## Contention 1 is the Economy

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#### Economy sucks right now- industries are bringing it down.

AP 9/27 (Associated Press, US economy grew at 1.3 percent rate in April-June quarter, weaker than previous estimate, <http://www.washingtonpost.com/business/us-economy-grew-at-13-percent-rate-in-april-june-quarter-weaker-than-previous-estimate/2012/09/27/d51062c6-08a5-11e2-9eea-333857f6a7bd_story.html> , 9/27/12)

The growth rate was lowered from a previous estimate of 1.7 percent, the Commerce Department said Thursday. About half of the downward revision to growth came from a decline in farm production. The estimate for crop production was slashed by $12 billion. But economic growth was also weaker because of slower growth in consumer spending and exports. Economists said that Midwest drought would likely be a drag on growth in the July-September quarter. But Paul Ashworth, chief U.S. economist at Capital Economics, said once the drought eases and crop yields rebound to normal levels, the farm sector will provide a boost to economic growth. Growth slowed from the 2 percent rate in the January-March and isn’t expected to exceed that level for the rest of the year. Growth at or below 2 percent is typically too slow to lower unemployment, which was 8.1 percent in August. Most economists expect unemployment will stay around 8 percent for the rest of this year.

#### Economic lows increase the likelihood for global war

Royal 10 (Jedediah, Director of Cooperative Threat Reduction – U.S. Department of Defense, “Economic Integration, Economic Signaling and the Problem of Economic Crises”, Economics of War and Peace: Economic, Legal and Political Perspectives, Ed. Goldsmith and Brauer, p. 213-215)

Less intuitive is how periods of economic decline may increase the likelihood of external conflict. Political science literature has contributed a moderate degree of attention to the impact of economic decline and the security and defence behaviour of interdependent states. Research in this vein has been considered at systemic, dyadic and national levels. Several notable contributions follow. First, on the systemic level, Pollins (2008) advances Modelski and Thompson's (1996) work on leadership cycle theory, finding that rhythms in the global economy are associated with the rise and fall of a pre-eminent power and the often bloody transition from one pre-eminent leader to the next. As such, exogenous shocks such as economic crises could usher in a redistribution of relative power (see also Gilpin. 1981) that leads to uncertainty about power balances, increasing the risk of miscalculation (Feaver, 1995). Alternatively, even a relatively certain redistribution of power could lead to a permissive environment for conflict as a rising power may seek to challenge a declining power (Werner. 1999). Separately, Pollins (1996) also shows that global economic cycles combined with parallel leadership cycles impact the likelihood of conflict among major, medium and small powers, although he suggests that the causes and connections between global economic conditions and security conditions remain unknown. Second, on a dyadic level, Copeland's (1996, 2000) theory of trade expectations suggests that 'future expectation of trade' is a significant variable in understanding economic conditions and security behaviour of states. He argues that interdependent states are likely to gain pacific benefits from trade so long as they have an optimistic view of future trade relations. However, if the expectations of future trade decline, particularly for difficult to replace items such as energy resources, the likelihood for conflict increases, as states will be inclined to use force to gain access to those resources. Crises could potentially be the trigger for decreased trade expectations either on its own or because it triggers protectionist moves by interdependent states.4 Third, others have considered the link between economic decline and external armed conflict at a national level. Blomberg and Hess (2002) find a strong correlation between internal conflict and external conflict, particularly during periods of economic downturn. They write: The linkages between internal and external conflict and prosperity are strong and mutually reinforcing. Economic conflict tends to spawn internal conflict, which in turn returns the favour. Moreover, the presence of a recession tends to amplify the extent to which international and external conflicts self-reinforce each other. (Blomberg & Hess, 2002. p. 89) Economic decline has also been linked with an increase in the likelihood of terrorism (Blomberg, Hess, & Weerapana, 2004), which has the capacity to spill across borders and lead to external tensions. Furthermore, crises generally reduce the popularity of a sitting government. "Diversionary theory" suggests that, when facing unpopularity arising from economic decline, sitting governments have increased incentives to fabricate external military conflicts to create a 'rally around the flag' effect. Wang (1996), DeRouen (1995). and Blomberg, Hess, and Thacker (2006) find supporting evidence showing that economic decline and use of force are at least indirectly correlated. Gelpi (1997), Miller (1999), and Kisangani and Pickering (2009) suggest that the tendency towards diversionary tactics are greater for democratic states than autocratic states, due to the fact that democratic leaders are generally more susceptible to being removed from office due to lack of domestic support. DeRouen (2000) has provided evidence showing that periods of weak economic performance in the United States, and thus weak Presidential popularity, are statistically linked to an increase in the use of force. In summary, recent economic scholarship positively correlates economic integration with an increase in the frequency of economic crises, whereas political science scholarship links economic decline with external conflictat systemic, dyadic and national levels.5 This implied connection between integration, crises and armed conflict has not featured prominently in the economic-security debate and deserves more attention.

#### Economic collapse now causes WWIII

**Hamer 3/6/10 (**Prof Dr. Eberhard Hamer writes for Current Concerns, “Increasing Indications for a Third World War,” http://www.currentconcerns.ch/index.php?id=1012)

Due to the fact that the US has assumed the bank debts and added them to the national budget and their already extreme increase in national debts – one billion dollars worth foreign credits is needed per day –, **the biggest financial crisis since World War II has arrived**. If the cash flow from abroad ceased or foreign countries decided to escape the dollar, the US would be bankrupt. Nevertheless, the US is not making sufficient efforts to reduce their growing national debts with cost-cutting measures. Neither do their raise taxes to generate more income, nor do they try to cut their budget, especially not their enormously grown military budget. The US has employed 200 000 soldiers in combat missions worldwide. Therefore nobody understood when the biggest warlord in the world, despite increased force levels, obtained the Nobel Peace Prize. A possible explanation: he received the prize as a precaution, because it depends mainly on him if there is a war in Iran or not. In history, politicians who were economically at an end have often opted for war as a last resort to maintain power. This has even be truer for a country in a crisis, which sees war as a way out of an economic crisis. This is how the US surmounted the biggest depression of the 20th century by entering World War I, as well as the Great Depression by entering World War II, and now they could try to solve their third crisis in the same way. We should not forget that both world wars enabled the US not only to overcome their enormous national debts, but they also developed into the leading economic power of the world. The temptation to go the same way a third time is big. Furthermore, **Israel has positioned the atomic submarines delivered from Germany with nuclear missiles** in front of Iran, and in Georgia they not only rebuilt a nuclear missile position which was destroyed by Russia one and a half years ago, and which faces Iran, but fortified them with 90 US missile experts. Military preparations are already advanced. Although the US military has not yet succeeded in “pacifying” the two neighbouring states Iraq and Afghanistan, they have practiced their biggest military concentration in the world in combat mission. The Nobel Peace Prize Committee have assessed the situation correctly, namely that a war against Iran cannot happen without the US president’s approval, the least without the approval of a Nobel peace prize winner. However, the pressure from banks, the oil billionaires, the arms industry, the military and the Israel lobby could force the US to come into war when Israel carried out the first strike against Iran and the above mentioned powers wanted to secure their interests. The US is not only the country with the highest debts in the world but along with their currency their empire decays. The world’s allegedly “only superpower” is at the moment imploding in the same manner the Russian did 20 years ago. With some kicks the Chinese have already told the US president quite clearly that they do not acknowledge their leadership any longer. Therefore, if Israel decided to strike, the US president would face the terrible choice between sinking further into the quagmire of financial-, economic and social crisis or seeking the solution of a world war, which has made the US a winner twice already. The danger of a world war has never been greater since World War II. Therefore, increasing warnings to the US mostly from a group of European intellectuals for more than a year have been justified. However, we cannot prevent it. A war in Iran would not remain a local event even if it was only led with missiles at the beginning. On Iran’s side the Chinese would intervene directly or indirectly and the Russians possibly as well to prevent the US from approaching their borders and becoming too dominant. On the side of Israel and the US the NATO states would be obliged to help, especially when they had sworn Nibelung loyalty before. Therefore, we in Europe have to brace ourselves for a participation in a war. Merkel’s government might find a war as the last political way out of their mess after the bailouts, public insolvency, the looming financial collapse of the social systems, and social unrest as a result of missing genuine corrections. **War is coming up. The next few months will decide if we will be drawn into a Third World War** or if we can escape this danger.

