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### AT – No US-China War

#### **US – China war inevitable – China’s military modernization, ambitions and empirics prove**

Stephen Glain, freelance writer with extensive experience as a foreign correspondent in Asia and the Middle East. “Why a U.S. War With China May Be Inevitable”

September 8, 2011 US News <http://www.usnews.com/opinion/blogs/stephen-glain/2011/09/08/why-a-us-war-with-china-may-be-inevitable> ET

Meanwhile, Dan Blumenthal, a commissioner of the reliably alarmist U.S.-China Economic and Security Review Commission, has cowritten a clarion call to preserve American hegemony in Asia and beyond. According to Blumenthal and his colleagues, the primary benefactor of the Pax Americana—China—is now doing everything possible to subvert it. In an essay [posted on FP.Com](http://shadow.foreignpolicy.com/posts/2011/09/06/avoiding_armageddon_with_china) this week, the authors warned a defense-spending floor of 4 percent of gross domestic product should be established to cope with the looming China threat. Otherwise, they argue, America will render itself vulnerable to Chinese prodding in Beijing’s own backyard. ("Can we thrive as a nation if we need China's permission to access Asia's trade routes?" the authors ask plaintively, as if Beijing was constructing a toll road through the South China Sea.) Even now, they warn, the Pentagon is forecasting strategic "shortfalls" of badly needed fighter aircraft, naval ships, and submarines. A failure of Congressional nerve to cover those deficits, according to Team Blumenthal, could "lead to Armageddon."¶ As a Tokyo-based correspondent in the mid-1990s, I used to lament the "irony deficiency" of my hosts. Clearly, that ailment has gone viral and jumped the Pacific (along with stagnant economic growth and political dysfunction). Have we forgotten the fraudulent "bomber" and "missile" gaps peddled by the Defense Department during the 1950s to leach taxpayers for ever more powerful, and as it turned out, largely unnecessary, weaponry against the Soviet Union? If the events of the last 60 years has proven anything, it’s that threat inflation is as deeply entrenched an American tradition as predatory lending. Yet with the evaporation of one threat inevitably comes the rise of another. Just as radical Islam filled the vacuum created by the imploded Soviet Union as an existential core threat, so too has the degradation of al Qaeda cleared the decks for the coming war with China. [[See a collection of political cartoons on Afghanistan.]](http://www.usnews.com/opinion/photos/afghanistan-cartoons)¶ In its annual report on China’s military modernization, the Pentagon this week expressed concerns about what it interprets as Beijing’s increasingly offensive posture and lack of transparency. (This from a bureaucracy that, according to its own inspector general, fails every year to account for hundreds of billions of dollars in unsupported expenditures.) No doubt China has its own hegemonic ambitions for a region that has been largely Sino-centric for the last three millennia. Washington meanwhile, appeals for a "peaceful" evolution of Chinese power even as it refuses to concede an inch of its own suzerainty over Asia’s seaways and air corridors. The two sides are talking past one another even as they engage in a menacing arms race; absent a diplomatic effort to reconcile their divergent positions, some kind of Sino-U.S. conflict is inevitable.

#### China will retaliate to the US – they will risk everything in conflict over Taiwan and use nuclear weapons

Stephanie Spies; research intern for the Project on Nuclear Issues; Oct 20, 2011; “China’s Nuclear Policy: (No) First Use?;” Center for Strategic and International Studies <http://csis.org/blog/chinas-nuclear-policy-no-first-use> ET

Other security experts express similar concerns about China’s commitment to its NFU pledge. According to Justin [Hastings](http://csis.org/files/media/csis/pubs/issuesinsights_v07n08.pdf), a visiting research associate at the Institute of Defense and Strategic Studies at Nanyang Technological University, China’s NFU is not credible to countries like the U.S. who are more focused on Chinese nuclear “capabilities rather than its intentions”. While the threats of a militarily weak country are not credible, “a country with a greatly increased capacity to wage war can credibly change its intentions quickly”, Hastings argues. Such a situation may emerge for China, which according to recent intelligence discussed in an earlier [post](http://csis.org/blog/nuclear-weapons-modernization-russia-and-china-re-cap) is steadily increasing its nuclear modernization efforts and the role of nuclear weapons in its defense policies. According to Hastings’ logic, if a China which feels more confident in its nuclear capabilities is threatened in a future military conflict, particularly one which threatens its core national interests, it may roll back its NFU pledge. Statements by Maj. Gen. Zhu Chenghu, dean of China’s National Defense University, affirm this view, as he [stated](http://se1.isn.ch/serviceengine/Files/ISN/31930/ichaptersection_singledocument/7741B210-9E69-485D-B958-462C66DEDDD9/en/cs1_chapter3.pdf) that “China would have no choice but to respond with nuclear weapons if the United States attacked Chinese territory with conventional (non-nuclear) forces during such a conflict”, even if this violated its NFU commitment. Bruce Blair, President of the World Security Institute, argues that Zhu’s statements implicitly indicate that preventing Taiwanese independence “is an inviolable principle that overrides everything including China’s No-First-Use Declaration”, consistent with stated Chinese policy to “risk everything” in a conflict over Taiwan. According to some analysts, such as Scott [Moore](http://www.nti.org/e_research/e3_80.html) of the East Asia Nonproliferation program at CNS, “hyper-nationalism may come to exert a significant influence on national policy” in such a conflict which threatens Chinese sovereignty and survival, perhaps inducing pressure on President Hu to use nuclear weapons to ensure a Chinese military victory.

#### China will attack the US – documents and multiple aspects of a possible conflict over Taiwan prove

Roger Cliff, Evan Medeiros, and Keith Crane; Roger Cliff and Evan Medeiros are RAND political scientists. Cliff specializes in China’s military strategy, China’s science and technology, and U.S. defense policy in the Asia-Pacific region. Medeiros focuses on China’s national security policy, its military and defense industrial affairs, and U.S.-China relations. Keith Crane is a RAND economist who focuses on defense and international economics; Spring 2007; “Keeping the Pacific - An American Response to China’s Growing Military Might;” <http://www.rand.org/publications/randreview/issues/spring2007/pacific.html> ET

China’s Military Strategy¶ America needs to retain a strategic as well as a technological advantage. Chinese military doctrinal writings discuss how to defeat a militarily superior adversary such as the United States. We found these writings in openly published Chinese-language books on military strategy, articles in Chinese military journals, reports from Chinese military newspapers, and recent Western studies of Chinese security policy. We found in the writings at least seven strategic principles that have implications for U.S. forces in the Pacific.¶ The first strategic principle is seizing the initiative early in a conflict. Chinese military analysts note that Iraq, by not seizing the initiative in the 1991 Gulf War, allowed the United States to build up its forces until it had overwhelming superiority. If China is to be victorious against a militarily superior power, China must go on the offensive from the very beginning. In the context of a conflict between the United States and China, this means that U.S. forces stationed permanently in the Western Pacific will be critical, because China is likely to go on the offensive before additional forces can be brought into the theater.¶ A second and related strategic principle for defeating a militarily superior adversary is the importance of surprise. Surprise is valuable not only for an immediate tactical advantage but also as an important way of seizing the initiative. Surprise puts the adversary in the position of reacting to China’s moves, making it easy to maintain the initiative thereafter. In the context of a conflict between the United States and China, this means that the ability of U.S. forces in the Pacific to avoid and survive surprise attacks will be critical.¶ Related to the first two strategic principles is a third one: the value of preemption. If China waits for a militarily superior adversary to commence hostilities, it will be difficult for China to seize the initiative, and the adversary will likely wield the preponderance of forces. If, by contrast, China initiates a conflict, China can seize the initiative and may also enjoy an initial advantage in the local balance of forces. Preemption also greatly increases the chances of successfully achieving surprise. In the context of a conflict between the United States and China over Taiwan, this means that China might initiate hostilities by preemptively attacking U.S. forces in the region, even before China has attacked Taiwan, on the presumption that the United States will inevitably intervene in a conflict with Taiwan.¶ A fourth strategic principle is raising the costs of conflict. At least some Chinese military analysts believe that the United States is sensitive to casualties and economic costs and that the sudden destruction of a significant portion of our forces would result in a severe psychological shock and a loss of will to continue the conflict. When this principle is combined with the preceding two, it suggests a belief that a preemptive surprise attack on U.S. forces in the Pacific could cause the United States to avoid further combat with China. Although the last time such a strategy was attempted in the Pacific the ultimate results were not favorable for the country that attacked, the Chinese military doctrinal writings that we examined did not acknowledge such historical counterexamples.¶ A fifth strategic principle is that of limited strategic aims. A militarily inferior country cannot expect to achieve total victory over a militarily superior adversary. But if its aims are limited, the inferior country could create a situation in which the costs to its adversary of reversing the results of an initial offensive exceed the benefits of such a reversal, and therefore the adversary will choose to live with the results. In the context of a conflict between the United States and China, this principle suggests that if China’s leadership believes it can quickly accomplish its military aims and present the United States with a fait accompli (such as the invasion and occupation of Taiwan) without threatening any truly vital U.S. interests, then China might embark on such a conflict even if its leadership recognizes that the United States could ultimately prevail if it desired.¶ The sixth and seventh strategic principles are avoiding direct confrontation and conducting “key point strikes,” or concentrated attacks. China knows that it cannot win in direct, force-on-force combat with the United States. However, all militaries rely on certain critical functions, any one of which, if disrupted, will render a military unable to operate effectively. Chinese doctrine identifies five such targets: command systems, information systems, weapon systems, logistics systems, and the linkages between the systems. In the context of a conflict between the United States and China, this means that the United States must be prepared for attacks that are focused less on its main combat forces than on key support systems.¶ Perhaps no U.S. military vulnerability is as important, in Chinese eyes, as its heavy reliance on its information network, which includes command, control, communications, computer, intelligence, surveillance, and reconnaissance systems. Chinese strategists believe that the U.S. military’s awesome power derives in large degree from its effective integration and use of information technology. Successfully attacking that system will affect U.S. combat capabilities much more profoundly than would directly targeting combat platforms. Chinese strategists also believe that the U.S. military information network is not just vulnerable but also fragile. Thus, the foundation of the U.S. military’s success can also be its undoing.

### AT – No Air Power

#### Air Power now – 9/11 spurred development and air force advances

RAND; RAND Corporation (Research ANd Development[[2]](http://en.wikipedia.org/wiki/RAND#cite_note-RANDHM-1)) is a [nonprofit](http://en.wikipedia.org/wiki/Nonprofit) global policy [think tank](http://en.wikipedia.org/wiki/Think_tank); 2005; “The New Face of Naval Strike Warfare;” <http://www.rand.org/content/dam/rand/pubs/research_briefs/2005/RAND_RB9137.pdf> ET

The terrorist attacks against the United States¶ on September 11, 2001, portended a change¶ of major proportions in the long-familiar¶ pattern of U.S. carrier air operations. Less¶ than a month after the attacks perpetrated by¶ Osama bin Laden and his al Qaeda terrorist organization,¶ the nation found itself at war against al¶ Qaeda’s main base structure in Afghanistan and¶ against the ruling Taliban theocracy that had provided¶ it safe haven. Th e war, code-named Operation¶ Enduring Freedom, in no way resembled the¶ open-ocean showdowns between opposing high¶ technology forces that the Navy had prepared for¶ throughout the preceding three decades. Instead,¶ the attacks required a credible, deep-strike capability¶ in the remotest part of Southwest Asia where¶ the United States had virtually no access. Although¶ Air Force heavy bombers fl ying from outside the¶ theater delivered the vast preponderance of munitions,¶ U.S. carrier-based air power, in fl ying 75¶ percent of all strike missions, substituted almost¶ entirely for land-based theater air forces because of¶ an absence of suitable forward operating locations¶ for the latter (see the fi gure).¶ Barely more than a year later, the Navy’s carrier¶ force again played a pivotal role when American¶ forces conducted around-the-clock operations¶ against Saddam Hussein’s forces in Iraq. Six of 12¶ carriers and their air wings were surged to contribute¶ to the campaign, with a seventh carrier battle¶ group held in ready reserve in the Western Pacifi c¶ and an eighth also deployed at sea and available for¶ tasking. Th e air wings from the committed carriers¶ fl ew approximately half the total number of fi ghter¶ sorties generated altogether by U.S. Central Command.¶ A report prepared by the International Security¶ and Defense Policy Center of the RAND National¶ Defense Research Institute presents highlights¶ from a larger ongoing RAND study of U.S. Navy¶ carrier air operations and capability improvements¶ since the end of the cold war.¶ Recent Gains in U.S. Carrier Air Power¶ Th e many gains that have been registered in U.S.¶ carrier air power over the past decade—and that¶ were demonstrated during Operations Enduring Freedom and Iraqi¶ Freedom—include the following.

