore does not have important industrial targets that it might conquer within easy reach. Geography naturally precludes China from gaining a wider industrial empire. Second, if China nevertheless does somehow conquer other industrial regions, it will gain little strength by doing so. The reason is that today’s postindustrial knowledge—based economies are far harder for a conqueror to harness to aggressive purposes than were the smokestack economies of the 1940S and i 9os. Postindustrial economies depend on free access to technical and social information. This access requires some domestic press freedom and access to the Internet, foreign publications, and foreign travel. But the police measures needed to subdue a conquered society require that these channels he controlled because they also serve-as carriers of subversive ideas. Thus key elements of the economic fabric now must be ripped out to maintain control over conquered polities. Conquerors must stifle the productivity of those they conquer in order to control them, leaving conquerors with little or no net economic gain. ,This is a marked change from the smokestack era, when societies could he conquered and policed with far less collateral harm to their economics. Third, the rising power of nationalism guarantees that China will pay large costs to police any empire that it conquers. The age of empire on the cheap has passed with the spread of nationalist ideas, small arms, and guerrilla tactics. A Chinese reach for empire will likely collide with effective resistance of the kind that defeated the Soviet Union in Afghanistan (1979—1989) and the United States in Vietnam (i 96 i—I 97). Fourth, and most important, the nuclear revolution makes great powers virtually unconquerable. Any state with a secure nuclear deterrent is secure from conquest, as it could annihilate any attacker. And a secure deterrent is far easier to maintain than to threaten, So nuclear powers can defend themselves against states with many times their economic power. As a result, the United States could defend itself against China even if China grew to become the world’s largest economy, conquered its neighbors, and then found a way to harness their industrial power for war. Under such exceedingly far—fetched circumstances. China still could not conquer the United States without first developing a nuclear first—strike capability against the United States. But a Chinese nuclear first—strike capability is a pipe dream and will remain so. It would require an implausibly overwhelming Chinese economic superiority over the United States. An economically fast—growing and politically unchecked China could never gain such vast economic superiority even in a best—case scenario for China. A Chinese nuclear first—strike capability against the United States is not in the cards. Therefore, a plausible Chinese threat to U.S. sovereignty can be ruled out for the foreseeable future. For these reasons, addressing geopolitical threats should have far less priority in U .S. national security policy than in the past. Other major Powers are not the danger to U.S. security that they once were. Even a vast increase in the assets possessed by China—or Russia or the major European powers— would leave them unable to threaten the sovereignty of the United States. The United States can therefore afford to put much less priority on limiting their power.

#### Their authors exaggerate threats to justify hegemony

Christopher Layne, Visiting Associate Professor at the Naval Postgraduate School. “From Preponderance to Offshore Balancing.” International Security. Summer 1997.

The security/interdependence nexus results in the exaggeration of threats to American strategic interests because it requires the United States to defend its core interests by intervening in the peripheries. There are three reasons for this. First, as Johnson points out, order-maintenance strategies are biased inherently toward threat exaggeration. Threats to order generate an anxiety “that has at its center the fear of the unknown. It is not just security, but the pattern of order upon which the sense of security depends that is threatened.”4’ Second, because the strategy of preponderance requires U.S. intervention in places that concededly have no intrinsic strategic value, U.S. policymakers are compelled to overstate the dangers to American interests to mobilize domestic support for their policies.42 Third, the tendency to exaggerate threats is tightly linked to the strategy of preponderance’s concern with maintaining U.S. credibility. The diplomatic historian Robert J. McMahon has observed that since 1945 U.S. policymakers consistently have asserted that American credibility is “among the most critical of all foreign policy objectives.” As Khalilzad makes clear, they still are obsessed with the need to preserve America’s reputation for honoring its security commitments: “The credibility of U.S. alliances can be undermined if key allies, such as Germany and Japan, believe that the current. arrangements do not deal adequately with threats to their security. It could also be undermined if, over an extended period, the United States is perceived as lacking the will or capability to lead in protecting their interests.” Credibility is believed to be crucial if the extended deterrence guarantees on which the strategy of preponderance rests are to remain robust. Preponderance’s concern with credibility leads to the belief that U.S. commitments are interdependent. As Thomas C. Schelling has put it: “Few parts of the world are intrinsically worth the risk of serious war by themselves. but defending them or running risks to protect them may preserve one’s commitments to action in other parts of the world at later times.”45 If others perceive that the United States has acted irresolutely in a specific crisis, they will conclude that it will not honor its commitments in future crises. Hence, as happened repeatedly in the Cold War, the United States has taken military action in peripheral areas to demonstrate—both to allies and potential adversaries—that it will uphold its security obligations in core areas.