### Stimulus

#### We have multiple internal links 1st is stimulus:

**Infrastructure Investments sustain and save the economy in a cycle.**

**STIGLITZ, Nobel Prize Winner and Professor at Columbia in 12**

[Joseph E. Stiglitz, Stimulating the Economy in an Era of Debt and Deficit, The Economists’ Voice http://www.degruyter.com/view/j/ev March, 2012]

Any diagnosis of the current economic situation should focus on the fact that the shortfall between actual and potential unemployment is huge and that monetary policy has proven ineffective, at least in restoring the economy to anything near full employment. Under these circumstances, the traditional economists’ solution has been to advocate the use of fiscal policy—tax cuts and/or spending increases. There is an especially compelling case for increasing public investments because they would increase GDP and employment today as well as increase output in the future. Given low interest rates, the enhanced growth in GDP would more than offset the increased cost of government spending, reducing national debt in the medium term. Moreover, the ratio of debt to GDP would decrease and the ability of the U.S. economy to sustain debt (debt sustainability) would improve. This happy state of affairs is especially likely given the ample supply of high-return investment opportunities in infrastructure, technology, and education resulting from underinvestment in these areas over the past quarter century. Moreover, well-designed public investments would raise the return on private investments, “crowding in” this additional source of spending. Together, increased public and private investment would raise output and employment in the short run, and increase growth and debt sustainability in the medium and long run. Such spending would reduce (not increase) the ratio of debt to GDP. Thus, the objection that the U.S. should not engage in such fiscal policies because of the high ratio of debt to GDP is simply wrong; even those who suffer from deficit fetishism should support such measures. Critics of this standard Keynesian prescription raise two objections: (a) government is not likely to spend the money on high return investments, so that the promised gains will prove elusive and (b) the fiscal multipliers are small (perhaps negative), suggesting that the shortrun gains from fiscal policy are minimal at best. Both of these objections are easily dismissed in the current economic environment. First, the assertion that government is incapable of making high return investments is just wrong. Studies of the average returns on government spending on investments in technology show extraordinarily high returns, with returns on investments in infrastructure and education returns well above the cost of borrowing. Thus, from a national point of view, investments in these areas make sense, even if the government fails to make the investments with the absolute highest returns. Second, the many variants of the argument that the fiscal multiplier is small typically rest on the assumption that as government spending increases, some category of private expenditure will decline to offset this increase. 1 Certainly, when the economy is at full employment and capital is being fully utilized, GDP cannot increase. Hence, under the circumstances, the multiplier must be zero. But today’s economic conditions of significant and persistent resource underutilization have not been experienced since the Great Depression. As a result, it is simply meaningless to rely on empirical estimates of multipliers based on post-World War II data. Contractionary monetary policy is another reason why multipliers may be markedly larger now than they were in some earlier situations of excess capacity. In these cases, monetary authorities, excessively fearful of inflation, responded to deficit spending by raising interest rates and constraining credit availability, thus dampening private spending. But such an outcome is not inevitable; it is a result of policies, often guided by mistaken economic theories. In any case, such an outcome is irrelevant today. This is because the Federal Reserve is committed to an unprecedented policy of maintaining near-zero interest rates through at least the end of 2014, while at the same time encouraging government spending. With interest rates at record lows and the Federal Reserve committed to keeping them there, crowding out of private investment simply will not occur. On the contrary, as I have noted, public investment— for instance, in better infrastructure—is more likely to increase the returns to private investment. Such public spending crowds in private investment, increasing the multiplier. Sometimes economists claim that consumers, worried about future tax liabilities in the wake of government spending, would contract their spending. However, the applicability of this notion (referred to as Ricardian equivalence) is contradicted by the fact that when George W. Bush lowered taxes and massively increased the deficit, savings plummeted to zero. But even if one believed in the applicability of Ricardian equivalence in today’s economy, government spending on investments that increase future growth and improve the debt-toGDP ratio would induce rational to spend more today. Consumption would also be crowded in by such government expenditures, not crowded out. Indeed, if consumers had rational expectations, the multiplier would increase even more in a long-lived downturn like the current one. The reason is that some of the money that is saved this year will be spent next year, or the year after, or the year after that—periods in which the economy is still well-below capacity. This increased spending will lead to higher employment and incomes in these later years. But if individuals are rational, the realization that their future incomes will be higher will lead them to spend more today. Deficit spending today crowds in not just investment, but also consumption. Thus, a careful look at the current situation suggests that the impact of well-designed government programs will be to stimulate the economy more than is assumed to be the case in standard Keynesian models (which typically assume a short-lived downturn and yield a shor run fiscal multiplier of around 1.5). Even in the current period, fiscal policy results in greater output increases because investment and consumption is crowded in, because: (a) the Federal Reserve is unlikely either to increase interest rates or reduce credit availability; (b) public investments are likely to increase the returns to private investments; and (c) rational consumers/ taxpayers may recognize that future tax liabilities will decline and that future incomes will rise as a result of these measures.

### Industry

#### Second is the aviation industry:

#### Implementation is key to economic growth

HUERTA 12 Administrator of the Federal Aviation Administration [Michael P. Huerta; March 2012; “NextGen Implementation Plan]

WHy NextGeN MatteRS NextGen benefits everyone from frequent flyers to those who rarely travel by air. NextGen will provide a better travel experience, with fewer delays, more predictable trips and the highest level of safety. Many people who live in neighborhoods near airports will experience less aircraft noise and fewer emissions. Communities will make better use of their airports, strengthening their local economy. Our nation’s economic health depends on a vital aviation industry.Hat IS NextGeN? The Next Generation Air Transportation System, or NextGen, is a transformative change in the management and operation of how we fly. NextGen enhances safety, reduces delays, saves fuel and reduces aviation’s adverse environmental impact. This comprehensive initiative, which is already providing benefits, integrates new and existing technologies, including satellite navigation and advanced digital communications. Airports and aircraft in the National Airspace System (NAS) will be connected to NextGen’s advanced infrastructure and will continually share real-time information to provide a better travel experience. The foundations of NextGen have been solidly built upon four major pillars: economic impact, sustainability, flexibility and safety. ECONOMIC IMPACT The overall health of the U.S economy is highly dependent on the aviation industry. As recently as 2009, civil aviation contributed $1.3 trillion annually to the national economy and constituted 5.2 percent of the GDP (gross domestic product.) It generated more than 10 million jobs, with earnings of $394 billion. Given the economic challenges faced by the country today, it is imperative that we protect and expand this vital economic engine. By implementing technologies and procedures that enable operators to burn less fuel and operate more efficiently and competitively, NextGen is intended to do just that.