### AT – Tech fails

#### Tech being developed now

Paul Marks; chief technology correspondent; 7/17/2012; “Loitering airships could dispense drones on demand;” <http://www.newscientist.com/blogs/onepercent/2012/07/future-of-drones.html> ET

¶ Go to any motor show and you'll see concept cars on show, demonstrating some of the technologies carmakers think we'll be driving some years hence. A similar "concept vision" for the drone industry was revealed at last week's Farnborough Airshow in the UK - where [missile maker MBDA](http://www.mbda-systems.com/) revealed an alarming future in which a strange cross between drones and missiles could one day loiter in the skies for extended periods. ¶ A joint venture of European aerospace firms [BAE Systems](http://www.baesystems.com/), [EADS](http://www.eads.com/) and [Finmeccanica](http://www.finmeccanica.com/Corporate/EN/index.sdo), MBDA asked its weapons engineers to project ahead to 2030 and take a stab at guessing how UAVs might then be deployed. ¶ What they came up with is a class of UAV that provides expendable backup for the descendants of today's Predator and Reaper drones. The vision is of vast airships (above) that constantly loiter at high altitude over target areas, carrying pods of small UAVs in much the same way as today's fighter jets carry missiles under their wings.¶ ¶ These launcher racks could contain at least two types of armed UAV - a small scout and a long-range version. Both sprout spring-loaded wings when air-dropped and are powered by electric ducted-fan engines.¶ A controller on the ground - dressed in the robotic garb that will clearly be de rigeur in the 2030's military - then punches a few buttons on a wrist mounted screen to choose a UAV and its target GPS waypoints. This will make the software used by the ground controllers' gadget a major safety-critical component, however, requiring vast expense to make it both reliable and secure from interception by an attacker.¶ ¶ The small scout UAV (below) would be an ultra lightweight drone designed for short-duration reconnaissance missions with a range less than 30 kilometres. ¶ One of its tasks might be to seek out and illuminate a target with a missile-guiding laser beam for a larger UAV. It would also carry a 1-kilogram warhead so it can form part of an attack - presumably self-destructing at altitude if the mission is called off. ¶ The larger air-dropped UAV (below) would fly for up to two hours to seek out harder-to-find targets. It also has a 1-kg warhead. "It can operate at low altitudes below the cloud base, providing accurate and precise targeting data when adverse weather conditions would limit target engagement directly by UAVs," says MBDA.¶ ¶ ¶ It may all sound very futuristic, but if you're tempted to write this off as a pie-in-the-sky concept that will never happen - like most concept cars - the idea has in fact already aroused serious interest from a raft of the company's military partners, according to an MBDA spokesman. You can see the firm's (somewhat gung-ho) video [here](http://www.mbda-systems.com/slideshow/videos/slideshow-1341242279.mp4).

### AT – Elections DA

#### Obama is losing now – Health Care ruling and losing key independents

By [Stephen Dinan](http://www.washingtontimes.com/staff/stephen-dinan/); author, marketing strategist, CEO of The Shift Network; 7/9/2012 “Obama loses ground to Romney in key measures of poll;” Washington Times; <http://www.washingtontimes.com/news/2012/jul/9/obama-loses-ground-to-romney-in-key-measures-of-po/> ET

[Mitt Romney](http://www.washingtontimes.com/topics/mitt-romney/) continues to hold a whisker-thin 1-percentage-point lead over President Obama in a head-to-head election match-up, but the former Massachusetts governor is eating into the president’s air of inevitability, according to the latest The Washington Times/JZ Analytics poll released Monday night.¶ The poll found [Mr. Romney](http://www.washingtontimes.com/topics/mitt-romney/) leading 43 percent to 42 percent — about the same margin as the poll in May, but Mr. Obama slipped on several key measures, including fewer voters who say they expect him to win, and fewer who say they are voting for him because he’s the best candidate.¶ Voters, who by a small margin say they agree with the [Supreme Court](http://www.washingtontimes.com/topics/supreme-court/)’s ruling upholding health care, still seem in a mood to punish Mr. Obama for it — particularly among independents. The poll found 45 percent of self-identified independents said they are less likely to support the president now after the ruling, compared with 20 percent who said the ruling made them more likely to back him.¶ [John Zogby](http://www.washingtontimes.com/topics/john-zogby/), the pollster who conducted the survey, said Mr. Obama had been ticking upward in other polling last month, but the health care ruling appears to have arrested that momentum.¶ “What happened was he was leading on the basis of doing better among independents. But this time around, there’s a shift — still a lot of independents who are undecided, but [Romney](http://www.washingtontimes.com/topics/mitt-romney/) has the plurality now,” [Mr. Zogby](http://www.washingtontimes.com/topics/john-zogby/) said. “The health care issue, at least at the moment, is tipping away from Obama among independents, and has caused other independents to kind of park themselves in the undecided parking lot.”

### Solvency – China

#### Air power is the key solution to the imminent threat of a Chinese missile attack

Roger Cliff, Evan Medeiros, and Keith Crane; Roger Cliff and Evan Medeiros are RAND political scientists. Cliff specializes in China’s military strategy, China’s science and technology, and U.S. defense policy in the Asia-Pacific region. Medeiros focuses on China’s national security policy, its military and defense industrial affairs, and U.S.-China relations. Keith Crane is a RAND economist who focuses on defense and international economics; Spring 2007; “Keeping the Pacific - An American Response to China’s Growing Military Might;” <http://www.rand.org/publications/randreview/issues/spring2007/pacific.html> ET

Proposed U.S. Counterstrategy¶ Based on the weapons being fielded by China’s military and on the vulnerability of U.S. assets to the types of attacks described in China’s military doctrine, we offer six recommendations for mitigating the potential effects of such attacks.¶ Our first recommendation is to strengthen passive defenses at U.S. air bases and aviation fuel storage facilities in the Western Pacific. The ability of China’s ballistic missiles to disrupt flight operations at air bases would be reduced by strengthening runways (for example, by adding a layer of concrete to them) and increasing rapid runway repair capabilities. The ability of the missiles to destroy aircraft on the ground would be reduced by constructing hardened aircraft shelters, because aircraft are most vulnerable when they are parked in the open. Constructing underground fuel tanks would similarly reduce the vulnerability of fuel supplies.¶ Our second recommendation is to deploy air defense systems with antiballistic missile capabilities, both on land and at sea, near all air bases and other facilities in the Western Pacific that the United States would use in the event of a conflict with China (see Figure 2). By themselves, ballistic missiles are capable of damaging only runways and “soft” targets, such as unsheltered aircraft and aboveground fuel tanks. But China is also developing cruise missiles and acquiring aircraft with precision-guided munitions, which are capable of destroying “hard” targets, including aircraft shelters and buried fuel tanks. To the extent to which air defense systems are capable of intercepting ballistic missiles and preventing the shutdown of runway operations, U.S. fighter aircraft stationed at those bases would be able to defend them from cruise missile and aircraft attacks. And even if land- or sea-based air defense systems were unsuccessful at defeating ballistic missile attacks, they would also be capable of defending the bases against follow-on attacks by cruise missiles and manned aircraft.¶ Our third recommendation, designed to undermine Chinese special operations forces and covert operatives, is to extend the coordination that now exists between U.S. and local forces in Korea to U.S. facilities in Japan and Guam. Chinese military doctrinal writings recommend using special operations forces and covert operatives to attack key strike points at air bases and other facilities. Because such attacks would generally originate from areas outside of U.S. military bases, the local security forces will be critical lines of defense, as will be the coordination between local forces and U.S. base forces. Given the ongoing threat from North Korean special operations forces, these defenses have long been in place at U.S. facilities in Korea, but now they should exist at U.S. facilities in Japan and Guam as well. The bases can further reduce their vulnerability to covert operatives by installing antisniper systems, fortifying perimeter security, and shielding key areas from outside view.¶ Our fourth recommendation is to establish more U.S. air bases in the region or, alternatively, to operate land-based aircraft from a broader range of existing locations. Increasing the number of airfields that China would have to neutralize and thus reducing the amount of Chinese firepower that could be devoted to each target would decrease the possibility that one or two Chinese attacks could significantly disrupt U.S. military operations in the region.¶ Our fifth recommendation is to consider deploying an additional U.S. aircraft carrier in the region. Currently, the United States keeps one aircraft carrier full time in the Western Pacific. Given the many threats to land-based aircraft, having an additional aircraft carrier on the scene could become extremely valuable. The closest additional carriers (other than those that might be transiting through the region) are now based on the U.S. west coast. Because a conflict with China could begin with little warning, as much as two weeks could elapse before an additional aircraft carrier would reach the area of combat operations. An aircraft carrier based in Hawaii would still take at least a week to reach the waters near Taiwan. An aircraft carrier departing from Singapore, by contrast, could arrive in three days, and one departing from Guam could arrive in about two days.¶ Our sixth recommendation is to reduce the vulnerability of the U.S. information network. Many of the above proposals for defending against attacks on critical facilities will also reduce the vulnerability of information networks to physical attack. But given the interest that Chinese military writers have shown in this topic, it seems likely that, in the event of a conflict with the United States, China will devote significant resources to computer network attacks and related information operations. The effectiveness of such efforts will depend largely on exploiting poor U.S. information-security practices. Conversely, the potential damage from Chinese information operations can be reduced significantly by enforcing proper security practices for U.S. military information systems: eliminating known security vulnerabilities, using software encryption, isolating critical systems from publicly accessible networks, eliminating unencrypted links to secure computers, enhancing user identification measures, and monitoring network activity.¶ Given the possibility that China could nonetheless succeed in disrupting U.S. information systems despite these measures, the U.S. military should also maintain and exercise the ability to conduct operations without continuous, high-bandwidth communications between units. Such operations could entail using communications technologies that are out of date by modern standards or even using completely autonomous operations, without data from remote sensors or direction from higher headquarters.¶ These suggestions do not represent an exhaustive list of enhancements that should be made to the U.S. force posture in the Pacific. We have not performed an economic cost-benefit analysis of these options, and so we cannot definitively say that the military benefits of the recommendations made here exceed the financial costs of implementing them. We can say, however, that in light of what we know about China’s current and future military capabilities and its military doctrine, the potential Chinese threat to U.S. facilities in the Western Pacific is real and growing, and there are a number of concrete actions that the United States can take to reduce the threat.

