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# 1NC Shell- China Relations DisAd

**1. Uniqueness**

**US- China relations high now- pivotal issues put relations on the brink**

**East West Institute. 2009.** [“ The Pivotal Relationship: How Obama Should Engage China.” East West Institute. <http://www.ciaonet.org/wps/ewi/0019248/f_0019248_16458.pdf> accessed June 27]

The United States and China have developed what is arguably the most important relationship in the 21st century. The interactions between the world’s largest developed state and the world’s largest developing country profoundly affect the stability of both the Asia-Pacific region and the rest of the world. Under the Bush administration, relations got off to a rocky start following the EP-3 spy plane collision in 2001 and political differences exacerbated by U.S. weapons deliveries to Taiwan. Since then, however, U.S.-China relations have been regarded by many experts on both sides of the Pacific as generally stable. Of course there are very real differences that have troubled and could well continue to hamper the potential of the U.S.-China relationship. But while other areas of Bush’s foreign policy are being scaled back or reversed by the Obama administration, Secretary of State Hillary Clinton has expressed a desire to build on the Bush administration’s engagement with China from one focused on common economic concerns to a comprehensive dialogue addressing a broader range of strategic interests, “more in keeping with the important role that China is playing and will be playing as both a regional and international player.” That last comment by Clinton says it all. The most pressing security concerns for the United States—including Afghanistan, which the Obama administration has labeled the most important military challenge facing the country—cannot be effectively managed without constructive Chinese participation. Likewise, China needs constructive U.S. engagement in dealing with its high-priority issues, including Taiwan and China’s growing involvement in global affairs that affect its own strategic future. Furthermore, both countries find themselves mired in a global economic crisis that can be resolved only by close cooperation between them and the rest of the international community. It was with such needs in mind that the East West Institute invited two highly respected experts on Sino-U.S. relations—one Chinese and one American—to provide their respective hopes and expectations on what they would like to see in the Obama administration’s China policy: Liu Xuecheng and Robert Oxnam. Liu is Senior Fellow and Executive Vice President of the Center for China-U.S. Relations Studies at the China Institute of International Studies. Oxnam was President of The Asia Society for over a decade (1981-92). Most recently, he served on the Asia policy advisory team for the Obama presidential campaign. (Oxnam’s views in this paper are his own—he is in no way speaking for the Obama administration.) Both authors envision opportunities for reframing the China-U.S. relationship in a way that will enable the two countries to collectively manage regional and global challenges. To this end, they advocate expanding and strengthening existing high-level dialogue mechanisms such as the Strategic Economic Dialogue, while identifying other strategic areas in which this pivotal bilateral relationship may be utilized for practical solutions to common global concerns. For example, Oxnam suggests that the United States and China develop the world’s first “green relationship” to lead global efforts on climate change issues, which dovetails with the Obama administration’s stated goal to make climate change issues one of its policy priorities.1 The way ahead in U.S.-China ties, though, will not be without its difficulties— some of them potentially serious and even destabilizing to the relationship. Tensions emerged in the U.S.-China relationship from the first day of Obama’s presidency. Chinese officials were riled first by President Obama’s inauguration speech, which referred to the defeat of communism and criticized governments that suppress dissent, and then by Treasury Secretary Timothy Geithner’s accusation of China as a currency manipulator during his confirmation hearings. Liu and Oxnam also recognize that certain potentially divisive issues will need careful attention, such as Taiwan, Tibet, human rights, China’s currency policies, and trade disagreements. Nevertheless, both authors agree on the need to continue developing the U.S.-China relationship from a long-term and strategic perspective in a way that allows both countries to focus on their myriad common concerns while addressing their strategic differences in an honest and constructive manner.

**2. Link**

**US militarization of space destroys relations with China**

**Chambers. March 2009. Master’s thesis Naval Postgraduate school.** [Rob W, “ China's Space Program: A New Tool for PRC "Soft Power" in International Relations?” DTIC. http://edocs.nps.edu/npspubs/scholarly/theses/2009/Mar/09Mar\_Chambers.pdf accessed June 25]

Where do we go from here? Looking at the bottom line, space is no longer the Cold War race between the Americans and the Soviets. As Nicolas Peter notes, “major space-faring nations are now using space as a political tool to reach non-traditional partners in order to build trusting relationships across political borders, illustrating that foreign policy and space are now increasingly overlapping...[;]greater international cooperation is the way forward for major space activities”.328 And China certainly is making its mark in the space world, and is not going to leave the space arena anytime soon. Johnson-Freese comments that “They [the Chinese] want to play a leadership role for developing countries that want to get into space. It’s just a win-win for them…they are making political connections, it helps them with oil deals and they bring in hard currency to feed back into their own program to make them even more commercially competitive”.329 The sooner Asia and the United States cautiously accommodate a more powerful, space-capable China, the more they will able to leverage and perhaps even shape its rise, weaning it away from a military race in space, and perhaps ensuring there is truly peaceful development and benefit from space for all nations. America has shown the rest of the world far too much edgy “hard power” diplomacy, including in the space realm. In doing so, it has isolated itself and thereby harmed its own security. Especially with regard to China, the United States is in danger of mischaracterizing the motivations and rationales behind China’s space program and, as a result, pursuing counterproductive policies that could actually create incentives for other countries to side with China against American interests in space. We have already seen a drop in U.S. dominance in commercial space, and the rise of ITAR-free programs as a result of our insecurities about technology transfer. The Chinese ASAT test is usually seen as a military test purely designed as an asymmetric capability to attack America’s overdependence on space assets, normally in the context of a Sino-U.S. wartime scenario (i.e., over Taiwan).330 But as China expands its number of military and civilians satellites and thereby incurring the same space-borne liabilities as the U.S., why is it not also vulnerable to a space attack? Bottom line, as Johnson-Freese argues, “other countries are clearly interested in working with China on space, regardless of the American stance. Therefore, the United States can either be involved and retain some measure of control through leadership, or watch from the sidelines”.331

**US China relations are key to solve every global impact**

**Cohen 2009 - former U.S. secretary of defense** [Maurice R. Greenberg is chairman and CEO of C.V. Starr & Co., Inc. “Smart Power in U.S.-China Relations,” pg online @ http://csis.org/files/media/csis/pubs/090309\_mcgiffert\_uschinasmartpower\_web.pdf //ef)

The evolution of Sino-U.S. relations over the next months, years, and decades has the potential to have a greater impact on global security and prosperity than any other bilateral or multilateral arrangement. In this sense, many analysts consider the US.-China diplomatic relationship to be the most influential in the world. Without question, strong and stable U.S. alliances provide the foundation for the protection and promotion of U.S. and global interests. Yet within that broad framework, the trajectory of U.S.-China relations will determine the success, or failure, of efforts to address the toughest global challenges: global financial stability, energy security and climate change, nonproliferation, and terrorism, among other pressing issues. Shepherding that trajectory in the most constructive direction possible must therefore be a priority for Washington and Beijing. Virtually no major global challenge can be met without U.S.-China cooperation. The uncertainty of that future trajectory and the "strategic mistrust" between leaders in Washington and Beijing necessarily concerns many experts and policymakers in both countries. Although some U.S. analysts see China as a strategic competitor—deliberately vying with the United States for energy resources, military superiority, and international political influence alike— analysis by the Center for Strategic and International Studies (CSIS) has generally found that China uses its soft power to pursue its own, largely economic, international agenda primarily to achieve its domestic objectives of economic growth and social stability.1 Although Beijing certainly has an eye on Washington, not all of its actions are undertaken as a counterpoint to the United States. In addition, CSIS research suggests that growing Chinese soft power in developing countries may have influenced recent U.S. decisions to engage more actively and reinvest in soft-power tools that have atrophied during the past decade. To the extent that there exists a competition between the United States and China, therefore, it may be mobilizing both countries to strengthen their ability to solve global problems. To be sure, U.S. and Chinese policy decisions toward the respective other power will be determined in large part by the choices that leaders make about their own nations interests at home and overseas, which in turn are shaped by their respective domestic contexts. Both parties must recognize—and accept—that the other will pursue a foreign policy approach that is in its own national interest. Yet, in a globalized world, challenges are increasingly transnational, and so too must be their solutions. As demonstrated by the rapid spread of SARS from China in 2003, pandemic flu can be spread rapidly through air and via international travel. Dust particulates from Asia settle in Lake Tahoe. An economic downturn in one country can and does trigger an economic slowdown in another. These challenges can no longer be addressed by either containment or isolation. What constitutes the national interest today necessarily encompasses a broader and more complex set of considerations than it did in the past As a general principle, the United States seeks to promote its national interest while it simultaneously pursues what the CSIS Commission on Smart Power called in its November 2007 report the "global good."3 This approach is not always practical or achievable, of course. But neither is it pure benevolence. Instead, a strategic pursuit of the global good accrues concrete benefits for the United States (and others) in the form of building confidence, legitimacy, and political influence in key countries and regions around the world in ways that enable the United States to better confront global and transnational challenges. In short, the global good comprises those things that all people and governments want but have traditionally not been able to attain in the absence of U.S. leadership. Despite historical, cultural, and political differences between the United States and China, Beijing's newfound ability, owing to its recent economic successes, to contribute to the global good is a matter for common ground between the two countries. Today there is increasing recognition that no major global challenge can be addressed effectively, much less resolved, without the active engagement of—and cooperation between—the United States and China. The United States and China—the worlds first- and third-largest economies—are inextricably linked, a fact made ever more evident in the midst of the current global financial crisis. Weak demand in both the United States and China, previously the twin engines of global growth, has contributed to the global economic downturn and threatens to ignite simmering trade tensions between the two countries. Nowhere is the interconnectedness of the United States and China more clear than in international finance. China has $2 trillion worth of largely U.S. dollar-denominated foreign exchange reserves and is the world's largest holder—by far—of U.S. government debt. Former treasury secretary Henry M. Paulson and others have suggested that the structural imbalances created by this dynamic fueled the current economic crisis. Yet. China will almost certainly be called on to purchase the lion's share of new U.S. debt instruments issued in connection with the U.S. stimulus and recovery package. Secretary of State Hillary Rodham Clinton's February 23.2009, reassurance to Beijing that U.S. markets remain safe and her call for continued Chinese investment in the U.S. bond market as a means to help both countries, and the world, emerge from global recession underscored the shared interest—and central role—that both countries have in turning around the global economy quickly. Although China's considerable holdings of U.S. debt have been seen as a troubling problem, they are now being perceived as a necessary part of a global solution. Similarly, as the worlds two largest emitters of greenhouse gases, China and the United States share not only the collateral damage of energy-inefficient economic growth, but a primary responsibility to shape any ultimate global solutions to climate change. To date, cooperation has been elusive, owing as much to Washington's reluctance as to Beijing's intransigence. Painting China as the environmental bogeyman as an excuse for foot-dragging in policymaking is no longer an option; for its part, China, as the world's top polluter, must cease playing the developing-economy card. Yet energy security and climate change remain an area of genuine opportunity for joint achievement. Indeed, U.S.-China cooperation in this field is a sine qua non of any response to the energy and climate challenges. The sheer size of the Chinese economy means that collaboration with the United States could set the de facto global standards for etficiency and emissions in key economic sectors such as industry and transportation. Climate change also provides an area for cooperation in previously uncharted policy waters, as in emerging Arctic navigational and energy exploration opportunities. Washington and Beijing also share a deep and urgent interest in international peace and stability. The resumption of U.S.-China military contacts is a positive development. As two nuclear powers with worldwide economic and strategic interests, both countries want to minimize instability and enhance maritime security, as seen by parallel antipiracy missions in the waters otT Somalia. Joint efforts in support of United Nations peacekeeping, nonproliferation, and counterterrorism offer critical areas for bilateral and multilateral cooperation. Certainly, regional and global security institutions such as the Six-Party Talks concerning North Korea or the UN Security Council require the active engagement of both Washington and Beijing. Even more broadly, crisis management in geographic regions of mutual strategic interest like the Korean peninsula, Iran, or Burma require much more Sino-U.S. communication if the two countries are to avoid miscalculation and maximize opportunities to minimize human sutfering. Increasing the number of mid-level military-to-military exchanges would help in this regard. The United States and China could do more to cooperate on law enforcement to combat drug trafficking and organized crime in Western China. Afghanistan is competing with Burma as the main provider of narcotics to China; Washington could use its influence with the International Security Assistance Force in Kabul to develop a joint antinarcotics program. This could potentially build networks and joint capabilities that might be useful for U.S.-China cooperation on the issue of Pakistan. In addition, Washington should also encourage NATO-China cooperation along the Afghan border. Collaborating under the auspices of the Shanghai Cooperation Organization (SCO) might provide an additional framework for Beijing and Washington to address Central Asian security issues in a cooperative manner. 1he SCO, which includes Pakistan as an observer and will convene a multinational conference on Afghanistan in March 2009, has long made curbing narcoterrorism in Afghanistan a priority. In addition, the VS. Drug Enforcement Agency and the Chinese Anti-Narcotics Bureau should expand cooperation on interdiction and prosecution of heroin and meth traffickers. To be sure, there are a number of areas of serious divergence between Washington and Beijing. This should surprise no one. The United States has disagreements with even its allies. Two large powers with vastly dilferent histories, cultures, and political systems are bound to have challenges. History has shown, however, that the most effective way of addressing issues is for the U.S. and Chinese governments to engage in quiet diplomacy rather than public recrimination. In the U.S.-China context, there is often little to be gained—and much to be lost in terms of trust and respect—by a polarizing debate. Any differences, moreover, must not necessarily impede Sino-U.S. cooperation when both sides share strong mutual interests. I;. Scott Fitzgerald wrote that "the test of a first-rate intelligence is the ability to hold two opposed ideas in the mind at the same time, and still retain the ability to function."3 Effective policy toward China by the United States, and vice versa, will require this kind of dual-minded intelligence. Moreover, working together on areas of mutual and global interest will help promote strategic trust between China and the United States, facilitating possible cooperation in other areas. Even limited cooperation on specific areas will help construct additional mechanisms for bilateral communication on issues of irreconcilable disagreement. In fact, many of the toughest challenges in U.S.-China relations in recent years have been the result of unforeseen events, such as the accidental bombing of the Chinese embassy in Belgrade in May 1999 and the EP-3 reconnaissance plane collision in April 2001. Building trust and finding workable solutions to tough problems is the premise behind the Obama administrations foreign policy of smart power, as articulated by Secretary of State Clinton. Smart power is based on, as Secretary Clinton outlined in her confirmation hearing, the fundamental belief that 'We must use... the full range of tools at our disposal—diplomatic, economic, military, political and cultural—picking the right tool, or combination of tools, for each situation."' As the CS1S Commission on Smart Power noted in November 2007, "Smart Power is neither hard nor soft—it is the skillful combination of bothIt is an approach that underscores the necessity of a strong military, but also invests heavily in alliances, partnerships and institutions at all levels... .°5 As such, smart power necessarily mandates a major investment in a U.S.-China partnership on key issues. 'The concept enjoys broad support among the Chinese and American people and, by promoting the global good, it reaps concrete results around the world. There should be no expectation that Washington and Beijing will or should agree on all, or even most, questions. But the American and Chinese people should expect their leaders to come together on those vital issues that require their cooperation. U.S.-China partnership, though not inevitable, is indispensable.

**4. Impact**

Nuclear war

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

If current market turmoil seriously damaged the performance and prospects of India and China, the current crisis could join the Great Depression in the list of economic events that changed history, even if the recessions in the West are relatively short and mild. The United States should stand ready to assist Chinese and Indian financial authorities on an emergency basis--and work very hard to help both countries escape or at least weather any economic downturn. It may test the political will of the Obama administration, but the United States must avoid a protectionist response to the economic slowdown. U.S. moves to limit market access for Chinese and Indian producers could poison relations for years. For billions of people in nuclear-armed countries to emerge from this crisis believing either that the United States was indifferent to their well-being or that it had profited from their distress could damage U.S. foreign policy far more severely than any mistake made by George W. Bush. It's not just the great powers whose trajectories have been affected by the crash. Lesser powers like Saudi Arabia and Iran also face new constraints. The crisis has strengthened the U.S. position in the Middle East as falling oil prices reduce Iranian influence and increase the dependence of the oil sheikdoms on U.S. protection. Success in Iraq--however late, however undeserved, however limited--had already improved the Obama administration's prospects for addressing regional crises. Now, the collapse in oil prices has put the Iranian regime on the defensive. The annual inflation rate rose above 29 percent last September, up from about 17 percent in 2007, according to Iran's Bank Markazi. Economists forecast that Iran's real GDP growth will drop markedly in the coming months as stagnating oil revenues and the continued global economic downturn force the government to rein in its expansionary fiscal policy. All this has weakened Ahmadinejad at home and Iran abroad. Iranian officials must balance the relative merits of support for allies like Hamas, Hezbollah, and Syria against domestic needs, while international sanctions and other diplomatic sticks have been made more painful and Western carrots (like trade opportunities) have become more attractive. Meanwhile, Saudi Arabia and other oil states have become more dependent on the United States for protection against Iran, and they have fewer resources to fund religious extremism as they use diminished oil revenues to support basic domestic spending and development goals. None of this makes the Middle East an easy target for U.S. diplomacy, but thanks in part to the economic crisis, the incoming administration has the chance to try some new ideas and to enter negotiations with Iran (and Syria) from a position of enhanced strength. Every crisis is different, but there seem to be reasons why, over time, financial crises on balance reinforce rather than undermine the world position of the leading capitalist countries. Since capitalism first emerged in early modern Europe, the ability to exploit the advantages of rapid economic development has been a key factor in international competition. Countries that can encourage--or at least allow and sustain--the change, dislocation, upheaval, and pain that capitalism often involves, while providing their tumultuous market societies with appropriate regulatory and legal frameworks, grow swiftly. They produce cutting-edge technologies that translate into military and economic power. They are able to invest in education, making their workforces ever more productive. They typically develop liberal political institutions and cultural norms that value, or at least tolerate, dissent and that allow people of different political and religious viewpoints to collaborate on a vast social project of modernization--and to maintain political stability in the face of accelerating social and economic change. The vast productive capacity of leading capitalist powers gives them the ability to project influence around the world and, to some degree, to remake the world to suit their own interests and preferences. This is what the United Kingdom and the United States have done in past centuries, and what other capitalist powers like France, Germany, and Japan have done to a lesser extent. In these countries, the social forces that support the idea of a competitive market economy within an appropriately liberal legal and political framework are relatively strong. But, in many other countries where capitalism rubs people the wrong way, this is not the case. On either side of the Atlantic, for example, the Latin world is often drawn to anti-capitalist movements and rulers on both the right and the left. Russia, too, has never really taken to capitalism and liberal society--whether during the time of the czars, the commissars, or the post-cold war leaders who so signally failed to build a stable, open system of liberal democratic capitalism even as many former Warsaw Pact nations were making rapid transitions. Partly as a result of these internal cultural pressures, and partly because, in much of the world, capitalism has appeared as an unwelcome interloper, imposed by foreign forces and shaped to fit foreign rather than domestic interests and preferences, many countries are only half-heartedly capitalist. When crisis strikes, they are quick to decide that capitalism is a failure and look for alternatives. So far, such half-hearted experiments not only have failed to work; they have left the societies that have tried them in a progressively worse position, farther behind the front-runners as time goes by. Argentina has lost ground to Chile; Russian development has fallen farther behind that of the Baltic states and Central Europe. Frequently, the crisis has weakened the power of the merchants, industrialists, financiers, and professionals who want to develop a liberal capitalist society integrated into the world. Crisis can also strengthen the hand of religious extremists, populist radicals, or authoritarian traditionalists who are determined to resist liberal capitalist society for a variety of reasons. Meanwhile, the companies and banks based in these societies are often less established and more vulnerable to the consequences of a financial crisis than more established firms in wealthier societies. As a result, developing countries and countries where capitalism has relatively recent and shallow roots tend to suffer greater economic and political damage when crisis strikes--as, inevitably, it does. And, consequently, financial crises often reinforce rather than challenge the global distribution of power and wealth. This may be happening yet again. None of which means that we can just sit back and enjoy the recession. History may suggest that financial crises actually help capitalist great powers maintain their leads--but it has other, less reassuring messages as well. If financial crises have been a normal part of life during the 300-year rise of the liberal capitalist system under the Anglophone powers, so has war. The wars of the League of Augsburg and the Spanish Succession; the Seven Years War; the American Revolution; the Napoleonic Wars; the two World Wars; the cold war: The list of wars is almost as long as the list of financial crises. Bad economic times can breed wars. Europe was a pretty peaceful place in 1928, but the Depression poisoned German public opinion and helped bring Adolf Hitler to power. If the current crisis turns into a depression, what rough beasts might start slouching toward Moscow, Karachi, Beijing, or New Delhi to be born? The United States may not, yet, decline, but, if we can't get the world economy back on track, we may still have to fight.

# 1NC Shell - Militarization

**No space race now – China’s space program not developed enough**

**Global Times, 10-13-10** [accessed 6-27-11, China has no desire for new space race, http://opinion.globaltimes.cn/commentary/2010-10/581744.html]

In the 21st century, the eyes of the world are turning to space again. New programs to explore space's resources are being launched in many countries, including China. Is there a new space race? Why are so many countries keen on lunar exploration? What benefits can the quest for space bring? Global Times reporter Yu Jincui (GT) talked to Ouyang Ziyuan (Ouyang), a senior consultant at China's lunar exploration program, on these issues. GT: Why did China initiate its lunar exploration program? What influence will the program have on China's devel-opment? Ouyang: Strictly speaking, China is a developing country. Some people argue that rather than explore the moon, we should concentrate on dealing with problems on Earth. It is understandable. However, from a broader development perspective, we should not only be engaged in lunar exploration, but also step up our pace. The lunar exploration program covers many high-tech fields. It is very scientifically demanding, which stimulates the technological upgrades and innovations. Lunar exploration is a threshold for exploring deep space and remote space, and it could provide the basic experience for eventually exploring other planets. There are unimaginable abundant natural resources on the moon, such as rare earths, or uranium and titanium ores. The titanium ore reserve on the moon is the same size as the whole of China. Although we are not able to exploit these resources due to the extremely high cost and technological limitations, as scientists, we have the responsibility to prove the existence of these resources and inform the people. The moon has a very huge energy reserve. Japanese scientists recently came up with a design idea that if humanity could build a moon belt for solar power generation and transmitting energy back to the earth, human energy needs could be permanently satisfied. Since the 1990s, a total of nine lunar probes have been launched into space, two from China (including the newly launched Chang'e-2 satellite), three from the US, one from Europe, two from Japan, and one from India. The world is witnessing the climax of the second round of lunar exploration. All the countries involved are expecting to discover more comprehensive and concrete knowledge about the moon. If China doesn't explore the moon, we will have no say in international lunar exploration and can't safeguard our proper rights and interests. The contribution of the Apollo project of the US is amazing. According to one calculation, the input-output ratio is 1:14. It drove the development of high-tech worldwide and made the US a leader in the high-tech field for almost 20 years. China's lunar exploration program is nowhere near as big as Apollo project in size, but it could also make great contributions in promoting technological improvements, scientific progress and talents cultivation. China should not stay in the cradle of the Earth forever. The Chinese people should make contributions to the human development in the field of space exploration. GT: Is there a new space race? Ouyang: I am strongly against seeing lunar exploration as a race. The second round of lunar exploration is quite different from the first one conducted by the US and the former Soviet Union, which was a struggle for hegemony in space. Every competent country will certainly take part in space exploration out of self-development and for technological and scientific progress. These countries are working together to contribute to the sum of human knowledge and development. Those who highlight China's alleged ambitions for control may have different agendas and motivations. GT: How is China's space program by international standards? Ouyang: Different countries have different advantages and disadvantages. Japan has better equipment and India has the advantage over China in computer software. In the final round of a marathon, several groups form. We could use this analogy to describe the current situation in the field of lunar exploration. The US and Russia belong to the leading group with the strongest strength. Although China is the only other country to have performed a spacewalk, we still lag far behind these two countries. The second group refers to those that have launched lunar probes, such as India, Europe, and Japan. That's where China is. Of course, there is a third group covering all the countries that are preparing to get involved in the field. Out of the needs for their own national development, more countries are expected to join the team in the future.

**All space technology would be perceived as a threat to China – dual-use technology**

**Shixiu 2007 - senior fellow of military theory studies and international relations at the Institute for Military Thought Studies, Academy of Military Sciences of the PLA** [Bao, Winter 2007, China Security, “Emerging Threat,” <http://www.wsichina.org/cs5_1.pdf>, accessed June 21, 2011]

The U.S. position makes another faulty assumption that national space programs and space assets can be effectively dissected into commercial and civilian uses versus military uses and capabilities. This is out of tune with technological developments and military inevitabilities. China’s space program is not transparent in many respects, but neither is that of the United States. The reality is that many space technologies are inherently dual-use and it is therefore very difficult to distinguish sufficiently and effectively the intentions and capabilities in space. Without some kind of mutual understanding on controlling arms in space, suspicion will dominate relations between China and the United States.

**US space weaponization will lead to additional Chinese ASAT and nuclear weapons**

**Blazejewski, 2008 –** **JD/MPA degree in NYU School of Law, previous work in American Civil Liberties Union (ACLU), Cleary Gottlieb Steen & Hamilton LLP, and the Democratic staff of the House Ways and Means Committee.** [Kenneth S., 2008, “Space Weaponization and US-China Relations,” <http://www.au.af.mil/au/ssq/2008/Spring/blazejewski.pdf>,” Date accessed 6/26/2011]

First, if the United States proceeds with space weaponization China will respond by bolstering its own military capabilities. China’s response will seek to preserve the asymmetric threat it poses to US space assets and maintain its nuclear deterrent. Under each of the interpretations considered, China is not willing to allow the United States to build up its space weapons program unchallenged. In the least, China would develop additional ASAT weapons to which the United States would seek to develop effective countermeasures. Alternatively or in addition, China could invest in more ICBMs and nuclear warheads acquiring the capacity to overwhelm a BMD shield. An option less likely in the near future, China could counter US space weaponization by deploying its own space weapons. Other potential Chinese responses include adopting a “launch on warning” policy or abandoning its no-first-use pledge. Each of these strategies would seek to counter the effectiveness of US space weapons. The United States, of course, could always respond to China’s response, but such tit-for-tat policy making risks devolving into an arms race. Chinese officials claim that an arms race would “likely emerge” unless a negotiated solution can be reached on PAROS. It is noteworthy, however, that under at least two interpretations, this is not China’s preferred outcome. Under the first and second interpretations, China will only proceed with further developing ASAT technology and acquiring additional weapons if it cannot be assured that the United States does not plan to weaponize outer space.

**ASAT use causes space accidents and war – draws in Russia, Japan, and India – also destroys the commercial sector – the time frame is seconds**

**Beljac, 2008 – professor at University of Melbourne** [Marko, March 31, 2008, Foreign Policy in Focus, Institute for Policy Studies, “Arms Race in Space,” <http://www.fpif.org/articles/arms_race_in_space>, accessed June 23, 2011]

In fact we have just learnt that the Air Force is working on plans to develop a “counter-ASAT” space weapon system by 2011. Reports suggest that most aspects of these plans are secret but some information has emerged in the public domain that sheds some interesting light on US space weapons planning. The system is known as the Rapid Attack Identification Detection Reporting System (Raidrs) Block 20. The rationale for this program is to develop information in a timely fashion to enable the Pentagon to intercept a direct-ascent anti-satellite weapon, which are launched from the Earth, before it strikes its target in low earth orbit. But if the asset used to achieve this objective is space based then this may well enable BMD hawks to also obtain a space based BMD interception capability and there is no reason to suppose that a “counter-ASAT” weapon could not also function as an offensive space weapon. Nascent Asian Space Race As noted, China has tested an anti satellite weapon and Russia has stated that it would not allow other states to control space and threaten its own space assets. In Asia a nascent space race seems to be developing between China, Japan and India. In the far future the large deposits of Helium-3 on the moon's surface could lead to a militarized race to colonize the moon to secure Helium-3 for nuclear fusion energy technologies based on anuetronic fusion reactions in the context of depleting hydro-carbons. Washington argues that it has too much commercially riding on space to allow others to have the potential capability of disrupting U.S. space assets. In 1998 the failure of one satellite, the Galaxy IV, made some 80% of pagers in the U.S. malfunction. Though the latest Russian and Chinese space arms control proposal is flawed, because of the clumsy definition of what constitutes a “space weapon,” this doesn’t mean that space arms control is not possible in principle. A global space arms control regime would protect U.S., Russian, Chinese, and even Australian space assets. An arms race in space will eventually lead other states to catch up with the United States and thereby placing Washington's commercial satellites at risk. Space weaponization may well have cataclysmic consequences given the link between space weapons and nuclear weapons strategy. This is because Russia, and the United States, to a certain extent rely on satellites for early warning of nuclear attack. As other space nations with nuclear weapons develop their space capacity it is expected that they will follow suit. The deployment of space weapons means that the first shot in a nuclear war would be fired against these early warning satellites. Currently strategic planners in Moscow have about 10 minutes between warning of an attack and the decision to launch nuclear weapons in response before they impact. Weapons in space would lower this in certain scenarios down to seconds. This would also apply for weapons placed in space that would be considered to be defensive such as say a space based BMD interceptor or a “counter-ASAT” weapon. On occasion, ground warning radars falsely show that a nuclear attack has been launched. In the 1990s a false alarm went all the way up to President Boris Yeltsin and was terminated after approximately eight minutes. We are still here, noted analysts believe, because warning satellites would have given Moscow real time information showing the alarm to be false. Should such a false alarm coincide with an accident involving an early warning satellite when space weapons are known to exist, an accidental nuclear exchange could result. The risk would increase if the false alarm occurred during a crisis. Space weapons could lead to itchy fingers on nuclear triggers. They would therefore significantly increase the importance nuclear weapon states place upon nuclear deterrence.