#### Nextgen solves: Even the pessimistic numbers show there will be a major economic boost

Bin Salam 12   
Fellow, Eno Center for Transportation [Sakib bin Salam, NextGen: Aligning Costs, Benefits and Political Leadership, April 2012, ENO Center for Transportation]

Based on these estimates, the total cost of accidents to the general aviation community in 2010 was about $1.449 bil- lion. Even with on-board ADS-B, the prospect of greater situ- ational feedback and data could be undermined by human error of judgment. However, a reasonably moderate esti- mate can be made where greater situational awareness does contribute to preventing some accidents. Table 5 shows savings to the general aviation community under various levels of NextGen’s impact on safety. Even if NextGen plays a small role in improving safety and reduc- ing incidents in general aviation, the potential benefits are substantial.28

Summary of NextGen Benefits

Table 6 summarizes the potential annual NextGen benefits to the aviation community, assuming complete infrastructure and equipage. For commercial airlines, reduced delays and fuel consumption could bring up to $1.45 billion/year of benefits. For passengers, the estimated value of reduced de- lays and travel time is about $852 million/year for a 20 per- cent delay reduction and $1.5 billion/year for a 35 percent delay reduction. The benefits are quite substantial for the general aviation community as well. One important point to note is that even for a small impact of NextGen, benefits can be very high. The value of reduced travel time is esti- mated to be $10.69 million/year for a one percent reduction, and $53.47 million/year for a five percent reduction. The value of reduced fuel consumption is about $45.31 million/ year for a one percent reduction and $226.54 million/year for a five percent reduction. Safety benefits could range from $14.21 million/year to $142.2 million/year in terms of reduced accident fatalities, while the cost of lost aircraft can be reduced by up to $2.83 million/year.

### Jobs

#### Third is jobs:

#### NextGen generates recovery through jobs and business efficiency

Calio 11

[Nicholas Calio, President and CEO of the Air Transport Association of America, 2/9/11, “Aviation infrastructure is vital to winning the future,” http://thehill.com/blogs/congress-blog/technology/143033-aviation-infrastructure-is-vital-to-winning-the-future]

With broad consensus in the business community and organized labor that Congress should work with the president to improve the nation’s aging infrastructure, it is timely for bipartisan actions that support strategic investments to grow the economy. With deficit reduction a national priority, investing in infrastructure is not at cross purposes with cleaning up the nation’s finances. In fact, they go hand-in-hand. Making real progress on the deficit requires that we spark economic growth that drives job creation and generates additional tax revenue. It is essential that key infrastructure projects receive funding now so that industries like commercial aviation that enable businesses to grow can contribute more to the economic recovery. Providing the funding to accelerate implementation of modern air traffic infrastructure should be a top priority in the 112th Congress. The antiquated, ground-based system in place today is a major drag on productivity. As Ben Franklin famously proclaimed, time is money. Unfortunately, the nation has been losing both for years because our archaic air traffic control system has been unable to meet the demands placed upon it – let alone the demands of the future. According to a recent study commissioned by the FAA, flight delays cost the U.S. $31 billion in 2007. With a satellite-based system, airline efficiency will increase and flight delays will be minimized. Safety and customer satisfaction will improve and businesses - large and small - will reap the benefits of greater efficiency and be better positioned to create jobs. Commercial aviation already provides key connections that make the economy grow. The industry contributes $1.2 trillion to the economy, is responsible for 5.2 percent of the nation’s GDP and supports nearly 11 million jobs. A fully operational, NextGen air traffic management system will unleash the true economic power of commercial aviation and benefit every industry in this country. Conservative estimates predict that implementation of this system will lead to the creation of more than 150,000 jobs. In reality, the economic impact of this investment in modern infrastructure will be exponentially bigger. The sky is the limit for what this industry can contribute to the economy. Now it is up to our leaders in Washington to provide airlines with the infrastructure needed to compete successfully and support the U.S. in our national ambition to win

### Congestion

#### Next is congestion:

#### NextGen ends airport congestion – boosting America’s economy

Schank 6/23

[Joshua L. Schank, President and CEO Eno Center for Transportation, 6/23/12, http://www.enotrans.org/eno-brief/the-federal-role-in-transportation-four-ideas-for-greater-federal-involvement]

We often think of airports as local economic generators, and they are that, but some also have substantial national importance. The aviation network is dependent on large hub airports for the efficient and timely movement of passengers across the country and the world. A safe and reliable aviation network is essential for maintaining our competitiveness in the global economy. Unfortunately, we are in danger of losing our edge in this area because of congestion. Successful NextGen implementation could greatly alleviate the problem, but even if that happens airlines could take advantage of the new capacity and provide more frequent flights. Once economic growth picks up again we are likely to see airport congestion and delays increase as well. Airports such as Newark, San Francisco, and Chicago O’Hare already have approximately 30-40 percent of their flights delayed. Airports face substantial challenges in trying to tackle this issue on their own. The most widely recommended solution is pricing airport runways by time of day. But this politically unpopular solution has faced substantial opposition from communities such as smaller cities flying into hubs, or general aviation aircraft that are concerned about being effectively priced out of the market for a given airport. Congested airports would have a much greater chance of success if they were trying to tackle congestion in partnership with the federal government and other local transportation agencies. The federal role could be improved by dedicating a portion of the Airport Improvement Program (AIP) to provide grants to airports in regions that have a plan to work collaboratively to reduce congestion and overcome some of the political barriers to more effective pricing. Or the AIP could be retooled to set specific performance goals for airports and rewarding achievement. However it is done, there is a clear national interest at play here and the federal government needs to be more involved.

## Contention 2 is Hegemony

### First is China,

#### Chinese aviation is growing now – It’s indicative of greater trends of maturity

**Dawson. 2012.**

Kelly Dawson. 2012-06-01. http://usa.chinadaily.com.cn/weekly/2012-06/01/content\_15441620.htm

Beyond standard economic indicators of prosperity, certain industries can be seen as a microcosm of a country's maturity. James Fallows' new book, China Airborne, argues that Chinese aviation is such an industry, worthy of closer examination for what its successes and shortcomings reflect about China's technological and social progress. "If a country succeeds in those industries, it indicates a larger range of accomplishment and networks of sophisticated production, and aerospace is one of these high-end industries. “Countries that have successful aerospace industries are capable of building sophisticated operation systems, maintaining safety standards, and can pull off the integration of military, civilian and weather systems on an international level," he says. "It's a microcosm of the larger Chinese effort to become a higher-value modern economy, and it seemed to me to deserve attention as a test case for China's emergence." China Airborne traces the history of the nation's commercial airline industry and its more recent attempts to compete as an aircraft manufacturer. Once rated among the most dangerous to fly, Chinese airlines now boast some of the lowest crash rates in the world. But Chinese airplane manufacturers lag behind international competitors in innovation and design - a telling sign, Fallows says. "There are major catch-up efforts to build regional jets and larger jetliners, and the test is whether these Chinese factories will be able to take the next step up. It has not happened yet, but Boeing and Airbus are very attentive to what will happen in China over the next few years." In 2011, the Chinese government unveiled its 12th Five-Year Plan (2011-2015), in which it pledged 1.5 trillion yuan ($237 billion, 189 billion euros) to develop the national aerospace industry in the form of new airports, navigation systems and planes. As of 2010, the country counted 2,600 commercial planes, about half as many as in the US, with a target of 4,500 by 2016.

#### NextGen boosts the airline industry – they’ll invest in other systems

Laing 6-14-12 (Keith; national political journalist; The Hill; “Obama: 'NextGen' air traffic control system a 'smart investment'”; <http://thehill.com/blogs/transportation-report/aviation/166373-obama-nextgen-air-traffic-control-system-a-smart-investment->)

During President Obama's meeting of his Jobs and Competitiveness Council in swing state North Carolina this week, the Southwest Airlines CEO Gary Kelly suggested building a new air traffic control system could stimulate economic growth. Kelly, who is a member of Obama's jobs council, told the president that the new system known as "NextGen" could save the airlines 15 percent, which they could be using for other activities that would stimulate jobs. "We want to grow, we want to buy more airplanes, but we're not just generating sufficient profits to make those kinds of investments," Kelly said to CNNMoney. President Obama seemed open to the idea, the agency said, though Republicans have indicated they are unlikely to go along with his proposal for a $556 billion transportation spending bill. "As we move forward, distinguishing between smart investments and dumb investments, it's not something that's often highlighted in these debates," Obama said. The Federal Aviation Administration has long planned to switch the air traffic control system from World War II-era radar technology to a satellite-based system. But in the series of continuing resolutions approved this spring as Congress was working to avert a government shutdown, lawmakers cut about $200 million from the FAA's budget that would have gone to the conversion. Additionally, a long-term overall funding bill for the FAA has also been bogged down in discussions over the labor rights of airline and railroad employees.