### Solvency – DARPA Good

#### DARPA’S RESEARCH FOCUS PROVES THEY CAN MEET ANY VISION

Richard **Van Atta**, Senior Research Analyst at the Institute for Defense Analyses focusing on the technological needs and interests of the United States, 20**08**, “Fifty years of Innovation

And Discovery”, DARPA, http://www.darpa.mil/WorkArea/DownloadAsset.aspx?id=2553

**An example of this research focus is DARPA’s championing of stealth.** A radical and controversial concept, DARPA’s stealth R&D harnessed industry ideas. Low-observable aircraft had been built before, for reconnaissance and intelligence purposes, but not pursued for combat applications. The Air Force had little interest in a slow, not very maneuverable plane that could only fly at night. **After considerable engineering work, the Have Blue proof-of-concept system enabled top OSD and service leadership to proceed with confidence to fund and support a full-scale acquisition program. OSD leadership kept the subsequent F-117A program focused on a limited set of high priority missions that existing aircraft could not perform well** (e.g., overcoming Soviet integrated air defenses) and worked with Congress to protect its budget, with a target completion date within the same administration. **The result was a “secret weapon” capability –** exactly what DARPA and top DoD leadership had envisioned.

#### DARPA’S TRACK RECORD, MISSION STATEMENT, AND FUNDING ENSURE PASSAGE OF THE PLAN.

Paul K. **Chappell**, deputy chief of the Doctrine, Training, Requirements, December 20**06**, “DARPA and the Future of Army Air and Missile Defense”, http://www.airdefenseartillery.com/online/Extracts/DARPA.pdf

DARPA has established an impressive track record. In the past, **the agency has been responsible for developing** such innovations as **the Internet**, Global Positioning System, **Stealth Fighter**, first network firewall, first computer mouse, M-16 rifle, **Army Tactical Missile System**, Global Hawk, **Joint Strike Fighter,** Predator unmanned aerial vehicle **(UAV),** Sea Shadow, Ground Surveillance Radar, **Joint Surveillance and Target Attack Radar System, and Saturn Rocket. What makes this possible is DARPA’s two-billion dollar annual budget,** the many forward-thinkers they employ who are pioneers and experts in their field, **and DARPA’s mission statement: “DARPA’s mission is to maintain the technological superiority of the U.S. military and prevent technological surprise from harming our national security by sponsoring revolutionary, high-payoff research that bridges the gap between fundamental discoveries and their military use.”**

#### DARPA WAS MADE TO BRING NEW TECH TO REALITY

Paul K. **Chappell**, deputy chief of the Doctrine, Training, Requirements, December 20**06**, “DARPA and the Future of Army Air and Missile Defense”, http://www.airdefenseartillery.com/online/Extracts/DARPA.pdf

**DARPA’s entire mission is to transform technologies that seem impossible into realities that can benefit the military.** Because DARPA’s innovations are so revolutionary, the agency’s work also impacts the civilian sector. The Internet, Global Positioning System, and first computer mouse are examples from the past, but **in the future, DARPA will continue to innovate and bring futuristic technologies to the present**

#### DARPA is exempt from budgets cuts and political pressures

Noah Shachtman is a editor, a nonresident fellow at the Brookings Institution, 2-14-12, Darpa Dodges Obama Budget Death Ray, Keeps Its $2.8 Billion, Wired, http://www.wired.com/dangerroom/2012/02/darpa-budget-death-ray/?utm\_source=Contextly&utm\_medium=RelatedLinks&utm\_campaign=Previous

For most of the U.S. military’s far-flung community of scientists and engineers, Monday was a day to pop a Xanax. Not only did the Defense Department announce a cut of more than $2 billion from is research and development budget for next year, but the Pentagon also said it would slow down production of new ships, spy drones, stealth jets, and combat vehicles — leaving a military that’s a bit creakier and older than before, and threatening the funding of thousands in the slide-rule set. Gulp.¶ But at the Virginia headquarters of the Defense Advanced Research Projects Agency, the Pentagon’s blue sky (and best-known) science and technology shop, there was no need for anxiety meds. Its $2.8 billion budget was cut a mere $1.4 million dollars — less than a half-percentage point drop. Given the fiscal climate in Washington today, that’s a downright soothing number. And it means you can look forward to a year of superfast missiles, living factories, and military-grade cloud computing.¶ It’s a testament, in part, to the bureaucratic skills of Regina Dugan, Darpa’s controversial director. Not only has she managed to steer the agency toward Obama administration priorities like cybersecurity and next-gen manufacturing — earning valuable face time with the famously technophilic president in the process. Dugan also won over some military commanders by diverting some of her research cash from long-term projects to immediate, battlefield concerns. And she satisfied some of Darpa’s congressional critics pushing her researchers to pass on their R&D projects to military commands, once they were through.¶ Most importantly, perhaps, Darpa locked in perfectly with a White House that has put technological innovation as a key to America’s economic recovery.¶ “I wasn’t in on the end game negotiations, but I did advocate for preserving R&D/S&T department/government wide in a economic down turn,” says Gen. James Cartwright, the former vice chairman of the Joint Chiefs of Staff who now chairs the defense policy studies program at the Center for Strategic and International Studies. “The reasoning being we will need all the competitive advantage we can muster. The Administration was on board with this and fairly explicit in their support of labs and innovation organizations, the best of which they [the Administration] believe is Darpa.”¶ Dugan has also reined in some of Darpa’s more free-wheeling tendencies by streamlining the number of projects the agency pursues. In fiscal year 2011, Darpa oversaw 230 separate R&D programs. For 2013, that figure will drop by more than a quarter, to 169.¶ Research priorities are changing, too. A $52-million-per-year effort to investigate “machine intelligence” has been eliminated. An unspecified “classified” initiative was cut from $107 million to $3 million.¶ Instead, the agency will invest $50 million to push the envelope on hypersonics — the ability to race through the air at five times the speed of sound or more. It’s key to the Pentagon’s plan to strike any target on Earth in less than an hour.¶ According to the budget that the agency released Monday, Darpa plans new programs to make computing clouds secure enough for the Pentagon. (There’s that cyber defense again.) It will investigate ways to peer into underground lairs using “acoustic, seismic, electromagnetic, chemical, resistivity, conductivity, lidar, multi/hyperspectral, and gravity/gravity gradient” sensors. (Watch out, Iran.) And the agency will try to create the building blocks for “Living Foundries” — “a revolutionary, biologically based manufacturing platform … leveraging biology to solve challenges associated with production of new materials, novel capabilities, fuels and medicines.”¶ Sure, the idea of a factory that’s alive seems far out, even a little creepy. But it also sounds like a good fit for a “Halftime America” that’s suddenly seeing some of its dormant factories spring back to life.

#### DARPA uses a special pool of funding to create ground-breaking technologies

Edmund Adam Zagorin, political analyst, 10-15-09, DARPA: Secretive money pit or innovator?, OhMyGov, <http://ohmygov.com/blogs/general_news/archive/2009/10/15/DARPA-Secretive-money-pit-or-innovator_3F00_--.aspx>

In a recent speech to Hudson Valley Community College, President Obama laid out another slew of bold new initiatives to overcome barriers to economic growth by cultivating a new generation of innovators. While the thrust of the speech was directed towards re-tooling America’s institutions of higher learning, Obama also voiced strong support for the Defense Advanced Research Projects Agency (DARPA) as an engine of innovation that would be capable of providing America with the technologies to drive future growth. While Obama correctly points out that DARPA has been behind such game-changing inventions as the Internet and stealth technology, the agency has also gained a reputation as notoriously wasteful, pouring millions into impossible projects such as the hafnium bomb, a proposal which literally violated the laws of physics.¶ As President Obama continues to push for new domestic spending initiatives on healthcare and alternative energy, can DARPA’s pet projects continue to be justifiable uses of tax-payer money? And if so, what exactly will the next generation of innovations mean for American society?¶ As its name suggests, DARPA’s focus is on projects with military applications. While innovations such as the Internet can later find civilian application, they often spend years in secret development and exclusive military use before society at large is able to extract any meaningful gains. These programs are funded through the Pentagon’s “black budget,” a classified appropriations process that has little of Obama’s touted accountability or transparency and thus invites the creation of all sorts of R&D money pits that have made DARPA infamous, from psychic CIA agents to dimension-bending wormhole-builders. The Pentagon’s proposed “black budget” for 2010 is over $50 billion, the largest its ever been, according to Bill Sweetman, a long-time black budgeteer, and equivalent to the entire defense budgets of Japan, France or the UK.

## WALRUS Addendum

### Inherency

#### Walrus is a large airlift vehicle program started by DARPA – but was discontinued despite feasible tech

DID; Defense Industry Daily, Military purchasing news for defense procurement managers and contractors; Dec 30, 2009; “Walrus/HULA Heavy-Lift Blimps Rise, Fall… Rise?;” <http://www.defenseindustrydaily.com/walrus-heavylift-blimp-getting-off-the-ground-01103/> ET

¶ The Walrus heavy-transport blimp (“heavy” as in “1-2 million pounds”) was among [a range of projects on the drawing board](http://www.defenseindustrydaily.com/usn-darpa-see-blimps-hulas-rising-0416/) in the mid ‘00s. It offered the potential for a faster and more versatile sealift substitute. The Defense Advanced Research Projects Agency (DARPA) funded phase 1 contracts, but things seemed to end in 2006. Yet the imperatives driving the need for Walrus, or even for a much smaller version of it, remain. Is the Walrus dead? And could it, or a Hybrid Ultra Large Aircraft (HULA) like it, rise again?¶ Recent presentations and initiatives in several US armed services indicate that it might…¶ ¶ A key goal of DARPA’s Walrus program was to provide confidence that earlier airship-era limitations will be overcome. These limitations will apply to any Hybrid Ultra-Large Aircraft (HULA).¶ Early foci of the program included investigation of advanced breakthrough technologies that will support the development of innovative lift and buoyancy concepts that do not rely on off-board ballast. Many airships depend on ballast to control their buoyancy, but this becomes problematic if one intends to carry military-class loads to dangerous areas. A craft with buoyancy-assisted lift and no ballast is much more suitable, but those technologies, and associated lightweight solutions that would give the craft the required structural integrity to carry those loads, need to be developed.¶ The Walrus program aimed to develop and evaluate a very large airlift vehicle concept designed to control lift in all stages of air or ground operations including the ability to off-load payload without taking on-board ballast other than surrounding air. This is obviously rather important when offloading up to 2 million pounds of personnel and military equipment in remote areas. In distinct contrast to earlier generation airships, the Walrus HULA (Hybrid Ultra Large Aircraft) will be a heavier-than-air vehicle and will generate lift through a combination of aerodynamics, thrust vectoring and gas buoyancy generation and management. ¶ The Walrus operational vehicle (OV) was intended to carry a payload of 500-1,000 tons (that’s 1-2 million pounds) up to 12,000 nautical miles, in less than 7 days and at a competitive cost. Given these enormous capacities, they would mostly be used to deploy full-scale fighting units (for example, the components of an Future Combat Systems Army Unit of Action) quickly, getting them to their site with a minimum of equipment reassembly work required. The ideal is that transported forces should fully ready to fight within 6 hours.¶ Initial conceptions called for the Walrus to operate without significant infrastructure and from unimproved landing sites, including rough ground having five-foot-high obstacles like boulders, shrubs, etc. Additionally, Walrus should be capable of performing theater lift and supporting sea-basing or even persistence missions like communications and surveillance.¶ DARPA said that advances in envelope and hull materials, buoyancy and lift control, drag reduction and propulsion have [combined to make this concept feasible](http://www.aat-fr.com/DARPA.htm). Technologies to be investigated in the initial study phase include vacuum/air buoyancy compensator tanks, which provide buoyancy control without ballast, and electrostatic atmospheric ion propulsion.