### Heg Bad – Great Power Wars

#### Heg makes great power wars inevitable – perceived as hostile

Benjamin Schwarz and Christopher Layne, 2002, “A New Grand Strategy,” Atlantic Monthly, Vol. 289, Issue 1.

Like some optimistic Britons in the late eighteenth century, many American strategists today assert that the United States, the only superpower, is a "benevolent" hegemon, immunized from a backlash against its preponderance by what they call its "soft power" — that is, by the attractiveness of its liberal-democratic ideology and its open, syncretic culture. Washington also believes that others don't fear U.S. geopolitical pre-eminence because they know the United States will use its unprecedented power to promote the good of the international system rather than to advance its own selfish aims. But states must always be more concerned with a predominant power's capabilities than with its intentions, and in fact well before September 11 — indeed, throughout most of the past decade — other states have been profoundly anxious about the imbalance of power in America's favor. This simmering mistrust of U.S. predominance intensified during the Clinton Administration, as other states responded to American hegemony by concerting their efforts against it. Russia and China, although long estranged, found common ground in a nascent alliance that opposed U.S. "hegemonism" and expressly aimed at re-establishing "a multipolar world." Arguing that the term "superpower" is inadequate to convey the true extent of America's economic and military preeminence, the French Foreign Minister Hubert Vedrine called the United States a "hyperpower." Even the Dutch Prime Minister declared that the European Union should make itself "a counterweight to the United States." American intervention in Kosovo crystallized fears of U.S. hegemony, prompting the emergence of an anti-U.S. constellation of China, Russia, and India. Viewing the Kosovo war as a dangerous precedent establishing Washington's self-declared right to interfere in other countries' internal affairs, and asserting their support for a multipolar world, these three states increased their arms transfers and their sharing of military technology, specifically to counter American power. Also, the Kosovo conflict made apparent the disparity between America's geopolitical power and Europe's, inciting Europe to take its first serious steps toward redressing that disparity by acquiring — through the European Defense and Security Identity — the kinds of military capabilities it would need to act independent of the United States. If the European Union, fulfills EDSI's longer-term goals, it will emerge as an unfettered strategic player in world politics. And that emergence will have been driven by the clear objective of investing Europe with the capability to act as a brake on America's aspirations. Any remaining doubt that American hegemony could trigger a hostile reaction, whether reasonable or not, surely dissipated on September 11. The role the United States has assigned itself in the Persian Gulf has made it — not Japan, not the states of Western Europe, not China — vulnerable to a backlash. Iran, Iraq, and Afghanistan resent America's intrusion into regional affairs. The widespread perception within the region that the Middle East has long been a victim of "Western imperialism" of course exacerbates this animosity. Moreover, aggrieved groups throughout the Middle East contest the legitimacy of the regimes in Saudi Arabia, Kuwait, and the Gulf emirates which the United States is compelled to support, making America even more of a lightning rod for the politically disaffected. In this sense Osama bin Laden's brand of terrorism (which aims to compel the United States to remove its military forces from the Persian Gulf, and to replace America's client, the Saudi monarchy, with a fundamentalist Islamic government) dramatically illustrates U.S. vulnerability to the kind of "asymmetric warfare" of which some defense experts have warned.