#### US avionics leadership is key to air power and conventional deterrence that prevents Chinese miscalculation

Eaglen and Szaszdi 09 Research Fellow for National Security Mackenzie M. Eaglen is Research Fellow for National Security and Lajos F. Szaszdi, Ph.D., is a former Researcher in the Douglas and Sarah Allison Center for Foreign Policy Studies, a division of the Kathryn and Shelby Cullom Davis Institute for International Studies, at The Heritage Foundation, 7-7-09, [“The Growing Air Power Fighter Gap: Implications for U.S. National Security,” Heritage Foundation, Produced by the Douglas and Sarah Allison Center for Foreign Policy Studies, www.heritage.org/Research/NationalSecurity/bg2295.cfm] E. Liu

China. China has ordered an estimated 76 Su30MKK Flanker-Gs and can produce an additional 250 under license, including at least 100 “knockdown kits” to be assembled in China.20 It has also received at least 24 Su-30MK2 naval strike fighters. If China modernizes its 171 Su-27SK/UBs to the Su27SKM standard and assembles another 105 Su27SKMs under license, it will have roughly 626 multirole fighters available for air superiority missions. This would place China in the same league as the U.S., which has 522 F-15A/B/C/Ds, 217 F-15Es, and a planned endstrength of 186 F-22s.21 China is also developing a stealth fifth-generation fighter, variously identified in the West as the JX.22 It may also benefit from information allegedly stolen on the “design and electronics systems” of the F-35 Lightning II.23 As militaries expand and modernize, especially the Chinese People’s Liberation Army, the probability of miscalculation grows. The 2009 DOD report on China’s military power discusses two ways that China’s growing power could lead to a miscalculation and possibly conflict. First, Chinese leaders may overestimate the proficiency of the Chinese military, leading them to overestimate its capability to achieve greater operational goals. Second, they could fail to appreciate how their decisions affect the perceptions and responses of other regional actors, inadvertently provoking a military confrontation.24 The increased potential for both competition and miscalculation between the United States and other countries raises the importance of America’s conventional deterrence. Preventing war by convincing a would-be adversary that its goals are not achievable is a primary goal of the military. Thus, even though the wars in Iraq and Afghanistan are America’s central focus and the U.S.

may not currently face a potential great-power adversary, maintaining a strong fighter force is critical to sustaining a credible conventional deterrent in the coming decades. Military Requirements and Current Inventory The U.S. achieves and maintains air superiority and supremacy with fighters from the Air Force, the Navy’s aircraft carriers, and the Marines’ carrierbased and land-based air wings. Typically, a fighter force is superior to any potential opponent if it has at least the following three elements: • Technically superior aircraft, including flight performance (speed, range, and maneuverability), avionics (sensors, navigation systems, computers, sensor fusion, data displays, communications, electronic support measures), and armament. • Numerical sufficiency. • Exceptionally trained pilots and crews and an adequate pool of replacements and well-trained new pilots.

#### Aggression escalates --- miscalculation leads to nuclear war.

**Fisher**, 10/31/**2011** (Max – associate editor at the Atlantic, 5 Most Likely Ways the U.S. and China Could Spark Accidental Nuclear War, The Atlantic, p. http://www.theatlantic.com/international/archive/2011/10/5-most-likely-ways-the-us-and-china-could-spark-accidental-nuclear-war/247616/#slide1)

After 10 years of close but unproductive talks, the U.S. and China still fail to understand one another's nuclear weapons policies, according to a disturbing report by Global Security Newswire. In other words, neither the U.S. nor China knows when the other will or will not use a nuclear weapon against the other. That's not due to hostility, secrecy, or deliberate foreign policy -- it's a combination of mistrust between individual negotiators and poor communication; at times, something as simple as a shoddy translation has prevented the two major powers from coming together. Though nuclear war between the U.S. and China is still extremely unlikely, because the two countries do not fully understand when the other will and will not deploy nuclear weapons, the odds of starting an accidental nuclear conflict are much higher. Neither the U.S. nor China has any interest in any kind of war with one other, nuclear or non-nuclear. The greater risk is an accident. Here's how it would happen. First, an unforeseen event that sparks a small conflict or threat of conflict. Second, a rapid escalation that moves too fast for either side to defuse. And, third, a mutual misunderstanding of one another's intentions. This three-part process can move so quickly that the best way to avert a nuclear war is for both sides to have absolute confidence that they understand when the other will and will not use a nuclear weapon. Without this, U.S. and Chinese policy-makers would have to guess -- perhaps with only a few minutes -- if and when the other side would go nuclear. This is especially scary because both sides have good reason to err on the side of assuming nuclear war. If you think there's a 50-50 chance that someone is about to lob a nuclear bomb at you, your incentive is to launch a preventative strike, just to be safe. This is especially true because you know the other side is thinking the exact same thing. In fact, even if you think the other side probably won't launch an ICBM your way, they actually might if they fear that you're misreading their intentions or if they fear that you might over-react; this means they have a greater incentive to launch a preemptive strike, which means that you have a greater incentive to launch a preemptive strike, in turn raising their incentives, and on and on until one tiny kernel of doubt can lead to a full-fledged war that nobody wants. The U.S. and the Soviet Union faced similar problems, with one important difference: speed. During the first decades of the Cold War, nuclear bombs had to be delivered by sluggish bombers that could take hours to reach their targets and be recalled at any time. Escalation was much slower and the risks of it spiraling out of control were much lower. By the time that both countries developed the ICBMs that made global annihilation something that could happen within a matter of minutes, they'd also had a generation to sort out an extremely clear understanding of one another's nuclear policies. But the U.S. and China have no such luxury -- we inherited a world where total mutual destruction can happen as quickly as the time it takes to turn a key and push a button. The U.S. has the world's second-largest nuclear arsenal with around 5,000 warheads (first-ranked Russia has more warheads but less capability for flinging them around the globe); China has only about 200, so the danger of accidental war would seem to disproportionately threaten China. But the greatest risk is probably to the states on China's periphery. The borders of East Asia are still not entirely settled; there are a number of small, disputed territories, many of them bordering China. But the biggest potential conflict points are on water: disputed naval borders, disputed islands, disputed shipping lanes, and disputed underwater energy reserves. These regional disputes have already led to a handful of small-scale naval skirmishes and diplomatic stand-offs. It's not difficult to foresee one of them spiraling out of control. But what if the country squaring off with China happens to have a defense treaty with the U.S.?