#### Congress killed the Walrus program with no explanation – it’s feasible now

DID; Defense Industry Daily, Military purchasing news for defense procurement managers and contractors; Dec 30, 2009; “Walrus/HULA Heavy-Lift Blimps Rise, Fall… Rise?;” <http://www.defenseindustrydaily.com/walrus-heavylift-blimp-getting-off-the-ground-01103/> ET

WALRUS: The Program

In the end, it did not matter. Congress killed the WALRUS program by refusing to fund it. No explanation was provided to DARPA, even though the initial investment was minimal, and the scaled-down demo vehicle alone would have solved some important military problems.

Walrus remains dead. On the other hand, since its demise, a commercial partnership involving Boeing and Canada’s SkyHook International Inc. has arisen to to create the JHL-40 HLV, a craft whose characteristics closely parallel the intended Walrus demonstrator. In addition, a couple of small DARPA contracts under much more modest programs are developing key components and technologies required for any HULA military transport.

### Solvency - Feasible

#### DARPA would test Walrus extensively – reducing risk and improve capability

DID; Defense Industry Daily, Military purchasing news for defense procurement managers and contractors; Dec 30, 2009; “Walrus/HULA Heavy-Lift Blimps Rise, Fall… Rise?;” <http://www.defenseindustrydaily.com/walrus-heavylift-blimp-getting-off-the-ground-01103/> ET

WALRUS: The Program¶ The Walrus program aimed to develop an operational vehicle concept design and required breakthrough technologies in the airship field. The first step involves risk reduction demonstrations of these new technologies. ¶ During the program’s first phase, a 12-month analytical effort, the 2 contractor teams would conduct trade studies to determine which OV design concept most satisfies the operational tasks and optimizes design capability. Phase I aimed to explore various vehicle configurations (rigid, non-rigid and semi-rigid). It would conclude with a concept design review of the 500-1,000 ton OV, and the supporting technology development plan for risk reduction demonstrations including the 30-ton capacity ATD vehicle. ¶ DARPA intended to select 1 contractor team to enter the second phase, which would have been a demonstration effort spanning 3 years. During Phase II, the program would refine the Walrus’ design needs, identify its potential military use through modeling and studies, develop breakthrough technologies, and conduct risk reduction demonstrations of components and subsystems. ¶ DARPA added that demonstrations will include flight tests of a Walrus Advanced Technology Demonstration (ATD) scaled aircraft. This is a fancy way of saying that they plan to flight-test a “significant-scale” lifting airship in 2008 with a payload capability of around 30 tons, about 50% more than a Lockheed Martin C-130 Hercules. These risk reduction demonstrations, including the ATD vehicle, were intended to establish a low-risk technology path for proving the Walrus concept and achieving the operating goals.

#### **WALRUS solves air mobility and is very feasible**

[Mike Hanlon](http://www.gizmag.com/author/mike-hanlon/); staff writer; September 6, 2005; “The Walrus: the US Army contemplates building an aircraft the size of a football field;” Gizmag – New and Emerging Technology News; <http://www.gizmag.com/go/4538/> ET

Not surprisingly, the Walrus won’t take on the zepellin-like cigar shape of the infamous and closely-related Hindenberg, the largest aircraft ever to fly, which burst into flames in one of the most public disasters [ever to etch itself into the public consciousness](http://www.columbia.edu/itc/psychology/rmk/T5/Hind2.AIFF) in 1937.¶ Indeed, mentions of the Hindenberg in official documents and the ever-present paragraphs distancing the Walrus from previous generation airships and their outdated technologies are plentiful in the documentation that has been made available to the public so far.¶ DARPA’s Walrus program will develop and evaluate a very large airlift vehicle concept designed to control lift in all stages of air or ground operations including the ability to off-load payload without taking on-board ballast other than surrounding air. In distinct contrast to earlier generation airships, the Walrus aircraft will be a heavier-than-air vehicle and will generate lift through a combination of aerodynamics, thrust vectoring and gas buoyancy generation and management.¶ The two contractors receiving Walrus phase I awards are Lockheed Martin (US$2,989,779) and Aeros Aeronautical Systems Corp (US$3,267,000).¶ The Walrus program will develop an operational vehicle concept design and required breakthrough technologies and will conduct risk reduction demonstrations of these new technologies. Demonstrations will include flight tests of a Walrus Advanced Technology Demonstration (ATD) scaled aircraft.¶ A key goal of the Walrus program is to establish clear and credible solutions that provide confidence that earlier airship-era limitations will be overcome. In particular, an early focus of the program will be the investigation of advanced breakthrough technologies that will support the development of innovative lift and buoyancy concepts that do not rely on off-board ballast.¶ The Walrus operational vehicle (OV) is envisioned to have the primary operational task of deploying composite loads of personnel and equipment (for example, the components of an Army Unit of Action) ready to fight within six hours after disembarking the aircraft. Walrus will operate without significant infrastructure and from unimproved landing sites, including rough ground having nominal five-foot-high obstacles. It is intended to carry a payload of more than 500 tons 12,000 nautical miles in less than seven days at a competitive cost. Additionally, Walrus will be capable of performing theater lift and supporting sea-basing and persistence missions to meet a range of multi-Service needs.¶ During the program’s first phase, a 12-month analytical effort, the two contractor teams will conduct trade studies to determine which OV design concept most satisfies the operational tasks and optimizes design capability. Phase I will explore various vehicle configurations (rigid, non-rigid and semi-rigid), and will conclude with a concept design review of the OV and the supporting technology development plan for risk reduction demonstrations including the ATD vehicle.¶ DARPA will select one contractor team to enter the second phase, which will be a demonstration effort spanning three years. During phase II, the program will refine the OV design needs, identify the OV’s potential military utility through modeling and studies, develop breakthrough technologies, and conduct risk reduction demonstrations of components and subsystems, including flight demonstration of the ATD vehicle. The risk reduction demonstrations, including the ATD vehicle, will establish a low-risk technology path for proving the Walrus concept and achieving the operating goals.¶ Accordingly, the WALRUS will probably be shaped more like a flat, lifting body as depicted in the images from the accompanying DARPA briefing slides.

### Solvency – Air power

#### Walrus allows for transportation of materials – improving trade and increasing our air network

[Mike Hanlon](http://www.gizmag.com/author/mike-hanlon/); staff writer; September 6, 2005; “The Walrus: the US Army contemplates building an aircraft the size of a football field;” Gizmag – New and Emerging Technology News; <http://www.gizmag.com/go/4538/> ET

Moving an elephant atom by atom costs a lot more than moving the elephant in one pre-assembled lump. And that is what the US Army’s Project Walrus is about – putting together an entire action unit of war machinery, with all the wiring and plumbing preinstalled, and placing it in the most strategic place. Whilst this would completely rewrite the way that war is conducted, the Walrus - a massive lozenge-shaped blimp the size of a football field capable of transporting 500 tons at a time - could offer solutions to myriad peacetime problems, opening land-locked countries to trade, enabling heavy construction materials to be delivered into urban centres with minimum disruption, freeing our highways of high volume, heavy loads, offering a more robust and agile air transportation network capable of absorbing disruptions due to weather or attack. Indeed, business logistics could again be completely rethought and streamlined because many physical transportation limits would no longer apply once a fleet of commercial walruses became available. The walrus does not require an airstrip and can land on water or on open ground.

#### **WALRUS solves military readiness and air power**

[Mike Hanlon](http://www.gizmag.com/author/mike-hanlon/); staff writer; September 6, 2005; “The Walrus: the US Army contemplates building an aircraft the size of a football field;” Gizmag – New and Emerging Technology News; <http://www.gizmag.com/go/4538/> ET

The military offers society many innovations –unlimited budgets buy cubic brainpower to dissolve massive problems – this is the good that comes from such intensive endeavours as war. This is the positive to the negative known as collateral damage. Call it collateral betterment … spontaneous transformation of the way we do things. Before September 11, the US military budget was in the vicinity of US$500 billion, and it’s now a LOT more.¶ And with a few years of very high budget requirements under the American public’s belt, and no end in sight, everybody is looking for a better, more efficient, way of running its own “virtual nation” of soldiers in Iraq, Afghanistan and elsewhere.¶ Lots more money is required and the US Military is seeking the most effective and judicious uses of its budget. One of the biggest, most complex and most costly aspects of the wars in far off countries is logistics. America has 140,000 soldiers on the ground in Iraq and 10,000 in Afghanistan and needs to police around 171,599 square miles, (444,439 square kilometers) of Iraq and 251,825 square miles (652,225 square kilometers) of Afghanistan. Not only did it move that number of troops from American soil to the respective countries, it also needed to take its entire military-strength infrastructure with it.¶ The American Military is a travelling nation – it needs not just to transport the nation’s citizens (the soldiers), but hundreds of small towns and a few cities – almost exactly the same number as there are towns or cities in Iraq. Including the fabled [Baghdad](http://edition.cnn.com/SPECIALS/2003/iraq/war.tracker/zoom.popup/frameset.exclude.html).¶ It must also supply its own air, water and ground transportation infrastructure, its own Mercedes class of customer service and spare parts network for the transportation, and its own town amenities (water, power, sewerage, food), and housing, security, administration … to a military, mess-it-up-and-people-will-die standard in the most hostile environment possible.¶ It also needs a military-strength hospital system capable of dealing with the casualties of war - there have been 2,077 coalition troop deaths in the war in Iraq as of September 2, 2005. At least 14,265 U.S. troops have been wounded in action – on average, there are 50 US deaths and 500 casualties a month.¶ The Walrus¶ One of the answers is a prototype "tri-phibian" (air, land, sea) zeppelin known as Project Walrus. The Defense Advanced Research Projects Agency (DARPA) has awarded funding to two contractors for the first phase of the Walrus program.¶ DARPA’s vision for the WALRUS Program is to demonstrate the feasibility of a heavy lift air vehicle concept to meet a strategic transport need. The program will not re-package 1930s technology or upscale the more limited commercial dirigibles of today, but rather will employ an LTA vehicle concept with new and emerging technologies. By leveraging these technologies to develop an air vehicle, DARPA hopes to truly introduce a paradigm change in capability for providing responsive and flexible deployment and force projection options to military commanders.¶ WALRUS will require little or no infrastructure to build or maintain, and will not be limited by the need to use runways or other infrastructure (masts, etc) at the landing location. The system will not require a hangar for storage while not in use, and will be able to withstand adverse weather conditions throughout operational life without significant tie down or other manpower intensive operations.¶ It is anticipated that Walrus will operate in areas where there is local air superiority and ground defenses are suppressed. Survivability will still be an issue that demands importance and will be shaped by the definitive needs resulting from the development of CONOPs.¶ The Military’s logical future tasks will require the capability of rapidly maneuvering to critical points across the earth and rough calculations show the walrus will be able to do this a minimum three times faster than by ship and be ready to operate immediately - and do so at lower cost than existing airlift. The current alternative is to find a nearby airport, and use a fleet of C-130 cargo planes, which can each carry about 22 tons, fly in the trucks necessary to move it, and truck it all to where it needs to be.