### Heg Bad – Prolif

#### Heg causes prolif

Naazneen Barma et.al., research fellow at the New Era Foreign Policy Center. Foreign Policy, January 1, 2007. “How globalization went band: from terrorism to global warming, the evils of globalization are more dangerous than ever before. What went wrong? The world become dependent on a single superpower. Only by correcting this imbalance can the world become a safer place.” Pg. 48(7) ISSN: 0015-7228

The world is paying a heavy price for the instability created by the combination of globalization and unipolarity, and the United States is bearing most of the burden. Consider the case of nuclear proliferation. There's effectively a market out there for proliferation, with its own supply (states willing to share nuclear technology) and demand (states that badly want a nuclear weapon). The overlap of unipolarity with globalization ratchets up both the supply and demand, to the detriment of U.S. national security.

#### Nuke war results

Samuel Totten, Associate Professor in the College of Education at the University of Arkansas, The Widening Circle of Genocide, 1994, p. 289

There are numerous dangers inherent in the spread of nuclear weapons, including but not limited to the following: the possibility that a nation threatened by destruction in a conventional war may resort to the use of its nuclear weapons; the miscalculation of a threat of an attack and the subsequent use of nuclear weapons in order to stave off the suspected attack; a nuclear weapons accident due to carelessness or flawed technology (e.g., the accidental launching of a nuclear weapon); the use of such weapons by an unstable leader; the use of such weapons by renegade military personnel during a period of instability (personal, national or international); and, the theft (and/or development) and use of such weapons by terrorists. While it is unlikely (though not impossible) that terrorists would be able to design their own weapons, it is possible that they could do so with the assistance of a renegade government.

### Ext – Heg Causes Prolif

#### Heg causes spirals of proliferation and balancing.

Ivan Eland, Director of Defense Policy Studies at the Cato Institute. “The Empire Strikes Out: The New Imperialism and Its Fatal Flaws.” Policy Analysis, November 26, 2002. http://www.cato.org/pubs/pas/pa459.pdf

Most of all, the strategy of empire is likely to overstretch and bleed America’s economy and its military and federal budgets, and the overextension could hasten the decline of the United States as a superpower, as it did the Soviet Union and Great Britain. The strategy could also have the opposite effect from what its proponents claim it would have; that is, it would alarm other nations and peoples and thus provoke counterbalancing behavior and create incentives for other nations to acquire weapons of mass destruction as an insurance policy against American military might.

#### Hegemony only pushes proliferation underground.

Eugene Gholz, Daryl Press were doctoral candidates in the Dept of Political Science at MIT, AND Harvey Sapolsky is Prof of Public Policy and Organization in the Dept of Political Science at MIT. Spring 1997. International Security.