# \*\*\*Extensions\*\*\*

# \*\*\*Uniqueness\*\*\*

# 2nc Uniqueness

**Relations high – Bilateral talks sustains relationship**

**Xinhua**, 6-21-**11**, [ Vice FM expresses confidence in future of China-U.S. Relationship, 6-21-11, http://news.xinhuanet.com/english2010/china/2011-06/21/c\_13941904.htm ]

BEIJING, June 21 (Xinhua) -- Chinese Vice Foreign Minister Cui Tiankai on Tuesday said he expected China-U.S. ties to continue to warm, saying that both parties can build their cooperative partnership through enhancing mutual trust and deepening cooperation. "I am confident about the future of China-U.S. ties," Cui told reporters in an interview on the first round of consultations on the Asia-Pacific region between the two countries. Cui and U.S. Assistant Secretary of State Kurt Campbell will co-host the consultations in Honolulu, Hawaii on Saturday. The two countries will exchange views on the situation of the Asia-Pacific region, their respective policies on the area, as well as other issues of common concern. As long as China and the United States abide by the principles of the three China-U.S. joint communiques and the China-U.S. Joint Statement, enhance dialogue and communication, strengthen mutual trust and cooperation and properly handle the differences, the two countries can continue to improve ties, Cui said. Since President Hu Jintao visited the United States in January, China-U.S. relations have entered a new phase in which both parties are committed to working together to build a cooperative partnership based on mutual respect and mutual benefit, Cui said. China and the United States held their second annual high-level Consultation on People-to-People Exchange in April and the third Strategic and Economic Dialogues in May. Both parties have deepened cooperation in a variety of areas and coordinated on important international and regional issues, he said. However, Cui said China and the United States have to properly handle issues such as the Taiwan issue, Tibet-related issues as well as those concerning economic issues and trade as well as human rights. The sound and steady development of China-U.S. relations is beneficial to both parties and the world, Cui said. There will be good chances to further develop China-U.S. ties in the further, he said. China and the United States should enhance mutual trust through conducting dialogues at different levels, Cui said. The two countries, which shoulder broad common interests, as well as deepen cooperation in the bilateral, multilateral and global spheres. They also should properly handle differences and sensitive issues based on the principle of equality and mutual respect, he said. Besides, people-to-people exchanges should be enhanced to solidify the social and civil basis for the development of China-U.S. ties, he said.

**Sino-US relations currently high**

**Xinhua**, 3-7-**11**, [Good atmosphere" in China-US relations – FM, 6-21-11,http://usa.chinadaily.com.cn/china/2011-03/07/content\_12129360.htm]

"We urge the United States to strictly abide by the principles and spirits of the three Sino-US joint communiques and the China-US Joint Statement," Yang told reporters, calling on the US to stop arms sales to Taiwan. The US should "take concrete actions to support the peaceful development of cross-Strait relations", he said, noting that it is important in upholding overall interests of China-US relations. Yang said there is now "good atmosphere" in China-US relations, but it is "an objective reality that China and the United States have some differences or even frictions over some issues." "What is important is to properly handle these differences on the basis of mutual respect," he said. Yang made the remarks at a press conference in Beijing on the sidelines of the annual session of the National People's Congress, the country's top legislature.

**Relations high – Countries respect each other**

**Green, 1-13-11**, senior advisor and Japan chair at the Center for Strategic and International Studies and also associate professor of international relations at Georgetown University[Michael J., Good news and bad news about U.S.-China relations, 6-21-11, http://shadow.foreignpolicy.com/posts/2011/01/13/good\_news\_and\_bad\_news\_about\_us\_china\_relations]

The Good News 1. Obama Gets It The Obama administration came into office intending to continue the broad Bush policy of engaging China based on strong alliance relationships in Asia, particularly with Japan. The Obama team hoped to build on that basic approach by establishing a more enduring formula for mutual strategic reassurance with Beijing. To set the right tone early on, the White House delayed sensitive arms sales to Taiwan and a meeting with the Dalai Lama in advance of the president's first trip to China in November 2009 and then sought language in a joint statement in Beijing that would signal U.S. understanding of China's "core interests" with respect to Tibet, Taiwan, and other issues. Set against the backdrop of the financial crisis and increasing confidence in China, these gestures backfired and the administration soon found itself responding to a series of assertive Chinese moves at the Copenhagen climate summit, in the South China Sea, on the Korean peninsula, and in the Sino-Japanese territorial dispute over the Senkaku or Diaoyutai Islands. To its credit, the Obama administration adjusted and spent much of 2010 reminding Beijing of the depths of U.S. strategic power and influence in Asia, as countries from India to Vietnam and Japan sought closer security ties with Washington to re-establish a stable strategic equilibrium vis-à-vis Beijing. The top national security team -- Donilon, Gates, and Clinton -- have now replaced the administration's earlier dreamy visions of transformational U.S.-China cooperation on global issues with a much more hardheaded appreciation of the underlying power realities of dealing with Beijing. 2. Hu Jintao Gets It Hu Jintao is a Dengist, which is to say that he faithfully adheres to his mentor Deng Xiaoping's admonition that China should lay low, bide its time, and build its power. For Hu, a stable U.S.-China relationship is foundational to winning international understanding of "peaceful development" and establishment of a "harmonious society" at home. Hu knows that the power differentials between the United States and China are still enormous and that a successful state visit in Washington is indispensable if he is to cement his own shaky legacy at home and build support for continuation of the Deng line with his presumed successor in 2012, Xi Jinping. This valedictory summit in the United States has focused Hu on the irritants in the relationship. Over the past few months China has allowed the renminbi to appreciate 3.2 percent against the dollar; urged North Korea not to retaliate or react to South Korea's December artillery exercises on the island of Yeonpyeong (which the North had bombarded in November); pledged not to backfill Western and Japanese firms divesting from Iran; pledged to work on intellectual property rights and prevent the new policy of "indigenous innovation" from freezing out U.S. firms in China; and invited Secretary of Defense Gates to reopen the on-again/off-again military-to-military dialogue through a visit to China. In exchange, Hu wants to be portrayed as a respected steward of U.S.-China relations.

**Relations High – mutual respect between Obama and Hu**

**Simons, 1-19-11, Pulitzer-winning Journalist**[U.S.-China relations: a newfound maturity, 6-21-11, http://www.usatoday.com/news/opinion/letters/2011-01-20-column20\_ST\_N.htm]

Among Americans' fitful obsessions in the world, the Iraqs and Afghanistans may come and go. But China is here to stay. That abiding certainty, above all else, tempered what was anticipated to be a generally successful outcome of the presidential meeting between President Obama and Chinese President Hu Jintao. The two were expected to override temptation to pander to the most vitriolic domestic political pressures. Rather, they were likely to pay mutual respect to each other’s countries while acknowledging a reality at times irritating to both: that the United States and China — even though they are destined to bicker and disagree — are joined at the hip. As Obama enters the second half of his term and Hu prepares to step down, such considered behavior at Wednesday's summit would suggest a joint realization that the two most powerful economies on earth cannot long continue to thrive without each other and that the relationship, for all its flaws, may be entering a period of newfound maturity.

**Obama and Hu keeping relations high – Mutual benefits high**

**Wines, 1-19-11, New York Times news analyst** [Michael, 6-23-11, Subtle Signs of Progress in U.S.-China Relations, http://www.nytimes.com/2011/01/20/world/asia/20assess.html]

Still, each side came away from the meeting with something it could point to as an accomplishment, however modest. The White House had set out to keep relations from sliding even further downhill, and to establish a more personal relationship with Mr. Hu that could sustain ties during the next two years, when the political realities of choosing leaders in both countries will work against any significant improvement. Mr. Obama appears to have gotten that. For his part, Mr. Hu was, by American accounts, fixated on engineering a state visit that would portray China as an equal partner with the United States, and China’s president as a successful, internationally recognized statesman. He got that, too. Both leaders should also reap domestic political benefits from their meeting. Mr. Hu’s enhanced stature, American analysts say, should help him tamp down political forces that have driven a more aggressive foreign policy and hamstrung relations with the United States and China’s Pacific neighbors in the last year. Mr. Hu and China’s prime minister, Wen Jiabao, “realize this assertiveness based in the last year on nationalism and the belief that the U.S. is declining has gotten them into deep trouble,” said Joseph S. Nye Jr., the former dean at the Kennedy School of Government at Harvard and a State Department and Pentagon official in the Carter and Clinton administrations. Mr. Nye was in Washington for a luncheon with Mr. Hu at the State Department. “They think a summit which could be played as a success can give them ammunition to quiet down this rumbling below in the ranks.”

# Relations High – Energy

**Relations high – Huge energy incentives**

**Chu, 1-18-11, U.S. Secretary of Energy** [Steven, 6-23-11, U.S.-China clean energy cooperation is good for America and good for the world, http://www.huffingtonpost.com/steven-chu/uschina-clean-energy-coop\_b\_810709.html]

Chinese President Hu Jintao's arrival in the United States this week will spur a national conversation on a range of bilateral issues. One issue that deserves attention is an emerging success story: our work together to accelerate clean energy research and development. For more than 30 years, science and technology cooperation has been a cornerstone of U.S.-China relations. From working to advance basic research in physics and chemistry to fighting disease to planning for natural disasters, joint U.S.-China science and technology initiatives have benefited the citizens of both our nations. Now, we have expanded our work to promote the development and deployment of clean energy technologies. Cooperation with China on clean energy is good for Americans and good for the world. As the world's largest producers of energy, consumers of energy and greenhouse gas emitters, the energy and climate challenge cannot be solved without the United States and China. What we do -- or do not do -- in the coming decades matters to the entire world. Additionally, by collaborating with China on clean energy research and development, we can bring down the costs of clean energy technologies for families and businesses. We can promote export opportunities for American companies, creating new jobs here at home. And we can help ensure that the United States leads in clean energy innovation, which is critical to our prosperity in the 21st century. Both the United States and China recognize that we can make more progress by working together than by working alone. Each country brings complementary strengths to the table. The United States remains the leader in the most innovative technologies, with our world-leading research universities and national laboratories, pioneering businesses and entrepreneurs, and well-developed financial and legal infrastructure. China has experience and expertise with rapid, large-scale deployment of technologies. As the world's fastest and largest growing energy market, China can serve as an important global testing ground for new technologies. Through strong collaboration, we can develop and deploy new clean energy technologies that promote economic prosperity while reducing carbon pollution. That is why, in November 2009, President Obama and President Hu launched an ambitious program of cooperation that covers energy efficiency, renewable energy, cleaner uses of coal, electric vehicles, shale gas and more. This week, I will be meeting with my Chinese colleagues to advance progress on a flagship research initiative: the U.S.-China Clean Energy Research Center. The research center was established to facilitate joint research and development by teams of scientists and engineers from the U.S. and China and to serve as a clearinghouse to help researchers in each country. It focuses on the high-priority research areas of building efficiency, electric vehicles and carbon capture and sequestration. In addition to the U.S. and Chinese governments, it includes participation from academic institutions and the private sector. A central feature of the program is that intellectual property developed jointly will be shared between our countries.

# AT Relations Low - Human rights

**Sino-US relations high now- diplomatic talks and human rights**

**Wines, 1-19-11, New York Times news analyst** [Michael, 6-23-11, Subtle Signs of Progress in U.S.-China Relations, http://www.nytimes.com/2011/01/20/world/asia/20assess.html]

The Chinese have striven to lend this week’s state visit by President Hu Jintao the aura of a fresh start, from feel-good displays of friendly Chinese in Times Square to a Washington newspaper insert that declared on Wednesday that his meeting with President Obama could open a new chapter in a relationship between the world’s two economic giants that had been troubled. Enlarge This Image At a news conference with President Obama at the White House on Wednesday, President Hu Jintao said that China “recognizes and also respects the universality of human rights.” That much is doubtful. But for the first time in months, the two leaders may at least have started reading from the same book. After a 2010 notable mostly for Chinese acrimony toward the United States and its policies, Mr. Hu came to the White House not only saying that constructive relations between the two powers were essential, but also offering some modest concessions to demonstrate it. In a joint statement issued Wednesday, the Chinese for the first time expressed public concern over North Korea’s recent disclosure of a modern uranium-enrichment plant, a small but ardently sought step in American efforts to press Kim Jong-il to roll back his nuclear weapons program. More surprising, perhaps, Mr. Hu said at a White House news conference that “a lot still needs to be done in China in terms of human rights,” an unusual admission for a government that recently called the award of the Nobel Peace Prize to one of its dissidents a Western plot to embarrass Beijing. Words, of course, are easier than deeds. “I don’t equate new rhetoric with new reality in China,” said Kenneth G. Lieberthal, a Brookings Institution scholar who was President Bill Clinton’s national security adviser on China issues. “But at least new rhetoric is better than nothing.” So, in a sense, were the events of Wednesday. Neither side made any significant progress, much less any breakthrough, on the larger problems that have bedeviled relations ever since Mr. Obama made his state visit to Beijing in November 2009. On the American side, that includes revaluing China’s currency, leveling the playing field for American investors in China and establishing a serious discourse between the nations’ militaries.

# AT Relations Low - Taiwan Arms Sales

**Relations improving despite Taiwan arms sales**

**Bloomberg, 3-7-11** [Relations Between China, U.S. Enjoy `Good Atmosphere,' Momentum, Yang Says, 6-21-11, http://www.bloomberg.com/news/2011-03-07/relations-between-china-u-s-enjoy-good-atmosphere-momentum-yang-says.html ]

China’s relations with the U.S. are being carried out in a “good atmosphere,” recovering after a year in which tensions damaged ties between the world’s biggest economies, Foreign Minister Yang Jiechi said. Chinese Vice President Xi Jinping, in line to become China’s next head of state, will make a trip to the U.S. after his counterpart Joseph Biden visits China this summer, Yang told reporters at Beijing’s Great Hall of the People today. Relations between the two countries soured early last year after the U.S. announced a $6.4 billion arms sale to Taiwan, President Barack Obama met with the Dalai Lama at the White House, and the U.S. criticized China over its restrictions on the Internet. Chinese President Hu Jintao met Obama in Washington in January, where the two leaders agreed to “work together to build a cooperative partnership.” “The presidents of the two countries have chartered the course for the future development of China-US relations,” Yang said. “What we need to do now is to seize the momentum and build on the progress.”

# \*\*\*Links\*\*\*

# Link- Unilateral Action Destroys Relations

**1. US will cooperate on asteroid tracking, space debris and manned missions now- unilateral actions will hurt relations**

**Klotz. June 30, 2010. Space reporter for Discovery News.** [Irene. “ U.S. Opens Space Doors to China.” Discovery News. http://news.discovery.com/space/nasa-space-china.html Accessed on June 26]

 The next time the United States decides to venture into space, it won't be going alone. Future missions beyond Earth will include Russian, European, Japanese, Canadian and possibly Chinese partners, under a new national space policy unveiled by the Obama administration this week. The ventures will start with projects to build confidence, gain trust and find common ground, such as cleaning up orbital debris, sharing climate information about the planet and collaborating on science missions. The International Space Station could even be tapped for trial runs, though obstacles remain. "I think it's a little premature to talk about China and the space station," said Jim Kohlenberger, chief of staff of the Office of Science and Technology Policy. "It's obviously a very complex policy issue." China carries considerable baggage, including its development, sales and use of military technologies, but also a key asset: a proven space transportation system, something the United States will soon be without. Two space shuttle missions remain before the fleet is retired after 30 years of service, primarily because of high operating costs. Obama wants to buy astronauts rides on commercial carriers, but none currently exist. That leaves the United States dependent on Russia to fly astronauts to the station. "We're rather thin in launch capabilities right now," said Joan Johnson-Freese, who oversees the Naval War College's department of National Security Studies. China's human space program made its debut in 2003 with the launching of its first astronaut into orbit aboard a capsule known as Shenzhou. Five more Chinese astronauts flew during follow-on missions in 2005 and 2008, the latter of which included a spacewalk. China has announced plans to build a space station, the first piece of which is scheduled for launch next year. Under the new U.S. space policy, "at least we're going to stop pretending that the Chinese don't exist in terms of space exploration," Johnson-Freese told Discovery News. "Now the doors are open." The biggest stumbling block is going to be the fact that technologies developed for space can be used for military applications. "It's going to be politically difficult," said Johnson-Freese. "If we were to be doing a manned mission (with China), there will be many people anxious to point out what the technology can do in a nefarious state. The list will be long and endless since we already have these people who are making a career out of portraying the Chinese manned space program as a military program." Preliminary steps to space partnerships could include Chinese involvement in tracking and cleaning up space debris. China intentionally destroyed one of its weather satellites in orbit to test a missile, creating more than 2,300 pieces of debris large enough to be tracked by ground radars and millions of smaller pieces. The debris is a collision threat to operational spacecraft orbiting Earth. Chinese and U.S. scientists already have been collaborators on a few research projects, including an exchange of Earth environmental data. "Initially, we'll start out with science, just like what we did with Japan and Russia," said Johnson-Freese. "Then we'll see what it is that the Chinese can contribute beyond launch capability."

# Link - Unilateralism/Bush NSP Internal Link

**China perceives the unilateralism of the Bush NSP and the projection of America in space as a threat – causes weaponization**

**Shixiu 2007 - senior fellow of military theory studies and international relations at the Institute for Military Thought Studies, Academy of Military Sciences of the PLA** [Bao, Winter 2007, China Security, “Emerging Threat,” <http://www.wsichina.org/cs5_1.pdf>, accessed June 21, 2011]

The latest U.S. National Space Policy (NSP) poses a serious threat to the national security of China. This new policy, released in October of 2006, sets out the George W. Bush administration’s vision for defending America’s security in space. 1 It reinforces a unilateral U.S. approach to space security which is compounded by the U.S. opposition to any international treaties that limit its access to or use of space. Aggregately, Bush’s space policy pursues hegemony in space and poses a significant security risk to China that cannot be left unaddressed. The NSP presents a number of challenges to China’s security environment. First, it grants the United States with exclusive rights to space: the right to use any and all necessary means to ensure American security while at the same time denying adversaries access to space for “hostile purposes.” This sets up an inequitable environment of “haves” and “have-nots” in space, raising suspicion amongst nations. For instance, the NSP declares that U.S. space systems should be guaranteed safe passage over all countries without exception (such as “interference” by other countries, even when done for the purpose of safeguarding their sovereignty and their space integrity). With its significant space assets and military space capabilities, this situation gives the United States an obvious and unfair strategic advantage in space. Second, it refutes international restrictions and undercuts potential international agreements that seek to constrain America’s use of space. This effectively undermines any potential initiatives put forth by the international community to control space weaponization– initiatives that China supports. This U.S. position leads the global community to suspect U.S. unilateralist intentions in space. Lastly, while the policy may not state it explicitly, a critical examination of its contents suggest its intention to “dissuade and deter” other countries, including China, from possessing space capabilities that can challenge the United States in any way– a parameter that would effectively disallow China to possess even a minimum means of national defense in space. The resultant security environment in space is one with one set of rules for the United States and another set of rules for other nations. In such a context, only U.S. security concerns are taken into account with a result of the reinforcement of a zero-sum dynamic to which space is already prone and threatens to pressure others into a military space race.

**US unilateral actions in space causes China to militarize in suspicion**

**Shixiu 2007 - senior fellow of military theory studies and international relations at the Institute for Military Thought Studies, Academy of Military Sciences of the PLA** [Bao, Winter 2007, China Security, “Emerging Threat,” <http://www.wsichina.org/cs5_1.pdf>, accessed June 21, 2011]

In this context, the only conclusion that can be drawn is that the United States unilaterally seeks to monopolize the military use of space in order to gain strategic advantage over others and afford it the ability to protect U.S. interests. While China is committed to upholding international treaties and norms, it also has its own national interests and cannot subsume them to the interests of another country. China may consider the security problems of the United States, but cannot change its national security considerations at their whim. Hence, China must be prepared to avoid being at the mercy of others in space. China must seek countermeasures to deal with this problem accordingly.

**Bush National Space Policy is unilateralist.**

**David, 2006 – Senior Space Writer for space.com** [Leonard, October 7, 2006, Space.com, “New Bush Space Unveiled, Stresses U.S. Freedom of Action,” <http://www.space.com/2884-bush-space-policy-unveiled-stresses-freedom-action.html>, accessed June 21, 2011]

For 50 years, the U.S. has led the world in space exploration, developing "a solid civil, commercial, and national security space foundation," the document notes. "Space has become a place that is increasingly used by a host of nations, consortia, businesses, and entrepreneurs," the space policy states. "In this new century, those who effectively utilize space will enjoy added prosperity and security and will hold a substantial advantage over those who do not." Additionally, the Bush space policy is designed to "ensure that space capabilities are available in time to further U.S. national security, homeland security, and foreign policy objectives." Moreover, a fundamental goal of the policy is to "enable unhindered U.S. operations in and through space to defend our interests there." The policy calls upon the Secretary of Defense to "develop capabilities, plans, and options to ensure freedom of action in space, and, if directed, deny such freedom of action to adversaries."

# Link- Mining for resources

**1.** **US dependent on China rare earth elements now**

**IB times Staff Reporter.** Feb 5, **2011.** [ “US says dependence on China for rare earth is economic, national security risk.” International Business Times. <http://www.ibtimes.com/articles/109216/20110205/rare-earth-american-security-project-research-emily-coppel.htm> accessed June 26th]

A report by an American think thank says that U.S. dependence on China for rare earths is extremely problematic and poses both economic and national security risks. The report by American Security Project Research Assistant, Emily Coppel, released Tuesday, noted that the United States has the "second-biggest deposit of rare earth minerals in the world. North American mines alone could supply U.S. rare earth needs." "The U.S. will need to develop new technologies and invest in mining operations to solve the long-term supply problem," Coppel suggested. "In the short-term, stockpiling rare earths metals is one of the best ways to prepare for a future shortage until these new mines and technologies become available." Rare earth metals have a wide variety of applications. They are used in hybrid car motors, computer hard drives, cell phones, and wind turbines. They are also essential for military equipment. Jet engines, smart bombs and guided missiles, lasers, radar, night vision goggles, and satellites all depend on rare earth metals to function. The report also asserts that the first nation or defense company which is able to develop "an effective and reliable substitute for rare earths" or "new and more efficient technologies" will gain a competitive advantage. "This is one area where the U.S. has a significant advantage, having the most robust defense industry in the world," the report noted. "The U.S. needs to capitalize on this advantage and regain its position as a producer and supplier of rare earth metals." The report also notes that the Pentagon claims that the U.S. only uses 5 percent of the world's supply of rare earth metals for defense purposes,5 the fact is that the U.S. is completely reliant on China for the production of some of its most powerful weapons. "The Pentagon has been incredibly negligent...there are plenty of early warning signs that China will use its leverage over these materials as a weapon," Peter Leiter, a former trade advisor at the Department of Defense was quoted as saying in the report. Coppel suggested the U.S. has gone from being the world's top producer to being completely dependent to China for its rare earth mineral supply. "The U.S. helped guarantee China's position at the top of the rare earths market when it removed American mining and production capabilities. With the closure of the Mountain Pass mine and the sale of domestic production facilities, the U.S. became almost completely import-dependent for its supply of rare earth metals," the report noted. China's monopoly of the rare earths market has allowed it to manipulate this market by restricting production, using export quotas to limit global supply, and increasing taxes on rare earth metals. The Organization for Economic Cooperation and Development has estimated that non-Chinese producers pay at least 31 percent more for raw rare earth metals than Chinese producers.10 As a result; a black market in rare earths has developed. Reserves of rare earth minerals across world The total reserves of rare earth in the world are estimated to be around 99 million tonnes. China and the United States control most of these reserves with individual endowments of 36 million tonnes (30 per cent of world's total) and 13 million tonnes (13 percent of world's total), respectively. Other countries which hold substantial reserves are Australia, India, the Commonwealth of Independent States, and Brazil. Over the years the supply patterns of rare earths have undergone fundamental changes. According to the US Geological Survey's Mineral Commodities Summary, whereas till 1995 USA and China produced equal quantities of rare earths, today China produces approximately 97 per cent of the world's rare earth. Of the 124,000 tonnes of ore mined in the year 2009, China produced 120,000 tonnes. Recommendations With shortages likely sometime in the next two to three years, the U.S. needs to act quickly to reduce its reliance on Chinese rare earth metals. Stockpile Rare Earths. While stockpiling rare earths is not a long-term solution (eventually stockpiles will run out), it is a good stop-gap measure until new technologies or mines are available. A few countries, such as Japan and South Korea, already have strategic stockpiles of rare earth metals.12 China will begin stockpiling rare earths this year.

**2. US is dependent on China for rare earth materials**

**Bova. Nov 27, 2010.** Written more than 120 futuristic novels and nonfiction books, and has been involved in science and high technology since the very beginnings of the space age. [Ben. “ BEN BOVA: Nov. 28, 2010 Rare earth elements are in the news.” Naples News. http://www.naplesnews.com/news/2010/nov/27/ben-bova-nov-28-2010-rare-earth-elements-are-news/?print=1 accessed on June 26]

Rare earth elements are in the news. They have strange names, such as neodymium, scandium, yttrium. Although they’re not really all that rare, they are messy to dig out of the ground and difficult to refine. Even so, rare earth elements are very useful, being important ingredients in lasers, superconducting magnets, batteries for hybrid automobiles, and the kinds of magnets used in computer hard disc drives. China produces roughly 97 percent of the world’s supply of rare earth elements. A few weeks ago China tightened its exports of these elements to the United States and Japan, two of the biggest users of them. The Chinese government says it is limiting its exports of rare earths because it wants to improve the environmental conditions of its mines — and, besides, it needs to keep a larger percentage of them for its own growing industries. Japan is looking into the possibilities of opening a rare earth mine in Vietnam, and in the U.S. Molycorp Minerals plans to reopen a mine in California it had closed in 2002 when radioactive waste was discovered leaking from a pipe there. But new facilities would have to be built to refine the ores from these mines. At present, the only operating refinery for rare earths happens to be — you guessed it — in China. Cynics believe the Chinese are merely trying to drive up the price of the rare earths. Conspiracy theorists see a plot afoot in Beijing to control a natural resource that is vital for many high-tech industries. Space enthusiasts, though, see an opportunity. The solar system contains millions, perhaps billions, of small chunks of metals and minerals, which are called asteroids. The largest of them, Ceres, is less than 600 miles wide. Most of them are much smaller, tiny chunks of rock left over from the creation of the solar system nearly five billion years ago. Most of the asteroids circle around the Sun between the orbits of Mars and Jupiter, roughly four times farther from the Sun than our own planet Earth. But there are thousands that are much closer to Earth. Some of them actually cross Earth’s orbit. They are called Near Earth Asteroids: NEAs. (Astronomers are not known for poetic nomenclature.) When President Barack Obama scrapped NASA’s plans for returning to the Moon and building permanent bases there, he proposed sending astronauts to one of the NEAs, instead. Now, many of these asteroids happen to be rich in rare earth elements. In fact, most of the rare earth mines on our planet are situated at the sites of ancient asteroid impacts. If we’re going to send astronauts to an asteroid, why not include a geologist who can bring back some samples of rare earths? Why not give the mission a purpose beyond merely exploring for the sake of scientific knowledge? Why not begin to exploit the natural resources that lie among the asteroids? Such an effort could act as an incentive for private industry to move farther into space than merely providing rockets to ferry people and cargo to the International Space Station. It could also show the world — and particularly the Chinese government — that we can move beyond our dependence on their resources (and ploys). Mining rare earths from asteroids would be enormously expensive, at first. But the effort could help to start a transition toward developing space industries. In time, we could see many industrial operations running in space, using virtually free solar energy, while our world becomes cleaner and greener: a residential zone, with industry moving off our planet. Would a move in this direction influence the Chinese government to relax its grip on rare-earth exports? There is a precedent for this sort of thing. In the 1980s, when former President Ronald Reagan proposed the Strategic Defense Initiative (aka “Star Wars”) it started a chain of events that led eventually to the fall of the Soviet Union. We didn’t go ahead with SDI — indeed, we still do not have a credible defense against ballistic missiles. But the possibility that the U.S. might develop missile defenses helped to crack the Soviet Union apart. The possibility of mining rare earths from asteroids might help influence China, too.