## Air Mobility Good

### Good - Generic

#### Airpower is a key to create increased warfighting capabilities

Barry R. Posen, Professor of Political Science at the Massachusetts Institute of Technology and a member of its Security Studies Program, 2003, “Command of the Commons: The military foundation of U.S. Hegemony,” International Security, Vol. 28, No. 1, Project Muse

The capability for precision attack at great range gives the United States an ability to do significant damage to the infrastructure and the forces of an adversary, while that adversary can do little to harm U.S. forces. 42 Air power alone may not be able to determine the outcome of all wars, but it is a very significant asset. Moreover, U.S. air power has proven particularly devastating to mechanized ground forces operating offensively, as was discovered in the only Iraqi mechanized offensive in Desert Storm, the battle of al-Khafji, in which coalition air forces pummeled three advancing Iraqi divisions. 43 The United States can provide unparalleled assistance to any state that fears a conventional invasion, making it a very valuable ally.

### Good – Heg

#### **A mobile and flexible Air Force is key to hegemony. This readiness will also deter wars and conflicts before they escalate.**

Thomas Donnelly, Research fellow @ the American Enterprise Institute, September 2000, “Rebuilding America’s Defenses: Strategy, Forces and Resources for a New Century,” http://www.informationclearinghouse.info/pdf/RebuildingAmericasDefenses.pdf

The reconstitution of the stateside Air¶ Force as a large-scale, warfighting force will¶ complicate the service’s plans to reconfigure¶ itself for the purposes of expeditionary¶ operations. But the proliferation of overseas¶ bases should reduce many, if not all, of the¶ burdens of rotational contingency operations.¶ Because of its inherent mobility and¶ flexibility, the Air Force will be the first¶ U.S. military force to arrive in a theater¶ during times of crisis; as such, the Air Force¶ must retain its ability to deploy and sustain¶ sufficient numbers of aircraft to deter wars¶ and shape any conflict in its earliest stages.¶ Indeed, it is the Air Force, along with the¶ Army, that remains the core of America’s¶ ability to apply decisive military power¶ when its pleases. To dissipate this ability to¶ deliver a rapid hammer blow is to lose the¶ key component of American military¶ preeminence.

#### American airpower is the linchpin of its hegemony

Thomas Donnelly, Research fellow @ the American Enterprise Institute, September 2000, “Rebuilding America’s Defenses: Strategy, Forces and Resources for a New Century,” http://www.informationclearinghouse.info/pdf/RebuildingAmericasDefenses.pdf

The past decade has been the best of¶ times and worst of times for the U.S. Air¶ Force. From the Gulf War to Operation¶ Allied Force over Kosovo, the increasing¶ sophistication of American air power – with¶ its stealth aircraft; precision-guided¶ munitions; all-weather and all-hours¶ capabilities; and the professionalism of¶ pilots, planners and support crews – has¶ allowed the Air Force to boast legitimately¶ of its “global reach, global power.” On¶ short notice, Air Force aircraft can attack¶ virtually any target on earth with great¶ accuracy and virtual impunity. American air¶ power has become a metaphor for as well as¶ the literal manifestation of American¶ military preeminence.

#### Air power is key to hegemony – Serbia proves

James Kitfield, staff writer, 8-15-99, “Providing High-Tech Hegemony,” Government Executive, http://www.govexec.com/magazine/1999/08/providing-high-tech-hegemony/6253/

When NATO announced a cease-fire in Operation Allied Force in Yugoslavia in June, Pentagon officials punctuated the victory by showing reporters detailed video of Serbian troops exiting the province of Kosovo in troop transports. It was a rare moment in the annals of modern warfare. For the first time, a land army had been defeated by precision-guided air power, with a corresponding combat casualty count of roughly 5,000 Serbian forces killed vs. none for the United States and NATO.¶ The revolutionary military capability behind those lopsided figures was underscored by the Pentagon video itself, which was shot by a Predator advanced unmanned aerial vehicle (UAV) that few nations possess. Indeed, the foundations of the technological "revolution in military affairs" that the Pentagon has been promoting for many years were on clear display during Operation Allied Force: air- and space-based sensors; stealth aircraft; precision-guided munitions; and advanced information systems supplying superior command, control, communications, intelligence, surveillance and reconnaissance. The synergistic result of those technologies is a U.S. military whose "situational awareness" and ability to influence the battlefield is so clearly superior to its counterparts that even close NATO allies have become concerned about a rapidly widening "technology gap."

### Good – Land-based troops

#### Air mobility provides a supplement to land-based troops giving them an edge in battle

AEI, American Enterprise Institute, 3-1-2012, “Backgrounder – Chip Preysler,” Operation Anaconda, http://www.aei.org/media/foreign-and-defense-policy/operation-anaconda/

Preysler came into the Army during a time of great transformation; in the wake of the Vietnam War and facing the Soviet threat. He saw firsthand at the tactical level the enormous changes that detailed the history of the United States Army throughout the 1980s: in doctrine, equipment and training. These had a direct effect on him as an infantry officer. The biggest change of all was a new basic doctrine, completed in 1982, called “AirLand Battle.” The manual in which this doctrine was published noted that “air mobility and airpower will extend the battle to new depths for all combatants.” The doctrine emphasized maneuver, initiative and agility over the basic tenets of firepower. It matched the psychology and makeup of the United States armed forces and represented a remaking of conventional forces to defeat a Russian attack by maneuvering to find their weak points and then exploit them. Fast-moving ground forces compounded by lethal air strikes could give a smaller force a distinct advantage over a larger slower force. This new doctrine was accompanied by a commitment to intense, realistic and innovative training at several new centers across the country. These centers employed new technologies that would track and capture the details of exercises, permitting commanders and units to understand what had happened, what they had done well and what needed to be improved.

### Good – Readiness

#### Air mobility is key to readiness

Thomas Donnelly, Research fellow @ the American Enterprise Institute, September 2000, “Rebuilding America’s Defenses: Strategy, Forces and Resources for a New Century,” http://www.informationclearinghouse.info/pdf/RebuildingAmericasDefenses.pdf

Air Force Units Based¶ In the United States¶ Even as the Air Force accelerates¶ operations and improves its reach in the key¶ regions of the world, it must retain sufficient¶ forces based in the United States to deploy¶ rapidly in times of crisis and be prepared to¶ conduct large-scale air campaigns of the sort¶ needed in major theater wars and to react to¶ truly unforeseen contingencies. Indeed, the¶ mobility and flexibility of air power¶ virtually extinguishes the distinction¶ between reinforcing and contingency forces.¶ But it is clear that the Air Force’s current¶ stateside strength of approximately eight to¶ nine fighter-wing equivalents and four¶ bomber wings is inadequate to these tasks.¶ Further, the Air Force’s fleets of support¶ aircraft are too small for rapid, large-scale¶ deployments and sustained operations.

## Air Mobility Solves

### Solvency – Generic

#### The radar feature of the airborne aircraft carrier enables the affirmative to defeat any adversary

Benjamin S. Lambeth, Ph.D. in political science @ Harvard University, “The Role of Air Power Going Into the 21st Century,” RAND Corporation, http://www.rand.org/pubs/conf\_proceedings/CF152/CF152.chap6.pdf

Second, air power is functionally inseparable from battlespace information and intelligence. Thanks to the dramatic growth in the¶ lethality and combat effectiveness of air power since the late 1980s, it¶ has become both correct and fashionable to speak increasingly not of¶ numbers of sorties per target killed, but rather of number of kills per¶ combat sortie. Yet air power involves more than merely attacking¶ and destroying enemy targets. It also involves knowing what to hit¶ and where to find it. It is now almost a cliche that air power can kill¶ anything it can see, identify, and engage. It is less widely appreciated¶ that it can kill only what it can see, identify, and engage. Air power¶ and intelligence are thus opposite sides of the same coin. If the latter¶ fails, the former is likely to fail also. For that reason, accurate, timely,¶ and comprehensive information about an enemy and his military assets is not only a crucial enabler for allowing air power to produce¶ pivotal results in joint warfare; it is an indispensable precondition for¶ ensuring such results. This means that tomorrow’s air campaign¶ planners will have an ever more powerful need for accurate and reliable real-time intelligence as a precondition for making good on¶ their most far-reaching promises.

### Solvency – Versatility

#### Air superiority is crucial to prevent catastrophic events and stop

Karl P. Mueller, Ph.D. in politics, April 2010, “Air Power,” RAND Corporation, http://www.rand.org/content/dam/rand/pubs/reprints/2010/RAND\_RP1412.pdf

Air power was born in the crucible of World War I, but came of age in the ¶ conflagration of World War II (Overy 1980 and 1995:101–33). In the former conflict, air ¶ power played small though important roles, preeminently by providing tactical ¶ reconnaissance and observation. In the latter, air forces ultimately comprising hundreds ¶ of thousands of far more capable aircraft were central to the conduct of the war on every ¶ front, both literal and figurative. Great effort was devoted to strategic bombing ¶ campaigns, particularly but not only against Britain, Germany, Italy, and Japan. By the ¶ end of the war almost every large German and Japanese city (and many smaller ones) had ¶ been devastated, with those killed by air attacks numbering on the order of a million ¶ (Elliot 1972). Britain became the first country to be subjected to strategic bombardment ¶ by cruise and ballistic missiles (the German V-1 and V-2). Aerial interdiction and close ¶ air support played a central role in the German blitzkrieg and in the subsequent Allied ¶ counteroffensives (Gunderson 1998); these were punctuated by spectacular though often ¶ costly airborne operations, while air transport became a ubiquitous and sometimes ¶ decisive component of military logistics. At sea, naval warfare was dominated by air ¶ power, as the aircraft carrier supplanted the battleship as the principal combatant and ¶ aircraft became key tools in antisubmarine warfare – in the Pacific, the war was above all ¶ a contest to seize and control bases for land-based air power. In each arena, the ¶ consequences of losing air superiority to the enemy were now potentially catastrophic.

### Solvency – Pakistan Terrorism

#### Air mobility is crucial to solving the Pakistani insurgency threat.

Bruce O. Riedel, Senior Fellow @ Brookings Institute, AND Jayshree Bajoria, staff writer, 5-11-10, “U.S. Options Limited in Pakistan,” Council on Foreign Relations, http://www.cfr.org/pakistan/us-options-limited-pakistan/p22099

In February, three U.S. soldiers from the U.S. special operations forces were killed in northwest Pakistan. They were involved in counterinsurgency training as well as development assistance. What is the extent of U.S. military presence on the ground in Pakistan that's kept quiet, and is there any possibility that we'll see an increase in this? I don't think we'll see a substantial increase. The Pakistanis don't want American boots on the ground. The Pakistani army is a very proud institution; it believes that it should do the job. What it wants from the United States is the weapons and the technology to do the job. And here there is a lot that the United States should do. The Pakistanis need air mobility to fight the insurgency and militants in their country. That means helicopters. They need dozens and dozens of more helicopters in order to be able to rapidly respond to militant attacks and to be able to move forces around quickly to deal with the militants. In that scenario, the Pentagon should be trying to do a lot more to give the Pakistanis the kind of air mobility that would allow them to deal with this problem effectively.¶ Is there anything the United States is doing to help Pakistan develop a more efficient counterinsurgency strategy? What more could it be doing? There's a lot we're doing and there's a lot more we can do. We've given the Pakistanis the benefit of our experience in counterinsurgency; we've traded tactics with them, we're trying to encourage more of their officers to spend more time in our training schools in order to benefit from our experience. We've also provided them with some very sophisticated avionics for their aircraft so they're better capable to target military sanctuaries and hideouts. But there's a tremendous amount we can still do. The one place we can do more is air mobility. As well as to be able to medevac soldiers who are wounded on the battlefield quickly back to hospitals in Pakistan.