### Second is aerospace,

#### Airline industry doing terribly now and Nextgen solves but only with FAA commitment

Kelly ’11 (Gary Kelly-CEO and executive of Southwest Airlines. “We Need 21st Century Air Traffic Control” April 27, 2011. <http://money.cnn.com/2011/04/27/news/companies/air-traffic-control-modernization/index.htm>) Rajiv

It's been a tough decade for the U.S. airline industry. Over the past ten years, total financial losses have risen to more than $50 billion. Fuel costs are 4.5 times higher. And, an obsolete air traffic control system exists that contributes to congestion and delays. It's not only been a tough decade -- it's been a lost decade.¶ Once again, escalating fuel prices are having a devastating effect on the airline industry. From the end of 2009 to the end of 2010, the price of jet fuel rose 44 cents per gallon. And, from the end of 2010 to the week ending April 21, the price of jet fuel rose 74 cents per gallon. To put things in perspective, just a penny increase in a gallon of jet fuel costs U.S. airlines $175 million annually.¶ The airline industry, both individually and collectively, has been focused on reducing our dependence on petroleum-derived jet fuel. Our efforts to conserve fuel have focused on three key areas:¶ Modernizing our nation's air traffic control system, including private investments in fuel-efficient technologies;¶ Developing, producing and acquiring the most advanced aircraft engines and airframes; and¶ Developing, certifying, and eventually producing commercially viable alternative jet fuels.¶ Step one must be to develop and deliver a much more direct and efficient satellite-based air traffic control system. The FAA has had a plan called "NextGen" to transform today's antiquated ground-based system to a 21st century satellite-based system.¶ However, the federal government must do more to leverage the technological investments already made by the airline industry so NextGen's benefits -- including greatly improved fuel consumption and reduced emissions -- can be realized much more quickly.¶ It's not an exaggeration to say that today's air traffic control system is using 1950's technology and flight paths to route our aircraft during a time when most drivers on the highway are following direct routes guided by their GPS systems.¶ Today's antiquated, ground-based systems add flight time because they do not route aircraft in a direct, linear fashion. Further, because today's technology does not precisely pinpoint an aircraft's position in space, greater separation must be factored into flight patterns.¶ Utilizing satellite-based systems, the FAA and airlines should be able to route flights more efficiently, precisely, and directly, thereby reducing fuel consumption, as well as flight miles, flight times, congestion, and delays.¶ Additionally, a satellite-based system would:¶ Make a safe system safer and more efficient because everyone shares the same precise view of aircraft in their vicinity;¶ Improve airline and airport operations because of greater scheduling and operating reliability;¶ Increase efficiency and reduce emissions;¶ And, enable the airlines to compete more effectively in the global marketplace.¶ The fuel savings projected from full NextGen implementation are significant and range from 6 to 15 %. Even a 6% fleetwide reduction in fuel burn results in 1.16 billion gallons in fuel savings and nearly 11 million metric tons (24 billion pounds) of carbon dioxide savings.¶ Southwest (LUV, Fortune 500) is the first airline to commit to spending millions of dollars to outfit its entire fleet with a GPS-based, NextGen technology called "Required Navigation Performance" (RNP). To date, we have committed to investing more than $175 million dollars over the next several years to install GPS in our 550 Boeing 737 aircraft and train our 6,000-plus pilots in RNP.¶ But the airlines cannot reach NextGen alone. The FAA, in coordination with the aviation community, must focus its limited resources to design and implement GPS-based flight paths that will result in measurable reductions in fuel consumption and emissions.¶ In other words, it does no good to use new technology to fly the same old routes more precisely. We must have new flight procedures approved by the FAA to leverage the tremendous potential of NextGen technologies.¶ Although it's been discussed since the 1970s, Southwest, along with the entire domestic airline industry, is ready for NextGen now.

#### Airline growth directly boosts Aerospace industry sales

GOMEZ et al 12 [Ben Hur Gomez, John Simon, Alan Ibrahim, undergraduate at Harvard University pursuing a degree in quantitative finance through the statistics department, and an economics degree 2. Zachs Analyst 3. worked at Wikinvest for 3.5 years as a content writer, industry analyst, and summer intern. Graduated from Harvard with a degree in economics and a secondary field in environmental science and public policy “Dependence on key customers”, http://www.wikinvest.com/stock/Precision\_Castparts\_(PCP)]

Demand in the aerospace market PCP’s commercial sales depend substantially on the production rates of both Boeing Company (BA) and Airbus , which in turn depend upon deliveries of new aircraft. The ultimate drivers of orders and deliveries of aircraft are underlying air travel demand, financial health of airlines, growth prospects for airline capacity, and overall economic growth. The current increase in aerospace demand is dependent on increased spending by foreign carriers and domestic airlines who must upgrade aging fleets. PCP stands to benefit from expected aircraft deliveries by Boeing and Airbus, and from the replacement cycle of aging turbines and aircraft that will be upgraded or overhauled. Any factor that adversely affects the aerospace industry (similar to the tragic events of 9/11 or the SARS travel scare) would likely pressure PCP’s operations and profitability. Bankruptcy of another airline, continued high oil prices, or the possibility of a major terrorist attack threaten to change the course of the recovery in the aerospace cycle and likely impact PCP.

#### Strong aerospace is critical to overall US military power – sustains heg

National Aerospace Week 10 (September 18, “Aerospace and Defense: The Strength to Lift America,” <http://www.nationalaerospaceweek.org/wp-content/uploads/2010/04/whitepaper.pdf>) National Aerospace Week

The beginning of a new decade presents the defense industry with challenges that aren’t new, but are becoming more urgent. Developing a national strategy to ensure a robust industrial base and modernizing our military hardware must become frontburner priorities. The health of the industrial base is at the heart of our ability to supply our nation with the weapons systems it requires,. As we wrote in our landmark study on the industrial base in 2009: “Military technologies used to be much more closely related to civilian technologies. They even used common production processes. But because DOD is today the sole customer for industry’s most advanced capabilities, the defense industrial base is increasingly specialized and separate from the general manufacturing and technology sectors. That means even a healthy general economy will not necessarily help underwrite the industrial capabilities DOD most needs.” A huge step forward was made this year when the industrial base was included in the Quadrennial Defense Review as a factor to be considered in its long-term planning. We’re optimistic that the next step — inclusion of industrial base considerations in program plans and policy — will be executed as directed by the QDR — ensuring that it becomes incorporated into long-range defense plans. However, we remain concerned about the fragility of the supplier base. With another round of acquisitions and consolidations imminent along with a projected decline in defense spending, the supplier base remains particularly vulnerable. These small businesses are critical to the primes and to the government. They face multiple challenges overcoming barriers to federal contracting and once they leave the contracting base, they and their unique skills cannot be recovered. 2010 Aerospace Industries Association of America, Inc. 4 Along with our concern about the industrial base is the long-term issue of modernizing our military hardware. The 1980s defense build-up is now 25 years old, and systems acquired then are in need of replacement. The decade of 2010-19 is the crucial time to reset, recapitalize and modernize our military forces. Not only are many of our systems reaching the end of their designed lives, but America’s military forces are using their equipment at many times the programmed rates in the harsh conditions of combat, wearing out equipment prematurely. Delaying modernization will make it even harder to identify and effectively address global threats in the future. The requirements identified in the QDR — for the United States to overmatch potential adversaries and to execute long-duration campaigns in coming years against increasingly capable potential opponents — will require complex and expensive aerospace capabilities. This is a concern that the Defense Department recognizes. Under Secretary of Defense Ashton Carter has said that the department is looking to develop a “family of systems” for future strike options that will be supported by the “family of industry.” 9 This is welcome news. However, defense modernization is not optional. While the fiscal 2011 budget request is a reasonable target that takes into account funding needed to fight two wars, the pressure on the procurement and research and development budget is sure to increase in the future. At the same time, America must adapt its defenses to new kinds of threats. A large-scale attack on information networks could pose a serious economic threat, impeding or preventing commerce conducted electronically. This would affect not only ATM transactions, but commercial and governmental fund transfers and the just-in-time orders on which the manufacturing sector depends. It could even pose threats to American lives, interrupting the transfer of medical data, disrupting power grids, even disabling emergency communications links. In partnership with the government, our industry is on the forefront of securing these networks and combating cyber attack. The American people also demand better security for the U.S. homeland, from gaining control of our borders to more effective law enforcement and disaster response. The aerospace industry provides the tools that help different forces and jurisdictions communicate with each other; monitor critical facilities and unpatrolled borders, and give advance warning of natural disasters, among other capabilities. In many cases, government is the only market for these technologies. Therefore, sound government policy is essential not only to maintain current capabilities, but to ensure that a technology and manufacturing base exists to develop new ones.