# Link- Militarization

**1. China will militarize if America’s militarizes space**

**Johnson-Fresse. 2006. Chair of the Department of National Security Studies at the Naval War College since August 2002.** [Joan, “ Strategic Communication with China: What message about space?” China Security. <http://chinasecurity.us/index.php?option=com_content&view=article&id=246> Accessed June 26]

Influence attitudes and behavior through communications strategies. Militarily, the world understands that it is futile to take on the United States force-on-force. That makes asymmetrical responses both logical and attractive. While it does not currently appear to be the case, China could seek an asymmetrical advantage in space as well, since parity is technically and economically out of the question for some time, and perhaps not even needed to be a space power.34 Currently, however, Beijing does not have a coherent military space architecture, but rather it appears to be actively pursuing a wide-range of capabilities. China watched the United States establish space dominance in the first Gulf War, Kosovo, Afghanistan and Operation Iraqi Freedom. It realized how far behind it was. "We are so dominant in space that I pity a country that would come up against us," said Maj. Gen. Franklin Blaisdell, director of space operations for the Air Force, eight days before Operation Iraqi Freedom began.35 Nevertheless – or perhaps at least partly pushed by that pronouncement – China clearly feels compelled to develop military space capabilities. Two critical events occurred in 2001 that the Chinese interpreted as sending clear messages to them. First, as noted earlier, the United States issued the Space Commission report. The part of the report that caught the attention of the Chinese was the statement that space would inevitably become a battleground, therefore the United States would be remiss not to prepare,36 with the unspoken assumption being that preparation meant the development of space weapons. Second, the United States held its first-ever space war game, called Schriever I.37 In that well-publicized war game, U.S. forces were pitted against an opponent threatening a small island neighbor, one about the size and location of Taiwan. It didn’t take the Chinese long to conclude that they in turn would be remiss not to prepare for the inevitability of U.S. development of space weapons, as China might well be the target of those weapons. From the Chinese perspective, officials have concluded that if the United States would be remiss to not prepare for the inevitable weaponization of space and against a space Pearl Harbor, they would be remiss not to prepare for the execution of the U.S. Counterspace Operations doctrine as part of a unilaterally developed and supported preemptive action. Is that the response that the United States has been seeking? Both China and the United States see space assets as so valuable to their national security equations that any gain made by one country in advancing its capabilities is viewed as not just threatening but as a loss by the other. China is interested in developing military space capabilities as part of its efforts military modernization effort, as are most countries in the world. It is further interested in development of space capabilities as part of globalization efforts and to send a techno-nationalist message regionally and globally. But China is also responding to the message it hears from the United States.

**Launching into space wrecks relations**

**Vieru 5-13-11,** Science Editor for Softpedia - possesses a biology, physics and chemistry background. [Tudor Vieru, How China's Space Program Affects the US, SoftNews NET SRL, http://news.softpedia.com/news/How-China-s-Space-Program-Affects-the-US-200147.shtml, 6-22-11]

 “What concerns me most about the Chinese space program is that, unlike the US, it is being led by the People’s Liberation Army (PLA),” Congressman Frank Wolf (R-VA) said at the meeting. He is the chairman of the House Appropriations Committee commerce, justice and science subcommittee. “There is no reason to believe that the PLA’s space program will be any more benign than the PLA’s recent military posture,” he added in his testimony. “The US has no business cooperating with the PLA to help develop its space program,” he added, in response to recent proposals calling for NASA and the government to work with CNSA and Beijing. But not everyone approves of not cooperating with the Asian country. “As China invests in and derives greater benefit from space, it will acquire the same stake in creating a predictable, stable, safe and sustainable space environment that the US, Canada, Japan and European and other countries already share,” Krolikowski said.

**China perceives US space militarization as a threat**

**Chase, 2011 – Ph.D. in international relations from Johns Hopkins, MA in China studies from SAIS, Johns Hopkins** [Michael S., March 25, 2011, Jamestown Foundation Publication, “Defense and Deterrence in China’s Military Space Strategy” <http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews%5Btt_news%5D=37699&tx_ttnews%5BbackPid%5D=25&cHash=e3f0fcd233f563e2364ad7bc49425244>, accessed June 21, 2011]

A review of Chinese writings on military space operations indicates that Chinese strategists are concerned about a wide variety of perceived threats to Chinese space systems. In particular, Chinese analysts characterize U.S. space policy as inherently threatening to China’s interests because of its emphasis on space dominance. As Zhang Hui of Harvard’s Belfer Center for Science and International Affairs writes, "Many Chinese officials and security experts have great interest in U.S. military planning documents issued in recent years that explicitly envision the control of space through the use of weapons in, or from, space to establish global superiority" [7]. Similarly, according to Bao Shixiu, a senior fellow at the PLA’s Academy of Military Science (AMS), "the only conclusion that can be drawn is that the United States unilaterally seeks to monopolize the military use of space in order to gain strategic advantage over others" [8]. Given that China must protect its own interests, Bao argues, "China cannot accept the monopolization of outer space by another country." Consequently, he asserts that U.S. space policy "poses a serious threat to China both in terms of jeopardizing its national defense as well as obstructing its justified right to exploit space for civilian and commercial purposes" [9]. Chinese writers also assert that U.S. space war exercises reflect the growing militarization of space. Yet Beijing’s concerns are not limited to the realm of policy statements and war games. Indeed, some Chinese strategists appear to believe that other countries are actively developing counter-space capabilities that could threaten Chinese satellites.

# Link- Space Debris

**1. Space Debris makes space unusable -destroys relations**

 **Senechal. June 2007. M.P.A. Harvard University, M.Sc. London Business School, B.A. Columbia University** [ Thierry Senechal http://web.mit.edu/stgs/pdfs/Orbital%20Debris%20Convention%20Thierry%20Senechal%2011%20May%202007.pdf Massachusetts Institute of Technology]

The time is right for addressing the problem posed by orbital debris and realizing that, if we fail to do so, there will be an increasing risk to continued reliable use of space-based services and operations as well as to the safety of persons and property in space. We have reached a critical threshold at which the density of debris at certain altitudes is high enough to guarantee collisions, thus resulting in increased fragments. In a scenario in which space launches are more frequent, it is likely that we will create a self-sustaining, semi-permanent cloud of orbital ―pollution‖ that threatens all future commercial and exploration activities within certain altitude ranges. The debris and the liability it may cause may also poison relations between major powers.

**2. Space co-op solves space debris**

**Senechal June 2007 M.P.A. Harvard University, M.Sc. London Business School, B.A. Columbia University** [ Thierry Senechal http://web.mit.edu/stgs/pdfs/Orbital%20Debris%20Convention%20Thierry%20Senechal%2011%20May%202007.pdf Massachusetts Institute of Technology]

Because space debris is a global challenge that may impact any country deciding to develop space activities, the issue cannot be resolved among a few countries. This is why I am advocating that a global convention on space debris is a requirement for preserving this special environment for future generations. Following the logic of the Brundland Report, we need development that ―meets the needs of the present without compromising the ability of future generations to meet their own needs. A global convention is needed for the simple reason that the successful approval of voluntary guidelines has not been consistent over the last years. For instance, the Chinese test is an example of failure to enforce mitigation standards for space debris. If rightly discussed and implemented, an international convention would increase mutual understanding on acceptable activities in space and thus enhance stability in space and decrease the likelihood of friction and conflict. It would also provide the mechanisms to study, mitigate and remediate the consequences posed by space debris. More importantly, the convention would serve as an agreement between the different countries and would be legally binding to the contracting States. Other important issues would also need to be addressed. For instance, the destruction of spacecraft is not covered right now. The liability and dispute mechanism and compensation of a damage resulting from “tracked” debris are non-existent at present. This is why a specific international convention on space debris is much needed.

# Link- Mission to Mars

**1. US unilateral mission to Mars will upset current US-China cooperation**

**Svitak. May 6, 2011.** **Staff writer for Space News.** [Amy, “ Obama sees China as a partner in Mars mission.” MSNBC. http://www.msnbc.msn.com/id/42934529/ns/technology\_and\_science-space/t/obama-sees-china-partner-mars-mission/ Accessed June 26]

U.S. President Barack Obama views China as a potential partner for an eventual human mission to Mars that would be difficult for any single nation to undertake, a senior White House official told lawmakers. Testifying May 4 before the House Appropriations subcommittee on commerce, justice and science, White House science adviser John Holdren said near-term engagement with China in civil space will help lay the groundwork for any such future endeavor. He prefaced his remarks with the assertion that human exploration of Mars is a long-term proposition and that any discussion of cooperating with Beijing on such an effort is speculative. "(What) the president has deemed worth discussing with the Chinese and others is that when the time comes for humans to visit Mars, it's going to be an extremely expensive proposition and the question is whether it will really make sense — at the time that we're ready to do that — to do it as one nation rather than to do it in concert," Holdren said in response to a question from Rep. Frank Wolf, R-Va., a staunch China critic who chairs the powerful subcommittee that oversees NASA spending. Holdren, who said NASA could also benefit from cooperating with China on detection and tracking of orbital debris, stressed that any U.S. collaboration with Beijing in manned spaceflight would depend on future Sino-U.S. relations. "But many of us, including the president, including myself, including (NASA Administrator Charles) Bolden, believe that it's not too soon to have preliminary conversations about what involving China in that sort of cooperation might entail," Holdren said. "If China is going to be, by 2030, the biggest economy in the world … it could certainly be to our benefit to share the costs of such an expensive venture with them and with others."

# Link- Dual-Use Militarization

**Dual-use technology causes China to militarize**

**Hagt, 2007 – director of the China Program at the World Security Institute** [Eric, Winter 2007, pp. 31-51, China Security, “China’s ASAT Test: Strategic Response,” <http://www.wsichina.org/cs5_3.pdf>, accessed 6/21/11]

There is a second threshold rapidly approaching that is raising China’s national security anxieties. China now stands at the cusp of becoming a heavily invested power in space. China has deep and growing interests in terms of the lucrative commercial satellite industry, its civilian, manned and exploratory space programs as well as military programs in space.69 China plans to launch up to 100 satellites during the Eleventh Five Year Plan (2006-2010), an almost four-fold increase from the number launched in the preceding FYP.70 It’s manned and unmanned civilian exploratory programs are equally ambitious for the next 15 years with launches planned for manned docking in orbit, voyages to the moon and the beginning of a Mars program.71 Several new satellite and micro-satellite research and production facilities have significantly boosted China’s indigenous satellite production program. Also, a brand new launch center is under construction in Hainan Province, which will vastly increase China’s capacity to launch vehicles into geostationary orbit. Due to China’s highly opaque system and the inherent dual-use nature of space technology, its military programs are largely unknown, though certainly significant. All told, China’s ambitions in space are impressive and the growth of its programs is unprecedented, perhaps even compared with past Soviet and American space programs. Moreover, space is far more than a monetary investment for China. It’s aspirations in space are also part of a larger and more comprehensive economic and social plan.72 Presently, China remains less dependent and therefore less vulnerable in space than the United States, but that situation is changing. The ASAT test was a clear message that China also has deep and growing interests in space that require defending.

**China will perceive civilian technology as a threat – all space technology is dual-use**

**Klotz, 99 – Lieutenant General of the Air Force, PhD in Political Science from Oxford** [Frank, January, Council on Foreign Relations, “Space, Commerce, and National Security” accessed on June 23, 2011]

Additionally, some of the systems that might be used to attack satellites, which would therefore be subject to limitation, might also have other, entirely legitimate civilian or military purposes. Reductio ad adsurdum, any satellite that can be maneuvered in such a way as to collide with another satellite could theoretically be used for "antisatellite" purposes. While one might counter that the functions of individual satellites are generally widely known, not everyone will agree. The Soviet Union, for example, objected to the U.S. space shuttle as a potential antisatellite platform since it had the capability to "snatch" satellites in orbit.67Even those future systems that have been popularly identified as having a possible antisatellite role--such as space-based lasers or a military spaceplane--could also perform a variety of other missions. The former has in fact been most closely identified with defense against ballistic missile warheads. The latter could be used to perform routine but cost-effective logistical tasks, such as repair, refueling, or replacement of satellites in orbit. Thus, unless a system is unmistakably identified as an antisatellite weapon--either by declaration or unequivocal action--it may be exceedingly difficult to apply an ASAT label to it. Limiting a system simply because it possesses a potential antisatellite capability would be unduly restrictive and could deny the nation capabilities that might prove militarily or economically important. Finally, attempting to place limits on multiple-use systems only if they were equipped for an ASAT role would pose obvious verification and enforcement problems or, conversely, opportunities for cheating by one or more parties.

**Dual-use technology is a threat to China.**

**Shixiu 2007 - senior fellow of military theory studies and international relations at the Institute for Military Thought Studies, Academy of Military Sciences of the PLA** [Bao, Winter 2007, China Security, “Emerging Threat,” <http://www.wsichina.org/cs5_1.pdf>, accessed June 21, 2011]

The U.S. position makes another faulty assumption that national space programs and space assets can be effectively dissected into commercial and civilian uses versus military uses and capabilities. This is out of tune with technological developments and military inevitabilities. China’s space program is not transparent in many respects, but neither is that of the United States. The reality is that many space technologies are inherently dual-use and it is therefore very difficult to distinguish sufficiently and effectively the intentions and capabilities in space. Without some kind of mutual understanding on controlling arms in space, suspicion will dominate relations between China and the United States.

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# Link - Space Dominance

**America’s push for space dominance violates the Outer Space Treaty and is perceived as a threat by China**

**Shixiu 2007 - senior fellow of military theory studies and international relations at the Institute for Military Thought Studies, Academy of Military Sciences of the PLA** [Bao, Winter 2007, China Security, “Emerging Threat,” <http://www.wsichina.org/cs5_1.pdf>, accessed June 21, 2011]

As a sovereign state, China has an equal right to access space. As the 1967 Outer Space Treaty clearly articulates: Outer space, including the moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law, and there shall be free access to all areas of celestial bodies. China cannot accept the monopolization of outer space by another country. For that reason, the U.S. administration’s penchant for “exceptionalism” in space policy poses a serious threat to China both in terms of jeopardizing its national defense as well as obstructing its justified right to exploit space for civilian and commercial purposes.

**US space dominance causes Chinese space militarization**

**Hagt, 2007 – director of the China Program at the World Security Institute** [Eric, Winter 2007, pp. 31-51, China Security, “China’s ASAT Test: Strategic Response,” <http://www.wsichina.org/cs5_3.pdf>, accessed 6/21/11]

The ASAT test itself also implies that the military option is beginning to win out over a diplomatic one in China as a solution to head off U.S. space control ambitions. Every call by China’s diplomatic effort at the CD for prevention of space weaponization has been effectively blocked by the United States.31 It has rejected any treaty that will restrict its freedom to act in space, claiming it has the most to lose and therefore has unique security considerations.32 The United States has also offered the reasoning that a treaty to ban weapons in space was not needed because there was no military space race.33 China sees this U.S. stance as a thinly veiled attempt to retain absolute access to space while leaving the door open for the United States to develop space weapons in the future if necessary.34 Along with the Bush administration’s willingness to use force against those who threaten U.S. national security interests in space, concluding an arms control treaty in space seems remote.35 Verification measures for a test ban for ASAT and other space weapons have also been rejected as infeasible due to the inherent dual-use nature of space technology. 36 The Chinese side has believed, fairly accurately, that the United States simply will never sign such a treaty for lack of trust, fearing others will secretly pursue space weapons capabilities while America’s hands are tied.37

**US dominance in space causes Chinese ASAT attack – empirics.**

**Hagt, 2007 – director of the China Program at the World Security Institute** [Eric, Winter 2007, pp. 31-51, China Security, “China’s ASAT Test: Strategic Response,” <http://www.wsichina.org/cs5_3.pdf> , accessed 6/21/11]

China’s testing of a direct-ascent anti-satellite weapon on Jan. 11, 2007, was an unambiguous challenge not to U.S. power in space but to its dominance in space. With little explanation emanating from officialdom in China, their principal motivation has not been made clear. A number of alternative intentions have also been offered up, for example, it was a clumsy maneuver to force the United States to the negotiating table for a space arms control treaty. Or, with a turbulent year expected in the run up to Taiwan elections, it was a grave reminder of Beijing’s resolve to defend the nation’s sovereignty at all cost. Or, that it was a raw show of force, a flexing of its growing military muscle. It is possible that all these motivations played a part in China’s decision to test an ASAT. But behind the test was a simpler message and arguably one more benign to international space security than this spectacular test and the orbital debris cloud it created would suggest. In fact, the test is consistent with both China’s notion of active defense and its deterrence doctrine, and should not have been a surprise in light of the growing threats that China perceives in space.

# US - China Relations – Solves Heg

**China cooperation solves for hegemony and international cooperation**

**Baker & Pollpeter, 12-13-04, - RAND Corporation** [John C. Baker & Kevin L. Pollpeter, A Future for U.S.-China Space Cooperation?, RAND Co., http://www.rand.org/commentary/2004/12/13/SN.html, 6-22-11]

China could go a long way in addressing American concerns by increasing the transparency of its space program to reduce uncertainties over its intentions in space. A big step in this direction would be for China to remove its human space flight program from military control and establish a civil organization with direct responsibility for human space flight that would be better suited to working with NASA. The U.S. experience with the Soviet Union, and later with Russia, offer some insights on the promise and challenges of international space cooperation. Nearly three decades ago the two countries proceeded with the Apollo-Soyuz docking mission despite Cold War tensions. In recent years, the United States has benefited from its cooperation with Russia in preparing for, constructing and operating the international space station. Cooperation has not been easy, but it has been essential for making progress in human space activities, particularly since the Columbia shuttle accident. While the United States may have apprehensions about partnering with China in space, other nations do not. China is becoming an attractive partner for Europe and Russia, which are less inhibited in selling dual-use technologies to China. European nations are already partnering with China on significant space ventures, including the Galileo satellite navigation project. Cooperation with Russia or Europe could provide China with much of the same technologies that the U.S. hopes to prevent China from obtaining. Chinese cooperation on major space efforts without U.S. involvement could threaten to erode the U.S. leadership position as the world's top space power. As with all areas of international relations, the United States must decide the extent it wants to proceed on its own path or collaborate with other countries to achieve common goals.

# US - China Relations – Solves Debris

**Confidence-building measures like space debris cooperation solve relations**

**Klomp, 2010 – Major, USAF** [Jeremiah O., April, 2010, Air Command and Staff College, Air University, “Is Space Big Enough For A US-Sino Partnership?” <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA537174&Location=U2&doc=GetTRDoc.pdf>, accessed June 24, 2011]

There are several low-threat options we could initially pursue with China that could lead to better relations and increased trust. Information sharing from previous experiences is a lowthreat approach to open the door to a dialogue. “Confidence building measures (CBMs) such as information exchange on debris management, environmental and meteorological conditions, and navigation, are widely considered an effective first step in building trust in a sensitive relationship.” 26

# US - China Relations - Solves Space Mil

**US-China bilateralism in space solves ASATs and Chinese space militarization**

**Larson, 2009 - Foreign Service Ofﬁcer with the US Department of State, lieutenant colonel in the US Air Force Reserves** [Garold, October 19, 2009, US Mission, “U.S. Statement on Peaceful Use of Outer Space – Thematic Debate of UNGA first Committee,” <http://geneva.usmission.gov/2009/10/19/outerspace/>, accessed June 21, 2011]

In particular, the United States will seek to engage China in discussions to achieve mutual reassurance in the space domain. China, like any nation, has the right to provide for its security using space systems. However, China’s increasing counter-space capabilities – including continued development of direct-ascent anti-satellite (ASAT) interceptors, lasers, high-powered microwaves and particle beam weapons – contrasts sharply with Chinese President Hu’s desire to pursue a path of peaceful development and “win-win progress.” The resumption of high-level military-to-military dialogues between the United States and China is a positive step, but expanding this relationship to include focused discussions on space activities would increase transparency and help clarify China’s intentions, strategy, and doctrine regarding the use of space for military purposes. Such clarification is one step towards reassuring the rest of the world that China’s development and growing global role will not come at the expense of the well-being of others. In addition to exploring ways to highlight and reinforce the areas of common interest, discussions of space security must address the source of mistrust directly. In particular, China must provide greater transparency regarding its intentions for the development, testing, and deployment of direct-ascent ASAT weapons and other elements of its multi-dimensional counter-space program.

**Bilateralism with China ensures TCBMs – solve militarization**

**Larson, 2009 - Foreign Service Ofﬁcer with the US Department of State, lieutenant colonel in the US Air Force Reserves** [Garold, October 19, 2009, US Mission, “U.S. Statement on Peaceful Use of Outer Space – Thematic Debate of UNGA first Committee,” <http://geneva.usmission.gov/2009/10/19/outerspace/>, accessed June 21, 2011]

Looking to the broader questions of space security, the United States believes that bilateral transparency and confidence-building measures with Russia and with China could form the foundation for establishing a set of multilateral voluntary TCBMs. As a result, the United States will continue to play a leading role in advancing TCBMs for national security and related space activities.

**China relations key to winning the Space Race.**

**Baker & Pollpeter, 12-13-04, - RAND Corporation** [John C. Baker & Kevin L. Pollpeter, A Future for U.S.-China Space Cooperation?, RAND Co., http://www.rand.org/commentary/2004/12/13/SN.html, 6-22-11]

During the post-Apollo era, U.S. space exploration programs have been burdened by unrealistic expectations and inadequate funding that sometimes led to canceled or scaled-back programs. Transporting humans into space for extended periods remains expensive, risky and technically demanding. Cooperation with China on human space flight provides opportunities for collaboration that could reduce the cost of major missions such as returning to the moon and long-duration flights to Mars.

**Cooperation key to relations**

**Klomp, 2010 – Major, USAF** [Jeremiah O., April, 2010, Air Command and Staff College, Air University, “Is Space Big Enough For A US-Sino Partnership?” <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA537174&Location=U2&doc=GetTRDoc.pdf>, accessed June 24, 2011]

A key driver in any joint venture is the political implications of the proposed collaboration. Our political relationship with China is tenuous at best, with neither side trusting the other completely, and in general discord respecting sensitive matters, such as the Taiwan issue and human rights discussions. Any joint venture between the US and China, particularly in an area as sensitive as space, may be perceived as waffling on our part which may then be construed as a moral compromise. Jeffrey Logan, a specialist in Energy Policy in the Resources, Science and Industry Division, points out in a special report to Congress that “China is widely criticized for its record on human rights and non-democratic governance. Any collaboration that improves the standing of authoritarian Chinese leaders might thus be viewed as unacceptable.” 15 However, a joint venture in the name of science may help to reduce barriers and open further dialog into many areas that are currently strained. President Nixon’s so-called “Ping-pong politics,” or using non-contentious means to begin dialog in other areas, may be an effective way to open doors currently closed to US involvement. Conversely, if we are unable to come to a suitable agreement over terms, or if additional accusations of piracy or claims of ‘unintentional technology transfers’ occur, pursuing a partnership may further exacerbate tensions between us. Logan posits that any joint venture with the Chinese may be ineffective, arguing “that increased collaboration will not produce tangible benefits for the United States, especially without a new bilateral political climate.” 16 An event like this, however, could prove to be the catalyst to political advances that could result in improved and expanded political interaction. Just as the sports exchanges in the 1970’s provided 18 opportunities for the friendly exchange of ideas, so might a joint space venture provide opportunities for extended dialog in other areas.

# US - China Relations key to Space

 **1. Sino-US relations shape space policy**

**Hays. Dec 13, 2010. Senior policy analyst of the National Security Space Office. A retired Lieutenant Colonel with 25 years of service in the Air Force**. [Peter L, “ Space Law and the Advancement of Spacepower.” National Defense University Press. <http://www.ndu.edu/press/space-Ch28.html> Accessed June 26]

Since Sino-American relations in general and space relations in particular are likely to play a dominant role in shaping the quest for space-power and sustainable security during this century, other proposed Sino-American cooperative space ventures or TCBMs are worthy of further consideration, including inviting a taikonaut to fly on one of the remaining space shuttle missions and making specific, repeated, and public invitations for the Chinese to join the International Space Station program and other major cooperative international space efforts. The United States and China could also work toward developing nonoffensive defenses of the type advocated by Philip Baines.14 Kevin Pollpeter explains how China and the United States could cooperate in promoting the safety of human spaceflight and "coordinate space science missions to derive scientific benefits and to share costs. Coordinating space science missions with separately developed, but complementary space assets, removes the chance of sensitive technology transfer and allows the two countries to combine their resources to achieve the same effects as jointly developed missions."15 Michael Pillsbury outlined six other areas where U.S. experts could profitably exchange views with Chinese specialists in a dialogue about space weapons issues: "reducing Chinese misperceptions of U.S. Space Policy, increasing Chinese transparency on space weapons, probing Chinese interest in verifiable agreements, multilateral versus bilateral approaches, economic consequences of use of space weapons, and reconsideration of U.S. high-tech exports to China."16 Finally, Bruce MacDonald's report for the Council on Foreign Relations, "China, Space Weapons, and U.S. Security," offers a number of noteworthy additional specific recommendations for both the United States and China. For the United States, MacDonald recommends assessing the impact of different U.S. and Chinese offensive space postures and policies through intensified analysis and "crisis games" in addition to wargames; evaluating the desirability of a "no first use" pledge for offensive counterspace weapons that have irreversible effects; pursuing selected offensive capabilities meeting important criteria— including effectiveness, reversible effects, and survivability—in a deterrence context to be able to negate adversary space capabilities on a temporary and reversible basis; refraining from further direct ascent ASAT tests and demonstrations as long as China does, unless there is a substantial risk to human health and safety from uncontrolled space object reentry; and entering negotiations on a kinetic energy ASAT testing ban. MacDonald's recommendations for China include providing more transparency into its military space programs; refraining from further direct ascent ASAT tests as long as the United States does; establishing a senior national security coordinating body, equivalent to a Chinese National Security Council; strengthening its leadership's foreign policy understanding by increasing the international affairs training of senior officer candidates and establishing an international security affairs office within the People's Liberation Army; providing a clear and credible policy and doctrinal context for its 2007 ASAT test and counterspace programs more generally, and addressing foreign concerns over China's ASAT test; and offering to engage in dialogue with the United States on mutual space concerns and become actively involved in discussions on establishing international space codes of conduct and confidence-building measures.17

# US-China Relations Solve Military Modernization

**Relations key to check China modernization**

**Klomp, 2010 – Major, USAF** [Jeremiah O., April, 2010, Air Command and Staff College, Air University, “Is Space Big Enough For A US-Sino Partnership?” <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA537174&Location=U2&doc=GetTRDoc.pdf>, accessed June 24, 2011]

Another potential benefit from a partnering relationship with China is that it would allow us to ‘control’ the rate of their development by keeping them dependent on US technology, offsetting the need for China’s unilateral development. “Collaborating with China – instead of isolating it – may keep the country dependent on U.S. technology rather than forcing it to develop technologies alone. This can give the United States leverage in other areas of the relationship.” 17

# Relations = peaceful development

**1. China-US relations key to peaceful development**

**Chambers. March 2009. Master’s thesis Naval Postgraduate school.** [Rob W, “ China's Space Program: A New Tool for PRC "Soft Power" in International Relations?” DTIC. http://edocs.nps.edu/npspubs/scholarly/theses/2009/Mar/09Mar\_Chambers.pdf accessed June 25]

Where do we go from here? Looking at the bottom line, space is no longer the Cold War race between the Americans and the Soviets. As Nicolas Peter notes, “major space-faring nations are now using space as a political tool to reach non-traditional partners in order to build trusting relationships across political borders, illustrating that foreign policy and space are now increasingly overlapping...[;]greater international cooperation is the way forward for major space activities”.328 And China certainly is making its mark in the space world, and is not going to leave the space arena anytime soon. Johnson-Freese comments that “They [the Chinese] want to play a leadership role for developing countries that want to get into space. It’s just a win-win for them…they are making political connections, it helps them with oil deals and they bring in hard currency to feed back into their own program to make them even more commercially competitive”.329 The sooner Asia and the United States cautiously accommodate a more powerful, space-capable China, the more they will able to leverage and perhaps even shape its rise, weaning it away from a military race in space, and perhaps ensuring there is truly peaceful development and benefit from space for all nations. America has shown the rest of the world far too much edgy “hard power” diplomacy, including in the space realm. In doing so, it has isolated itself and thereby harmed its own security. Especially with regard to China, the United States is in danger of mischaracterizing the motivations and rationales behind China’s space program and, as a result, pursuing counterproductive policies that could actually create incentives for other countries to side with China against American interests in space. We have already seen a drop in U.S. dominance in commercial space, and the rise of ITAR-free programs as a result of our insecurities about technology transfer. The Chinese ASAT test is usually seen as a military test purely designed as an asymmetric capability to attack America’s overdependence on space assets, normally in the context of a Sino-U.S. wartime scenario (i.e., over Taiwan).330 But as China expands its number of military and civilians satellites and thereby incurring the same space-borne liabilities as the U.S., why is it not also vulnerable to a space attack? Bottom line, as Johnson-Freese argues, “other countries are clearly interested in working with China on space, regardless of the American stance. Therefore, the United States can either be involved and retain some measure of control through leadership, or watch from the sidelines”.331

# US-China collaboration in space now

**1. Obama wants collaboration in space**

**Zifcak. June 30, 2010. Epoch times staff.** [Nicholas, “US Wants International Cooperation in Space.” The Epoch Times. <http://www.theepochtimes.com/n2/content/view/38358/> Accessed June 22nd]

 WASHINGTON—President Obama announced a new national space policy on Monday. The policy emphasizes international cooperation for sustainable use and free access to space for all nations. No longer does the United States seek dominance in space, because, “no longer are we racing against an adversary,” said President Obama in a statement released by the White House on Monday. In the same statement Obama said that one of the United States’ central goals is promoting peaceful cooperation and collaboration in space. He says this will not only prevent conflict, but will increase operating capability in orbit and beyond. The new national space policy’s emphasis on international cooperation is reminiscent of Clinton-era space policy, says Dr. Ray Williamson, executive director of the Secure World Foundation. He spoke with The Epoch Times by phone. But Williamson also sees the new policy as going beyond past space policy, with the current administration stepping forward to lead the way in international space cooperation and collaboration. He says one indicator in the policy of greater willingness to work closely with other nations can be found in the guidelines for enhancing positioning, navigation, and timing systems. Here the policy states that foreign positioning, navigation, and timing services can be used “to augment and strengthen the resiliency of GPS”(global positioning system). This is important because GPS has several civil and national security uses. Dr. Williamson says this level of collaboration is new within GPS systems and could be important in savings lives (for example ambulances use GPS for navigation). Another of the core principles listed in the new national space policy is that the United States will “assure the use of space for all responsible parties,” through a “variety of measures.” The policy states that “all nations have the right to explore and use space for peaceful purposes” and the benefit of all humanity as long as they follow international law. Maintaining sustainability of space use is a high priority in the new policy, and it is of vital national importance to the United States to maintain the “sustainability, stability, and free access to, and use of, space.” The Secure World Foundation's Dr. Williamson, who is also concerned with maintaining the sustainable use of space, pointed out the importance of maintaining stability—we rely heavily on satellites. In addition to data transfer, international broadcasting, cell phone communication, weather pattern modeling, and global positioning systems, satellites also measure things such as soil moisture, which can be used to warn of possible drought. Commercial Space Industry The policy also encourages developing a stronger and internationally competitive commercial space sector. The administration finds such an industry a key to continued progress in space. “The United States is committed to encouraging and facilitating the growth of a U.S. commercial space sector that supports U.S. needs, is globally competitive, and advances U.S. leadership in the generation of new markets and innovation-driven entrepreneurship.“

**1. Chinese want cooperation with the US on space projects**

**Selding. April 14, 2011. Space news staff writer.** [Peter B, “ Chinese Government Official Urges U.S.-Chinese Space Cooperation.” Space News. <http://www.spacenews.com/civil/110414-chinese-official-space-cooperation.html> accessed June 22nd]

 A top Chinese government space official on April 14 appealed to the U.S. government to lift its decade-long ban on most forms of U.S.-Chinese space cooperation, saying both nations would benefit from closer government and commercial space interaction. He specifically called for cooperation on manned spaceflight, in which China has made massive investment in recent years. Lei Fanpei, vice president of China Aerospace Science and Technology Corp. (CASC), which oversees much of China’s launch vehicle and satellite manufacturing industry, said China purchased more than $1 billion in U.S.-built satellites in the 1990s before the de facto ban went into effect in 1999. Since then, the U.S. International Traffic in Arms Regulations (ITAR) have made it impossible to export most satellite components, or full satellites, to China for launch on China’s now successful line of Long March rockets. The ITAR regulations that tightened the U.S. technology export regime were put into place to punish China for its missile exports, and to slow development of China’s rocket industry by reducing its customer base. Most commercial telecommunications satellites carry at least some U.S. parts, which is why ITAR has all but locked China out of the global commercial launch market. The U.S. government is reviewing the current ITAR regime, which U.S. industry says has had the unintended effect of making it difficult to sell satellites and satellite components just about anywhere in the world. At the same time, China’s domestic demand for launches of its own telecommunications, navigation, Earth observation and science satellites — and its manned space program — has given the Long March vehicle sufficient business to earn it a record of reliability. The global insurance underwriting community now ranks the Long March vehicle alongside Russian and European rockets for reliability when it sets insurance premiums. Addressing the National Space Symposium here, Lei said Chinese vehicles launched more than 20 U.S.-built satellites in the 1990s. While cooperation with the United States has been shut down, he said, China has maintained relations with the 18-nation European Space Agency, Brazil, France, Russia and others. China also has developed a telecommunications satellite product line that has been bundled with a Chinese Long March vehicle to offer in-orbit delivery of telecommunications spacecraft to a half-dozen nations that in many cases can offer China access to their crude oil reserves. Lei said he sees three areas in which U.S.-Chinese cooperation would be in both nations’ interests. The first, he said, is an open commercial access of each nation to the other’s capabilities in satellites and launch vehicles. The second, he said, is manned spaceflight and space science, particularly in deep space exploration. The third is in satellite applications including disaster monitoring and management.