### Solvency – Terrorism

#### Empirical evidence proves the U.S.’s air power, specifically bombers and airlifters, are cruicial to hegemony, deterrence, and solving terrorism

Charles J. Dunlap, Major General of the USAF, 2006, “America’s Asymmetric Advantage,” Armed Forces Journal, http://armedforcesjournal.com/2006/09/2009013

So where does that leave us? If we are smart, we will have a well-equipped high-technology air power capability. Air power is America’s asymmetric advantage and is really the only military capability that can be readily applied across the spectrum of conflict, including, as is especially important these days, potential conflict. Consider the record. It was primarily air power, not land power, that kept the Soviets at bay while the U.S. won the Cold War. And it was not just the bomber force and the missileers; it was the airlifters, as well. There are few strategic victories in the annals of military history more complete and at so low a human cost as that won by American pilots during the Berlin airlift. Armageddon was avoided.¶ And the flexibility and velocity of air power also provides good-news stories in friendly and low-threat areas. For example, huge U.S. transports dropping relief supplies or landing on dirt strips in some area of humanitarian crisis get help to people on a timeline that can make a real difference. Such operations also illustrate, under the glare of the global media, the true American character the world needs to see more often if our strategic goals are to be achieved.¶ Air power also doesn’t have the multi-aspect vulnerabilities that boots on the ground do. It can apply combat power from afar and do so in a way that puts few of our forces at risk. True, occasionally there will be a Francis Gary Powers, and certainly the Vietnam-era POWs — mostly airmen — became pawns for enemy exploitation. Yet, if America maintains its aeronautical superiority, the enemy will not be able to kill 2,200 U.S. aviators and wound another 15,000, as the ragtag Iraqi terrorists have managed to do to our land forces.¶ And, of course, bombs will go awry. Allegations will be made (as they are currently against the Israelis) of targeting civilians and so forth. But the nature of the air weapon is such that an Abu Ghraib or Hadithah simply cannot occur. The relative sterility of air power — which the boots-on-the-ground types oddly find distressing as somehow unmartial — nevertheless provides greater opportunity for the discreet application of force largely under the control of well-educated, commissioned officer combatants. Not a total insurance policy against atrocity, but a far more risk-controlled situation.¶ Most important, however, is the purely military effect. The precision revolution has made it possible for air power to put a bomb within feet of any point on earth. Of course, having the right intelligence to select that point remains a challenge — but no more, and likely much less so, than for the land forces. The technology of surveillance is improving at a faster rate than is the ability to conceal. Modern conveniences, for example, from cell phones to credit cards, all leave signatures that can lead to the demise of the increasing numbers of adversaries unable to resist the siren song of techno-connection.¶ Regardless, eventually any insurgency must reveal itself if it is to assume power, and this inevitably provides the opportunity for air power to pick off individuals or entire capabilities that threaten U.S. interests. The real advantage — for the moment anyway — is that air power can do it with impunity and at little risk to Americans. The advances in American air power technology in recent years make U.S. dominance in the air intimidating like no other aspect of combat power for any nation in history.¶ The result? Saddam Hussein’s pilots buried their airplanes rather than fly them against American warplanes. Indeed, the collapse of the Iraqi armed forces was not, as the BOTGZ would have you believe, mainly because of the brilliance of our ground commanders or, in fact, our ground forces at all. The subsequent insurgency makes it clear that Iraqis are quite willing to take on our ground troops. What really mattered was the sheer hopelessness that air power inflicted on Iraq’s military formations.

## Air Power Modules

### Irregular Warfare

#### Air power is key to levying our military against conventional and irregular warfare

Michael B. Donley, Secretary of the Air Force, and Norton A. Schwartz, USAF General, 1-2009, “The 21st Century Air Force Irregular Warfare Strategy” pp. 2 //ER

This is a new strategy document to chart how **airpower's inherent flexibility and adaptability can shape the operational environment, build positive relationships, and erode the effectiveness of both state and non-state adversaries. The Air Force must successfully balance both the capability to wage irregular warfare and the capability to enable a partner nation to fight irregular warfare. This strategy charts the ways and means by which we adapt to the irregular challenges of the 21st Century. Our intent is to provide definitive guidance to initiate new approaches and synchronize Air Force actions to balance the requirements levied upon airpower in irregular warfare with the concurrent need to maintain decisive advantage in conventional warfare.**

#### A strong US air power presence is key to fighting off irregular warfare

Major Chris Wachter, USAF, chief of the Irregular Warfare Concepts Branch for the director of operations, 1-2012, “Air-Mindedness: The Core of Successful Air Enterprise Development” Air & Space Power Journal //ER

The Department of Defense defines IW as “a violent struggle among state and non-state actors for legitimacy and influence over the relevant population(s). Irregular warfare favors indirect and asymmetric approaches, though it may employ the full range of military and other capacities, in order to erode an adversary’s power, influence, and will.”13 Struggles to influence popular will show that information, communication, and responsiveness repeatedly prove vital to success. A government bolstered by a strong aviation enterprise is better equipped to inform, support, and secure its population. In the twenty-first century, helping partner nations build an air-minded society is one of the best ways to spread and ensure good governance in their outlying areas. US policy on IW usually consists of five IW activities—counterinsurgency, Counterterrorism, foreign internal defense, stability operations, and unconventional warfare—but many other relevant IW activities other than those five exist.14 A common approach, which will produce greater efficiencies in a coherent and effective strategy for employing such activities, must inform the Air Force capabilities and capacities required to work with, through, and by our partner nations.15 AED offers this common approach for Airmen to advocate with policy makers regarding the role that US aviation resources play in assisting partner nations, including those developing countries that typically do not receive traditional security assistance. Just as Mitchell argued for a system of airdromes, regulation of aircraft, and properly administered public safety regulations, so can the Air Force offer our nation’s decision makers and component commanders AED capabilities to help a partner nation build its aviation infrastructure and increase its capacity for transportation, communication, and commerce in previously unattainable ways and in unreachable areas. Doing so, in turn, can allow for improved governance and supply capability to support theater security via air. Consequently, the tangible benefits to citizens will help create technological advancement as their air-mindedness grows. Airminded societies tend to seek progress and freedom; additionally, they are more open and more likely to foster educational opportunities as well as scientific advancements. Air-mindedness propels a society towards a common core of communication and language, allowing it to contribute to greater market access and unrestricted logistical flow.

### Terrorism

**US Air Power is key to combating terrorism**  
Rand 03, RAND Project Air Force, “Annual Report 2003”, 2003, http://www.rand.org/pubs/annual\_reports/2005/AR7089.pdf //ER

The war on terrorism is more likely to be a long-term effort in which the use of force, at least by U.S. military personnel, is only sporadic and successful mili- tary operations will resemble counterinsurgency operations. The primary role of U.S. military forces will often be indirect and supportive. U.S. forces will be called upon to train, equip, advise, and assist host-country forces in rooting out terrorist groups; forge strong relationships with host-country personnel; show great discretion in their conduct of operations; and maintain a low pro- file in the host country. They will be able to react swiftly and effectively when promising targets arise. The Air Force, then, should expect sustained heavy demand to provide important capabilities, assets, and skill sets to support counterterrorism operations abroad. Chief contributions will include surveillance platforms, operators, and analysts; language-qualified personnel to help train and advise host-country forces and to analyze human intelligence; security police and other force- protection assets; base operating support personnel and equipment to provide communications, housing, and transportation; heliborne insertion and extraction capabilities; and humanitarian relief assets. In some cases, U.S. airpower may be called upon to strike terrorists in base camps, hideouts, vehicles, and other locations.

#### **That prevents nuclear war**

Chuck Freilich, Senior Fellow at the Belfer Center for Science and International Affairs, 4-2010, “The Armageddon Scenario: Israel and the Threat of Nuclear Terrorism” http://www.biu.ac.il/Besa/MSPS84.pdf //ER

There is little reason to believe that regional governments will permit political reform and greater self-expression, and political grievances will likely continue to be expressed in extremist and fundamentalist terms which render them inviolate and non-negotiable. For example, there is no assurance that Egyptian President Hosni Mubarak will be succeeded by a moderate and peaceful leader, or that Egypt will not become a radical Islamic state. The long anticipated regime change in Iran may give rise to a more moderate government, but may also result in an even more radical one. Saudi Arabia’s future is also questionable. Even the future of Turkey, heretofore held out as a beacon of democracy and secularism within the Muslim world, is unclear. Hatred of Israel, the US, and the West is likely to continue and possibly intensify. Progress towards peace with Israel and improvements in Arab-Western relations are unlikely to be sufficient to reduce the evolving socio-economic, political, and demographic pressures. The Middle East faces another explosion today – of potential nuclear capabilities. Not only Israel, but also the Sunni Arab regimes, are deeply afraid of Iran's nuclear capabilities. In response, over a dozen Arab countries have announced civil military programs. Arab “civil” nuclear programs, as seen from past experience, have a nasty tendency to morph into military ones. The danger of nuclear terrorism, further abetted by the spread of nuclear technology and materials in the region, will be greatly exacerbated by the rise of a multi-polar nuclear Middle East. Nuclear terrorism could give rise to a broader war in the Middle East and even lead to nuclear war. Nuclear war could give rise to more nuclear terrorism.24

#### Terrorist attacks kill the economy

OECD 2002, OECD Economic Outlook 71, “IV. ECONOMIC CONSEQUENCES OF TERRORISM” http://www.oecd.org/dataoecd/11/60/1935314.pdf //ER

The disruptions in the transportation system following the attacks have illustrated the importance of efficient and open borders for the daily operations of firms. The just-in-time supply chain management system, increasingly common in industry, depends to a large degree on the efficiency of border crossings. The severe tightening of border controls following the September attacks resulted in long waiting times that disrupted the operations of manufacturing companies, especially at the US-Canada border. Border controls have now been relaxed and waiting times reduced, but some observers feel that the porosity of borders creates a security threat. Attempts to reinstate comprehensive controls at the borders would have long-lasting detrimental consequences for economic growth. Industrial sources estimate that proposed security measures may increase the ad valorem cost of trading internationally by 1 to 3 percentage points. Given that the elasticity of trade flows with respect to transaction costs may be in the –2 to –3 range, this could lead to a significant drop in international trade, negatively affecting openness, productivity and medium-term output growth. Thus, the right balance between efficiency and security at the border needs to be found, preferably in agreement with trading partners and on a non-discriminatory basis.