Some advocates of continued engagement argue that America should use its military to prevent hostile countries (e.g., Iran, Syria, and Libya) from developing nuclear weapons. These critics of restraint argue that, due to the nuclear revolution, the oceans grant less security than ever before; even poor faraway countries can do serious harm.9° Counterproliferators conclude that today more than ever America needs to discourage proliferation by allies and adversaries.91 The spread of nuclear weapons to hostile countries is not good news. Certain countries may use nuclear weapons in irrational attacks on Americans or their friends. Accidental nuclear wars are not likely but are possible, especially if new nuclear states lack technical safeguards for their weapons. Continued military engagement, however, will not help stop proliferation to America’s enemies. In 1981 Israel attacked the Iraqi nuclear facilities near the city of Osirak, setting back the Iraqi nuclear program by at least a decade. The raid taught Iraq and other countries with nuclear ambitions an important lesson: nuclear weapons facilities must be hidden and dispersed. In the decade following the Israeli attack, Iraq rebuilt its nuclear weapons program, and efforts to hide its size and progress were very effective. In 1990, as American military planners designed the Gulf War air campaign, they knew of only two major Iraqi nuclear weapons facilities. In the months following the war, UN inspectors on the ground discovered sixteen additional major sites.92 Until troops and inspectors were on the ground and searching warehouses, factories, and military installations for clandestine nuclear facilities, the world was almost completely in the dark about Iraq’s weapons program.93 A military counterproliferation operation against a regional power with a dispersed, concealed weapons program would require weeks or months of ground operations. Stopping an Iranian weapons program, for example, would not be a precision strike. Iran’s armed forces would have to be neutralized and its major military and industrial areas occupied. In other words, Iran would have to be conquered. Counterproliferation operations would be long, complex, and costly, but more to the point, these operations would **multiply**, not reduce, the risk that America will be the target of nuclear attacks. The reason to attack an Iranian nuclear program is that Iran might, in some fit of irrationality, use nuclear weapons against the United States. But during an attack, Iran would be forced to defend itself. It would not face the difficulty of delivering a warhead against a distant U.S. homeland, because American troops would be on its shore. Even worse, the Iranian government might believe it had little to lose. Nuclear proliferation among hostile states would not be a pleasant development, but an activist security policy does not reduce the danger. To the contrary, the best the United States may be able to do is to stay out of hostile countries’ disputes and maintain a powerful nuclear deterrent. Fortunately, that is probably good enough. Military restraint would not increase the danger of rogue states developing nuclear weapons, because even an activist policy could not halt their efforts.

#### Hegemony has the comparatively larger risk of sparking proliferation.

Christopher Layne, Visiting Associate Professor at the Naval Postgraduate School. “From Preponderance to Offshore Balancing.” International Security. Summer 1997.

An offshore balancing strategy would recognize explicitly that the credibility of U.S. extended deterrence guarantees will be vitiated in coming years. The United States would be more secure if it withdraws its deterrent umbrella and allows other states to defend themselves. As an offshore balancer, the United States would accept that some (preferably managed) nuclear proliferation is inevitable. Extended deterrence’s eroding credibility is an important reason why U.S. hegemony will be unsustainable in the twenty-first century. As potential great powers come to doubt the reliability of the U.S. security umbrella (which will occur even if the United States sticks with the strategy of preponderance), they inevitably will seek strategic self-sufficiency (including nuclear weapons). It is unlikely, however, that an offshore balancing strategy would touch off a proliferation chain reaction. Middle and small powers, given their limited resources, might well decide that they would be more secure by enhancing their conventional forces than by acquiring nuclear weapons.76

### Heg Bad – Terrorism

#### Primacy encourages terrorist backlash – offshore balancing prevents terrorism

Christopher Layne, Visiting Associate Professor at the Naval Postgraduate School, 9-10-2007, “Balancing Act,” The American Conservative, http://www.amconmag.com/article/2007/sep/10/00003/.

The insights of Scheurer, Betts, and other experts have been validated by University of Chicago professor Robert Pape in his recent study of suicide terrorist groups. Pape found that “what nearly all suicide terrorist attacks have in common is a specific secular and strategic goal: to compel modern democracies to withdraw military forces from territory that the terrorists consider to be their homeland.” Al-Qaeda fits this pattern perfectly, and—because it reinforces the widespread perception in the Islamic world that the United States is pursuing a neo-colonial policy—Bush’s determination to maintain a long-term U.S. military presence in Iraq is exactly the wrong policy to reduce America’s exposure to Islamic terrorism. If policymakers are serious about reducing America’s exposure to the Islamic terrorist attacks, the way to do so is to adopt a new strategy that would lower the U.S. profile in the region—what security-studies scholars call “offshore balancing.” As Pape argues, offshore balancing “is America’s best strategy for the Persian Gulf” because the “mere presence of tens of thousands of U.S. troops in the region is likely to fuel continued fear of foreign occupation that will fuel anti-American terrorism in the future.” Similarly, Harvard’s Stephen Walt, who also favors a U.S. offshore-balancing strategy in the Middle East, observes, “The U.S. does have important interests in the Middle East—including access to oil and the need to combat terrorism—but neither objective is well served by occupying the region with its own military forces.” Even Michael Lind, who is skeptical that offshore balancing is a good strategy for the United States to follow in Europe and East Asia, believes it is the best grand strategy option for the United States in the Middle East.