# Cooperation in space-->better relations

**1. U.S-China Space Cooperation would increase relations**

**Day.** January **2008. American space historian and policy analyst and served as an investigator for the Columbia Accident Investigation Board** [Dwayne A, “The China gambit.” The Space Review.http://www.thespacereview.com/article/1042/1, Accessed 6/26/11]

Space triangulation Last week, former MirCorp CEO, Jeffrey Manber proposed in an op-ed article in the Los Angeles Times that the United States could effectively engage China in space cooperation. Manber has essentially proposed taking a page from the Nixon playbook and using China to triangulate against Russia in space. He argues that China has newly-developed space capabilities that the United States could use, and the United States has something that China would like, access to the International Space Station (ISS). Such access would be highly symbolic and prestigious, declaring that China has arrived as a major space power and is recognized as a peer by the other space powers. The United States and China do have stable, non-hostile diplomatic relations with each other. But the two countries have no history of even minor cooperation in space.

**2. U.S-China relations in space leads to alliance on earth**

**Day.** January **2008. American space historian and policy analyst and served as an investigator for the Columbia Accident Investigation Board** [Dwayne A, “The China gambit.” The Space Review. http://www.thespacereview.com/article/1042/1, Accessed 6/26/11]

Chinese participation in ISS could eliminate America’s total dependence for manned access to the space station By creating more manned transportation options to low Earth orbit, cooperation could help the US in its goal to return to the Moon Civil space cooperation could provide a forum for discussions on strategic space issues The United States could gain another space partner instead of a competitor The cost of the ISS is still rising, and if another country wants to help pay, the United States should let them The boldest of these proposals is using China’s Shenzhou spacecraft as another means for American astronauts to access the ISS. But that proposal is too ambitious both politically and technically.

# \*\*\*Impacts\*\*\*

# ASATs – Debris Impact

**ASATs cause space debris**

**Larson, 2009 - Foreign Service Ofﬁcer with the US Department of State, lieutenant colonel in the US Air Force Reserves** [Garold, October 19, 2009, US Mission, “U.S. Statement on Peaceful Use of Outer Space – Thematic Debate of UNGA first Committee,” <http://geneva.usmission.gov/2009/10/19/outerspace/>, accessed June 21, 2011]

Many spacefaring nations and commercial operators continue to face unnecessary hazards resulting from the orbital debris created by China’s ASAT weapon flight-test in January 2007. This test created a pervasive debris cloud of more than 150,000 objects greater than 1 centimeter in size. U.S. experts estimate that many of the objects in this cloud – which accounts for more than 25 percent of all cataloged objects in low earth orbit – will stay in orbit for decades, and some for more than a century.

**China will use ASATs – the impact is space debris**

**Klomp, 2010 – Major, USAF** [Jeremiah O., April, 2010, Air Command and Staff College, Air University, “Is Space Big Enough For A US-Sino Partnership?” <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA537174&Location=U2&doc=GetTRDoc.pdf>, accessed June 24, 2011]

First, China’s direct-ascent anti-satellite (ASAT) demonstration in 2007 proves China’s willingness to engage in provocative and dangerous activities without consulting or informing other nations. This act caused immeasurable damage on several fronts, including the obvious 11 flooding of the orbit with debris that will take decades to clear naturally. This debris cloud is harmful to anyone who wishes to operate in space due to the physical danger of the debris, much of which is too small to identify and track from the Earth, and will be a cause of concern for all space faring nations, China included. More importantly, however, is the good will lost by China’s blatant demonstration of an offensive space control capability (or space weapon) with no warning or explanation. Lack of information beforehand combined with a weeks-long silence after the test also indicate a lack of coordination between China’s military and political branches, which is a dangerous harbinger for future military as well as space operations. 7

# ASATs – Proliferation Impact

**US weaponization causes fast ASAT proliferation**

**Hsu, 2008 –** [Jeremy, Jeanna Bryner, 2/21/2008, Space.com, “Space Arms Race Heats Overnight,” <http://www.space.com/5007-space-arms-race-heats-overnight.html>, Accessed 6/27/2011]

Experts have also suggested the U.S. attempt [to weaponize] could legitimize China's anti-satellite demonstration that took place a year ago, and open the doors for other nations such as India or Iran to do their own tests. "Since China did their ASAT [anti-satellite] test and got into political hot water, there's been debate in China about whether to go forward," Hitchens said. "This would seem to give PLA [People's Liberation Army] hardliners more ammunition for their argument, and also gives other nations the signal that it's okay if you test this technology if it's done safely."

# ASATs – War Impact

**ASAT use causes space accidents and war – draws in Russia, Japan, and India – also destroys the commercial sector – the time frame is seconds**

**Beljac, 2008 – professor at University of Melbourne** [Marko, March 31, 2008, Foreign Policy in Focus, Institute for Policy Studies, “Arms Race in Space,” <http://www.fpif.org/articles/arms_race_in_space>, accessed June 23, 2011]

In fact we have just learnt that the Air Force is working on plans to develop a “counter-ASAT” space weapon system by 2011. Reports suggest that most aspects of these plans are secret but some information has emerged in the public domain that sheds some interesting light on US space weapons planning. The system is known as the Rapid Attack Identification Detection Reporting System (Raidrs) Block 20. The rationale for this program is to develop information in a timely fashion to enable the Pentagon to intercept a direct-ascent anti-satellite weapon, which are launched from the Earth, before it strikes its target in low earth orbit. But if the asset used to achieve this objective is space based then this may well enable BMD hawks to also obtain a space based BMD interception capability and there is no reason to suppose that a “counter-ASAT” weapon could not also function as an offensive space weapon. Nascent Asian Space Race As noted, China has tested an anti satellite weapon and Russia has stated that it would not allow other states to control space and threaten its own space assets. In Asia a nascent space race seems to be developing between China, Japan and India. In the far future the large deposits of Helium-3 on the moon's surface could lead to a militarized race to colonize the moon to secure Helium-3 for nuclear fusion energy technologies based on anuetronic fusion reactions in the context of depleting hydro-carbons. Washington argues that it has too much commercially riding on space to allow others to have the potential capability of disrupting U.S. space assets. In 1998 the failure of one satellite, the Galaxy IV, made some 80% of pagers in the U.S. malfunction. Though the latest Russian and Chinese space arms control proposal is flawed, because of the clumsy definition of what constitutes a “space weapon,” this doesn’t mean that space arms control is not possible in principle. A global space arms control regime would protect U.S., Russian, Chinese, and even Australian space assets. An arms race in space will eventually lead other states to catch up with the United States and thereby placing Washington's commercial satellites at risk. Space weaponization may well have cataclysmic consequences given the link between space weapons and nuclear weapons strategy. This is because Russia, and the United States, to a certain extent rely on satellites for early warning of nuclear attack. As other space nations with nuclear weapons develop their space capacity it is expected that they will follow suit. The deployment of space weapons means that the first shot in a nuclear war would be fired against these early warning satellites. Currently strategic planners in Moscow have about 10 minutes between warning of an attack and the decision to launch nuclear weapons in response before they impact. Weapons in space would lower this in certain scenarios down to seconds. This would also apply for weapons placed in space that would be considered to be defensive such as say a space based BMD interceptor or a “counter-ASAT” weapon. On occasion, ground warning radars falsely show that a nuclear attack has been launched. In the 1990s a false alarm went all the way up to President Boris Yeltsin and was terminated after approximately eight minutes. We are still here, noted analysts believe, because warning satellites would have given Moscow real time information showing the alarm to be false. Should such a false alarm coincide with an accident involving an early warning satellite when space weapons are known to exist, an accidental nuclear exchange could result. The risk would increase if the false alarm occurred during a crisis. Space weapons could lead to itchy fingers on nuclear triggers. They would therefore significantly increase the importance nuclear weapon states place upon nuclear deterrence.

**China perceives US militarization as a threat – causes ASAT development**

**Chase, 2011 – Ph.D. in international relations from Johns Hopkins, MA in China studies from SAIS, Johns Hopkins** [Michael S., March 25, 2011, Jamestown Foundation Publication, “Defense and Deterrence in China’s Military Space Strategy” <http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews%5Btt_news%5D=37699&tx_ttnews%5BbackPid%5D=25&cHash=e3f0fcd233f563e2364ad7bc49425244>, accessed June 21, 2011]

As China continues to place more satellites into orbit, Chinese strategists are likely to become more interested in space defense and space deterrence, but this does not necessarily mean that their interest in attacking adversary space systems if required will be diminished. Indeed, Chinese writings on military space operations emphasize the importance of maintaining one’s own freedom of action in space while denying the adversary the ability to use space assets in a conflict with China. Moreover, many Chinese analysts indicate that they perceive the US military as heavily dependent on space assets for crucial functions such as ISR, communications, and navigation and positioning. Some Chinese writers also argue that space represents a crucial U.S. vulnerability, one that must be exploited to win a future local war under informatized conditions. Chinese concerns about the potential of enemy space-based missile defense systems to undermine China’s nuclear deterrence capabilities continue to provide another rationale for the development and possibly employment of ASAT capabilities [21]. Given the conviction that preventing an enemy from using space systems effectively in a conflict may very well be essential to gaining information superiority, or possibly even to preserving China’s ability to launch a retaliatory nuclear strike, it seems unlikely that China’s development of counter-space systems would be limited to deterring attacks against China’s own satellites. Consequently, even as its interest in space defense and space deterrence increases along with the need to protect its own growing satellite capabilities, Beijing will probably still view counter-space weapons as giving it the option of denying an enemy the advantages its forces derive from unhindered access to space systems.

# China Military Modernization Impact

**US must take caution with China relationship – China gaining military capabilities**

**Blazejewski, 2008 –** **JD/MPA degree in NYU School of Law, previous work in American Civil Liberties Union (ACLU), Cleary Gottlieb Steen & Hamilton LLP, and the Democratic staff of the House Ways and Means Committee.** [Kenneth S., 2008, “Space Weaponization and US-China Relations,” <http://www.au.af.mil/au/ssq/2008/Spring/blazejewski.pdf>,” Date accessed 6/26/2011]

In considering the costs and benefits of space weaponization, the United States must consider the effects it will have on its security relationship with foreign states. The United States should pay particular attention to the effect on relations with China, a potential future superpower with nuclear, intercontinental ballistic missile (ICBM), and ASAT capability, along with growing space programs. This article explores the range of possible interpretations of US policy and Chinese policy on space weaponization. I argue that although the United States cannot have full certainty about China’s space weapons program, it should proceed against the background of certain basic facts about China’s position. First, I argue that if the United States proceeds with space weaponization, China will respond with some form of its own military buildup. The extent of such a response is not certain, but a new arms race revolving around space warfare is not unthinkable. Second, China has already developed the means to attack some US satellites, and there is no guarantee that China does not seek to develop the means to launch a more robust space weapons or ASAT program.

**China will lead with ASAT program to prevent US space domination**

**Blazejewski, 2008 –** **JD/MPA degree in NYU School of Law, previous work in American Civil Liberties Union (ACLU), Cleary Gottlieb Steen & Hamilton LLP, and the Democratic staff of the House Ways and Means Committee.** [Kenneth S., 2008, “Space Weaponization and US-China Relations,” <http://www.au.af.mil/au/ssq/2008/Spring/blazejewski.pdf>,” Date accessed 6/26/2011]

A second interpretation, not wholly inconsistent with the first, is that China is concerned that the United States seeks to deny Chinese use of outer space. As China continues down the path of economic develop- ment and technological advancement, it seeks to grow its outer space programs. China seeks to launch new satellites for commercial and military purposes. For instance, China has plans to launch a GPS-like satellite system called Beidou-2. From 2006 to 2010, China plans to launch up to 100 satellites. It also has an interest in developing a space science pro- gram much like NASA. Although the United States has officially stated that it supports the peaceful use of outer space by all space-faring nations, so-called US “space controllers” or “space hegemonists” argue the United States should carefully police the use of space to assure that no country uses it in a manner inconsistent with its interests. In response to such a US policy, China seeks to deny the US denial of outer space. One means of doing so would be through the ratification of an international treaty that precluded the United States from putting in place the instruments or means to control outer space. Since the diplomatic approach does not seem likely to produce any concrete results, China is moving forward with its ASAT program in order to hedge the risk of US space domination.

**US space weaponization will lead to additional Chinese ASAT and nuclear weapons**

**Blazejewski, 2008 –** **JD/MPA degree in NYU School of Law, previous work in American Civil Liberties Union (ACLU), Cleary Gottlieb Steen & Hamilton LLP, and the Democratic staff of the House Ways and Means Committee.** [Kenneth S., 2008, “Space Weaponization and US-China Relations,” <http://www.au.af.mil/au/ssq/2008/Spring/blazejewski.pdf>,” Date accessed 6/26/2011]

First, if the United States proceeds with space weaponization China will respond by bolstering its own military capabilities. China’s response will seek to preserve the asymmetric threat it poses to US space assets and maintain its nuclear deterrent. Under each of the interpretations considered, China is not willing to allow the United States to build up its space weapons program unchallenged. In the least, China would develop additional ASAT weapons to which the United States would seek to develop effective countermeasures. Alternatively or in addition, China could invest in more ICBMs and nuclear warheads acquiring the capacity to overwhelm a BMD shield. An option less likely in the near future, China could counter US space weaponization by deploying its own space weapons. Other potential Chinese responses include adopting a “launch on warning” policy or abandoning its no-first-use pledge. Each of these strategies would seek to counter the effectiveness of US space weapons. The United States, of course, could always respond to China’s response, but such tit-for-tat policy making risks devolving into an arms race. Chinese officials claim that an arms race would “likely emerge” unless a negotiated solution can be reached on PAROS. It is noteworthy, however, that under at least two interpretations, this is not China’s preferred outcome. Under the first and second interpretations, China will only proceed with further developing ASAT technology and acquiring additional weapons if it cannot be assured that the United States does not plan to weaponize outer space.

**China focusing on a full-blown space program – future space arms race inevitable**

**Blazejewski, 2008 –** **JD/MPA degree in NYU School of Law, previous work in American Civil Liberties Union (ACLU), Cleary Gottlieb Steen & Hamilton LLP, and the Democratic staff of the House Ways and Means Committee.** [Kenneth S., 2008, “Space Weaponization and US-China Relations,” <http://www.au.af.mil/au/ssq/2008/Spring/blazejewski.pdf>,” Date accessed 6/26/2011]

Second, China has developed the means to attack some US satellites, and there is no guarantee that China does not ultimately seek to develop a robust space weapons program. China’s ASAT test demonstrates that the Chinese have been working assiduously at developing their space weapons program. Although China made a decision in the early 1990s to focus its space resources on civilian programs, an annual official budget of $2.5 billion for space programs and a growing number of dual-use technology programs suggest that China’s military space capacity is growing. For instance, China has long conducted research on the development of beam weapons that can be incorporated into ASAT weapons systems. China is known to have tested high-power microwave weapons for jamming satellite communication. If China is indeed pursuing a full-blown space weapons program, a space arms race may be inevitable despite a US decision not to launch the first space weapons program.

**US space weaponization will cause Chinese to respond with military buildup**

**Blazejewski, 2008 –** **JD/MPA degree in NYU School of Law, previous work in American Civil Liberties Union (ACLU), Cleary Gottlieb Steen & Hamilton LLP, and the Democratic staff of the House Ways and Means Committee.** [Kenneth S., 2008, “Space Weaponization and US-China Relations,” <http://www.au.af.mil/au/ssq/2008/Spring/blazejewski.pdf>,” Date accessed 6/26/2011]

I recommend that the United States accept a commitment to forgo place- ment of weapons in outer space. The costs of space weaponization simply outweigh the benefits. Above, I argue that China would respond to US space weaponization with some level of military buildup. In the least, this response would include the deployment of a more robust ASAT system capable of attacking and potentially eliminating space weapons. After all, space weapons, like military satellites, make for vulnerable military targets. The use of space-based weapons in a conflict must be discounted by the likelihood that they would be eliminated by Chinese ASAT attack. More importantly, increased ASAT deployment would have the counterproductive effect of exposing US satel- lites to greater threat. Aside from ASAT issues, Chinese response to US space weaponization would include an increase in China’s ICBM fleet and nuclear arsenal. Vertical proliferation cannot be in the interests of the United States, if only for the increased peacetime risks of accidental launch or the terrorist risk associated with increased availability of weapons technology and components. Finally, the United States should not discount the possibility, often cited by opponents of space weaponization, that the deployment of US space weapons would instigate a space arms race.

# Commercial Sector Impact

**Debris prevents US space militarization and kills commercial access to space.**

**DeBlois 2003 – Colonel in USAF and Professor of Air and Space Technology at Air University** [Bruce, July 5, 2003, Council on Foreign Relations, “The Advent of Space Weapons,” [http://www.cfr.org/pdf/Bergman\_11ast03.pdf](http://www.google.com/url?q=http://www.cfr.org/pdf/Bergman_11ast03.pdf&ei=15cDTr_sK4PG-Qbf_72MDg&sa=X&oi=unauthorizedredirect&ct=targetlink&ust=1308860127720799&usg=AFQjCNEva7wQzrjksRBNOmG7aVDbAHPbhw), accessed June 23, 2011]

Unfortunately, there are between 30,000 and 100,000 untracked objects between 1 cm and 10 cm diameter (large enough to cause serious damage to spacefaring vehicles), and an unknown but enormous number of particles smaller than 1 cm (many of which could damage sensitive systems on impact). While the space environment is extremely large and the probability of an impact is still small, that probability is growing. .or some space missions active protection through shielding is already a requirement (e.g. the International Space Station). Getting this shielding to orbit is an added expense to an already low-profit-margin industry. Any weapon use in space, but particularly proliferating weapons use in space, could readily make space a no-go area of dangerous debris, in the process pre-empting commercial and civil development.

# Cyber War Impact

**US-China on the brink of cyber war**

**Vladmir, 6-3-11, Russian Journalist** [On the brink of cyber-war, 6-22-11, http://english.ruvr.ru/2011/06/03/51244308.html]

Meanwhile the US Secretary of State Hillary Clinton stated that the US had been extremely disturbed by the recent attack on Google. Clinton also added that such attacks became a prime reason the State Department had decided for the first time to create a cyber-security co-coordinator. According to Google spokesmen, the assault targeted "hundreds of users including, among others, senior US government officials, Chinese political activists, officials in several Asian countries (predominantly South Korea), military personnel and journalists". Google also stated that it had traced the attacks to Jinan in Shandong province, believed to be a hub for Chinese cyber espionage. While not directly accusing the Chinese government of being the mastermind behind the attacks, Google states that the sophistication of the assault may easily point to a government source. No one was surprised when China angrily declined these assumptions. Hong Lei - a spokesman for the Chinese foreign ministry called the accusation “a total fabrication” and even made a risky statement that “China is also a victim”. It is hard to take this objection seriously, especially considering the history of the relations between Google and Chinese government. In 2009 Google stated that it would no longer agree to censor its Chinese search results. This decision became a reaction to the same year cyber assault, believed to be the government sponsored attempt to gather data on Chinese human rights activists. In return, the Chinese authorities have withdrawn the license for Google's mainland-based search operations.

**Cyberwar leads to conventional warfare**

**Vladmir, 6-3-11, Russian Journalist** [On the brink of cyber-war, 6-22-11, http://english.ruvr.ru/2011/06/03/51244308.html]

The situation proves that independent hackers attacking government and corporation websites are rapidly becoming the attributes of the past. Today the international cyber-space is turning into a playground for the big boys – governments and intelligence agencies. It leads to the fusion of cyber-assaults with real military attacks. This process is well illustrated by the comment of an unnamed US military official, who said to the Wall Street Journal: "If you shut down our power grid, maybe we will put a missile down one of your smokestacks." It sounds like cupcake recipes are not going to be the most menacing weapon in this war.

# Debris Impact

**Modernization space leads to space traffic – increasing space debris**

**Mac’Donald 3-18-2009**, Senior Director of the Nonproliferation and Arms Control Program with the USIP Center for Conflict Analysis and Prevention, MacDonald is an honors graduate in aerospace engineering from Princeton University.  He also received two Masters Degrees from Princeton, one in aerospace engineering with a specialty in rocket propulsion, and the second in public and international affairs. [Bruce W. Macdonald, Testimony of Bruce W. MacDonald-Before the Strategic Forces Subcommittee, <http://www.usip.org/experts/bruce-w-macdonald>, 6-22-11]

Space “traffic” is heavier than it has ever been and getting worse, both in terms of physical vehicles and communications. Yet there is no “FAA for space” and even just the monitoring, much less the management, of space objects is widely seen as far less than needed. There is a great need for space traffic management capabilities, including enforceable rules of the road, codes of conduct, and space situational awareness that would inform a “space FAA” management capability. Space debris poses an insidious and growing threat to all space assets. Debris in space does not quickly fall to the ground, as on earth; at all but the lowest orbits, debris can stay aloft for centuries and more. In addition to the 17,000 orbiting objects the Air Force can track, there are hundreds of thousands of potentially lethal objects in orbit, and millions of smaller objects that pose at least some risk. The recent collision between a U.S. Iridium satellite and an old Russian Cosmos dramatically illustrated the problem. Our space assets are exposed and fragile. They can’t run, they can’t hide, and today they can’t defend themselves. One small object traveling at orbital speeds can destroy them. Unless we take proactive measures, all these threats will grow, and we must bear in mind that the U.S. depends more on space than our potential adversaries. If we are not careful, the way we are currently thinking, planning, and investing, our space capabilities may only be available in peacetime, or against non-peer adversaries. We could lose them just when we need them most. At a minimum, we need far greater space situational awareness and space intelligence (SSA/SI) capabilities than today. Responsible officials have been saying this for years, but SSA/SI has never received the priority it deserves. If this fails to change, we can expect more frequent space collisions and growing instability in space.

**International cooperation is key to solving dangerous space debris – past multipolar actions have placed mitigation guidelines**

**Johnson 2/4/11** NASA Chief Scientist for Orbital Debris in 2006[Nicholas L. **“**These Things Are Not Similar” http://www.informationdissemination.net/2011/02/these-things-are-not-similar.html 6/26/11]

Following the establishment in 1995 of detailed space debris mitigation guidelines for all NASA space projects and programs, several additional space debris mitigation policies were developed, including by the space agencies of Japan, France, and Russia, as well as the European Space Agency. After several years of coordination with U.S. industry, the U.S. Government Orbital Debris Mitigation Standard Practices were formally adopted in February 2001 and are referenced in the latest U.S. National Space Policy signed by President Bush on 31 August 2006. In recent years, emphasis has shifted from national efforts to control the space debris population to international ones. Here, too, great progress has been made, most notably by the Inter-Agency Space Debris Coordination Committee (IADC) and the Committee on the Peaceful Uses of Outer Space (COPUOS) of the United Nations. Today, a firm international consensus is rapidly building on the principal space debris mitigation measures. The IADC is an association of the space agencies of ten countries (China, France, Germany, India, Italy, Japan, Russia, Ukraine, the United Kingdom, and the United States) and the European Space Agency, representing 17 countries of which four (France, Germany, Italy, and the United Kingdom) are also full IADC members. At the 17th meeting of the IADC in October 1999, a new Action Item (AI 17.2) was adopted to develop a set of consensus space debris mitigation guidelines. The purpose of the activity was to identify the most valuable space debris mitigation measures and to reach an international agreement on common directives. The IADC Space Debris Mitigation Guidelines were formally adopted in October 2002 during the Second World Space Congress in Houston, Texas. Two years later a companion document, entitled Support to the IADC Space Debris Mitigation Guidelines, was completed to provide background and clarification for the guidelines. The history demonstrates China played an active role in developing international guidelines for space debris going back to at least 1999.

**Unilateral action catastrophic for debris levels-China ‘s ASAT test increased debris by 45%**

**Johnson 2/4/11** NASA Chief Scientist for Orbital Debris in 2006[Nicholas L. **“**These Things Are Not Similar” http://www.informationdissemination.net/2011/02/these-things-are-not-similar.html 6/26/11]

On the other hand, the Chinese ASAT strike against the FY-1C weather satellite is the biggest disaster in the history of space exploration, and every statistic proves it. As a result of that incident China became the biggest contributing nation to low orbit space debris. There are some 2,500 major pieces of space debris that will remain in earths low orbit until at least 2030, and an additional 100,000 smaller pieces of debris that will not fall into earths atmosphere until next century. When we compare the two incidents, they are not equal by any standard. The carelessness of China cannot be legitimately compared to the careful calculus of the United States. China didn't tell anyone about their ASAT test, but the US gave plenty of warning and time for every nation around the world to ask questions and give opinions. The complete screw up by China in their ASAT test is monumental. The amount of debris that resulted from their little military exercise is enormous, and accounts for 45% of all the low orbit space debris around the planet. Russia and the US were in a space race for decades with what today is seen as low technology, and neither country ever approached the stupidity exercised by China. What China did was akin to detonating a nuclear weapon in their own house just to prove they have nuclear weapons. It's that colossal in stupidity.

**Asteriods and Debris lead to miscalculation and wars**

**Stone ’08,** Asia News Editor of Science, the international weekly magazine [Richard, “”Near-Earth Objects: Preparing for Dooms Day” <http://www.fr.sott.net/articles/show/150527-NEAR-EARTH-OBJECTS-Preparing-for-Doomsday>, 6/22/11]

Shustov's nightmare is that leaders will drag their feet until the threat of a direct hit becomes real. But an asteroid need not impact to cause chaos**. Each year, military satellites detect several 1-kiloton explosions of asteroids in the upper atmosphere, and every several years, a much larger explosion of 10 kilotons or more, says Sandia's Boslough. "They are quite frightening to people on the ground."** A bus-size meteoroid would explode in the stratosphere with the energy of a small atomic bomb, producing a blinding flash much brighter than the sun, says Chapman. "Military commanders in a region of tension might regard it as the hostile act of an enemy and retaliate," he says. A 25-kiloton airburst occurred over the Mediterranean Sea on 6 June 2002. Imagine, Chapman says, "if that had happened instead in the vicinity of Kashmir, where tensions between India and Pakistan were elevated."