### COIN

#### Air power is essential to performing counterinsurgency operations

Michael B. Donley, Secretary of the Air Force, and Norton A. Schwartz, USAF General, 1-2009, “The 21st Century Air Force Irregular Warfare Strategy” pp. 6 //ER

**As demonstrated in Iraq, host nation and coalition ground forces are dependent upon airpower in major counterinsurgency (COIN) operations.** The most important elements have often been mobility and ISR, but **the list of airpower contributions is long. Airpower brings the joint and coalition team: theater command and control, precision strike, close air support, information operations, electronic warfare, agile combat support, show of force, aeromedical evacuation, psychological operations, airbase construction and opening, computer network attack, and strategic communication to name a few**. Additionally, **airmen, as part of the joint team, also provide linguistic support, education, medical support, legal advice, civil engineering, public affairs, political-military support and security training. Airpower‘s role is equally important when the adversary is a rogue regime that threatens regional stability or other U.S. interests. The joint team of airpower and special operations forces offers the proven capability to conduct unconventional warfare as demonstrated in Operation ENDURING FREEDOM. The speed, flexibility, and precision of today‘s Air Force can extend the effect of a small U.S. presence in support of a friendly insurgent movement and enhance their viability against a much stronger foe.**

### NoKo

#### US air power is the strongest deterrent against North Korean aggression

Bruce Bechtol Jr. , Assistant Professor of National Security Studies at Air Command and Staff College, 05 [Air & Space Power Journal, “The Future of US Airpower on the Korean Peninsula”, Fall 2005, http://www.airpower.au.af.mil/airchronicles/apj/apj05/fal05/bechtol.html#bechtol

Clearly, **US and South Korean airpower serves as a strong deterrent against the traditional aggression that North Korea wanted to initiate** prior to the economic collapse that put its formidable armored and mechanized forces into a state of decline. But **airpower also would play a major role** (perhaps an even more important one) **in stopping aggression from North Korea’s asymmetric capability that built up during the 1990s.** As discussed previously, **North Korea has now moved a large number of long-range artillery systems close enough to the DMZ to threaten virtually all of Seoul** and many areas of Kyongi Province (the northernmost province in South Korea; it contains the largest concentration of that country’s ground forces) **with little warning time to US and ROK forces**. Currently, the ground-based mission of providing counterfire to this long-range artillery falls to the 2d US Infantry Division, which operates 30 multiple-rocket-launcher systems and 30 M109A6 Paladin self-propelled howitzers. **During April 2005**, as part of the ongoing shift of defense responsibilities on the Korean Peninsula between South Korean and US forces, **leadership announced that the South Korean army would assume responsibility for this mission**. Integration of South Korean units into the combined ROK-US command, control, communication, computers, and intelligence (C4I) system on the peninsula will be key to the success of this new mission.17 **Regarding the current state of readiness of South Korean forces on the peninsula**, however, **the U**nited **S**tates **has concerns about the unwillingness of Seoul to spend money to upgrade its own C4I infrastructure**—or to help with the costs of the current structure.18 **Integrating these newly assigned units into a modern C4I system is vital because of the importance of quick reaction time in pinpointing North Korean artillery units** with radar and destroying them before they fire or shortly thereafter.19

It’s key to combat the three elements of North Korea’s asymmetric triad – long-range artillery, missiles and special forcesBruce BechtolJr. , Assistant Professor of National Security Studies at Air Command and Staff College, 05, Air & Space Power Journal, “The Future of US Airpower on the Korean Peninsula”, Fall 2005, http://www.airpower.au.af.mil/airchronicles/apj/apj05/fal05/bechtol.html#bechtol

**Even if all of these systems could operate at peak efficiency and immediately integrate effectively** into current or future C4I infrastructures, **they would still need heavy augmentation by effective airpower in both their offensive and defensive postures.** North Korea **simply has more long-range artillery systems** deployed along the DMZ than ground-based systems could destroy all at once—particularly in a first-strike scenario. Of course, this is exacerbated by the concerns about C4I, which will probably remain an issue in ROK-US alliance talks for the foreseeable future. Thus, **in terms of the first element of North Korea’s asymmetric triad (long-range artillery), airpower will continue to play an essential role in deterring and destroying that threat**. Because of **the unique and unmatched capability of US fighter and attack aircraft to suppress this type of target, American airpower has become extremely important to countering this growing threat**—and will likely remain so for many years as Seoul continues to upgrade its C4I and airborne-strike capabilities. **Regarding the second element of the triad (missiles), US airpower is an absolutely vital deterrent**, now and in the future, **against a first strike by the North Koreans**, who have a large number of dispersed missile facilities (as well as mobile launchers, which they have not only deployed but also proliferated to other nations, such as Syria).20 **In case of war, ROK-US forces would need to take out Scud missile sites and launchers as well as longer-range missiles because North Korea might use the latter to launch a retaliatory strike at Japan** (perhaps at US bases located at Okinawa or elsewhere) (fig. 4). To do so, **the US Air Force would use its assets on the Korean Peninsula** (Seventh Air Force), **in Japan** (Fifth Air Force), **on Guam** (bombers), **and elsewhere in Pacific Air Forces, where US airpower possesses unique and vital capabilities for the defense of the Korean Peninsula**.21 **US airpower will continue to play a key role as well in countering special forces, the third element** of North Korea’s asymmetric triad. Clearly, **US Air Force** aircraft would figure prominently in the suppression and destruction of North Korean airfields, from which platforms (most of them AN-2s) carrying SOF troops would deploy, and in support of the South Korean air force’s aerial interception of enemy transport aircraft conducting paradrop missions into the South. **But this represents only part of the story. Because North Korea has far more SOF troops than aircraft to carry them, many of these forces would attempt to infiltrate South Korea through weaker areas of the DMZ. Two such locations include the inter-Korean transportation corridors, where roads and rail lines are being repaired for future transportation routes and where barbed-wire barriers and mines have been cleared away (fig. 5). Airpower would track and kill attempted infiltrations through these zones.**

#### That’s extinction

Peter Hayes, Professor of International Relations at Royal Melbourne Institute of Technology and Director at Nautilus Institute,and Michael Hamel Green,Victoria University1-5-2010, “The Path Not Taken, the Way Still Open: Denuclearizing the Korean Peninsula and Northeast Asia”, Nautilus Institute Special Report, http://www.nautilus.org/fora/security/10001HayesHamalGreen.pdf

At worst, **there is the possibility of nuclear attack**1, whether **by intention, miscalculation, or merely** accident, leading to the resumption of **Korean** War hostilities. On the Korean Peninsula itself, key population centres are well within short or medium range missiles. The whole of Japan is likely to come within North Korean missile range. Pyongyang has a population of over 2 million, Seoul (close to the North Korean border) 11 million, and Tokyo over 20 million. Even **a limited nuclear exchange would result in a holocaust of unprecedented proportions**. But the catastrophe within the region would not be the only outcome. New research indicates that **even a limited nuclear war in the region would rearrange our global climate far more quickly than global warming.** Westberg draws attention to new studies modelling the effects of even a limited nuclear exchange involving approximately 100 Hiroshima-sized 15 kt bombs2 (by comparison it should be noted that the United States currently deploys warheads in the range 100 to 477 kt, that is, individual warheads equivalent in yield to a range of 6 to 32 Hiroshimas).The studies indicate that the soot from the fires produced would lead to a decrease in global temperature by 1.25 degrees Celsius for a period of 6-8 years.3 In Westberg’s view: That is not global winter, but the nuclear darkness will cause a deeper drop in temperature than at any time during the last 1000 years. The temperature over the continents would decrease substantially more than the global average. A decrease in rainfall over the continents would also follow…The period of **nuclear darkness will cause much greater decrease in grain production** than 5% and it will continue for many years...**hundreds of millions of people will die from hunger**…To make matters even worse, such amounts of smoke injected into the stratosphere would cause a huge reduction in the Earth’s protective ozone.4 These, of course, are not the only consequences. Reactors might also be targeted, causing further mayhem and downwind radiation effects, superimposed on a smoking, radiating ruin left by nuclear next-use. Millions of refugees would flee the affected regions. The direct impacts, and the **follow-on impacts on the global economy** via ecological and food insecurity, **could make the present** global financial **crisis pale by comparison**. How the great powers, especially the nuclear weapons states respond to such a crisis, and in particular, whether nuclear weapons are used in response to nuclear first-use, **could make or break the global nonproliferation and disarmament regimes. There could be many unanticipated impacts on regional and global security** relationships5, **with** subsequent **nuclear breakout** and **geopolitical turbulence**, including possible loss-of-control over fissile material or warheads in the chaos of nuclear war, **and** aftermath **chain-reaction affects involving other potential proliferant states**. The Korean nuclear proliferation issue is not just a regional threat but a global one that warrants priority consideration from the international community.

### Iran

#### Ground force removal from Iran has resulted in the potential for instability – only US air power keeps it in check

George Friedman, founder and editor of STRATFOR Global Intelligence, 3-14-2011, “A Decisive Moment Awaits the U.S. as Mideast Unrest Mounts”, http://www.thecuttingedgenews.com/index.php?article=32096&pageid=13 //ER

For Tehran, this is both reasonable and attainable. Iran has the largest and most ideologically committed military of any state in the Persian Gulf region. Despite the apparent technological sophistication of the Gulf states’ militaries, they are shells. Iran’s is not. In addition to being the leading military force in the Persian Gulf, Iran has 75 million people, giving it a larger population than all other Persian Gulf states combined. Outside powers have prevented Iran from dominating the region since the fall of the Ottoman Empire, first the United Kingdom and then the United States, which consistently have supported the countries of the Arabian Peninsula. It was in the outsiders’ interests to maintain a divided region, and therefore in their interests to block the **most powerful country in the region from dominating even when the outsiders were allied with Iran. With the U.S. withdrawal from Iraq, this strategy is being abandoned in the sense that the force needed to contain** Iran is being withdrawn. The forcesleft in Kuwait and U.S air power might be able to limit a conventional Iranian attack. Still, the U.S. withdrawal leaves the Iranians with the most powerful military force in the region regardless of whether they acquire nuclear weapons. Indeed, in my view, the nuclear issue largely has been an Iranian diversion from the more fundamental issue, namely, the regional balance after the departure of the United States. By focusing on the nuclear issue, these other issues appeared subsidiary and have been largely ignored. The U.S. withdrawal does not mean that the United States is powerless against Iran. It has been reconstituting a pre-positioned heavy brigade combat team set in Kuwait and has substantial air and naval assets in the region. It also can bring more forces back to the region if Iran is aggressive. **But it takes at least several months for the United States to bring multidivisional forces into a theater and requires the kind of political will that will be severely lacking in the United States in the years ahead**. **It is not clear that the forces available on the ground could stop a determined Iranian thrust**. **In any case, Iraq will be free of American troops, allowing Iran to operate much more freely there. And Iran does not need to change the balance of power in the region through the overt exercise of military force. Its covert capability, unchecked by American force, is significant.** It can covertly support pro-Iranian forces in the region, destabilizing existing regimes**. With the psychology of the Arab masses changing, as they are no longer afraid to challenge their rulers,** Iran will enjoy an enhanced capacity to cause instability.