#### Hegemony solves nuke war and extinction

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

It is worth first examining the larger picture: We live in a time of arguably the greatest structural change in the global order yet endured, with this historical moment's most amazing feature being its relative and absolute lack of mass violence. That is something to consider when Americans contemplate military intervention in Libya, because if we do take the step to prevent larger-scale killing by engaging in some killing of our own, we will not be adding to some fantastically imagined global death count stemming from the ongoing "megalomania" and "evil" of American "empire." We'll be engaging in the same sort of system-administering activity that has marked our stunningly successful stewardship of global order since World War II. Let me be more blunt: As the guardian of globalization, the U.S. military has been the **greatest force for peace the world has ever known**. Had America been removed from the global dynamics that governed the 20th century, **the mass murder never would have ended**. Indeed, it's entirely conceivable there would now be no identifiable human civilization left, once nuclear weapons entered the killing equation. But the world did not keep sliding down that path of perpetual war. Instead, America stepped up and changed everything by ushering in our now-perpetual great-power peace. We introduced the international liberal trade order known as globalization and played loyal Leviathan over its spread. What resulted was the collapse of empires, an explosion of democracy, the persistent spread of human rights, the liberation of women, the doubling of life expectancy, a roughly 10-fold increase in adjusted global GDP and a profound and persistent reduction in battle deaths from state-based conflicts. That is what American "hubris" actually delivered. Please remember that the next time some TV pundit sells you the image of "unbridled" American military power as the cause of global disorder instead of its cure. With self-deprecation bordering on self-loathing, we now imagine a post-American world that is anything but. Just watch who scatters and who steps up as [the Facebook revolutions](http://www.worldpoliticsreview.com/articles/8089/the-realist-prism-politics-vs-social-media-in-the-arab-uprising) erupt across the Arab world. While we might imagine ourselves the status quo power, we remain the world's most vigorously revisionist force. As for the sheer "evil" that is our military-industrial complex, again, let's examine what the world looked like before that establishment reared its ugly head. The last great period of global structural change was the first half of the 20th century, a period that saw a death toll of about 100 million across two world wars. That comes to an average of 2 million deaths a year in a world of approximately 2 billion souls. Today, with far more comprehensive worldwide reporting, researchers report an average of less than 100,000 battle deaths annually in a world fast approaching 7 billion people. Though admittedly crude, these calculations suggest a 90 percent absolute drop and a **99 percent** relative **drop in** deaths due to **war**. We are clearly headed for a world order characterized by multipolarity, something the American-birthed system was designed to both **encourage and accommodate**. But given how things turned out the last time we collectively faced such a fluid structure, we would do well to keep U.S. power, in all of its forms, **deeply embedded in the geometry** to come. To continue the historical survey, after salvaging Western Europe from its half-century of civil war, the U.S. emerged as the progenitor of a new, far more just form of globalization -- one based on actual free trade rather than colonialism. America then successfully replicated globalization further in East Asia over the second half of the 20th century, setting the stage for the Pacific Century now unfolding.

#### And, US pursuit of hegemony is inevitable – only a question of effectiveness

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(David P, “American Decline Revisited,” *Survival*, 52:4, 215 – 227)

The history of the past two decades suggests that adjusting to a plural world is not easy for the United States. As its economic strength is increasingly challenged by relative decline, it clings all the more to its peerless military prowess. As the wars in Iraq and Afghanistan have shown, that overwhelming military power, evolved over the Cold War, is less and less effective. In many respects, America's geopolitical imagination seems frozen in the posture of the Cold War. The lingering pretension to be the dominant power everywhere has encouraged the United States to hazard two unpromising land wars, plus a diffuse and interminable struggle against 'terrorism'. Paying for these wars and the pretensions behind them confirms the United States in a new version of Cold War finance. Once more, unmanageable fiscal problems poison the currency, an old pathology that firmly reinstates the nation on its path to decline. It was the hegemonic Cold War role, after all, that put the United States so out of balance with the rest of the world economy. In its hegemonic Cold War position, the United States found it necessary to run very large deficits and was able to finance them simply by creating and exporting more and more dollars. The consequence is today's restless mass of accumulated global money. Hence, whereas the value of all global financial assets in 1980 was just over 100% of global output, by 2008, even after the worst of the financial implosion, that figure had exploded to just under 300%.25 Much of this is no doubt tied up in the massive but relatively inert holdings of the Chinese and Japanese. But thanks to today's instantaneous electronic transfers, huge sums can be marshalled and deployed on very short notice. It is this excess of volatile money that arguably fuels the world's great recurring bubbles. It can create the semblance of vast real wealth for a time, but can also (with little notice) sow chaos in markets, wipe out savings and dry up credit for real investment. What constitutes a morbid overstretch in the American political economy thus ends up as a threat to the world economy in general. To lead itself and the world into a more secure future the United States must put aside its old, unmeasured geopolitical ambitions paid for by unlimited cheap credit. Instead, the United States needs a more balanced view of its role in history. But America's post-Soviet pundits have, unfortunately, proved more skilful at perpetuating outmoded dreams of past glory than at promoting the more modest visions appropriate to a plural future. One can always hope that newer generations of Americans will find it easier to adjust to pluralist reality. The last administration, however, was not very encouraging in this regard. III What about Barack Obama? So far, his economic policy has shown itself probably more intelligent and certainly more articulate than his predecessor's. His thinking is less hobbled by simple-minded doctrines. It accepts government's inescapable role in regulating markets and providing a durable framework for orderly governance and societal fellowship. To be sure, the Obama administration, following in the path of the Bush administration, has carried short-term counter-cyclical stimulation to a previously unimagined level. Perhaps so radical an expansion of credit is unavoidable under present circumstances. The administration is caught between the need to rebalance by scaling back and the fear that restraint applied now will trigger a severe depression. Obama's chief aide, Rahm Emanuel, is famous for observing: 'Rule one: Never allow a crisis to go to waste. They are opportunities to do big things.'26 So far, Obama's administration has made use of its crisis to promote an unprecedented expansion of welfare spending.27 Much of the spending is doubtless good in itself and certainly serves the administration's strong counter-cyclical purposes. But at some point the need to pass from expansion to stabilisation will presumably be inescapable. Budget cuts will have to be found somewhere, and demographic trends suggest that drastic reductions in civilian welfare spending are unlikely. Elementary prudence might suggest that today's financial crisis is an ideal occasion for America's long-overdue retreat from geopolitical overstretch, a time for bringing America's geopolitical pretensions into harmony with its diminishing foreign possibilities and expanding domestic needs. The opportunities for geopolitical saving appear significant. According to the Congressional Budget Office (CBO), current military plans will require an average military budget of $652bn (in 2010 dollars) each year through 2028. The estimate optimistically assumes only 30,000 troops will be engaged abroad after 2013. As the CBO observes, these projections exceed the peak budgets of the Reagan administration's military build-up of the mid-1980s (about $500bn annually in 2010 dollars). This presumes a military budget consuming 3.5% of GDP through 2020.28 Comparable figures for other nations are troubling: 2.28% for the United Kingdom, 2.35% for France, 2.41% for Russia and 1.36% for China.29 Thus, while the financial crisis has certainly made Americans fear for their economic future, it does not yet seem to have resulted in a more modest view of the country's place in the world, or a more prudent approach to military spending. Instead, an addiction to hegemonic status continues to blight the prospects for sound fiscal policy. Financing the inevitable deficits inexorably turns the dollar into an imperial instrument that threatens the world with inflation.