#### Nuke war results

Patrick **Speice**, Jr. J.D. Candidate 2006, Marshall-Wythe School of Law, College of William and Mary, February 20**06**, William & Mary Law Review

The potential consequences of the unchecked spread of nuclear knowledge and material to terrorist groups that seek to cause mass destruction in the United States are truly horrifying. A terrorist attack with a nuclear weapon would be devastating in terms of immediate human and economic losses. [49](http://www.nti.org/e_research/Securing_the_bomb08.pdf?_m=0a3109dbc60902f6e2cf6f2a66ae4c5d&csvc=bl&cform=bool&_fmtstr=FULL&docnum=1&_startdoc=1&wchp=dGLzVlz-zSkAA&_md5=b7478009938b75f75e8896ccf2d3f78c#n49) Moreover, there would be immense political pressure in the United States to discover the perpetrators and retaliate with nuclear weapons, massively increasing the number of casualties and potentially triggering a full-scale nuclear conflict. In addition to the threat posed by terrorists, leakage of nuclear knowledge and material from Russia will reduce the barriers that states with nuclear ambitions face and may trigger widespread proliferation of nuclear weapons. [51](http://www.ciaonet.org/olj/sa/?_m=0a3109dbc60902f6e2cf6f2a66ae4c5d&csvc=bl&cform=bool&_fmtstr=FULL&docnum=1&_startdoc=1&wchp=dGLzVlz-zSkAA&_md5=b7478009938b75f75e8896ccf2d3f78c#n51) This proliferation will increase the risk of nuclear attacks against the United States [\*1440] or its allies by hostile states, [52](http://www.brook.edu/views/papers/psinger/20070228.htm?_m=0a3109dbc60902f6e2cf6f2a66ae4c5d&csvc=bl&cform=bool&_fmtstr=FULL&docnum=1&_startdoc=1&wchp=dGLzVlz-zSkAA&_md5=b7478009938b75f75e8896ccf2d3f78c#n52) as well as increase the likelihood that regional conflicts will draw in the United States and escalate to the use of nuclear weapons.

### Ext – Heg Causes Terrorism

#### Heg is the root cause of all terrorism – prefer our comprehensive studies to their shallow research

Robert Pape, Prof at U Chicago, 11-1-2006, “Suicide Terrorism and Democracy,” [Cato Institute](http://www.sciencedirect.com/science?field1=publisher&query1=%22Cato%20Institute%22).

Previous analyses of suicide terrorism have never had the benefit of a comprehensive survey of all suicide terrorist attacks worldwide over an extended period of time. The lack of complete data together with the fact that many such attacks—including all those against Americans—have been committed by Muslims has led many in the United States to assume that Islamic fundamentalism must be the underlying main cause.17 That, in turn, has fueled a belief that anti- American terrorism can be stopped only by wholesale transformation of Muslim societies. That was one of the primary justifications employed by the Bush administration to build public support of the invasion of Iraq, and it remains a central objective of U.S. strategy, particularly in the Middle East and South Asia. Comprehensive study of the phenomenon of suicide terrorism, however, shows that the presumed connection to Islamic fundamentalism is misleading. The research presented in my book Dying to Win: The Strategic Logic of Suicide Terrorism, was based on a complete dataset of suicide terrorist attacks around the globe from 1980 to 2003. Using hundreds of reports in nativelanguage newspapers, computer databases, and expert analyses, the survey counted every instance in which at least one terrorist killed himself or herself while attempting to kill others. Attacks authorized by national governments, such as those by North Korea against the South and Iranian human wave attacks in the Iran-Iraq war, were excluded.18 Overall, there were 315 separate suicide terrorist attacks from 1980 to 2003, and these occurred in a variety of countries, including Lebanon, Israel, Turkey, India, Sri Lanka, Chechnya, Iraq, Saudi Arabia, Morocco, Algeria, Yemen, and the United States. The data showed that all suicide terrorist campaigns have in common a specific secular and strategic goal: to compel democracies to withdraw military forces from territory that the terrorists value. Religion is rarely the root cause, although it is often used as a tool by terrorist organizations in recruiting and in other efforts in service of the broader strategic objective.