# Econ impacts Generic

**Internal Link**

**China- US relations key to the economy**

**Xinhua News. April 25, 2011.** [“ Three Essential Principles for U.S.-China Relations.” Watching America. <http://watchingamerica.com/News/100258/three-essential-principles-for-u-s-china-relations/> accessed June 27]

The first principle is that U.S. economic growth depends on China. The 2008 financial crisis exposed the structural problems and weaknesses in the U.S. economy. These problems provide two implications for effective U.S.-China cooperation: First, because both countries are mutually dependent, China cannot afford a collapse in the U.S. economy. Second, a healthy U.S. economy also depends on China’s growing economy to be strong. Therefore, preventing another U.S. economic collapse is a U.S. concern as well as a Chinese. China plays an important role in sustaining a healthy U.S. economy. Not only are the two economies not a zero-sum game, they have great implications for Obama’s handling of China-U.S. trade relations. For example, should the U.S. restrict export of high-tech skills to China when it depends so much on the “China factor” for its development? Should national security be used as an excuse for preventing investments coming from China? How does the U.S. handle protectionism and its implication on creating tension in U.S.-China trade relations? The second principle is that China needs to have a stable society. The Tunisian Revolution in North Africa more or less affected China. During an age of rapid development and social transformation, China sways in the turmoil and its ability to stand still is the world’s focus. The Chinese believe that though China has many problems, it needs to find a solution for stability and development. World experts who are not looking through colored lenses also agreed that China’s stability might hugely impact the world economy. This is not good news for the world. This April, I visited the U.S. and heard some complaints from Americans that the U.S. should focus more on human rights issues in China. Although the issues are important, we should not neglect a more high-level perspective: China’s stability is of utmost importance. Social instability will undo all the current efforts for economic development and miss all the great growth opportunities and trends in the modern era. Globally, the world will miss out on a very important economic driver. Americans might not understand China’s need for stability and development, but they sure will understand the consequences of bringing down China’s economy, especially its impact on the U.S. economy. During the financial crisis, the U.S. government took over Fannie Mae and Freddie Mac. Because they were “too big to fail,” the government had to intervene. Now, China is an economy that the world should recognize as “too big to fail.” Observing the issues in China, one should not be merely looking at the trees and forget about the forest. This will shed a practical light on how to create dialogues for human right issues in China. Third, the U.S. and China need to avoid conflicts in the Asia-Pacific region. Last year, Obama’s government heightened its diplomatic strategy by turning its focus to Asia. From the South Sea of the Korean Peninsula to the Diaoyu Islands, the U.S. stood at the opposite end of China. These various conflicts are of great concern. The U.S. has been actively deploying in Asia-Pacific by using various methods to balance its power in the region. If the two powers continue their open confrontations and hidden struggles, it will soon be very difficult to maintain order here. Very likely, the result will be disastrous.

**Cooperation key to the economy**

**Klomp, 2010 – Major, USAF** [Jeremiah O., April, 2010, Air Command and Staff College, Air University, “Is Space Big Enough For A US-Sino Partnership?” <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA537174&Location=U2&doc=GetTRDoc.pdf>, accessed June 24, 2011]

The economic arena provides a very compelling argument in favor of cooperation. The high cost of research and development as well as constructing and launching satellites makes it extremely prohibitive to initiate a space venture alone. As costs are shared across multiple partners, the same, or nearly the same, benefit is achieved by all partners, making it much more cost effective when compared to developing technology and completing the project solo. It is thus much easier to justify and approve new projects as joint ventures. 13 China is a seemingly ideal economic partner, if only because it has very large coffers and has demonstrated a willingness to use those resources in pursuit of space-related objectives. Partnering with China on a peaceful space venture would relieve significant economic pressure on US Government budgetary constraints. There are many valuable, yet low threat, research and development projects and ideas in various stages of development that would be great candidates for a partnership with China. For example, there are many civil projects in need of funding regarding medical experiements in space, effects of space weather on near space satellites, space weather effects on cell phones, to name a few. This type of joint project could open the door to expanded partnerships with China in other areas.

**China relations key to the US economy**

**CNN 11-16-2009**, Tom Evans – Staff Writer for CNN. [CNN, the Relationship between China and the United States if the “Most Important” bilateral realtionship in the world, CNN, <http://articles.cnn.com/2009-11-16/world/china.us.relations_1_chinese-foreign-ministry-official-chinese-president-hu-jintao-china?_s=PM:WORLD>, 6-22-11]

The relationship between China and the United States is "the most important" bilateral relationship in the world, a former Chinese foreign ministry official said Monday. Victor Zhikai Gao, now the director of the Beijing Private Equity Association, told CNN's Christiane Amanpour that the United States should deal with Beijing "with respect" and not be "too abrasive." "That's the minimum thing we can ask for, I believe," he said on the eve of talks between President Obama and Chinese President Hu Jintao.Gao pointed out that China is now the United States' largest creditor nation, holding foreign reserves of more than $2 trillion, about two-thirds of which are assets that are denominated in U.S. dollars. "China-U.S. relations are the most important bilateral relations in the world," Gao said.

**US and China relations key to the economy**

**Xinhua News, 5/24/11** [China Daily, “Wang stresses China, US economic interdependence”, <http://www.chinadaily.com.cn/china/2010-05/24/content_9886089.htm>, accessed 6/22/11]

BEIJING - Chinese Vice-Premier Wang Qishan said on Monday economic interdependence between China and the United States reflects the importance of bilateral cooperation. "With increasingly close links, our two economies have become inseparable. This has been particularly true since the outbreak of the international financial crisis, and our two countries have acted together to meet the challenge," said Wang at the opening session of the second round of the China-US Strategic and Economic Dialogue (S&ED). The dialogue will conclude Tuesday. He said China-US economic ties are a cornerstone of the bilateral relationship, adding that the high economic complementarity between the two sides makes for win-win cooperation, not a zero-sum game. The world economy is at a "critical juncture," but as long as the two countries communicate with candor, enhance mutual trust and look for common ground, China and the US will overcome any future difficulty, Wang said. Wang said the dialogue's core objective is building a positive, cooperative and comprehensive China-US relationship for the 21st century. "The dialogue will enable us to further our cooperation, solidify the positive momentum and promote the strong, sustainable and balanced growth of the global economy," he added. Wang expressed confidence the two nations will broaden their consensus, narrow their differences, and work together for sound and steady growth in China-US relations through the talks.

# Econ Impact – Weaponization Internal

**US weaponization causes economic collapse**

**Mac’Donald 3-18-2009**, Senior Director of the Nonproliferation and Arms Control Program with the USIP Center for Conflict Analysis and Prevention, MacDonald is an honors graduate in aerospace engineering from Princeton University.  He also received two Masters Degrees from Princeton, one in aerospace engineering with a specialty in rocket propulsion, and the second in public and international affairs. [Bruce W. Macdonald, Testimony of Bruce W. MacDonald-Before the Strategic Forces Subcommittee, <http://www.usip.org/experts/bruce-w-macdonald>, 6-22-11]

With the proliferation of space and other technologies, and specifically with the anti-satellite (ASAT) capability China demonstrated two years ago, there is a risk that China or another adversary could exploit this fast-growing U.S. dependence on space in a war to greatly weaken U.S. military and economic power. China could do so and thus pose a serious threat to U.S. space assets within a decade if it chose to do so. China is also pursuing other programs that have important ASAT implications, and other nations are interested in ASAT as well. The 2008 U.S. shoot-down of an errant satellite demonstrated the ASAT capability inherent to missile defense systems, ours and others. Last week Russia indicated renewed interest in ASAT weapons when their deputy defense minister, General Valentin Popovkin, stated that Russia is working on ASAT.

**Space weaponization risks destroying the commercial economy.**

**Deblois 2003**, Director, Mission Integration Programs at BAE Systems, Consultant at United States Secret Service, Director, Mission Integration Programs at BAE Systems, graduated from Oxford University. [Bruce DeBlois, Use of Space Weapons would Increase Space Debris, Crippling Commercial Space Sector, Spacedebate.org, <http://www.spacedebate.org/evidence/1529/>, 6-23-11]

In addition to posing insurmountable military opportunity costs and the potential of another costly arms race, space weapons directly threaten the fiscal health of the space sector itself. Use of destructive weapons in space would obviously promote an orbital debris problem that is on the threshold of becoming a major inhibitor to space commerce. Currently, the US Space Surveillance Network uses ground-based radar and optical/infrared sensors to track roughly 7,500 objects across orbital space. That constitutes objects greater than 10 cm in diameter in low Earth orbit to objects greater than 1 m diameter in geostationary orbit. Only approximately five per cent of those objects are operating satellites; the rest are effectively debris, 40 per cent of which are fragments of disintegrated satellites and upper stages of rockets.

# Environment Impact

**China-US partnership solves biosphere collapse and global warming -results in cleantech energy and diplomacy**

**Dignan in 2010, editor-in-chief [Larry, Smart Planet, “The new space race? China, U.S. duel for cleantech leadership,” http://www.smartplanet.com/blog/smart-takes/the-new-space-race-china-us-duel-for-cleantech-leadership/10832]**

The United States and China are in a race for cleantech supremacy akin to the space race in the 1960s, according to a report from PwC. This cleantech race has high stakes and will forge a new commercial diplomacy according to PwC, an accounting and consultant firm. PwC said in a report: The potential scale and political urgency of these emerging industries—along with ambitious national targets for rollouts—bear a semblance of the Space Race of the 1960s. While cleantech companies in both countries are in many cases locked in head-to-head competition to become major players in these developments, there also exist intersections where US and Chinese companies are partnering in ways that play to each other’s strengths while closely aligning with national clean energy policies. Successful partnerships could potentially hold significant growth opportunities both within and beyond US and Chinese markets. The report is worth a read and highlights a bevy of key points. Among the notable findings: Incentives for clean tech investing has turned China into the world’s largest market for wind turbines. China products a third of all the solar panels, but installations in China are less than three percent of projects implemented around the globe. Those installations are likely to increase. Water management is critical to China due to pollution. Electric vehicle penetration in China is likely to leapfrog deployments in the U.S. and Europe. U.S. companies can collaborate and profit from these cleantech opportunities in China. Not-too-surprisingly the money is flowing into China’s hot spots: Solar, transportation and smart grids. What remains to be seen is how the U.S.-China cleantech race plays out. China can stimulate and dictate cleantech mandates much easier as a centrally-planned government. In the U.S., politics, not-in-my-backyard (NIMBY) and legacy infrastructure are all hurdles to clear for cleantech deployments to accelerate.

# Global Cooling - Launches

**Space Launch will deplete the Ozone – Leads to Global Cooling**

**The Green Left 5-1-91**, Christic Instutute – Pegasus - Online Global Enviornmental Newspaper, Established in 1989, Staff writers include some of the top enviornmentalists in the Country. [The GreenLeft, Rockets Destroying Ozone Layer – Says Scientists, the Green Left Publications, http://www.greenleft.org.au/node/1487, 6-26-2011]

Two Soviet rocket scientists have warned that the solid fuel rocket boosters used on the US space shuttle release 187 tons of ozone-destroying chlorine molecules into the atmosphere with every launch. Valery Burdakov, co-designer of the Russian "Energiya" rocket engine, pointed out that each shuttle launch produces seven tons of nitrogen (another ozone depleter), 387 tons of carbon dioxide (a major contributor to the greenhouse effect) and 177 tons of aluminium oxide (linked to Alzheimer's disease) before reaching an altitude of 31 miles. Burdakov also notes that the history of ozone depletion correlates closely with the increase of chlorine discharged by solid fuel rockets since 1981. Soviet rockets employ a fuel combination that is 2000 times less damaging than the shuttle's but which still destroys 1500 tons of ozone per launch. According to Burdakov and his colleague, Vyacheslav Filin, a single shuttle launch can destroy as much as 10 million tons of ozone. This means that 300 total shuttle flights will completely destroy the Earth's protective ozone shield. All other solid fuel rockets also contribute to ozone destruction. Near the top of the list are the US Delta rocket (which destroys 8 million tons per launch), the US Titan, and the French Ariane V. In an article published originally in South, Burdakov warned that, at present rates of increase, rockets will soon be pouring 100,000 tons of chlorine and nitrogen into the atmosphere annually. Burdakov has called for international controls and a phasing out of solid fuel rocket technology as well as a ban on supersonic aircraft flights into the stratosphere. The charges by the Soviet scientists were supported by research done by the Military Toxics Network, headquartered in San Francisco. Working with the Soviet figures and data obtained from NASA, the network concluded that significant damage was being done to the ozone layer by the space shuttle launches.

**Ozone Depletion/Global Warming results in Global Cooling – Ensures Extinction**

**Thomas 8-7-06,** award-winning Canadian journalist specializing in health and environment; Thomas’ writing and photography have appeared in more than 50 publications in eight countries, has also appeared on the CBC and New Zealand’s national television. [William Thomas, Scientist Says Chemtrails - Shuttle Launches Endangering Earth, Chemtrails & Willthomas, http://www.chemtrails911.com/docs/Space%20Shuttle%20Launch-Ozone%20Layer.htm, 6-26-11]

While increased greenhouse gases in the air trap more heat in the lower atmosphere, sunlight reflected back into space by artificial clouds formed by chemtrails, airline exhausts and solid-fuel rocket launches is causing the upper stratosphere (between 14 and 26 kilometres above the Earth) to get much colder. Winter stratospheric ice clouds trap vast expanses of ozone-eating chemicals—and they are increasing in size and frequency. From the end of November 2005 to the end of February 2006, there were more ozone-destroying ice clouds that lingered for longer periods than ever previously recorded. In late March, when ozone depletion was at its worst, ice clouds drifted over the UK and Europe as far south as northern Italy—frying exposed life forms below. On April 26, 2005, scientists told a meeting in Vienna that "the atmospheric lifetime of these [ozone depleting] compounds is extremely long and the concentrations will remain at dangerously high levels for another half century." As Professor John Pyle explains, “We thought things would start to get better because of the phasing out of CFCs and other chemicals because of the Montreal protocol, but this has not happened. The pollution levels have leveled off but changes in the atmosphere have made it easier for the chemical reactions to take place that allow pollutants to destroy ozone. With these changes likely to continue and get worse as global warming increases, then ozone will be further depleted even if the level of pollution is going down.”

# Global Warming - Launches

**Space Missions Destroy the Ozone – Leads to Global Warming**

**Sylvester 6-21-1990**, Purdue University, Principal at Secure Environment, President Security Technologies - Americas at Ingersoll Rand, Staff Writer for San Francisco Times. [David Sylvester, Shuttle Damages Earths Ozone, San Francisco Cronicle, http://www.linkedin.com/pub/dir/David/Sylvester, 6-26-2011]

Every time the space shuttle is launched, 250 tons of hydrochloric acid is released into the air. With each launch, .25 percent of the ozone is destroyed. So far, the space shuttle has destroyed 10 percent of the ozone. Dr. Helen Caldicott, world renown physician and environmentalist stuns audiences when she makes that statement in her talks across the country. A brief article, in a small-circulation environmental publication, supports Dr. Caldicott's charges. Two Soviet rocket scientists have warned that the solid fuel rocket boosters used on the space shuttle release 187 tons of ozone destroying chlorine molecules into the atmosphere with every launch. Valery Burdakov, co-designed of the Russian "Energiya" rocket engine, also noted that each shuttle launch produces seven tons of nitrogen (another ozone depleter), 387 tons of carbon dioxide (a major contributor to the "greenhouse effect") and 177 tons of aluminum oxide (linked to Alzheimer's Disease) before reaching an altitude of 31 miles. Burdakov also notes that the history of ozone depletion correlates closely with the increase of chlorine discharged by solid fuel rockets since 1981. Soviet rockets employ a fuel combination that is 2000 times less damaging than the shuttle's but which still destroys 1500 tons of ozone per launch. According to Burdakov and his colleague, Vyacheslav Filin, a single shuttle launch can destroy as much as 10 million tons of ozone. This means that 300 total shuttle flights will completely destroy the Earth's protective ozone shield. All other solid fuel rockets also contribute to ozone destruction. Near the top of the list are the U.S. Delta rocket (which destroys eight million tons per launch), the U.S. Titan, and the French Ariane V.In an article published originally in South, Burdakov warned that, at present rates of increase, rockets will soon be pouring 100,000 tons of chlorine and nitrogen into the atmosphere annually. Burdakov has called for international controls and a phase out of solid fuel rocket technology as well as a ban on supersonic aircraft flights into the stratosphere. The extraordinary charges by the Russian scientists were supported by research done by the Military Toxics Network, headquartered in San Francisco. Working with the Russian figures and data obtained from NASA, the Network concluded that significant damage was being done to the ozone layer by the space shuttle launches.

**Global Warming destroys Bio-Diversity – makes Earth Uninhabitable**

**Vitousek 1994**, American Ecologist, Professor of Zoology, Biology, and Biological Studies, member f the National Academy of Sciences, teaches at Indiana University, Amherst College, and Stanford University. [Peter Vitousek, Beyond Global Warming: Ecology and Global Change, Ecology Society of America, <http://www.esajournals.org/doi/abs/10.2307/1941591>, 6-26-2011]

While ecologists involved in management or policy often are advised to learn to deal with uncertainty, there are a number of components of global environmental change of which we are certain–certain that they are going on, and certain that they are human—caused. Some of these are largely ecological changes, and all have important ecological consequences. Three of the well—documented global changes are: increasing concentrations of carbon dioxide in the atmosphere; alterations in the biogeochemistry of the global nitrogen cycle; and ongoing land use/land cover change. Human activity–now primarily fossil fuel combustion– has increased carbon dioxide concentrations from °280 to 355 mL/L since 1800; the increase is unique, at least in the past 160 000 yr, and several lines of evidence demonstrate unequivocally that it is human—caused. This increase is likely to have climatic consequences–and certainly it has direct effects on biota in all Earth's terrestrial ecosystems. The global nitrogen cycle has been altered by human activity to such an extent that more nitrogen is fixed annually by humanity (primarily for nitrogen fertilizer, also by legume crops and as a by product of fossil fuel combustion) than by all natural pathways combined. This added nitrogen alters the chemistry of the atmosphere and of aquatic ecosystems, contributes to eutrophiction of the biosphere, and has substantial regional effects on biological diversity in the most affected areas. Finally, human land use/land cover change has transformed one—their to one—half of Earth's ice—free surface. This in and of itself probably represents the most important component of global change now and will for some decades to come; it has profound effects on biological diversity on land and on ecosystems downwind and downstream of affected areas. Overall, any clear dichotomy between pristine ecosystems and human—altered areas that may have existed in the past has vanished, and ecological research should account for this reality. These three and other equally certain components of global environmental change are the primary causes of anticipated changes in climate, and of ongoing losses of biological diversity. They are caused in turn by the extraordinary growth in size and resource use of the human population. On a broad scale, there is little uncertainty about any of these components of change or their causes. However, much of the public believes the causes–even the existence–of global change to be uncertain and contentious topics. By speaking out effectively, we can help to shift the focus of public discussion towards what can and should be done about global environmental change.

# Heg – Relations Internal

**Relations key to heg**

**Klomp, 2010 – Major, USAF** [Jeremiah O., April, 2010, Air Command and Staff College, Air University, “Is Space Big Enough For A US-Sino Partnership?” <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA537174&Location=U2&doc=GetTRDoc.pdf>, accessed June 24, 2011]

The political arena is one of the most sensitive regarding any potential partner. According to Steven Lambakis, any political decision can be significant because it can take years to reverse if it turns out not to be in our favor. 18 This may be particularly true in the case of China, since it is on a steady rise and set to overtake the US economy by 2050. 19 If and when China overtakes the US, it will be nearly impossible to reclaim the lead in any area without a significant shift in foreign and domestic policies currently affecting the US economic and political climates. Once our preeminence in space is lost, it will likely be gone for good. For this and other reasons, it may be beneficial to abandon the isolationist strategy in favor of a leading partner role with China space. In this way we can slow the development of Chinese space technology, keeping them dependent on the US and forestall their rise in space power.

**Chinese cooperation key to solve for Hegemony**

**Furukawa and Ogawa 6-23-11**, Staff Writers for the Daily Yomiuri Online National Japanese News Company. [Hajime Furukawa and Satoshi Ogawa, Chinas a threat – comes out clear as a bell, The Yomiuri Shimbun, <http://www.yomiuri.co.jp/dy/national/T110622005028.htm>, 6-23-11]

"Although China wasn't specifically named, Japan and the U.S. have all but said, 'China is a threat,'" a Japanese government source said of the "main objective" of a joint statement issued after ministerial-level defense and security talks in Washington. The preamble of the statement said both countries agreed on the need to "address challenges posed by the increasingly uncertain security environment" in East Asia in "common strategic objectives." For the first time, the statement also mentioned "nontraditional security concerns," and other evolving threats, such as "to outer space, to the high seas, and to cyberspace." It is not difficult to figure out what nation this was referring to."Everybody knows that the nation causing the most concern to others in these fields is China," the government source said. With China acting increasingly hegemonistic in its nearby waters, the statement reaffirmed the importance of maintaining the "security of the maritime domain by defending the principle of freedom of navigation." Japan and the United States also agreed to maintain cooperation for the protection of and access to space and cyberspace as new elements in the objectives.

# Chinese Military Modernization

**Perceived US space militarization leads to China militarization**

**Hagt, 2007 – director of the China Program at the World Security Institute** [Eric, Winter 2007, pp. 31-51, China Security, “China’s ASAT Test: Strategic Response,” <http://www.wsichina.org/cs5_3.pdf>, accessed 6/21/11]

In the past decade, China has derived a number of key conclusions from its observations of U.S. military activities in space that have fundamentally shaped China’s own strategic posture. The first is the profound implications of space for information and high-tech wars. China witnessed with awe and alarm the power of the U.S. military using satellite communication, reconnaissance, geo-positioning and integration capabilities for an impressive show of force beginning first with the Gulf war in 1991 to the recent campaign in Afghanistan and Iraq.1 The U.S. military’s almost complete dependence on space assets has also not escaped the close examination of Chinese analysts.2 Coupled with a number of key U.S. policy and military documents that call for control in space and the development of space weapons as well as the U.S. refusal to enter into any restrictive space arms control treaty, China has concluded that America is determined to dominate and control space.3 This perceived U.S. intent leads Beijing to assume the inevitable weaponization of space.4 Even more worrisome for China is the direct impact of these developments on China’s core national interests. The accelerated development of the U.S. ballistic missile system, especially as it is being developed in close cooperation with Japan, has been cited as threatening China’s homeland and nuclear deterrent.5 The ‘Shriever’ space war games conducted by the U.S. Air Force in 2001, 2003 and 20056 strongly reinforced the conclusion that U.S. space control sets China as a target.7 Most central to China’s concerns, however, is the direct affect U.S. space dominance will have on China’s ability to prevail in a conflict in the Taiwan Straits.8 As U.S. military space developments have evolved, China’s observations and subsequent conclusions have engendered a fundamental response: we cannot accept this state of affairs. For reasons of defense of national sovereignty as well as China’s broader interests in space – civilian, commercial and military – America’s pursuit of space control and dominance and its pursuit to develop ASATs and space weapons pose an intolerable risk to China’s national security.9 China’s own ASAT test embodied this message. Attempting to redress what China perceives as a critically imbalanced strategic environment that increasingly endangers its interests, China demonstrated a deterrent to defend against that threat. Its willingness to risk international opprobrium through such a test conveys China’s grim resolve to send that message.

**Perceived US militarization causes Chinese militarization**

**Hagt, 2007 – director of the China Program at the World Security Institute** [Eric, Winter 2007, pp. 31-51, China Security, “China’s ASAT Test: Strategic Response,” <http://www.wsichina.org/cs5_3.pdf>, accessed 6/21/11]

China’s approach to addressing its perceived insecurity in space fundamentally took on two separate forms: one political/diplomatic, the other military. At the international level, China’s pursuit of a space weapons ban and test ban treaty as well as attendant verification measures is most visibly represented by China’s efforts at the Conference on Disarmament in Geneva.10 Other official initiatives included China’s opposition, along with Russia and Belarus, over the U.S. decision to withdraw from the ABM treaty and its push to build the NMD system.11 China’s White Papers on space, the first issued in 2000 and the other in 2006, reinforce this message but also put China’s ambitions in space in a broader national and strategic context, calling the space industry an important part of the state’s comprehensive development strategy.12 Though official documents reveal limited information about China’s space program, especially its military components, at a minimum they clearly lay out the political/diplomatic stance of China’s interest in pursuing the peaceful development of space and its willingness to cooperate with others to achieve those goals. The other solution is a military hedge, including the strengthening of capabilities to protect China’s satellites and a robust ASAT capability. This military hedging approach largely focuses on capabilities to enhance the survivability of China’s satellite networks, and to ensure its access to space.13 ‘Active defense’, a central component of this strategy, includes countermeasures such as anti-interference and anti-jamming techniques, and in extreme situations using micro-satellites to actively guard other satellites, act as decoys or even counter-attack.14 The heart of this strategy is to protect against an adversary’s ability to prevent or restrict China from using space to its economic and national security advantage and constitute “comprehensive defensive actions.” ASAT technology has been cited as an “evitable choice for most medium-sized and small space-faring states to protect themselves and deter strong enemies.”15 Although most aspects of China’s military program in space are largely unknown, the open source literature indicates that it proceeded in several stages as a response to developments in the United States. It largely began in the late 1980s with a realization that the U.S. missile defense, ASAT and space weapons programs could endanger China’s national security interests.16 Yet, at this time, it seems China preferred to solve this through a diplomatic approach. With gridlock at the CD beginning in the mid-1990s, however, the military option took on greater urgency with the call for a development of relevant space technology.17 An awareness that effective defensive capabilities in space would require a long time to develop gave early impetus to these trends.18 The second phase was marked by the Shriever war game exercise in 2001 (reinforced by the Rumsfeld Commission and other factors19), which vindicated China’s longheld fear of being a primary target of the U.S. military space program and triggered China’s determination to resolve this threat in space – either through military or diplomatic means. From China’s perspective, all U.S. actions since that time have served to diminish a diplomatic solution while underscoring the necessity of a military hedge in space. While there is no explicit evidence of a concerted ASAT program in China, a significant increase in calls to meet this threat as well as various research and development programs for ASAT and related space defense technologies began in the mid-1990s, and accelerating in the early 2000s. 2021 (The ASAT test itself also attests to the fact that China’s military space program, particularly its ASAT program, has been in development for some time.)

# New Cold war/International Divisions Impact Module

**Asian countries forced to pick sides in Sino-American war**

**Kaiser in 6/14/11** [Emily, Reuters, “Analysis: Asia wary of China-U.S. economic cold war,”http://www.reuters.com/article/2011/06/14/us-china-us-analysis-idUSTRE75D0XS20110614]

The rest of Asia is acutely aware that when giants wrestle, smaller players can get trampled. "There must be flexibility on both sides because if you don't (have that) then you create more problems for all of us," said Cesar Purisima, secretary of finance for the Philippines, which has close trade ties with both countries. Purisima said the best protection was ensuring sound policies at home so that small countries can weather any economic storms. Groupings such as ASEAN for Southeast Asian economies can also help smaller players build up a bit more global clout. Oh Joon, South Korea's ambassador to Singapore, said Asian countries would hate to be forced into choosing sides should the U.S.-China relationship sour. "They don't want to answer that question," Oh said. "We all have bad memories of the Cold War."

**Sino-American cold war leads to international choosing of sides**

**Kissinger in 1/14/11, Former Secretary of State** [Henry, Washington Post, “Avoiding a China-US cold war,” <http://www.washingtonpost.com/wp-dyn/content/article/2011/01/13/AR2011011304832.html>”

Most Chinese I encounter outside of government, and some in government, seem convinced that the United States seeks to contain China and to constrict its rise. American strategic thinkers are calling attention to China's increasing global economic reach and the growing capability of its military forces. Care must be taken lest both sides analyze themselves into self-fulfilling prophecies. The nature of globalization and the reach of modern technology oblige the United States and China to interact around the world. A Cold War between them would bring about an international choosing of sides, spreading disputes into internal politics of every region at a time when issues such as nuclear proliferation, the environment, energy and climate require a comprehensive global solution.

# Nuclear Proliferation Impact

**Prolif kills millions and causes environmental catastrophe London Times, 2009**

(Scrapping nuclear arms is now real politik, April, Pro Quest, <http://www.timesonline.co.uk/tol/comment/columnists/guest_contributors/article6011286.ece> , June 23, LB)

When presidents Barack Obama and Dmitry Medvedev meet today for the first time, they will have an historic opportunity to confront the most urgent security threat to our world: the proliferation of nuclear weapons and the risk of nuclear terrorism. The two leaders can move beyond traditional arms control and, in a bold move, set the world on a course towards the total elimination of all nuclear weapons - global zero. In London, they should agree that the US and the Russian Federation will begin work immediately to achieve an accord for deep reductions in their arsenals and then lead a longer-term effort with other nuclear powers to eliminate all nuclear weapons worldwide through phased and verified reductions. Today nine countries have more than 23,000 nuclear weapons, many of which are programmed to launch in minutes. A nuclear conflict - or accident - could cause millions to die in a flash and create an environmental catastrophe that would last for generations. Terrorist groups have been trying to buy, build or steal nuclear weapons, and in the last two decades there have been at least 25 instances of nuclear explosive materials being lost or stolen. If terrorists were to get their hands on a bomb and explode it in a big city, hundreds of thousands of people would die instantly. We believe that whatever stabilizing impact nuclear weapons may have had during the Cold War, in the new security environment of the 21st century any residual benefits of these arsenals are overshadowed by the growing risks of proliferation and terrorism.