#### The transition independently causes extinction

**Brzezinski 12**(Zbigniew, Prof of US Foreign Policy at School of Advanced International Studies – Johns Hopkins University, Counselor – CSIS and Trustee and Co-Chair – CSIS Advisory Board, Former National Security Advisor – Carter, “After America”, Foreign Policy, January / February, <http://www.foreignpolicy.com/artic> les/2012/01/03/after\_america?page=full)

For if America falters, the world is unlikely to be dominated by a single preeminent successor-- not even China. International uncertainty, increased tension among global competitors, and even outright chaos would be far more likely outcomes.While a sudden, massive crisis of the American system-- for instance, another financial crisis –would produce a fast-moving chain reaction leading to global political and economic disorder, a steady drift by America into increasingly pervasive decay or endlessly widening warfare with Islam would be unlikely to produce, even by 2025, an effective global successor. No single power will be ready by then to exercise the role that the world, upon the fall of the Soviet Union in 1991, expected the United States to play: the leader of a new, globally cooperative world order. More probable would be a protracted phase of rather inconclusive realignments of both global and regional power, with no grand winners and many more losers, in a setting of international uncertaintyand even of potentially fatal risks to global well-being. Rather than a world where dreams of democracy flourish, a Hobbesian world ofenhanced national security based on varying fusions of authoritarianism, nationalism, and religion could ensue. The leaders of the world's second-rank powers, among them India, Japan, Russia, and some European countries, are already assessing the potential impact of U.S. decline on their respective national interests.The Japanese, fearful of an assertive China dominating the Asian mainland, may be thinking of closer links with Europe. Leaders in India and Japan may be considering closer political and even military cooperation in case America falters and China rises. Russia, while perhaps engaging in wishful thinking (even schadenfreude) about America's uncertain prospects, will almost certainly have its eye on the independent states of the former Soviet Union.Europe, not yet cohesive, would likely be pulled in several directions: Germany and Italy toward Russia because of commercial interests, France and insecure Central Europe in favor of a politically tighter European Union, and Britain toward manipulating a balance within the EU while preserving its special relationship with a declining United States. Others may move more rapidly to carve out their own regional spheres: Turkey in the area of the old Ottoman Empire, Brazil in the Southern Hemisphere, and so forth. None of these countries, however, will have the requisite combination of economic, financial, technological, and military power even to consider inheriting America's leading role.China, invariably mentioned as America's prospective successor, has an impressive imperial lineage and a strategic tradition of carefully calibrated patience, both of which have been critical to its overwhelmingly successful, several-thousand-year-long history. China thus prudently accepts the existing international system, even if it does not view the prevailing hierarchy as permanent. It recognizes that success depends not on the system's dramatic collapse but on its evolution toward a gradual redistribution of power. Moreover, the basic reality is that China is not yet ready to assume in full America's role in the world. Beijing's leaders themselves have repeatedly emphasized that on every important measure of development, wealth, and power, China will still be a modernizing and developing state several decades from now, significantly behind not only the United States but also Europe and Japan in the major per capita indices of modernity and national power. Accordingly, Chinese leaders have been restrained in laying any overt claims to global leadership. At some stage, however, a more assertive Chinese nationalism could arise and damage China's international interests. A swaggering, nationalistic Beijing would unintentionally mobilize a powerful regional coalition against itself. None of China's key neighbors -- India, Japan, and Russia -- is ready to acknowledge China's entitlement to America's place on the global totem pole. They might even seek support from a waning America to offset an overly assertive China. The resulting regional scramble could become intense, especially given the similar nationalistic tendencies among China's neighbors. A phase of acute international tension in Asia could ensue. Asia of the 21st century could then begin to resemble Europe of the 20th century -- violent and blood thirsty.At the same time, the security of a number of weaker states located geographically next to major regional powers also depends on the international status quo reinforced by America's global preeminence -- and would be made significantly more vulnerable in proportion to America's decline. The states in that exposed position-- including Georgia, Taiwan, South Korea, Belarus, Ukraine, Afghanistan, Pakistan, Israel, and the greater Middle East --are today's geopolitical equivalents of nature's most endangered species. Their fates are closely tied to the nature of the international environment left behind by a waning America, be it ordered and restrained or, much more likely, self-serving and expansionist.A faltering United States could also find its strategic partnership with Mexico in jeopardy. America's economic resilience and political stability have so far mitigated many of the challenges posed by such sensitive neighborhood issues as economic dependence, immigration, and the narcotics trade. A decline in American power, however, would likely undermine the health and good judgment of the U.S. economic and political systems. A waning United States would likely be more nationalistic, more defensive about its national identity, more paranoid about its homeland security, and less willing to sacrifice resources for the sake of others' development. The worsening of relations between a declining America and an internally troubled Mexico could even give rise to a particularly ominous phenomenon: the emergence, as a major issue in nationalistically aroused Mexican politics, of territorial claims justified by history and ignited by cross-border incidents.Another consequence of American decline could be a corrosion of the generally cooperative management of the global commons -- shared interests such as sea lanes, space, cyberspace, and the environment, whose protection is imperative to the long-term growth of the global economy and the continuation of basic geopolitical stability. In almost every case, the potential absence of a constructive and influential U.S. role would fatally undermine the essential communality of the global commons because the superiority and ubiquity of American power creates order where there would normally be conflict.None of this will necessarily come to pass. Nor is the concern that America's decline would generate global insecurity, endanger some vulnerable states, and produce a more troubled North American neighborhood an argument for U.S. global supremacy. In fact, the strategic complexities of the world in the 21st century make such supremacy unattainable. But those dreaming today of America's collapse would probably come to regret it. And as the world after America would be increasingly complicated and chaotic, it is imperative that the United States pursue a new, timely strategic vision for its foreign policy -- or start bracing itself for a dangerous slide into global turmoil.

#### PLAN: The United States federal government should invest in upgrading air traffic control infrastructure to NextGen.

## Contention 3 is Solvency

#### The USFG should do the plan – only a strong federal signal will get the system in place and operational.

ALPA 12 Air Line Pilots Association International. [June 2012 White Paper, Leveling the Playing Field for U.S. Airlines and Their Employees, <http://www.alpa.org/publications/ALPA_White_Paper_Leveling_the_Playing_Field_June_2012/ALPA_White_Paper_Leveling_the_Playing_Field_June_2012.html#top>]

Invest in NextGen to Improve Safety and Increase Efficiencies While Decreasing Costs to Airlines To maintain a competitive advantage in the international marketplace, the United States’ national airspace system (NAS)—which is composed of the entire air- and ground-based infrastructure, including air traffic control surveillance and communication, navigation, airports, aircraft, vehicles on the surface, and others—must be modernized. The current system of air traffic control and air traffic management is based on technologies, techniques, and processes that date back decades. The infrastructure continues to deteriorate, and the ability of the FAA and operators in the NAS to guarantee the safest possible travel is similarly being diminished. Existing and emerging technologies hold the promise of significant increases in the ability to maintain or improve levels of safety while improving capacity and efficiency of our system, allowing our airlines to grow and ultimately save costs, resulting in a better business environment and more level playing field for U.S. airlines. NextGen, in its mature state, will improve efficiency of operations, enhance both the accuracy and coverage of controllers’ ability to pinpoint the position of aircraft in flight and on the ground, increase capacity, reduce delays in the air and on the ground, and cut down greenhouse gas emissions. With the rising cost of fuel, less fuel will be consumed, resulting in immediate cost savings. Reduced taxi and flight time also translates into less noise and emissions. Better knowledge of exactly where the aircraft is on the ground translates into more efficient gate management, reduced tarmac delays, and fewer runway incursions. More accurate airborne position knowledge will allow the air traffic controller to arrange aircraft into more efficient streams. All of these benefits lead to profitability and growth of our airlines and our nation’s economy, as well as a better customer experience The upgrade from the current outdated system to a modern, more efficient one is as complex as the technologies themselves. It is simply impossible to “turn off” the current system while changes are made. Every major upgrade to the system must be undertaken while the system is in full operation, with the existing workforce. Thus, development of equipment and procedures, acquisition and deployment strategies, and training for pilots, controllers, and technicians must all be fully integrated Policy Recommendation: The U.S. government can help level the playing field for U.S. airlines and their employees by investing in NextGen to promote greater safety and efficiency. The administration and Congress must work to accelerate the FAA’s NextGen plan. The scope, duration, and cost of NextGen require that decisions on critical aspects, such as funding and equipage, must be timely, accurate, and focused on the overall needs of the public. Strong government leadership, consistent long-term funding, and cooperative planning are all needed in establishing standards and requiring minimum levels of equipage.