#### Offshore balancing solves terrorism

John Mearsheimer, a professor of political science at the University of Chicago, 12-31-2008, “Pull Those Boots Off The Ground,” http://www.newsweek.com/id/177380/page/2

Second, offshore balancing would ameliorate America's terrorism problem. One of the key lessons of the past century is that nationalism and other forms of local identity remain intensely powerful, and foreign occupiers generate fierce local resentment. That resentment often manifests itself in terrorism or even large-scale insurgencies directed at the United States. When the Reagan administration put U.S. troops in Beirut following Israel's invasion of Lebanon in 1982, local terrorists responded by suicide-bombing the U.S. Embassy in April 1983 and the U.S. Marine barracks in October, killing more than 300. Keeping U.S. military forces out of sight until they are needed would minimize the anger created by having them permanently stationed on Arab soil.

### A2: Transition Wars

#### No risk of transition wars – nuclear weapons, military and economic power, and geographic insultation

Christopher Layne, Visiting Associate Professor at the Naval Postgraduate School, Summer, 1997, “From Preponderance to Offshore Balancing,” International Security 22:1. p.115-116. JSTOR.

The strategy of preponderance assumes that multipolar systems are unstable. As a generalization this may be true, but instability does not affect all states equally. Preponderance’s advocates fail to consider geography’s differential effects. An offshore balancing strategy, however, would account explicitly for geography’s impact on grand strategy. Insular great powers are substantially less likely to be affected by instability than are states that face geographically proximate rivals. Hence the United States could effectively insulate itself from the future great power wars likely to be caused by power transition effects. Because of the interlocking effects of geography, nuclear weapons (which enhance insularity’s strategic advantages), and formidable military and economic capabilities, the United States is virtually impregnable against direct attack. The risk of conflict, and the possible exposure of the American homeland to attack, derive directly from the overseas commitments mandated by preponderance’s expansive definitions of U.S. interests.

#### Heg makes transition wars more likely

Christopher Layne, Professor in the School of International Studies at the University of Miami. World Policy Journal. New York: Summer 1998. Vol. 15, Iss. 2; pg. 8, 21 pgs. “Rethinking American grand strategy: Hegemony or balance of power in the twenty-first century?”

In purely economic terms, an open international economic system may have positive effects. But economics does not take place in a political vacuum. Strategically, economic openness has adverse consequences: it contributes to, and accelerates, a redistribution of relative power among states in the international system (allowing rising competitors to catch up to the United States more quickly than they otherwise would). This leads to the emergence of new great powers. The resulting "power transition," which occurs as a dominant power declines and new challengers arise, usually climaxes in great power wars. 24 Because great power emergence is driven by uneven growth rates (that is, some states are growing faster economically than others), there is little, short of preventive war, that the United States can do to prevent the rise of new great powers. But U.S. grand strategy, to some extent, can affect both the pace and the magnitude of America's relative power decline.