**Prolif causes countries to miscalculate – most probable scenario**

**Totten**, **94’** **[Samuel, Associate Professor, College of Education, University of Arkansas, 1994, The Widening Circle of Genocide, p. 289]cn**

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

# Ozone

**Space Race causes ozone depletion – increase in launching**

**Atkinson, 2009 – Senior editor of Universe Today** [Nancy, April 2, 2009, Universe Today, “Will Rocket Launches Deplete the Ozone”, <http://www.universetoday.com/28412/will-rocket-launches-deplete-the-ozone/>, accessed June 26, 2011]

A new study predicts that Earth’s stratospheric ozone layer will suffer significant damage from future unregulated rocket launches. The study provides a market analysis for estimating future ozone layer depletion based on the expected growth of the space industry and known impacts of rocket launches. The increase in launches could cause ozone depletion that eventually could exceed ozone losses from CFCs (chlorofluorocarbons) which were banned in the 1980′s. “As the rocket launch market grows, so will ozone-destroying rocket emissions,” said Professor Darin Toohey of CU-Boulder’s atmospheric and oceanic sciences department, a member of the study. “If left unregulated, rocket launches by the year 2050 could result in more ozone destruction than was ever realized by CFCs.” The study says more research should be done on how different rockets affect the ozone before imposing stricter regulations on chemicals used in rocket fuels.

**Environment problems risk extinction – cooperation key**

**Hongyuan 9-15-06**, associate professor and deputy director of the Department of International Organisations and Laws at the Shanghai Institute for International Studies; worked with the administrative centre for Chinaʼs Agenda 21 at the ministry of science and technology. [Yu Hongyuan, Green challenges in China-US relations, Creatuve Commons’ Attribution – Non Commercial, <http://www.chinadialogue.net/article/show/single/en/378-Green-challenges-in-China-US-relations>, 6-26-2011]

Nowadays, environmental issues -- mainly global warming, ozone-layer depletion, acid rain, air and water pollution, desertification and the loss of biodiversity -- have caught the attention of the human race. The global environment has changed beyond recognition and poses a great challenge everywhere. Moreover, environmental issues have moved from the margin to the center of security policies, particularly since the end of the cold war. On one hand, environmental problems have been recognised over the last several decades as an important source of threats to human survival. The human impact on the environment in a modern society is 10 to 100 times greater than it was in an agrarian society. On the other hand, it is now universally acknowledged that international environmental cooperation is necessary. Environmental cooperation is a political and social concern as well as an economic one. It involves various sectors the national economy and so has an important bearing on the sustainable economic and social development of all countries. The need for access to natural resources has increased and more people are making greater demands upon those resources. The loss of balance between human activities and preservation of nature in many parts of the world is attributed to a growth-oriented economic model.

# Weaponization-->Arms Race

**US weaponization will cause an arms race with China**

**Mac’Donald 3-18-2009**, Senior Director of the Nonproliferation and Arms Control Program with the USIP Center for Conflict Analysis and Prevention, MacDonald is an honors graduate in aerospace engineering from Princeton University.  He also received two Masters Degrees from Princeton, one in aerospace engineering with a specialty in rocket propulsion, and the second in public and international affairs. [Bruce W. Macdonald, Testimony of Bruce W. MacDonald-Before the Strategic Forces Subcommittee, <http://www.usip.org/experts/bruce-w-macdonald>, 6-22-11]

We should not seek offensive counterspace capability at the expense of effective steps to protect U.S. space capabilities. We must be very careful, if we acquire offensive capabilities, to do so in a manner that other nations will find as unthreatening as possible. Otherwise, we could create a self-fulfilling prophecy: as nations like China or Russia see evidence of U.S. attempted space hegemony, they would accelerate their own efforts, just as we would if the roles were reversed. Above all, we want to avoid the space policy and doctrinal near-vacuum we currently are in, where our space technology seems to shape our policy, rather than our policy shaping technical solutions. Space Pre-Eminence, Not Dominance, Should Be the U.S. Obective. It would be unwise for the United States to seek space dominance. There are many ways to attack space assets, and it is easier and cheaper to attack than to defend them, which would likely frustrate any sustained attempt at dominance and leave us worse off than we are now. In trying to maintain dominance, we would be at the mercy of unpredictably advancing space technologies that could favor China or others as well as us. In the face of likely Chinese and other resistance to such a provocative posture, we would constantly be trying to stay ahead technologically to maintain this dominance, demanding large expenditures. It would also be very unstable, especially if China achieved a breakthrough that threatened our dominance.

# Taiwan Impact

**ASATs will target US military satellites – China attacks Taiwan**

**Saunders and Lutes, 2007 - Senior Research Fellows in the Institute for National Strategic Studies at the National Defense University** [Phillip C. and Charles D., 2007, National Defense University “China’s ASAT Test: Motivations and Implications” <http://www.hsdl.org/?view&doc=120252&coll=limited>, accessed June 22, 2011]

The direct-ascent ASAT system China tested could threaten satellites in LEO. These include U.S. military satellites used for reconnaissance, remote sensing, surveillance, electronic surveillance, and meteorology, as well as a number of civilian communications satellites with military applications. Satellites in medium Earth orbit and geostationary orbit are not vulnerable to the direct-ascent ASAT system boosted by the two-stage DF–21 launcher. Although China has demonstrated the ability to launch satellites into geostationary orbits using larger rockets, the techniques required to reach higher orbits would significantly alter the dynamics for an effective hit-to-kill KKV, making the current ASAT design unusable for such purposes. However, laser-based ASAT weapons could potentially target U.S. reconnaissance satellites. One space expert viewed lasers as a more important threat than the direct-ascent system, while another noted that all efforts to develop high-powered lasers had been plagued with technical problems, and deployment of such capabilities was probably decades away. Jammers that degrade GPS signals or interfere with satellite communications are another means of disrupting U.S. space assets, but it is difficult to assess Chinese capabilities in this area. Experts noted that China’s doctrine for employing space weapons and ability to link systems operationally were unclear.9 A Taiwan Contingency Given U.S. military advantages, China’s best chance of success in a conflict over Taiwan would be to delay the arrival of U.S. forces until after it forced Taiwan to capitulate, presenting Washington with a fait accompli. Most agreed that a PRC ability to destroy U.S. satellites in LEO would significantly increase the costs and risks of U.S. intervention on behalf of Taiwan. One China expert pointed out that ASAT weapons are only one in a range of military capabilities Beijing is developing to complicate and delay U.S. military responses. Even if any individual program had only a marginal impact, the cumulative impact could still be significant. A comprehensive net assessment of new Chinese technologies and potential U.S. counters is necessary to consider how to mitigate strategic risk. An operational ASAT capability would provide flexible options for delaying and disrupting an American response to a Taiwan contingency. The direct-ascent ASAT could be used to destroy U.S. reconnaissance satellites in LEO; at the same time, China could attempt to destroy Taiwan’s Formosat-series satellites operating in LEO.10 Chinese forces would likely attempt to temporarily blind U.S. reconnaissance and remote-sensing capabilities through lasing, while jamming U.S. communication links and GPS signals to disrupt navigation and, more importantly, precision targeting. These efforts might be coupled with cyber attacks to disrupt and delay the response of U.S. forces. This strategy could be conducted in whole or in part, and without a complete integration of systems.

**China perceives dual-use technology as weaponization – risks US-China war and war over Taiwan**

**Klomp, 2010 – Major, USAF** [Jeremiah O., April, 2010, Air Command and Staff College, Air University, “Is Space Big Enough For A US-Sino Partnership?” <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA537174&Location=U2&doc=GetTRDoc.pdf>, accessed June 24, 2011]

A key area of competition lies with the military powers on opposite sides of the Pacific Ocean. 20 With regards to intelligence, a strong argument against partnering with the Chinese space industry is that their strategic offensive and defensive programs would likely be significantly advanced through the relationship. Since many civil and commercial space 19 applications can be modified to fit military missions, or so-called “dual-use” technology, it is certainly reasonable to conclude that any benefit they derived from the collaboration would be used militarily. “Uncertainty over China’s pathway to potential major power status, the possibility of a conflict over Taiwan, and the inherent dual-use nature of space technologies means that China’s improving space capabilities could be used against the U.S. military.” 21

**Taiwan conflict escalates to extinction**

**Strait Times 2000**(June 25, “Regional Fallout: No one gains in war over Taiwan”, Lexis)

THE DOOMSDAY SCENARIO THE high-intensity scenario postulates a cross-strait war escalating into a full-scale war between the US and China. If Washington were to conclude that splitting China would better serve its national interests, then a full-scale war becomes unavoidable. Conflict on such a scale would embroil other countries far and near and -- horror of horrors -- raise the possibility of a **nuclear war**. Beijing has already told the US and Japan privately that it considers any country providing bases and logistics support to any US forces attacking China as belligerent parties open to its retaliation. In the region, this means South Korea, Japan, the Philippines and, to a lesser extent, Singapore. If China were to retaliate, east Asia will be set on fire. And the conflagration may not end there as opportunistic powers elsewhere may try to overturn the existing world order. With the US distracted, Russia may seek to redefine Europe's political landscape. The balance of power in the Middle East may be similarly upset by the likes of Iraq. In south Asia, hostilities between India and Pakistan, each armed with its own nuclear arsenal, could enter a new and dangerous phase. Will a full-scale Sino-US war lead to a nuclear war? According to General Matthew Ridgeway, commander of the US Eighth Army which fought against the Chinese in the Korean War, the US had at the time thought of using nuclear weapons against China to save the US from military defeat. In his book The Korean War, a personal account of the military and political aspects of the conflict and its implications on future US foreign policy, Gen Ridgeway said that US was confronted with two choices in Korea -- truce or a broadened war, which could have led to the use of nuclear weapons. If the US had to resort to nuclear weaponry to defeat China long before the latter acquired a similar capability, there is little hope of winning a war against China 50 years later, short of using nuclear weapons. The US estimates that China possesses about 20 nuclear warheads that can destroy major American cities. Beijing also seems prepared to go for the nuclear option. A Chinese military officer disclosed recently that Beijing was considering a review of its "non first use" principle regarding nuclear weapons. Major-General Pan Zhangqiang, president of the military-funded Institute for Strategic Studies, told a gathering at the Woodrow Wilson International Centre for Scholars in Washington that although the government still abided by that principle, there were strong pressures from the military to drop it. He said military leaders considered the use of nuclear weapons mandatory if the country risked dismemberment as a result of foreign intervention. Gen Ridgeway said that should that come to pass, we would see the destruction of civilization. There would be no victors in such a war. While the prospect of a **nuclear Armageddon** over Taiwan might seem inconceivable, it cannot be ruled out entirely, for China puts sovereignty above everything else.

# US-China War Impact

**Chinese ASAT test crushes relations and causes US-China War – miscalc and defense**

**Saunders and Lutes, 2007 - Senior Research Fellows in the Institute for National Strategic Studies at the National Defense University** [Phillip C. and Charles D., 2007, National Defense University “China’s ASAT Test: Motivations and Implications” <http://www.hsdl.org/?view&doc=120252&coll=limited>, accessed June 22, 2011]

A deployed Chinese ASAT capability would complicate the strategic military relationship between Washington and Beijing. Although U.S. early warning and nuclear command and control communications satellites would not be vulnerable to the current direct-ascent ASAT, they could be targeted for denial by other means. Actions that cast doubt on the U.S. ability to effectively use its nuclear force would set up a destabilizing strategic dynamic. A China expert noted that U.S. attacks on ground-based ASAT systems or components might inadvertently affect China’s nuclear command and control system. A PRC perception that the United States might be attacking its nuclear command and control would be very destabilizing. A space expert also suggested that one motive for developing ASAT weapons is concern that U.S. space-based ballistic missile defenses might eventually negate China’s nuclear deterrent. In this sense, ASAT weapons could be regarded as defensive in that they could prevent China from becoming vulnerable to a potential U.S. nuclear attack. The possibility of a U.S.-China space weapons race was discussed. A strategist noted that Beijing probably exaggerates current U.S. space capabilities and overstates the likelihood that Washington will develop and deploy an extensive space weapons arsenal. Statements by U.S. advocates of space control or space weaponization coupled with U.S. reluctance to accept constraints on future space options encourage this misperception. One China expert noted that Beijing is probably sincere in proclaiming that it has no intention of engaging in an arms race. However, China is also unwilling to lock itself in a position of permanent vulnerability to the United States. Several experts highlighted China’s lack of transparency as a factor that aggravates the negative impact of the ASAT test on U.S.China strategic relations. One China expert noted that the Foreign Ministry and Defense Ministry both initially claimed to be unaware of the test. China did not acknowledge the test publicly for 12 days. An MFA spokesman then gave a bland statement that “this test was not directed at any country and does not constitute a threat to any country”—a line repeated in March by Prime Minister Wen Jiabao.11 China’s reluctance to discuss its military dynamic modernization frankly may strengthen its efforts to deter the United States from intervening in a Taiwan crisis, but it also reinforces U.S. suspicions about Chinese intentions and creates the possibility that the United States will overestimate future Chinese space capabilities and respond accordingly. Lack of transparency also heightens U.S. doubts about whether agreements with Beijing to limit space weapons or to ban ASAT weapons could be verified. One space expert suggested China may be using a competitive strategies approach against the United States. Space may become an “offensive dominant” arena. By demonstrating a relatively inexpensive response to U.S. space dominance, China may calculate that the United States will pursue costly options that divert resources from other areas. China could avoid an expensive arms race by minimizing reliance on space assets and developing a relatively inexpensive set of asymmetric capabilities. Conversely, other China experts suggested Beijing’s dependence on space for military purposes is likely to increase dramatically over the next 5 to 10 years. Foregoing space capabilities would greatly limit China’s ability to fight an “informationalized war.” The shift toward more symmetrical U.S. and Chinese dependence on space may create opportunities for arms control or restraint in the development of space weapons.

**US-China war is likely – native writers concur**

**Chase, 2011 – Ph.D. in international relations from Johns Hopkins, MA in China studies from SAIS, Johns Hopkins** [Michael S., March 25, 2011, Jamestown Foundation Publication, “Defense and Deterrence in China’s Military Space Strategy” <http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews%5Btt_news%5D=37699&tx_ttnews%5BbackPid%5D=25&cHash=e3f0fcd233f563e2364ad7bc49425244>, accessed June 21, 2011]

In all, according to Chinese analysts, as a result of the actions of the world’s major space powers, space war is no longer the stuff of science fiction. Indeed, they argue that it is already more a reality than a myth. Consequently, they conclude that China must be prepared not only to degrade an adversary’s ability to use space, but also to protect its own space capabilities. Chinese writings suggest that Beijing would consider doing so through a combination of defensive measures and deterrence.

**US-China war leads to economic collapse and nuclear war**

**Payne, 5-31-11,  he is an independent progressive, U.S. Army veteran** [President Obama Faces Two Ultimatums; One By China, One By The American People, 6-21-11, http://www.opednews.com/author/author23439.html]

So, China gave the U.S. a strong warning; should our government take that seriously? What can China do if the U.S. decides to attack Pakistan with force? Well, let's remember that China is the world's most populous nation; it has the world's largest standing army, and it has a navy and an air force. Oh yes, lest I forget, China has a nuclear arsenal. And, most important of all, China who holds a massive amount of U.S. debt has the power to literally bring down America's financial foundations almost any time it wishes.

# Wars Impact - Dominance

**Space Dominance is not Sustainable – Leads to Escalated Conflicts**

**Mac’Donald 3-18-2009**, Senior Director of the Nonproliferation and Arms Control Program with the USIP Center for Conflict Analysis and Prevention, MacDonald is an honors graduate in aerospace engineering from Princeton University.  He also received two Masters Degrees from Princeton, one in aerospace engineering with a specialty in rocket propulsion, and the second in public and international affairs. [Bruce W. Macdonald, Testimony of Bruce W. MacDonald-Before the Strategic Forces Subcommittee, <http://www.usip.org/experts/bruce-w-macdonald>, 6-22-11]

the governing U.S. space force doctrine is deterrence -- that we would have offensive capability strictly to deter attacks on our assets, and we would not initiate them – but there is no indication that this is the case; or the U.S. could maintain space dominance, which the policy tacitly implies, but such a posture would not be sustainable; or such attacks were limited and localized, i.e., tactical, not strategic, though there would be serious risks of escalation. There is an inherent risk of strategic instability when relatively modest defense efforts create disproportionate danger to an adversary, as with space offense. And there is a serious risk of crisis instability in space when “going first” pays off – destroying an adversary’s satellites before he destroys yours. We don’t know what would happen in a crisis, but the potential for space instability seems high and likely to grow. But our policy is silent on this.

# Impact Framing - Timeframe

**All Space Innovations won’t come into effect until years into the future. Prefer the neg’s impact which has a quicker timeframe**

**Space.com 3-31-06** [March 31, 2006, “U.S. Losing Unofficial Space Race Congressmen Say,” space.com, http://www.space.com/1232-losing-unofficial-space-race-congressmen.html, June 21st, 2011]

This time, though, lawmakers sounded as if they might be willing to do more than just talk about the issue. Griffin was asked to produce in 30 days an unclassified report to Congress containing an assessment of the Chinese space program and its goals. Rep. Frank Wolf, R-Va., chairman of the House Appropriations subcommittee with NASA oversight, said he would hold a hearing on the subject to coincide with the report's release. Griffin acknowledged that China's new Shenzou spaceships are capable of supporting a crew on a round-trip mission to the moon. But their Long March rockets are not powerful enough to get them there, he said. The United States has neither a crew vehicle nor a rocket capable of making a moon run. The shuttle is designed for low Earth orbit only. NASA has begun work on a lunar Crew Exploration Vehicle, but it won't be operational until 2013 or 2014 because of budget constraints, Griffin said. Its new heavy-lift rocket won't be ready until even later, he said. NASA's timeline predicts the new rocket and crew vehicle will be ready for a mission to the moon in 2018, a year later than the Chinese target. The U.S. space agency is known for missing planned deadlines for major projects.

# AT: Deterrence solves

**China does not have spatial deterrence capabilities**

**Chase, 2011 – Ph.D. in international relations from Johns Hopkins, MA in China studies from SAIS, Johns Hopkins** [Michael S., March 25, 2011, Jamestown Foundation Publication, “Defense and Deterrence in China’s Military Space Strategy” <http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews%5Btt_news%5D=37699&tx_ttnews%5BbackPid%5D=25&cHash=e3f0fcd233f563e2364ad7bc49425244>, accessed June 21, 2011]

In addition to defense, Chinese military writers also emphasize the growing importance of space deterrence. For example, Peng Guangqian and Yao Youzhi highlight space deterrence as one of the key types of strategic deterrence, placing it on par with nuclear deterrence, conventional deterrence, information deterrence, and "People’s War Deterrence" [18]. Other Chinese writers contend that China is still developing its space deterrence strategy. According to Bao Shixiu, "Currently, China does not have a clear space deterrence theory to guide its actions for countermeasures." Nonetheless, he argues, the rough outlines of China’s approach approximate Chinese thinking on deterrence in other areas and its overall "active defense" strategy. "The basic necessity to preserve stability through the development of deterrent forces as propounded by Mao and Deng remains valid in the context of space," Bao writes [19].

# AT: Space Race Turn

**Chinese civil space capabilities solves North Korea nuclear weapons**

**Pace in 5/11/11, Director of Space Policy Institute at George Washington University** [Scott, Hearing of the U.S.­China Economic and Security Review Commission, “China’s Growing Space Capabilities: Implications for the United States,” <http://www.gwu.edu/~spi/assets/docs/11_05_11_pace_testimony.pdf>]

Chinese space capabilities could be of potential value in reducing tensions on the Korean peninsula. While the six-party talks (North Korea, South Korea, China, the United States, Japan and Russia) are currently suspended, future discussions will continue to deal with missile proliferation as well as denuclearization. If North Korea were to give up its long-range missile capabilities and suspend space launch activities, it is likely that North Korean leadership will require inducements or compensation of some sort. One such offset could be Chinese launch services for North Korea satellites as part of broader agreement that eliminated North Korean strategic missiles. While highly speculative, it is possible to imagine constructive outcomes if China chose to pursue them.

**North Korea has nuclear weapons**

**Moore in 4/24/09, reporter** [Malcolm, Telegraph, ”North Korea now ‘fully fledged nuclear power’,” <http://www.telegraph.co.uk/news/worldnews/asia/northkorea/5212630/North-Korea-now-fully-fledged-nuclear-power.html>]

"North Korea has nuclear weapons, which is a matter of fact," said Mohamed ElBaradei, the head of the International Atomic Energy Agency, speaking in Beijing.

He added: "I don't like to accept any country as a nuclear weapon state but we have to face reality."

Mr ElBaradei said there are now nine countries in the world with the capability of launching a nuclear missile. His comments echoed a report by a Pentagon task force chaired by James Schlesinger, the former US defence secretary. The task force admitted that "North Korea, India and Pakistan have acquired both nuclear weapons and missile delivery systems".

The warning that North Korea is a full nuclear power came as Russia's most senior diplomat, Sergei Lavrov, visited Pyongyang and warned that there is no sign of a easy solution to the North Korean crisis. The rogue state vowed to cease all negotiation and to restart its nuclear weapons programme after it was criticised by the UN Security Council for illegally testing a missile at the beginning of April.

"We do not foresee any breakthroughs," he told Russia's Interfax news agency after he held talks with the North Korean foreign minister, Pak Ui-chun. "This is a complicated process and we must not give in to emotions. We need to concentrate on the base we already have."

**N. Korea halfway to nuclear superpower- Empirics**

**Chi-Dong in 6/21/2011, reporter** [Lee, Yonhap News Agency, “N. Korea a ‘half-way’ nuclear state: Global Zero,”<http://english.yonhapnews.co.kr/national/2011/06/21/39/0301000000AEN20110621000300315F.HTML>”]

North Korea is "half-way" to becoming a full-fledged nuclear weapons power, as developing a nuclear warhead that can be mounted on long-range missiles is a matter of its choice, a prominent nongovernmental organization said Monday. In its report on expenditures on nuclear weapons, the group, Global Zero, known for its anti-nuclear movement, put North Korea on a list with the United States, Russia, China, France, Britain, India, Pakistan and Israel. "The 8.5 nuclear weapons countries (North Korea is half-way there) are passing a new milestone this year by collectively spending approximately one hundred billion dollars on their nuclear programs," it said. "This conservatively estimated expenditure represents about 9 percent of their total annual military spending. At this rate the nuclear-armed states will spend, conservatively estimated, at least one trillion dollars on nuclear weapons and their direct support systems over the next decade." The group, based in London and Washington, said North Korea has produced enough plutonium for up to a dozen fission bombs, apart from a program to enrich uranium. "It does not yet possess the capability to deliver atomic bombs using long-range missiles, but this is clearly their delivery system of choice and an earnest effort is underway to develop this capability. The core and full cost of this program are estimated at US$500 and $700 million (this year), respectively," it said. The full cost reaches 8 percent of the North's total military spending, estimated at $8.8 billion, it added. South Korean and U.S. officials are increasingly concerned about the reclusive nation's long-range missile technology. "It's been a long time (since North Korea's first nuclear test), so we judge that by this time (the North) could have succeeded in making smaller or miniaturized versions of its nuclear weapons," South Korean Defense Minister Kim Kwan-jin said earlier this month in Seoul. U.S. Defense Secretary Robert Gates also warned that North Korea was within five years of being able to strike the continental United States with an intercontinental ballistic missile.

# Turn- Economy Advantage

**1. US- China economy intertwined- China pull out would destroy US economy**

**Prasad.** March 10**, 2010. Senior Fellow, Global Economy and Development, U.S.-China Economic and Security Review Commission.** [Eswar, “ The U.S.-China Economic Relationship: Shifts and Twists in the Balance of Power.” Brookings Institute. <http://www.brookings.edu/testimony/2010/0225_us_china_debt_prasad.aspx> accessed June 23]

The lopsided nature of trade and financial flows between the U.S. and China has complicated this relationship, tightening the economic entanglements between the two economies and making them more contentious. The U.S. receives a large volume of low-cost imports from China and has also gotten help in financing a significant part of its budget and current account deficits. China remains quite dependent on U.S. export markets and continues to look to U.S. Treasury bond markets to park a large portion of its rapidly rising stock of foreign exchange reserves. Over the past year, the U.S. has become less dependent on China’s financing of its deficits, particularly as the U.S. private saving rate has gone up and the current account deficit has fallen. Nevertheless, given the sheer scale of the U.S. deficit financing requirement—a budget deficit of about $1.6 trillion in 2010 and prospects of nearly $9 trillion of deficits over the next decade—sentiments in bond and currency markets are fragile. A precipitous action by China to shift aggressively out of U.S. dollar-denominated instruments, or even an announcement of such an intention, could act as a trigger that nervous market sentiments coalesce around, leading to a sharp fall in bond prices and the value of the U.S. dollar. However, such a move would not be without cost for China. Certainly, China would like to tear itself away from the U.S. Treasury market but faces the prospect of a capital loss on its large accumulated stock of holdings (on a mark-to-market, domestic currency basis) if U.S. Treasury bond prices were to fall as a result of a spike in interest rates or if the renminbi were to appreciate in value relative to the U.S. dollar. But the U.S. leaves itself vulnerable as China might well view these costs as worth bearing in order to preserve its national sovereignty or if trade and other economic disputes with the U.S. came to a head. Indeed, I will argue that the direct costs could in fact be rather modest from the Chinese perspective. The prospect of economic and political disputes ratcheting up has been elevated by an increasing imbalance in this relationship. For instance, in recent months, China has aggressively sought to shift the narrative about the financial crisis and its aftermath by arguing that global current account imbalances had little or nothing to do with the crisis. Moreover, even as the world economy is recovering, China has argued that it is loose U.S. monetary policy alone that may be fueling asset price bubbles around the world. Whatever the merits of these arguments, the forcefulness with which Chinese leaders have put forward these narratives indicates their strong perception that the balance in the bilateral relationship has shifted decisively in their favor. This assertive tone is likely to continue as China’s economy becomes larger and its influence both in the Asian region and abroad becomes more pervasive. In fact, the bargaining strengths of the two countries are finely balanced. But the changing perceptions set up a dangerous game of chicken that could spin out of control if unrealistic expectations and the desire to pander to domestic audiences trumps rational collective policymaking in one or both countries. In my testimony, I will lay out some key facets of this complicated bilateral relationship, present my prognosis for how this relationship is likely to evolve, and then discuss how to manage some of the potentially contentious aspects of this relationship.

# Turn- Hegemony Advantage

**1. China rises is a zero sum trade-off with US hegemony**

**Watson.** Dec 28, **2008. Staff writer for News Flavor**. [Jake, “ China: The Greatest Threat to US Hegemony.” New Flavor. http://newsflavor.com/politics/international-relations/china-the-greatest-threat-to-us-hegemony/ Accessed June 24]

In the next twenty-five years, the United States will see China become its biggest threat to hegemony. The US currently dominates the world’s political, military, and cultural scene. This dominance is known as hegemony. The economic relationship between the US and China, the global energy crisis, and the increase in Chinese soft power will lead to the decline of US hegemony. China has become one of the globe’s largest economic powers. Economic growth has depended on Chinese exports to the US. Without American consumers, the Chinese economy would not be as powerful, and the economic relationship between the two countries would not be interdependent. Eventually, the Chinese middle-class will grow large enough to end their reliance on exports to the US. When this happens, Chinese ownership of American debt could be used as political leverage. Now, China needs American markets and the US needs Chinese capital. The US will lose power as soon as the economic balance inevitably tips in China’s favor. The global energy crisis creates competition between the US and China. Competition for fossil fuels will decrease American influence in the world. China will soon pass the US for the lead consumer of fossil fuels. As China needs and gains more energy resources, their technological and military prowess will approach that of the US. Chinese influence will expand as fuel imports increase. Any expansion of Chinese influence negatively affects the US. As the competition between the US and China grows, US hegemony is decreased. An increase in exports, global political participation, and culture projection will help China gain influence in the international community. Trade agreements between China and other countries increase China’s legitimacy and reputation in the capitalist world. China continues to increase its participation in international organizations and multi-lateral agreements. As Chinese culture is projected to the rest of the world, influence abroad is gained. Influence across the globe will give China soft power. Soft power is non-military influence exerted on foreign nations. As China gains soft power, American influence and power is decreased. Any power the Chinese gain is power lost by the US. The US will undoubtedly remain powerful in the international community for many more years. However, Chinese economic growth, acquisition of energy resources, and soft power projection will give China more influence and take away from US global dominance. Unless the situation changes or the US takes action to hinder Chinese expansion, Americans may soon see a world controlled by more than one great power.