#### Federal investment spurs industry adoption and overcomes all current stalemates

Bin Salam 12 Fellow, Eno Center for Transportation [Sakib bin Salam, NextGen: Aligning Costs, Benefits and Political Leadership, April 2012, ENO Center for Transportation]

The aviation system that is part of the life-blood of our economy is poised to face rising demand with limited additional capacity and outdated technology. This could put considerable stress on the system in terms of con- gestion and efficiency. The Next Generation Air Transportation System (NextGen) represents a series of incre- mental policies, procedures, and technological changes to modernize the air traffic control (ATC) system into a more efficient, state-of-the-art satellite-based system. On the technology side, NextGen is composed of two main components: aircraft based equipment that re- cords and transmits the exact location of the aircraft using Global Positioning System (GPS), and ground based infrastructure that can receive and analyze the GPS data. Infrastructural improvements also entail devising more direct and fuel-efficient routes, and upgrading the computer and backup system used at 20 Federal Avia- tion Administration (FAA) air traffic control centers nationwide. The infrastructure implementation is currently in the hands of the FAA and funded by the Airport and Airway Trust Fund (AATF), while aircraft equipage is expected to be paid for by the operators. On-board equipage could allow improved decision-making capabilities and accessibility during adverse weather, as well as better data communications between cockpit and ATC. This more precise system has the potential to reduce the minimum aircraft separation standard and allow more direct flight patterns, thus decreasing fuel consumption, carbon emissions, and congestion. On the policy-side, there are several obstacles to NextGen that hinder progress and the likelihood of a timely and cost- efficient implementation. First of all, there are uncertainties regarding the extent of the benefits NextGen can potentially provide. It is difficult to make forecasts about how much congestion or fuel consumption can be reduced to make the **infrastructure** investment worthwhile. This makes it chal- lenging to create sustained political, financial, and industry support for the project Secondly, there are doubts about costs and the FAA’s ability to deliver technology solutions of this magnitude. In the early 1980s, aviation modernization projects were pro- jected to cost $12 billion and be ready in 10 years. NextGen **infrastructure** and equipage is now estimated to cost about $40 billion with expected completion by 2025.1 Testimony by the US Department of Transportation Inspector Gen- eral and a recent report by the Government Accountability Office (GAO) have pointed out cost overruns and delays in several NextGen programs. This continued uncertainty regarding the total infrastructure and equipage cost figure of NextGen has planted seeds of doubt amongst stakeholders and potential NextGen beneficiaries. Third, the airlines and general aviation users have been hesi- tant to bear equipage costs due to low profitability, econom- ic turmoil, and a lack of clear incentives to justify investing in NextGen. Operators are unlikely to invest until, at a minimum, the FAA is ready to deliver the promised benefits. This leads to a stalemate: operators are uncertain whether investing in NextGen is worthwhile, when the infrastructure is not yet fully in place, and without equipage the infrastruc- ture by itself is ineffective. The FAA has mandated equi- page of Automated Dependent Surveillance-Broadcast Out (ADS-B) that allows the equipped aircraft to send transmis- sion to other equipped aircraft ADS-B ground stations for all operators by 2020. However, there is uncertainty over when other NextGen on-board equipment will be required, particularly ADS-B In which allows the equipped aircraft to receive transmission from other ADS-B ground stations and other aircraft Fourth, NextGen faces funding issues that pose some very difficult policy decisions. Work on the ground infrastruc- ture aspect of NextGen is currently funded by the Facilities and Equipment account of the AATF and some progress, albeit slow, has been made on this project. However, recent reports by the Congressional Budget Office and the Gov- ernment Accountability Office show that current AATF revenues are inadequate to fund NextGen.2 Despite recent resolution over the long overdue FAA reauthorization bill, little progress has been regarding securing a full-fledged modernization funding plan. The current bill authorizes a flat amount of $2.731 billion over four years for Next- Gen and funding is still subject to annual appropriation. A project that is already endangered by uncertainties regarding its worth would benefit from a stable and adequate funding source. A fifth problem facing NextGen is lack of Congressional political leadership in prioritizing a project of such potential value. In July 2011 the House of Representatives passed a short-term extension bill that failed to pass the senate, resulting in a shutdown that lasted a fortnight. The AATF received no tax revenues during the shutdown. As Con- gressional leaders argued over the Essential Air Services program, the trust fund lost over $400 million in foregone tax revenues. Those are funds that could have potentially been used towards an investment like NextGen. Further- more, according to the FAA some of the NextGen program delays can be attributed to the furlough of some of the FAA employees in July 2011 and a freeze on contractor funding which resulted in work stoppage orders for several projects.3 This impact of the impasse on NextGen was also docu- mented on the GAO report on the FAA’s NextGen cost- management.4 In order for NextGen to succeed, there must be greater certainty about potential benefits and costs. In the highly competitive low profit-margin airline industry, few want to take on the burden of paying for something that spreads speculative benefits so widely. It will also be essential to have a mechanism that raises sufficient capital for NextGen **infrastructure** in a transparent and equitable manner, while imposing minimal burdens on those who pay for it. Without a sustainable, stable, and reliable strategy for both continued infrastructural improvements and incentives for equipage, there is no guarantee that NextGen can be implemented in a timely and cost-effective manner. Without strong politi- cal leadership, a clear and unbiased delineation of costs and benefits, a transparent source of funds, and incentives for operators to equip, it is unlikely that NextGen benefits can be delivered in a timely manner if at all.

#### Building the infrastructure will incentivize users to pay for the equipage – overcomes all private investment barriers

Bin Salam 12 Fellow, Eno Center for Transportation [Sakib bin Salam, NextGen: Aligning Costs, Benefits and Political Leadership, April 2012, ENO Center for Transportation]

Most US operators have been less than enthusiastic about paying for NextGen equipage because the technology does not provide benefits unless the infrastructure and ATC procedures are in place to use it. Investing in new technol- ogy for which the infrastructure is not yet in place poses a significant financial risk operators are not incentivized to bear. Equipage is at a standstill due to concerns of rapid technological obsolescence and uncertainty. “If I go first, I’ll have to bear the cost of updating the software, and when NextGen is turned on, I’ll have the oldest, most obsolete systems out there”,34 is an oft-expressed concern, accord-ing to Russell Chew of Nexa Capital, a private financing firm for NextGen equipage. Operators have also expressed concerns regarding the lack of control over benefits arising from NextGen, which can only be reaped if a majority of operators decide to equip. If only some operators equip, that may lead to freeriding by other operators. Low profitability due to increasing fuel costs and post-9/11 recessionary demand-side shocks is another reason why commercial carriers have been reluctant to pay for NextGen equipage. Some carriers have lobbied in vain for federal stimulus funding for NextGen equipage during this period.35 Operators would have an incentive to invest in NextGen if they can be sure it will generate profits by reducing operating costs. As discussed earlier, NextGen could significantly reduce operating costs by reducing delay and fuel consump- tion. Whether this would increase airline profits depends to some extent on the intensity of competition between opera- tors.36 However, assuming that the underlying assumptions and analyses are correct and annual airline benefits exceed the total equipage cost, there is a sensible business case for the industry as a whole to invest in NextGen, meaning there is a reason for operators to pay for their own equipage. From a policy side, a strong set of incentives needs to be provided to facilitate this equipage. The FAA has already begun to provide some aid to airlines for equipage, but it has not been enough to counter the continuing risk across the larger industry.37