### A2: Ream/Prolif

#### Non-Unique - Other countries don’t trust American security guarantees and are militarizing.

Christopher Layne, Professor of International Studies at the University of Miami. 2006. *The Peace of Illusions: American Grand Strategy from 1940 to the Present*. Pg. 151

Up until now, other states have foregone overt counterbalancing because they benefit from American hegemony. However, Washington’s ability to provide other major states with collective goods—in both the security and economic spheres—is a wasting asset. Although other states have relied on U.S. security guarantees to protect them against regional rivals and instability, the credibility of America’s extended deterrence commitments is increasingly problematic. As other major states experience growing doubts about whether they can count on the United States to protect them, they will move—and, indeed, in some cases already have—to acquire military capabilities so that, if necessary, they can defend themselves without U.S. assistance.67 When other major states build up militarily as a hedge against abandonment by the United States, they open a second avenue to multipolarity. Regardless of how multipolarity comes about—as the result of balancing against the United States, or as a result of others arming themselves as a hedge against regional rivals—the consequences for America’s hegemonic grand strategy are the same. Precisely because multipolarity is antithetical to the Open Door world that the United States seeks, the aim of American grand strategy is to prevent the other major powers—even U.S. allies—from gaining autonomy in the realm of security.

#### Only multipolarity prevents rearm

Naazneen Barma et.al., research fellow at the New Era Foreign Policy Center. Foreign Policy, January 1, 2007. “How globalization went band: from terrorism to global warming, the evils of globalization are more dangerous than ever before. What went wrong? The world become dependent on a single superpower. Only by correcting this imbalance can the world become a safer place.” Pg. 48(7) ISSN: 0015-7228

How would things be different in a multipolar world? For starters, great powers could split the job of policing proliferation, and even collaborate on some particularly hard cases. It's often forgotten now that, during the Cold War, the only state with a tougher nonproliferation policy than the United States was the Soviet Union. Not a single country that had a formal alliance with Moscow ever became a nuclear power. The Eastern bloc was full of countries with advanced technological capabilities in every area except one--nuclear weapons. Moscow simply wouldn't permit it. But today we see the uneven and inadequate level of effort that non-superpowers devote to stopping proliferation. The Europeans dangle carrots at Iran, but they are unwilling to consider serious sticks. The Chinese refuse to admit that there is a problem. And the Russians are aiding Iran's nuclear ambitions. When push comes to shove, nonproliferation today is almost entirely America's burden.

#### Turn – hegemony devastates attempts at non-proliferation and encourages allied rearm through perception of overstretch.

Michael M. May, senior fellow at the Institute for International Studies , March, 2000, “The U.S. Enlargement Strategy and Nuclear Weapons,” Page 4, iis-db.stanford.edu/pubs/11892/enlargementstrategy.pdf.

These two policies, military enlargement and reliance on nuclear stability and arms control, are not compatible. Continued enlargement backed or led by military force will not support de-emphasis of nuclear weapons, let alone nuclear disarmament. It may not support nuclear nonproliferation even among allies, depending on whether the United States is seen to become overextended or overcommitted at home or abroad. Military enlargement weakens support for several of the arms-control measures on the U.S. agenda. Enlargement is also likely to lead to crises that will test the stability of nuclear deterrence more seriously than it has been tested since the early years of the Cold War. The alternative to military enlargement would require the United States and the other principal military powers in the world to accept geographic restraints on the unilateral use of their power. Such acceptance would minimize nuclear-weapons-related risks. It would also, perhaps paradoxically, better serve continued U.S. power and influence than continued attempts at military enlargement. It might even be popularly acceptable. But it would represent such a change from the present U.S. strategic patterns that it is not likely to be acceptable today. Nevertheless, welcome or not, limits will have to be accepted someday. Continued expansion, if not checked voluntarily, must lead to nuclear confrontation where the adversary is a nuclear power. Nuclear confrontation will lead either to nuclear war or to a mutual acceptance of lines of demarcation. Nuclear war is unacceptable and will not be accepted so long as rational decision-making prevails. Unfortunately, if not planned in advance, acceptance of limits will be reached through a succession of dangerous crises, some of which may sap U.S. power and influence.