#### Absent intervention an Iranian strike against Israel is inevitable — successful nuclear use causes global nuclear war

Jeffrey T. Kuhner, columnist at The Washington Times and president of the Edmund Burke Institute, 10/4/2009, “The coming war with Iran;

Real question is not if, but when,” Published in Washington Times, Lexis //ER

War with Iran is now inevitable. The only question is: Will it happen sooner or later? Tehran's recent missile tests and war games suggest that the apocalyptic mullahs have reached the same conclusion. Iran is on the march. Their medium-range Shahab-3 and Sajjil missiles can reach Israel, the entire Middle East and parts of Europe. Tehran is slowing expanding its regional sphere of influence. It has backed insurgency groups in Iraq, which have killed U.S. soldiers. It sponsors Hamas and Hezbollah. It has transformed Syria into a political vassal. It has forged an alliance with Hugo Chavez's Venezuela. It has purchased key air defense systems from Vladimir Putin's Russia. Iranian President Mahmoud Ahmadinejad is a Holocaust-denier and virulent anti-Semite. He is a Persian Nazi strongman who vows to wipe Israel "off the map." He is a revolutionary Shi'ite. He believes the Jews must be extinguished in order to usher the coming of the Shi'ite Messiah, the so-called "Hidden Imam." For years, the fascist theocracy has invested considerable resources into developing a clandestine nuclear weapons program. Mr. Ahmadinejad insists Tehran only wants atomic energy for "peaceful purposes." Yet, he cannot answer one simple question: Why does a country with the world's second-largest natural gas reserves and third-largest oil supply need domestic nuclear power? Moreover, Mr. Ahmadinejad is a congenital liar. He repeatedly insists that Iran is a "democracy." Rather, it is a brutal police state based on rigged elections and the torture and murder of dissidents. He claims that Iran has "no homosexuals" and that women are treated "fairly." In fact, the Islamist regime routinely executes gays and subjugates women. He says Iran has "nothing to hide" about its nuclear program. The West, however, recently discovered a hidden, underground facility near the holy city of Qom capable of producing highly enriched uranium for weapons-grade nuclear material. Since establishment of the Islamic Republic in 1979, Iran has been engaged in an ideological struggle against the West. Its two main enemies have been the United States ("the Great Satan") and Israel ("the Little Satan"). From its inception, Tehran has sought to erect a world Muslim empire; to restore medieval Islamic civilization to its former dominance. The regime is reactionary and - in a twisted manner - even utopian. Nuclear weapons are about more than attaining great-power status. They are the means to achieve the final triumph of messianic Shi'ism. Iran is on the verge of acquiring the bomb. The mullahs have reached the point of no return. Israel - the country that has to live in that dangerous part of the world - believes the mullahs are six to nine months away from getting it. Hence, President Obama's policy of diplomatic engagement combined with possible sanctions is doomed to fail. It is ineffective, naive and reckless. Direct talks, like those conducted in Geneva on Thursday, only give Iran more time. Mr. Obama is simply providing the mullahs with the cover they need to finish completing their nuclear arsenal. Washington now has two choices: Sanction an American or Israeli military attack to destroy Iran's nuclear facilities or allow Tehran to go nuclear. Either option means war. A devastating strike would likely trigger a fierce Iranian response, including waves of suicide bombers targeting Israeli civilians and U.S. troops in Iraq. Iranian missiles would pound Israeli and, maybe, European cities. Vital shipping lanes in the Persian Gulf would be disrupted, driving the price of oil to more than $300 a barrel - plunging the West into a possible depression. Hezbollah sleeper cells might be activated within the United States, unleashing deadly atrocities on American soil. Yet, allowing a nuclear-armed Iran is likely to lead to an even worse regional war. Once the ruling clerics get their hands on nukes, a military showdown with Israel is inevitable. They will seek to destroy the Jewish state once and for all. Jerusalem will existential not stand by and commit suicide. It will retaliate. The result would be a nuclear holocaust in the Middle East. The winds of war are blowing across the Persian Gulf. Following this summer's crackdown on pro-democracy protesters, the Iranian regime is weak, desperate and fracturing. Washington should vigorously pursue a policy of internal regime change; otherwise, Tehran will drag the Middle East into a certain conflagration that could lead to the slaughter of millions. Instead, Mr. Obama has ruled out "meddling in Iran's internal affairs." His peace-at-any-cost diplomacy guarantees military conflict. It is no longer a question of if this will happen, but when and on whose terms. Mr. Obama is sleepwalking into disaster. America and the Middle East will pay the price.

### Prolif

#### Air power is key to preventing proliferation and surprise nuclear attack

Dr. Bernard I. Finel, associate professor of the NSS at the National War College, 1999, “The Role of Aerospace Power in US Counterproliferation Strategy” Aerospace Power Journal, Winter 1999 //ER

**Aerospace power plays a critical role in sustaining the sort of engagement activities that might help prevent proliferation.** First, it is important to consider that **states often seek WMDs because of regional security concerns. The Indo-Pakistani nuclear competition is a prime example of this dynamic, as is the Israeli nuclear program and the now-dismantled South African nuclear program.**6 Given that fact, **there is some possibility that the United States could help prevent WMD proliferation by judiciously extending security guarantees to insecure actors.**7 The problem with extending security guarantees for non-proliferation purposes rather than narrow national interest is that the recipient of the guarantees may not believe the guarantees are credible.8 Furthermore, the American public may resist extending security guarantees if it believes that doing so will significantly increase the likelihood that US soldiers may be called up to defend these guarantees and hence be exposed to the possibility of casualties. **Because aerospace power is able to strike at a distance and with great precision, the recipient of security guarantees may find them more credible.** **US cold war security guarantees, both implicit and explicit, seem to have been very successful in preventing South Korea, Japan, and Taiwan from proliferating.** **These successes**, not surprisingly, **occurred in cases where US aerospace power was an especially potent threat given the geographical situation of these three countries.** By contrast, Israel, France, and Great Britain decided to build nuclear weapons despite implicit and explicit security guarantees, perhaps because they wanted to bolster their own deterrence capabilities rather than rely completely on the US ground forces that a war would have required.9 Of course, all of these countries faced unique security challenges, historical legacies, and domestic constraints, but it does seem plausible to suggest that **American security guarantees are more likely to be credible where American intervention can be accomplished exclusively or largely through relative low-casualty means such as aerospace power.** **Second, aerospace power is crucial to building increased transparency in either bilateral relations or in support of an international regime.**10 Since we might expect that counterproliferation in the future will rely at least in part on bilateral or multilateral regional arms control agreements, **the United States will almost certainly be called upon to help guarantee that none of the parties cheat. Aerospace power in the form of unmanned aerial vehicles (UAV), satellites, and other sensor platforms will play an important role.** More generally, **international regimes which rely on inspection systems, such as the Non-proliferation Treaty (NPT), Chemical Weapons Convention (CWC), and hopefully a strengthened Biological Weapons Convention (BWC) will be bolstered by aerospace-based transparency systems.**11 Detecting WMDs **In terms of detecting the possession of WMDs and the intention to use them, aerospace power will be similarly important. Aerospace-based sensors will be crucial in detecting WMD manufacturing facilities and stockpiles. Furthermore, aerospace-based sensors will be crucial in developing timely warning about WMD stores being dispersed to combat units or fitted on long-range delivery systems.** Although aerospace power will not be fool-proof, **in the absence of a comprehensive inspection regime it will form the best hope for avoiding the surprise use of WMDs.**

#### Prolif causes regional instability and war

Matthew Kroenig, assistant professor of Government at Georgetown University and a Stanton Nuclear Security Fellow at the Council on Foreign Relations, 9-2009, “Beyond Optimism and Pessimism: The Differential Effects of Nuclear Proliferation,” Managing the Atom Working Paper No. 2009-14, Harvard Kennedy School, Harvard University

Triggers Regional InstabilityNuclear proliferation can embolden new nuclear states, triggering regional instability that could potentially threaten the interests of power-projecting states and even entrap them in regional disputes. **New nuclear weapon states may be more aggressive and this newfound assertiveness can result in regional instability.** **I define regional instability as a heightened frequency** (but not necessarily the intensity) **of militarized interstate disputes among states in a given geographical region.** **The threat that regional instability poses to power-projecting states is different from the concern about international instability expressed by the proliferation pessimists.** Pessimists assume that international instability is bad in and of itself – and they may be right. But, **power-projecting states** have a different concern. They **worry that nuclear proliferation will set off regional instability and that, because they have the ability to project power over the new nuclear weapon state, they will be compelled to intervene in a costly conflict.** **Power-projecting states could feel the need to act as a mediator between nuclear-armed disputants, provide conventional military assistance to one of the parties in the dispute, or because they have the ability to put boots on the ground in the new nuclear state, potentially be drawn into the fighting themselves.** There is direct evidence that nuclear weapons can contribute to regional instability**.** Robert Rauchhaus has demonstrated that **nuclear weapon states are more likely to engage in conflict than nonnuclear weapon states.** Michael Horowitz extends this analysis to show that **aggressiveness is most pronounced in new nuclear states that have less experience with nuclear diplomacy.** These related findings are not due to the fact that dispute-prone states are more likely to acquire nuclear weapons; the scholars carefully control for a state’s selection into nuclear status. Rather, the findings demonstrate that **nuclear weapons increase the frequency with which their possessors participate in militarized disputes.** **Qualitative studies have also provided supporting evidence of nuclear weapons’ potentially destabilizing effects.** Research on internal decision-making in Pakistan reveals that **Pakistani foreign policymakers may have been emboldened by the acquisition of nuclear weapons, encouraging them to initiate militarized disputes against India.** Proliferation optimists counter that nuclear proliferation should increase regional stability, but the most recent empirical investigations undermine the stronger versions of the optimism argument. **While nuclear-armed states may be less likely to experience full-scale war providing some support for the optimist position, the preponderance of evidence suggests that nuclear-armed states are more likely to engage in other types of militarized disputes.**50 **This is true whether only one state or all of the contentious actors in a region possess nuclear weapons.**

### Deterrence

#### US air power helps deter WMD usage

Dr. Bernard I. Finel, associate professor of the NSS at the National War College, 1999, “The Role of Aerospace Power in US Counterproliferation Strategy” Aerospace Power Journal, Winter 1999 //ER

**The process of deterring WMD use is also likely to rely heavily on aerospace power. There are two forms of deterrence: deterrence by punishment and deterrence by denial. Although the former is more obviously within the realm of aerospace power, aerospace power can also play a role in deterrence by denial.** The important thing to remember about deterring the use of WMDs is that WMDs are not primarily military weapons but rather terror weapons. WMDs are probably not particularly effective in achieving traditional military goals such as the destruction of enemy military capabilities and the conquest and control of territory. **To deter the use of WMDs, deterrence by punishment requires the ability to threaten credibly to inflict severe pain on a potential adversary. Fundamentally, given US power-projection capabilities, this sort of punishment will rely on aerospace power in its various forms—from aircraft to cruise missiles.** However, the United States’s ability to punish an adversary by airpower is variable. The key to punishment is to destroy assets the opponent particularly values. Are these assets targetable through aerospace power? The answer is not clear. Ultimately, many hostile regimes may only value their own leadership.15 **Aerospace power may be able to undermine some of the bases of an adversary’s leadership**, but as the case of Iraq suggests, it is difficult to bring down a regime with air-power alone.16 Even adjusting for the equivocal commitment to bringing down the regime in the Bush and Clinton administrations, it is difficult to conceive of an alternate target set that could have finished off the regime with-out some sort of intervention on the ground. It is difficult to undermine a regime by bombing it. Numerous studies have shown that civilians usually either rally around a leader or respond to bombings by becoming passive.17 The North Atlantic Treaty Organization (NATO) bombing of Serbia over the Kosovo situation has apparently weakened the regime of Slobodan Milosevic; however, virtually all the large-scale demonstrations against Milosevic occurred after the bombing stopped and are as much a response to the failure of his policies as the suffering inflicted by the bombing. Deterrence by denial is also more difficult than it might seem on the surface. **Deterring the use of WMDs by denial does not only mean preventing an adversary from achieving military goals since WMDs are most likely to be used for political effect rather than narrow military missions.** Rather, deterrence by denial in this context refers to steps which nullify the effects of WMDs. Since these effects are both military and political, the deterrence calculus is difficult to examine simply and precisely. That said, **the inherent passive defense capabilities of aerospace power seem to make it an ideal basis for denying an adversary the ability to constrain US use-of-force decisions. Aerospace assets are difficult to tar-get and hence can be used without exposing American soldiers to the effects of terror weapons. Certainly, the passive defense capability of aerospace assets does not prevent the use of WMDs against civilian targets, but it does limit the forward-deploying military as-sets that can be targeted. In this sense, the ability to fly high and fast is itself a form of deterrence by denial.**