# Turn- Aerospace Advantage

**1. US’ aerospace industry depend on China**

**Cliff. 2011. Senior political scientist at the RAND Corporation, P.H.D. in international relations.** [ Roger with Chad J. R. Ohlandt, Ph.D. Aerospace Engineering and Scientific Computing, and David Yang, Ph.D in politics at Princeton University. “ Ready for Takeoff-China’s Advancing Aerospace Industry.” RAND. <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA539926&Location=U2&doc=GetTRDoc.pdf> accessed June 24]

 The value of aerospace imports to the United States from China was about $421 million in 2009, about 1 percent of total U.S. aerospace imports. This made China the tenth most important aerospace supplier to the United States. See Figures 4.1 and 4.2. By contrast, aerospace exports to China from the United States totaled $5.314 billion in 2009, or 6.5 percent of U.S. aerospace exports. See Figure 4.3. The disparity between these figures should not be taken to imply that the United States is contributing more to China’s aviation industry than China is contributing to the U.S. aviation industry. The vast majority of aerospace exports from the United States to China appear to be complete aircraft sold directly to Chinese airlines. In 2009, Boeing sold 72 large commercial airplanes to Chinese airlines, including 61 737s, four 747s, and seven 777s (“Orders and Deliveries”). Boeing does not disclose the total amount paid for these aircraft, but according to Boeing’s website, 737s cost between $60 million and $80 million, while both the 747 and 777 cost more than $200 million each (“Commercial Airplanes —Jet Prices”). If the Chinese airlines paid $60 million for each 737 and $200 million for each 747 or 777, the total amount would have been $5.86 billion, more than actual U.S. aerospace exports to China that year. Even if the Chinese airlines paid only 90 percent of these amounts, these sales would account for all but $40 million of U.S. aerospace exports to China in 2009. Most of the exports from China to the United States, by contrast, are inputs to final products that are completed in the United States. Aerospace imports from China grew at an average annual rate of 25 percent between 2005 and 2009, while total aerospace imports from all sources grew at an average annual rate of only about 6 percent, suggesting that China’s share of U.S. aerospace imports will likely increase rapidly in coming years. Most China-based production that supplies U.S. (and other Western) aerospace firms comes from either the joint ventures described above or the various subsidiaries of AVIC. According to figures released at AVIC’s 2009 company summit meeting, the total value of the company’s subcontract deliveries in 2008 reached $639 million, a 35-percent year-on-year increase over 2007. More than half of that value came from engine subcontracts, which accounted for $330 million (“AVIC Aims to Deepen Reform in 2009,” 2009). To date, Boeing is by far the largest foreign customer of the Chinese aviation manufacturing industry. According to information released by Boeing, since the 1980s, Boeing has purchased more than $1.5 billion of aviation hardware and services from China, and it holds active contracts with Chinese suppliers valued at more than $2.5 billion. All of Boeing’s commercial aircraft lines now incorporate parts and assemblies built in China, although most of these parts are relatively minor. Boeing’s subcontract relationship with China received a major boost in 2005, after China contracted with Boeing for up to 60 Boeing 787 Dreamliners, a deal worth $7.2 billion at list prices. Soon after, a number of Chinese firms were selected as exclusive, single-source suppliers for the 787, and Boeing also “introduced” its existing network of suppliers to Chinese firms, encouraging them to purchase from Chinese suppliers. To date, U.S.-based Boeing suppliers with Chinese subcontracting relationships include the Eaton Corp. (777 fuel-system components), GE (jet engine components and parts assembly), Goodrich (jet engine fan cowls, 787 nacelle components), Honeywell (cabin management systems, engine parts, and other avionics components for the 737 and 757), and Pratt & Whitney (engine components, such as compressor airfoils). It is worth noting that many of these subcontracts are themselves correlated with the U.S. supplier’s success in penetrating the Chinese market. For example, while GE’s purchase of jet engine components in China reached $284 million in 2007, Chinese engine orders with GE reached more than $1 billion (list price) that year. In addition, some of the Chinese production subcontracts increase American exports in other sectors, and joint ventures with Chinese firms may create jobs in the United States. The aluminum alloys used for Xi’an Aircraft’s subcontract for 737 vertical-tail assemblies and Shanghai Aircraft’s subcontract for horizontal stabilizers, for instance, are sourced mainly from Alcoa’s production facilities in Indiana and Arizona. And GE’s new joint venture with AVIC Systems to produce avionics systems will reportedly create more than 200 jobs in the United States.

# US dependent on Chinese aerospace

**1. US dependent on Chinese aerospace- economy and jobs**

**Cliff. 2011. Senior political scientist at the RAND Corporation, P.H.D. in international relations.** [ Roger with Chad J. R. Ohlandt, Ph.D. Aerospace Engineering and Scientific Computing, and David Yang, Ph.D in politics at Princeton University. “ Ready for Takeoff-China’s Advancing Aerospace Industry.” RAND. <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA539926&Location=U2&doc=GetTRDoc.pdf> accessed June 24]

China’s emergence as an aerospace power is perhaps inevitable but hardly an accomplished fact. It will be at least another decade before China has reached today’s state of the art, and by then, the state of the art will have moved further ahead in ways that are, by the nature of technological discovery, fundamentally unknowable in advance. U.S. and other Western companies are deeply involved in China’s aerospace development, and although this is unquestionably contributing to the development of China’s military aerospace capabilities—capabilities that one day might be used against the United States—those companies are reaping profits for their American shareholders and keeping Americans employed, even as they transfer lower-value-added production to China. They are also helping raise the standards of living of some of the one-fifth of the world’s population that lives in China, increasing their ability to buy American-made products. And war with China may never come. The policy choices here are far from black-and white, and it is unclear whether the United States could significantly improve its security through alterations of its policy toward civil aerospace cooperation with China without having a significant negative effect on U.S. economic interests.

# \*\*\*Aff\*\*\*

# \*\*\*Uniqueness\*\*\*

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**Not unique: China is inherently militarizing space and developing ASATs**

**Chase, 2011 – Ph.D. in international relations from Johns Hopkins, MA in China studies from SAIS, Johns Hopkins** [Michael S., March 25, 2011, Jamestown Foundation Publication, “Defense and Deterrence in China’s Military Space Strategy” <http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews%5Btt_news%5D=37699&tx_ttnews%5BbackPid%5D=25&cHash=e3f0fcd233f563e2364ad7bc49425244>, accessed June 21, 2011]

China’s theory of space deterrence may be a work in progress, but Beijing is already developing an impressive array of counter-space systems. Indeed, the capabilities that China is working on go beyond the direct ascent anti-satellite (ASAT) weapon, successfully tested in January 2007. The test demonstrated its capability to destroy satellites in low-earth orbit and was followed by a missile intercept test in January 2010. According to the 2010 Department of Defense (DoD) report on Chinese military developments, "China is developing a multi- dimensional program to improve its capabilities to limit or prevent the use of space-based assets by potential adversaries during times of crisis or conflict" [1]. In addition to the direct ascent ASAT, China’s capabilities include foreign and domestically developed jamming capabilities, and the inherent ASAT capabilities of its nuclear forces. In addition, "China is developing other technologies and concepts for kinetic and directed-energy (e.g. lasers, high-powered microwave, and particle beam) weapons for ASAT missions" [2]. According to Chinese analysts, along with the increasing its importance for military and commercial reasons, space is becoming an important domain for the defense of national security and national interests [3]. Chinese strategists regard space as a crucial battlefield in future wars. Chinese military publications characterize space as the high ground that both sides will strive to control in informatized local wars because of its influence on information superiority and its importance in seizing the initiative in a conflict [4]. Chinese analysts write that space systems serve as key enablers by providing support in areas such as intelligence, surveillance, and reconnaissance (ISR), early warning, communications, navigation and positioning, targeting for precision weapons, surveying and mapping, and meteorological support. Chinese analysts also portray space systems as force multipliers that support joint operations and enhance the effectiveness of ground, air, and naval forces. In keeping with this emphasis on the importance of space systems in contemporary military operations, China is making major strides in improving its own space capabilities [5]. According to the 2010 DoD report, "China is expanding its space-based intelligence, surveillance, reconnaissance, navigation, and communications satellite constellations" [6]. As China places more satellites into orbit, the PLA’s reliance on space systems is growing. China’s military is becoming more dependent on space capabilities for intelligence, surveillance, reconnaissance, navigation and positioning, as well as communications. Chinese military publications suggest that China still sees itself as far less dependent on space than the United States, but they also recognize that with this increasing reliance on space comes greater vulnerability. Many Chinese analysts believe that China’s space systems face a variety of potential threats. Consequently, they argue that the PLA needs to be able to protect its space assets through defensive measures or deterrence.

**Continued military action in Middle-east causes china aggression**

**Payne, 5-31-11, independent progressive, U.S. Army veteran** [President Obama Faces Two Ultimatums; One By China, One By The American People, 6-21-11, http://www.opednews.com/author/author23439.html]

By his expansion of the Afghan War into the sovereign nation of Pakistan, President Obama and his military advisers have made a grievous mistake that could lead America to the brink of a massive Central Asian war. Pakistan, a nuclear power, is in a state of turmoil as its government and its people react with rage over the continued U.S. encroachment into their nation and the relentless attacks by deadly U.S. drones in civilian populated areas. What makes this situation even more volatile is the fact that, because of this increased U.S. military action, China has just recently issued a strong warning to the U.S. that an attack (meaning an attack using massive force) would be construed as an attack on China. China, which has very important interests and investments in Pakistan, will not allow them to be jeopardized by the increasing U.S. military actions in that nation. China, which has not been known to issue frivolous warnings, is giving the U.S. a strong, clear message in the form of an ultimatum.

# Uniqueness: Relations Low- Oil and Bin Laden

# US-China relations on the brink- oil prices and Bin Laden

**Allen. CNBC EMEA head of news. May10, 2011.** [Patrick. http://www.cnbc.com/id/42968112/Falling\_Oil\_Prices\_Bad\_for\_US\_China\_Relations\_Economist “falling oil prices bad for US/China relations: economist.” CNBC. Accessed June 20th.

The talks have been surprisingly low key, due in part to the US attention being focused on the death of Osama bin Laden and the markets' attention being focused on falling commodity prices and the euro zone crisis. One analyst though predicts the recent fall in oil and commodity prices could turn the heat up on US/Chinese relations in the coming months. “On the economic side, the atmosphere in the run-up to this year’s meeting has been the most positive since the financial crisis,” said Mark Williams, the senior China economist at Capital Economics, in a research note. His point is that higher commodity prices have led China’s trade surplus to, on the surface at least, come down to less than four percent of gross domestic product, compared with 10 percent on the eve of the financial crisis. “We doubt this will last. The speed at which the surplus has fallen over the last year can be entirely explained by the rise in commodity prices rather than any surge in real import demand,” Williams wrote. Overnight Chinese data showed the trade surplus for April coming in at $11.4 billion, nearly four times higher than the many in the market had been expecting, in a clear sign Williams is right. “For everything apart from commodities – including the bilateral surplus with the US – China’s surplus remains close to a record high,” he wrote. “For this reason, the surplus is likely to rebound rapidly if commodity prices continue to decline, potentially reawakening strains with the US. Nonetheless, for now, China can argue that its economy is rebalancing,” Williams added.

# Uniqueness: Relations Low – Arms Race and space technology

**1. China- US relations down- China is building up defense eventually causing a US-China arms race**

**Neill. January 11, 2011. Senior Research Fellow, Asian Studies. Head of the Asia Security Program at the Royal United Services Institute**. [Alexander, “Viewpoint: A New US-Sino high-tech arms race?” BBC News. http://www.bbc.co.uk/news/world-asia-pacific-12154991 accessed June 21st.]

Alexander Neill, head of the Asia Security Programme at the Royal United Services Institute, considers the apparent emergence of a new Sino-US high-tech arms race. Beneath the veneer of official smiles and neatly choreographed handshakes at the defence summit in Beijing, the Sino-US relationship remains fraught with uncertainty. A year after military relations were frozen by Beijing in the wake of a $6.4bn (£4.1bn) arms package to Taiwan, the US request for a resumption of a substantial strategic dialogue has been given a lukewarm reception in Beijing. The People's Liberation Army's (PLA) appetite for engagement with the US has waned considerably over the last year. Cementing its defence arrangement with Taiwan, and holding large-scale naval war games in China's back yard in recent months, the US has buttressed its alliances with its East Asian allies. These actions have fuelled resentment in China and fears of US military encirclement. US irritation is based on a recent spate of harassment by the PLA Navy and Chinese fishing vessels against the US Navy and its allies in the West Pacific. The US is also frustrated with China's intransigence towards meaningful strategic dialogue on international security concerns, particularly while tension on the Korean peninsula remains high and nuclear proliferation by North Korea continues unchecked. But the Pentagon's visceral concern is its failure to detect the break-neck speed of Chinese military technological advances and its ability to curb an arms race in East Asia. 'Pressure point warfare' Despite recent headlines reporting the appearance of a Chinese stealth fighter prototype, of more concern to US military planners is the enabling technology that will produce the bite to China's military bark. Photo apparently showing prototype of Chinese-made stealth bomber Photos of a possible working prototype of a Chinese-made stealth aircraft were recently leaked This angst is focused on China's decade-long programme of military "informationisation" designed to leap-frog over US capabilities in the Pacific region. The PLA is rapidly developing asymmetric warfare techniques against US command, control, communications, computers, intelligence, surveillance and reconnaissance infrastructure, known as "C4ISR" in military parlance. For China, with its inferior conventional military capabilities, the key to gaining the upper hand in a conflict with the US is to gain dominance of the space theatre and to damage its digital nerve system. China views space as a corner-stone of its future prosperity: a mandate from heaven for China's growth and military strength. For this reason, China is working hard to counter the Pentagon's monopoly in space and to build its own space-based deterrent. The PLA's doctrine of "pressure point warfare", a multi-layered approach using space, cyberspace and information operations alongside conventional capabilities is designed to cripple an adversary in one swift strike. This fast paced and high-tech military modernisation has led to the emergence of weapons systems and technology, which in certain theatres has closed the military capability gap with the US considerably. These include directed energy, jamming and cyber attack technologies, designed to paralyse the US military machine. The PLA has recently developed and successfully tested advanced anti-satellite (ASAT) weapons systems, demonstrating it can destroy or manoeuvre close to enemy satellites in space. ASAT weapons are part of a new genre of "assassin's mace" or surprise weapons aimed at the Pentagon's Achilles Heel in space and cyberspace. All of these capabilities require state of the art signals processing and communications systems, technology which China has been developing indigenously to create its own command and control architecture. Carrier fears One of the most pressing concerns for the United States navy is the prospect of US aircraft carriers and other vessels being denied access to theatres of operation in the event that the US were dragged into a conflict over Taiwan or in support of its other Pacific allies. US aircraft carrier USS George Washington, in the Sea of Japan on 10 December 2010 Could Chinese missile systems target US aircraft carriers in the region? Coined by Pentagon planners as China's "A2/AD" (Anti Access/Area Denial) strategy, the PLA would attempt to prevent US aircraft carriers from deploying to theatre, targeted by Chinese torpedoes, Cruise Missiles and Anti Ship Ballistic Missiles (ASBMs). PLA tacticians know that a successful strike against a moving US aircraft carrier requires advanced space-based targeting assets and an ability to penetrate the US ballistic missile defence umbrella. They also know that their land-based missiles are vulnerable to attack from the US. One solution is to develop a submarine-launched ballistic missile (SLBM) capability, something which is also causing for concern for US defence secretary Robert Gates. The PLA's latest weapons systems serve as an opportunity to showcase China's considerable achievements and provide an anchor for the legitimacy of the Chinese Communist Party. What the PLA is prepared to reveal in public is also directed at the domestic audience as much as abroad - hence the roll-out of the J-20 stealth fighter prototype and the likely launch of an aircraft carrier within a year or two. China, Taiwan and the United States do not want a confrontation; this would likely be a disaster of global proportions. However, as China's President Hu Jintao and his US counterpart Barack Obama prepare to meet next week, the potential for miscalculation and an East Asian arms race extending into the space domain creates a lingering atmosphere of uncertainty and mistrust in the region.

**2. US-China relations remain rocky and are likely not to get better due to weapons and military technology**

**Interview with Zhu Chenghu. June 7, 2011.** **Director of the Strategic Studies Department at the National Defense University**. [ “Boasting of rising China makes US nervous.” Global Times. http://opinion.globaltimes.cn/commentary/2011-06/662770\_2.html accessed on June 21st.]

PO: Could China and the US make substantial progress in the communication of military technology? What is hindering the exchange in this regard? Zhu: Under current circumstances, it is not very likely for the two countries to make substantial process in the exchange of military technology. There are many reasons for this. We cannot expect too much from it. US global strategy helps decide this. The US goal is to dominate the world, financially, politically, and militarily. There are structural conflicts in the Sino-US relationship. Such conflicts are brought about by the differences in political system, ideology, and values between the two countries. Actually, after the Cold War, particularly after China's reform and opening-up policy, the difference or contradiction in ideology has faded from China's memory. But I guess the US has never let go of this. I understand that the relationship between two big nations is naturally competitive, but that doesn't mean we can't cooperate with each other. For a long time, the cooperation between the two countries has mainly been in other fields and even in non-traditional security. But when it comes to military technology, cooperation becomes rather sensitive. Therefore, it is difficult for the US to share with us its technology while there is a tense competitive relationship. We had cooperated with the US in military technology before, but we were on the losing side in the process. I think Chinese should not rely on others for their national security. We need to make military breakthroughs ourselves. PO: How do you see the relation between a country's military expenditure and its military strength? In answering questions from a journalist in the US, Chen Bingde said China was 20 years behind in military equipment. How can we catch up? Zhu: I think Chen was just using a figure of speech to make it clear that we are not competing anyone in the development of weaponry and military equipment and we don't want to challenge US military dominance. But we do need to increase military investment, speed up the development of weaponry and equipment, and improve the training of the army and their ability in coping with all kinds of security threats. From reform and opening-up in the late 1970s to 1995 when Taiwan leader Lee Teng-hui visited the US, China's military expenditure was nearly stagnant. The increase in the past years has actually been catching up with what we should have spent earlier. As China is growing stronger, it should shoulder more international responsibilities. To do this, it needs the appropriate military training and technology. For instance, in the past, our navy never went beyond Chinese waters. But today, they are in the Gulf of Aden fighting against pirates and protecting convoys together with other countries in the territorial waters of other countries with the backing of the UN. Sometimes, when there is a natural disaster, our government needs to provide help and material relief for people in other countries, which also requires us to have modern equipment. PO: The US greatly supported China in both the War against Japanese Aggression (1937-45) and in the early stages of our reform and opening-up. Why can we not have a good relationship with the US, while we can get along well with Russia? Zhu: I admit that without the help from the US we might have lost more in the war and it might not have ended so soon. And after the then US President Richard Nixon visited China in 1972, the US also played an indispensable role in the process of reform and opening-up in China. But why have there been so many problems with the Sino-US relationship in recent years? I think US global strategy demands an opponent. Without a competitor, it would not be possible for the US to maintain a high military expenditure, nor would it be necessary for it to keep an enormous number of forces overseas. After the disintegration of the Soviet Union, some decision-makers and scholars in the US regarded China as a threat to global US hegemony, setting obstacles in the Sino-US relationship to hinder its development. But we also are at fault. It is true that we are developing, but are we really rising now? Is China developed enough to replace the US as No.1? Is it developed to a degree that China could seek hegemony through military strength? We should examine the remarks by some media and scholars in the past years about China's rise, our new power, and so on. Some even believed that there must be a war between China and the US. All these words inevitably would become excuses for the US to guard against or even contain China. PO: The military exchanges between China and the US are on and off and an effective and regular dialogue mechanism has not taken shape yet. What do you think are the main reasons for this? Zhu: I think there appeared a weird circle in the Sino-US relationship in the past years, that is, destroy-repair-destroy again-repair again. I think the US is mainly to blame for this. There are three major obstacles in the military relationship between China and the US: US arms sale to Taiwan, the National Defense Authorization Act and DeLay Amendment in 2000, and US spy missions over China's exclusive economic zones. The discontinuity of the military communication between the two countries actually all resulted from these three factors, particularly US arms sales to Taiwan. I want to remind you that it is na?ve to think Chen's visit to the US will lead the military relationship between China and the US to a healthy path, since the US now is planning another sale of F-16 C/D fighters to Taiwan, or helping Taiwan to upgrade its existing 145 F-16 A/B fighters to the C/D version.

# Uniqueness: Relations Low- Human Rights

**1. US-China relations low from Human Rights talks earlier this year**

**Johnson. April 22, 2011. Staff writer for the NY Times.** [Ian. “ Tension Precedes U.S.-China Meeting on Human Rights.” New York Times. http://www.nytimes.com/2011/04/23/world/asia/23china.html?ref=china Accessed June 21st]

BEIJING — The United States and China will have their annual meeting on human rights next week, but there are signs that the session may be more tense than usual. Related According to a statement issued by the State Department, the two sides are to meet Wednesday and Thursday in Beijing for what has become a regular springtime meeting on human rights. But the statement was highly unusual for several reasons, not least because Washington made the announcement for a meeting to be held in Beijing — which runs counter to diplomatic protocol — and because it was made just days before the event. Indeed, the Chinese government confirmed the meeting late Friday only after repeated calls to the Foreign Ministry. A day earlier, a ministry spokesman said details still had to be “discussed and arranged.” “Objectively speaking, the announcement is being made at the last minute,” said Joshua Rosenzweig of the Dui Hua Foundation, a rights group in Hong Kong. “It’s also interesting that the U.S. is making it unilaterally and that they’re using this language.” The American announcement bluntly says that the talks will focus on “the recent negative trend of forced disappearances, extralegal detentions and arrests and convictions” — highly unusual in such a statement and most likely reflecting Washington’s growing frustration with the human rights situation in China. China is in the midst of a crackdown on dissent in which dozens of lawyers and activists have been rounded up. Some have been detained for brief questioning; others have disappeared for months without a trace. The most prominent is Ai Weiwei, an artist and critic detained this month when trying to board a flight to Hong Kong. The immediate catalyst for the crackdown seems to have been a call by dissidents for Chinese to emulate the “jasmine” revolutions of North Africa. Even though few people heeded the calls to protest, the government has reacted strongly. Western human rights analysts say the clampdown shows the limits of government-to-government human rights dialogue. Besides the United States, other countries and the European Union have similar sessions, which usually take place in private once a year. Typically, Western countries bring up problems or lists of detained dissidents, and China responds by saying that it is a country ruled by laws, and that those people violated the law.

# Uniqueness: Relations low- space

**1. China’s space development is hurting already shaky relations with the US**

**Trivedi. June 16, 2011. A research analyst working on security and sustainable development in South and East Asia for Strategic Foresight Group.** [Sahiba, “Space: the final frontier of Sino-US rivalry?” Open Security. http://www.opendemocracy.net/opensecurity/sahiba-trivedi/space-final-frontier-of-sino-us-rivalry accessed June 21st.]

 China’s sky-high space ambitions have the potential to upset the current world order. Within the coming decade, China may become capable of challenging America’s dominance over space and its monopoly over global navigational systems. Over the past few years, China has engaged in completing high-profile, grand projects like high-speed rail, the world’s biggest airport terminal (since overtaken by Dubai) and the 2008 Beijing Olympics. Its space programme, like all else, is a matter of Chinese prestige. On successful completion, it will be yet another grand feather in China’s cap signalling its ambition of becoming a world power. China’s ambitious space programme has three tracks. Track one is the setting up of China’s own space station. The Chinese were successful in launching their first astronaut or taikonaut into space in 2003. Since then, China’s space programme has witnessed major breakthroughs. By summer 2011, it plans to launch its first unmanned space module called ‘Tiangong – 1’. The ‘Shenzhou – 8’, scheduled for later this year (2011), will attempt to dock with the ‘Tiangong – 1’. Both these launches are the initial stages of Chinese plans for setting up a space station by 2015. Once its space station is completed, China will become the third country in the world, after Russia and the US to do so with indigenous technology. The second track is China’s lunar ambitions, scheduled to be carried out over three phases. The first phase of this was successfully completed in October 2010 with the launch of the “Chang’e – 2” lunar orbiter. By 2020, China could actually land its first astronaut on the moon. The third track of its space programme involves the development of a Chinese global navigational system called ‘Beidou’. Until now, the US has had a monopoly over navigation systems with its global positioning system (GPS). China aims to make ‘Beidou’ available to Asia-Pacific by 2012, which will go global by 2020. China’s programme could have repercussions for the Sino-US relationship. Chinese President Hu Jintao’s recent US visit resulted in a number of trade and investment deals being inked between the two countries. However, space was not one of them even though according to Washington, the 4 main areas of potential cooperation with China include space alongside cyber-security, missile defense and nuclear weapons. But since mutual trust is important for any kind of cooperation between the two nations, space is a ‘no-go’. The US and Chinese space programmes cannot be compared directly. The American programme precedes China’s by at least 40 years and China has yet to land its first man on moon. The US satellite and spacecraft technology is still years ahead of China. But China is on the fast track right now. In 2011 alone, China aims to put more than twenty vehicles into space. Compared to this, the US space programme is in a state of inertia. It has had to scrap its ‘Constellation Program’ since the struggling American economy cannot afford the huge price tag attached to the programme at present. Details of the Chinese space programme remain undisclosed and even its civilian component is run primarily by its military. For the US, this limits strategic cooperation to a large extent. The US is also wary of China’s growing military ambitions. China has recently tested its first stealth fighter aircraft. Since space technology almost always has military uses like missile development and remote monitoring and control, it is likely that a successful space programme in China would bolster its military and naval prowess. Hence, the US is clearly uneasy about the programme even though the administration has downplayed reports of China’s goal of a manned moon mission. For China, the US skepticism over its space programme as well as its ban on high-tech exports to China is a hurdle to cooperation in space. The navigational system ‘Beidou’ is crucial for the Chinese military as presently it has to depend on the US GPS. The Chinese fear is that this GPS could be blocked or manipulated in case of a conflict. The US is also jittery because of fears of technology proliferation since China’s allies include countries like Pakistan, Iran and North Korea. Supremacy in space would also aid China in elevating it to the status of a global superpower. Commercially too, an advanced space programme could eventually result in China being first in the race to extract lunar resources like uranium and titanium. Over the next few years, it is unlikely that the speed of China’s progress in its space programme will go down. Also, as it achieves its goals, China’s programme will definitely make many countries around the world nervous. Hence, with each of China’s successes, the world will see other countries taking frantic action to catch up with it. It is also possible that with a robust and thriving space programme in its kitty, China may be the next nation to be included in International Space Station (ISS). Such a situation may lessen the atmosphere of mutual suspicion to a certain degree.

**2. US-China relations down each worried about the other’s space developments**

**Zhang. May 2011. Dr. BaoHui Zhang is a faculty researcher at the Learning Sciences Lab and an Assistant Professor in the Learning Sciences and Technologies Academic Group at the National Institute of Education (NIE), Nanyang Technological University in Singapore.** [Baohui, “The Security Dilemma in the U.S.-China Military Space Relationship: The Prospects for Arms Control.” University of California. Accessed June 20th]

The U.S.-China military space relationship has been driven by the security dilemma in international relations. China pursues military space capabilities in part to counter perceived national security threats posed by the U.S. quest for space dominance and missile defense. However, the current strategic adjustment by the Obama administration and the altered situation at the Taiwan Strait have moderated the bilateral security dilemma, offering an opportunity for arms control in outer space. KEYWORDS: space security, security dilemma, U.S.-China relations, space war, arms control China’s military space program and its strategies for space warfare have caused rising concerns in the United States. In fact, China’s military intentions in outer space have emerged as one of the central security issues between the two countries. In November 2009, after the commander of the Chinese Air Force called the militarization of space “a historical inevitability,” General Kevin Chilton, head of the U.S. Strategic Command, urged China to explain the objectives of its rapidly advancing military space program.1 Indeed, in the wake of China’s January 2007 anti-satellite (ASAT) test, many U.S. experts have attempted to identify China’s motives. One driver of China’s military space program is its perception of a forthcoming revolution. The People’s Liberation Army (PLA) sees space as a new and critical dimension of future warfare. The comment by the commander of the Chinese Air Force captures this perception of the PLA.2 In addition, China’s military space program is seen as part of a broad asymmetric strategy designed to offset conventional U.S. military advantages. For example, as observed by Ashley J. Tellis in 2007, “China’s pursuit of counterspace capabilities is not driven fundamentally by a desire to protest American space policies, and those of the George W. Bush administration in particular, but is part of a considered strategy designed to counter the overall military capabilities of the United States.”3 Richard J. Adams and Martin E. France, U.S. Air Force officers, contend that “Chinese interests in space weapons do not hinge on winning a potential U.S.-Chinese ASAT battle or participating in a space arms race.” Instead, they argue, China’s military space program is driven by a desire to “counter the space-enabled advantage of U.S. conventional forces.”4 This perspective implies that given the predicted U.S. superiority in conventional warfare, China feels compelled to continue its offensive military space program. Inevitably, this perspective sees China as the main instigator of a possible space arms race, whether implicitly or explicitly. China’s interpretation of the revolution in military affairs and its quest for asymmetric warfare capabilities are important for understanding the 2007 ASAT test. This article suggests that the Chinese military space program is also influenced by the security dilemma in international relations. Due to the anarchic nature of the world order, “the search for security on the part of state A leads to insecurity for state B which therefore takes steps to increase its security leading in its turn to increased insecurity for state A and so on.”5 The military space relationship between China and the U.S. clearly embodies the tragedy of a security dilemma. In many ways, the current Chinese thinking on space warfare reflects China’s response to the perceived U.S. threat to its national security. This response, in turn, has triggered American suspicion about China’s military intentions in outer space. Thus, the security dilemma in the U.S.-China space relationship has inevitably led to measures and countermeasures. As Joan Johnson-Freese, a scholar at the Naval War College, observed after the January 2007 ASAT test, China and the U.S. “have been engaged in a dangerous spiral of action-reaction space planning and/or activity.”6 This article, citing firsthand Chinese military sources, identifies the major factors contributing to the security dilemma that is driving China’s military space program. The first is China’s attempt to respond to perceived U.S. military strategies to dominate outer space. Chinese strategists are keenly aware of the U.S. military’s plan to achieve so-called full-spectrum dominance, and the Chinese military feels compelled to deny that dominance. The second factor is China’s concern about U.S. missile defense, which could potentially weaken Chinese strategic nuclear deterrence. Many PLA analysts believe that a multilayered ballistic missile defense system will inevitably compromise China’s offensive nuclear forces. China’s response is to attempt to weaken the U.S. space-based sensor system that serves as the eyes and brains of missile defense. Thus, U.S. missile defense has forced China to contemplate the integration of nuclear war and space warfare capabilities.

# Uniqueness-Chinese technological setbacks

**1. China has experienced many technological setbacks- failed satellites slow space development**

**Cliff. 2011. Senior political scientist at the RAND Corporation, P.H.D. in international relations.** [ Roger with Chad J. R. Ohlandt, Ph.D. Aerospace Engineering and Scientific Computing, and David Yang, Ph.D in politics at Princeton University. “ Ready for Takeoff-China’s Advancing Aerospace Industry.” RAND. <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA539926&Location=U2&doc=GetTRDoc.pdf> accessed June 24]

China has maintained a relatively high launch tempo of about one launch every two months, on average, for the past decade and is steadily increasing its total number of orbiting operational satellites. At the end of 2002, China had nine satellites in orbit (Guo, 2002). Today, it has an estimated 55 operational satellites, not including communications satellites owned and operated out of Hong Kong. Additionally, since 2002, there have been five recoverable photoreconnaissance satellite missions, three manned missions (manned spaceflight program), and two lunar observation missions, and a commercial communications satellite was successfully built and launched for Venezuela (“UCS Satellite Database”; “Long March [Chang Zheng],” 2010; “Chang’e Series,” 2010). Nonetheless, China’s space program has encountered significant technical problems, particularly with satellites. China’s domestically designed high-capacity communications satellite platform, called Dongfanghong 4 (DFH-4), has experienced multiple failures. The Huanjing series of environmental and disaster-monitoring satellites and the Haiyang series of oceanographic satellites, although they have experienced no known failures, are being deployed more slowly than originally announced. Three out of 10 Beidou-series PNT satellites have also experienced technical problems. It is not clear whether these problems are due to underlying design issues, insufficient quality control in construction, or simple poor luck, but China’s space capabilities will probably not develop as quickly as outlined in the “National Guidance for Medium- and Long-Term Plans for Science and Technology Development (2006–2020).” Nonetheless, comparison with the successes of China’s space program suggests that any technical problems will be overcome eventually. The ultimate effect on U.S. national security will be the same, but that effect might not emerge as quickly as current plans would imply. Despite some technical setbacks, Chinese satellites now provide increasingly sophisticated intelligence, surveillance, and navigation capabilities that have significantly advanced China’s military capabilities. Though the capabilities of the satellites fall short of U.S. standards, they are more than sufficient for most military purposes. China’s commercial space prospects seem more limited given extensive foreign competition, but its space launch program has achieved a number of successes that make it potentially appealing to other countries interested in launching commercial satellites.

# \*\*\*Links\*\*\*

# No Link- Asteroid Tracking

**Empirics prove, Asteroids have massive destructive capabilities.**

**Mosher ‘07** - Staff Writer for Space.com [Dave “Crater Could Solve the 1908 Tunguska Meteor Mystery” http://www.freerepublic.com/focus/f-news/1857424/posts 6/22/11]

In late June of 1908, a fireball exploded above the remote Russian forests of Tunguska, Siberia, flattening more than 800 square miles of trees. Researchers think a meteor was responsible for the devastation, but neither its fragments nor any impact craters have been discovered. Astronomers have been left to guess whether the object was an asteroid or a comet, and figuring out what it was would allow better modeling of potential future calamities.

**Asteroids are a global security concern. International search for technologies show development of tracking capabilities would be welcomed globally**

**CBC News**, 2/27/**08** [“Asteroid tracking plans win award” CBC News http://www.cbc.ca/news/technology/story/2008/02/27/tech-asteroid-earth.html 6/22/11]

 A team from the U.S. won the top prize in an international competition to solve a dilemma more commonly associated with Hollywood blockbusters like Armageddon and Deep Impact: How do you track an asteroid headed for Earth? The winning team, led by SpaceWorks Engineering Inc. of Atlanta working in conjunction with SpaceDev Inc. of Poway, Calif., won the Apophis Mission Design Competition's $25,000 US first-place prize on Tuesday, according to The Planetary Society, the space exploration advocacy group that held the contest. The competition takes its name from the asteroid 99942 Apophis, which scientists once calculated had a one in 42 chance of striking Earth in 2036. Further study has since scaled those odds back considerably, to about one in 45,000. The society's aim with the competition was to seek out new, more accurate methods of tracking an asteroid to give governments better information about whether or not a mission to deflect it off our path was necessary. Large asteroids can have a potentially disastrous impact if they strike the Earth. Scientists have theorized that a collision of an asteroid off the coast of the Yucatan Peninsula in Mexico 65 million years ago wiped out the dinosaurs by causing an upheaval in the planet's climate. The actual contest required teams to come up with a plan to track Apophis as it nears Earth. The winning team's plan, called Foresight, calls for a spacecraft to be equipped with a radio beacon and two tracking instruments and would launch aboard an Orbital Sciences Corp. Minotaur IV rocket sometime between 2012 and 2014. It would rendezvous with the asteroid some five to 10 months later, orbit it for a month to collect data, and then fly alongside it, using radio tracking from Earth to determine the exact orbit. The winning team said the total cost of the operation would be $137.2 million US. A team from the Georgia Institute of Technology, also of Atlanta, won the $5,000 US first-place prize awarded to students. The competition received 37 mission proposals from 20 countries, according to the Planetary Society, the international group founded in 1980 by Carl Sagan and other astronomers. NASA's Near-Earth Object (NEO) program office already tracks the paths of both near-Earth asteroids and comets. As of Jan. 20, 2008, the NEO office said it has discovered 5,086 near-Earth asteroids. In September 2007 NASA's Dawn spacecraft lifted off from Cape Canaveral on an eight year, 6.4 billion-kilometre mission to monitor the asteroids Vesta and Ceres. But both of these asteroids lie in the asteroid belt between Jupiter and Mars, and neither is seen as a danger to Earth.

**China supports Asteroid Tracking and is actively pursuing its capabilities as part of global efforts**

**Stone ’08,** Asia News Editor of Science, the international weekly magazine [Richard, “”Near-Earth Objects: Preparing for Dooms Day” <http://www.fr.sott.net/articles/show/150527-NEAR-EARTH-OBJECTS-Preparing-for-Doomsday>, 6/22/11]

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On a ridge in this quiet, dark corner of southeastern China, about 100 kilometers northwest of Nanjing, XuYi's new 1-meter telescope espies a few dozen asteroids on a good night. Most are known to science. But since China's first telescope dedicated to asteroid detection saw first light early last year, Zhao's team has discovered more than 300 asteroids, including a near-Earth object (NEO), the class of asteroids and comets that could smash into our planet, if fate would have it. China's asteroid hunters are the latest participants in a painstaking global effort to catalog NEOs. Close encounters with asteroids in recent years--and comet Shoemaker-Levy's spectacular death plunge into Jupiter in 1994--have spurred efforts to find the riskiest NEOs before they blindside us. Tracking potentially hazardous objects--NEOs passing within 0.05 astronomical units, or 7.5 million kilometers, of Earth's orbit--is essential for any attempt to deflect an incoming rock. The first test of our planet's defenses could be Apophis, an asteroid the size of a sports arena that made the world sweat for a few days in December 2004, when calculations suggested as great as a 1 in 37 chance of an impact in 2029. Although further data ruled out that day of reckoning, another could be looming. In April 2029, Apophis will pass a mere 36,350 kilometers from Earth, inside the orbits of geostationary satellites. If it enters a keyhole--a corridor of space barely wider than the asteroid itself where gravitational forces would give it a tug--it will end up on a trajectory that would assure a collision 7 years later: on 13 April 2036, Easter Sunday. The odds of Apophis threading the needle are currently 1 in 45,000--but dozens of factors influence asteroid orbits. Researchers will get a better look during Apophis's next appearance in our neighborhood in 2012.

**Cooperation is key to protect against NEOs**

**Stone ’08,** Asia News Editor of Science, the international weekly magazine [Richard, “”Near-Earth Objects: Preparing for Dooms Day” <http://www.fr.sott.net/articles/show/150527-NEAR-EARTH-OBJECTS-Preparing-for-Doomsday>, 6/22/11]

Eventually, an asteroid with our name on it will come into focus, forcing an unprecedented decision: whether to risk an interdiction effort. "The very concept of being able to slightly alter the workings of the cosmos to enhance the survival of life on Earth is staggeringly bold," says Russell Schweickart, chair of the B612 Foundation, a Sonoma, California, nonprofit that lobbies for NEO deflection strategies. We have the means to deflect an asteroid--indeed, "it's really the only natural hazard that we can possibly prevent," says NEO specialist David Morrison, an astrobiologist at NASA's Ames Research Center in Mountain View, California. There is one "fatal missing element," says Schweickart, who in 1969 piloted the lunar module for the Apollo 9 mission: "There is no agency in the world charged with protecting the Earth against NEO impacts." He and others hope to change that. Wake-up calls Like any natural disaster, impacts occur periodically; gargantuan impacts are so rare that their frequency is hard to fathom. Every 100 million years or so, an asteroid or a comet a few kilometers or more in width--a titan like the rock thought to have wiped out the dinosaurs 65 million years ago--smacks Earth. "This is not just getting hit and killed," says Edward Lu, a former astronaut who now works for Google. "You're on the other side of the Earth and the atmosphere turns 500° hotter. Lights out."

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**Chinese researchers already collaborating with US scientists on NEO research**

**Stone ’08,** Asia News Editor of Science, the international weekly magazine [Richard, “”Near-Earth Objects: Preparing for Dooms Day” <http://www.fr.sott.net/articles/show/150527-NEAR-EARTH-OBJECTS-Preparing-for-Doomsday>, 6/22/11]

Zhao's team is working fast to stake NEO claims before Pan-STARRS, the first Spaceguard II facility, starts gobbling up the heavens. The telescope on Mount Haleakala on Maui Island, Hawaii, has a charge-coupled device camera with 1.4 billion pixels--the highest resolution in the world--that acquires images every 30 seconds. Pan-STARRS, which saw first light last August, will usher in a new paradigm in observational astronomy (Science, 12 May 2006, p. 840). "It's a set of surveys that will be analyzed in a wealth of different ways," says Kenneth Chambers, an astronomer with the Institute for Astronomy (IfA) at the University of Hawaii, Manoa, who is leading a consortium of 300 scientists whose institutions have paid for first crack at Pan-STARRS gold. Some will map the Milky Way or look for distant quasars. Others will hunt for asteroids. "The astronomical community is not ready for the fire hose of data that's going to hit them," Chambers says. Once Pan-STARRS begins taking data in earnest this summer, NEO finds should come thick and fast. According to IfA astronomer Robert Jedicke, who led development of the software that will cull NEOs from the data deluge, Pan- STARRS will be 10 times more effective at spotting NEOs than all current surveys combined. "Are there many more objects like Apophis out there? This is something that Pan-STARRS will answer," says IfA Director Rolf-Peter Kudritzki. Magnificent feats of detection are also expected from LSST, which will have 24 times greater survey power than Pan-STARRS. Like its Hawaiian rival, the $389 million project has broad science objectives, including studying dark energy and dark matter and mapping the Milky Way. Unlike Pan-STARRS, LSST data will be available immediately to any researcher. Construction is expected to begin in 2011 at Cerro Pachón, Chile.

**NEOs threaten whole world and have a unifying effect on politics as Earth is faced with destruction from beyond**

**Stone ’08,** Asia News Editor of Science, the international weekly magazine [Richard, “”Near-Earth Objects: Preparing for Dooms Day” <http://www.fr.sott.net/articles/show/150527-NEAR-EARTH-OBJECTS-Preparing-for-Doomsday>, 6/22/11]

The "threshold of pain," as Lu calls it, may depend on who would be affected--and what resources they have. Based on current calculations, the line where Apophis might hit--the so-called risk corridor--runs from Kazakhstan through Siberia, over the northern Pacific, and across Costa Rica, Colombia, Venezuela, and the south Atlantic. Who would mount and pay for a deflection mission? All countries along the corridor? Just Russia, vulnerable to a direct hit, or the United States, vulnerable to a towering tsunami? The United Nations? What if a mission failed, deflecting Apophis to another point on the risk corridor, converting an "act of God" into an act of humankind? Who would be liable? As experts grapple with these questions, some are trying to rouse political leaders. With outside advice, the Association of Space Explorers, an organization of astronauts and cosmonauts based in Houston, Texas, is drafting an NEO Deflection Decision Protocol to present to the U.N.'s Committee on the Peaceful Uses of Outer Space in 2009. "Apophis should unite our efforts to deal with the threat," says Shustov, who is leading an effort to develop Russia's first national R&D program on NEO hazards.

**Asteroid Tracking is key to prevent miscalculation and war**

**Stone ’08,** Asia News Editor of Science, the international weekly magazine [Richard, “”Near-Earth Objects: Preparing for Dooms Day” <http://www.fr.sott.net/articles/show/150527-NEAR-EARTH-OBJECTS-Preparing-for-Doomsday>, 6/22/11]

Shustov's nightmare is that leaders will drag their feet until the threat of a direct hit becomes real. But an asteroid need not impact to cause chaos. **Each year, military satellites detect several 1-kiloton explosions of asteroids in the upper atmosphere, and every several years, a much larger explosion of 10 kilotons or more, says Sandia's Boslough. "They are quite frightening to people on the ground."** A bus-size meteoroid would explode in the stratosphere with the energy of a small atomic bomb, producing a blinding flash much brighter than the sun, says Chapman. "Military commanders in a region of tension might regard it as the hostile act of an enemy and retaliate," he says. A 25-kiloton airburst occurred over the Mediterranean Sea on 6 June 2002. Imagine, Chapman says, "if that had happened instead in the vicinity of Kashmir, where tensions between India and Pakistan were elevated."

# No Link- Space Debris Aff

**Space Debris threatens international Space assets**

**Space.com** 5/25/**09** [“Space Debris Cleanup Suggestions Ignored” <http://www.space.com/6488-space-debris-cleanup-suggestions.html> 6/22/11]

Space debris cleanup suggestions by fiction writers have been made repeatedly; all have been ignored by the world's space agencies. Now, we have a real problem. This past week, ISS astronauts have ducked into a Russian space capsule for [protection](http://www.space.com/6488-space-debris-cleanup-suggestions.html) from space debris: The three astronauts, two Americans and one Russian, moved into the station's attached Soyuz TMA-13 spacecraft at 12:35 p.m. EDT (1635 GMT) as a safety precaution in case the debris — a small piece of a spent satellite motor — slammed into the orbiting lab and ripped a hole in its outer hull. The astronauts were ready to evacuate the space station if the debris hit the station and depressurized its living space. This follows the incident last month in which a Russian cosmos 2251 satellite improbably collided with an Iridium 33 satellite, creating enormous debris clouds: According to an e-mail alert issued by NASA today, Russia's Cosmos 2251 satellite slammed into the Iridium craft at 11:55 a.m. EST (0455 GMT) over Siberia at an altitude of 490 miles (790 km). The incident was observed by the U.S. Defense Department's Space Surveillance Network, which later was tracking two large clouds of debris. Satellite debris has been a problem for many years. Of course, you'd think NASA and all the other space agencies would be ready with a [solution](http://www.space.com/6488-space-debris-cleanup-suggestions.html). Wrong.

**world with an energy conversion efficiency of 35.8**

**Space Debris threatens international Space assets**

**Imburgia 4/4/11,** United States Air Force Academy Lieutenant Colonel,Judge Advocate in the US Air Force, legal exchange officer to the Directorate of Operations and International Law, Tennessee and Supreme Court of the United States bars, member of the Australian and New Zealand Society of International Law. [Lieutenant Colonel Joseph S., “Space Debris and Its Threat to National Security: A Proposal for a Binding International Agreement to Clean Up the Junk” aw.vanderbilt.edu/publications/journal-of-transnational.../download.aspx? 6/22/11]

In 1986, the Soviet representative to the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS) “was of the view that the space debris problem affecting the space environment must be dealt with immediately.”**3** Almost twenty-five years later, the international community still has not sufficiently dealt with the problem. Sadly, space debris continues to threaten the survivability of space-based assets and manned spaceflight. On

March 12, 2009, space debris forced astronauts aboard the International Space Station to take shelter in an escape capsule out of fear that debris would collide with the station.**4** Based on the current space debris environment and the very real threat it poses, it is now time for the international community to heed the Soviet representative’s advice and deal with the space debris problem. The solution to that problem needs to come in the form of a binding international agreement.

**China has felt impact of space debris, both US & China best interest to solve debris problem**

**Imburgia 4/4/11,** United States Air Force Academy Lieutenant Colonel,Judge Advocate in the US Air Force, legal exchange officer to the Directorate of Operations and International Law, Tennessee and Supreme Court of the United States bars, member of the Australian and New Zealand Society of International Law. [Lieutenant Colonel Joseph S., “Space Debris and Its Threat to National Security: A Proposal for a Binding International Agreement to Clean Up the Junk” aw.vanderbilt.edu/publications/journal-of-transnational.../download.aspx? 6/22/11]

 Without a binding international agreement, the problem will only continue to worsen. According to scientists at the National Aeronautics and Space Agency (NASA), more than 5,500 tons of space debris orbited Earth in 2006.**5** Unfortunately, the space debris problem has worsened drastically in the years since.**6** During 2007, the explosion of a Russian rocket and the Chinese destruction of one of its own weather satellites during an anti-satellite (ASAT) mission created potentially millions of new pieces of space debris.**7** In February 2009, a collision between a defunct Russian communications satellite and a privately owned Iridium telecommunications satellite created possibly thousands more.**8** This recent creation of so much space debris is unprecedented, and the wreckage could soon damage or destroy other working satellites.**9** Such a sudden and massive addition to the space debris environment is cause for concern. In fact, some experts fear that we have reached the point that space is so cluttered with debris that a chain reaction of collisions, severely jeopardizing sustainable space access, is unavoidable unless international action is taken soon.**10** This Article argues that international action must be in the form of a binding international agreement on space debris. The agreement at Annex A provides a starting point for discussion. Without legal consequences, including appropriate international sanctions for treaty violations, little international influence exists to compel space-faring nations to find a viable solution to this problem. Moreover, space debris threatens the durability and survivability of the space assets on which the United States so heavily depends for its national security.**11** It is therefore in the United States’ best interest to support a binding international agreement to deal with the removal and mitigation of space debris. To demonstrate the urgency of the problem and highlight the need for a binding international agreement on space debris, this Article first examines the amount of space debris currently in existence and the predictions for future additions. It then discusses the United States’ reliance on the unhindered use of space for national security and demonstrates why a space debris threat to American space assets presents an immediate and serious concern to the United States. The Article then analyzes the 1967 Outer Space Treaty,**12** the 1972 Liability Convention,**13** and the 1975 Registration Convention**14** to show that these treaties are, by their terms, insufficient to deal with the space debris problem. Next, the Article illustrates why no other international agreement adequately addresses or demands the removal of space debris currently in Earth’s orbit. Consequently, to better preserve and protect the national security interests of the United States by assuring access to space and the freedom to operate there, the United States must pursue a binding international agreement with real consequences, and it must persuade the international community to follow its lead. Definitions for both “space” and “space debris” are needed in such an agreement. Additionally, countries must be required to do at least three things: (1) minimize the creation of space debris; (2) make efforts to rid the space environment of the debris they create or have already created; and (3) notify each other when they cause space debris. The proposed agreement at Annex A addresses each of these issues. An agreement is necessary because of both the gloomy future presented by an unresolved space debris problem and the lack of adequate international law in this area. II. THE MEASURABLE PROBLEM OF SPACE DEBRIS The phrase “space debris” is generally described as “a blanket term for any man-made artifact discarded, or accidentally produced, in space, either in orbit around a planetary body (when it is also known as orbital debris) or on a trajectory between planetary bodies.”**15** Space debris typically consists of fragments of older satellites and rocket boosters resulting from explosions or collisions.**16** Space debris, however, also includes “dead satellites, spent rocket stages, a camera, a hand tool and junkyards of whirling debris left over from chance explosions and destructive tests.”**17** In addition to the space debris created during the satellite collision of February 10, 2009,**18** some of the newest space debris includes a $100,000 set of grease guns and other tools that Space Shuttle Endeavour astronaut Heidemarie Stefanyshyn-Piper lost during a space walk on November 19, 2008.**19** These recent additions to the space debris population intensify a problem that began on October 4, 1957, when the former Soviet Union launched the first satellite, Sputnik 1, into space.**20** Since that date, space-faring nations have launched objects into space at a frenetic pace. Those launches have, in turn, created a considerable amount of space debris.**21** In October 2010, Air Force Space Command’s (AFSPC) Space Surveillance Network was tracking over 21,000 man-made objects orbiting Earth that were larger than ten centimeters.**22** Unfortunately, fewer than 5 percent of those 21,000 man-made objects are operational satellites; the rest are debris.**23** Even worse, scientists currently estimate “that there are over 300,000 objects with a diameter larger than one centimeter, and several million that are smaller,” orbiting in space, and a large majority of these objects are man-made space debris.**24**  Historically, explosions have been the biggest cause of space debris.**25** That fact, however, is about to change. Due to the amount of space debris that currently exists, several NASA computer “models predict that more [space] debris will be generated by collisions, rather than explosions, in the future.”**26** As a result of this outer space clutter, Earth’s orbital region has become, in just over fifty years, “the junkyard of the solar system.”**27** This orbital junkyard is already hindering our utilization of outer space. In recent years, the vast amount of space debris has affected space launch schedules and caused in-space collisionavoidance maneuvering. On March 12, 2009, the near collision of space debris with the International Space Station (ISS) caused the ISS crew to temporarily evacuate into a Russian escape capsule docked with the station.**28** This was the second time in less than a year that space debris threatened the ISS,**29** and it highlighted a list of nine 2009 space debris collision-avoidance maneuvers by satellites under NASA’s control.**30** Since February 2009, over thirty-two collision-avoidance maneuvers have been reported, including one by China.**31** Concerns with space debris also threatened a space shuttle launch in fall 2008, as NASA warned that the risk of a catastrophic collision between space debris and the shuttle exceeded the norm.**32** Earlier that year, in order to ensure that an Atlas V rocket carrying a secret payload into space did not collide with space debris, the United States was forced to delay the rocket’s launch for two weeks.**33** Additionally, in 2005, a spacecraft that is a major part of NASA’s Earth Observing System successfully performed a small collisionavoidance maneuver to ensure that it did not collide with space debris.**34** 4. China Is Not the Only Culprit; Russia and the United States Are Also to Blame Although China drastically increased the space debris population through its 2007 ASAT mission, it is certainly not the only originator of space debris. As evidenced by the February 2009 satellite collision, Russia and the United States are also responsible.**108** With its January 2007 ASAT mission, China is the number one space polluter per satellite in terms of the ratio of space debris created to satellites launched.**109** However, the United States and Russia rank second and third respectively.**110**

**China wants to cooperate with US on Constellation, Top officials urge joint pursuit of manned space flight**

**Space news.com 4/14/11** [“Chinese Government Official Urges U.S.-Chinese Space Cooperation” [http://www.spacenews.com/civil/110414-chinese-official-space-cooperation.html 6/23/11](http://www.spacenews.com/civil/110414-chinese-official-space-cooperation.html%206/23/11)]

A top Chinese government space official on April 14 appealed to the U.S. government to lift its decade-long ban on most forms of U.S.-Chinese space cooperation, saying both nations would benefit from closer government and commercial space interaction. He specifically called for cooperation on manned spaceflight, in which China has made massive investment in recent years. Lei Fanpei, vice president of China Aerospace Science and Technology Corp. (CASC), which oversees much of China’s launch vehicle and satellite manufacturing industry, said China purchased more than $1 billion in U.S.-built satellites in the 1990s before the de facto ban went into effect in 1999. Since then, the U.S. International Traffic in Arms Regulations (ITAR) have made it impossible to export most satellite components, or full satellites, to China for launch on China’s now successful line of Long March rockets.

**Collaboration coming, China and US moving back towards collaboration of early 90s, US government reviewing ITARs .**

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The ITAR regulations that tightened the U.S. technology export regime were put into place to punish China for its missile exports, and to slow development of China’s rocket industry by reducing its customer base. Most commercial telecommunications satellites carry at least some U.S. parts, which is why ITAR has all but locked China out of the global commercial launch market. The U.S. government is reviewing the current ITAR regime, which U.S. industry says has had the unintended effect of making it difficult to sell satellites and satellite components just about anywhere in the world. At the same time, China’s domestic demand for launches of its own telecommunications, navigation, Earth observation and science satellites — and its manned space program — has given the Long March vehicle sufficient business to earn it a record of reliability. The global insurance underwriting community now ranks the Long March vehicle alongside Russian and European rockets for reliability when it sets insurance premiums. Addressing the National Space Symposium here, Lei said Chinese vehicles launched more than 20 U.S.-built satellites in the 1990s. While cooperation with the United States has been shut down, he said, China has maintained relations with the 18-nation European Space Agency, Brazil, France, Russia and others. China also has developed a telecommunications satellite product line that has been bundled with a Chinese Long March vehicle to offer in-orbit delivery of telecommunications spacecraft to a half-dozen nations that in many cases can offer China access to their crude oil reserves. Lei said he sees three areas in which U.S.-Chinese cooperation would be in both nations’ interests. The first, he said, is an open commercial access of each nation to the other’s capabilities in satellites and launch vehicles. The second, he said, is manned spaceflight and space science, particularly in deep space exploration. The third is in satellite applications including disaster monitoring and management.

# No Link-SPS Aff

**China’s growth necessitates an alternative energy source- Solar power is ideal**

**The Space Review ’07** [“China, the US, and space solar power” <http://www.thespacereview.com/article/985/1>, 6/23/11]

Now that the National Security Space Office’s (NSSO) space solar power study has been released and shows that the technology is well within America’s grasp, a set of decisions have to be made concerning how the US government should proceed. The idea that the government should fund a series of demonstration projects, as the study recommends, is a good place to start. Another aspect should be to study the impact that this technology will have on the political and economic future of the world. The biggest factor in world affairs in the next twenty or so years is the rise of China to true great power status. Leaving aside the political vulnerabilities inherent in any communist regime, the greatest danger to China’s future prosperity is its huge need for energy, especially electricity. According to an International Energy Agency estimate, demand for electricity in China will grow at an average annual rate of 4.8% from 2003 and 2025. At some point within the next twenty or thirty years China will face an energy crisis for which it will be almost certainly unprepared. Only a new source of electrical energy will insure that such a nightmare never happens. China is already experiencing shortages. The Yangtze Delta region, which includes Shanghai and the provinces of Jiangsu and Zhijiang and contributes almost 20% of China’s GDP, faced capacity shortages of four to five gigawatts during peak summer demand in 2003. In spite of a furious effort to develop new power sources, including dam building and new coal-fired power plants, China’s economic growth is outstripping its capacity to generate the terawatts needed to keep it going. While China may turn to widespread use of nuclear power plants, the Communist Party leadership is certainly aware of the role that glasnost and the Chernobyl disaster played in the downfall of another Communist superpower. Thus, China may be reluctant to rely heavily on nuclear power plants, at least not without strong safety measures, thus making them more expensive and more time consuming to build. Wind power and terrestrial solar power will not be able to contribute much to meeting China’s demand and certainly not without government subsidies which a relatively poor nation such as China will be reluctant to provide. At some point within the next twenty or thirty years China will face an energy crisis for which it will be almost certainly unprepared. The crisis may come sooner if, due to a combination of internal and external pressures, the Chinese are forced to limit the use of coal and similar fuels. At that point their economic growth would stall and they would face a massive recession. Only a new source of electrical energy will insure that such a nightmare never happens. The global repercussions would be disastrous. In the near term the only new source of electric power that can hope to generate enough clean energy to satisfy China’s mid- to long-term needs is space based solar power. The capital costs for such systems are gigantic, but when compared with both future power demands and considering the less-than-peaceful alternative scenarios, space solar power looks like a bargain.

**U.S. would supply China with SPS technologies, furthering peaceful cooperation**

**The Space Review ’07** [“China, the US, and space solar power” <http://www.thespacereview.com/article/985/1>, 6/23/11]

For the US this means that in the future, say around 2025, the ability of private US or multinational firms to offer China a reliable supply of beamed electricity at a competitive price would allow China to continue its economic growth and emergence as part of a peaceful world power structure. China would have to build the receiver antennas (rectennas) and connect them to its national grid, but this would be fairly easy for them, especially when compared to what a similar project would take in the US or Europe when the NIMBY (Not In My Back Yard) factor adds to the time and expense of almost any new project. Experiments have demonstrated, at least on a small scale, that such receivers are safe and that cows and crops can coexist with them. However, there are persistent doubts and it would be wise to plan for a world in which rectenna placement on land will be as politically hard as putting up a new wind farm or even a nuclear power plant. China, like its neighbors Japan and Korea, has a land shortage problem. This may seem odd when one looks at a map, but the highly productive industrial regions of China are confined to a limited coastal area. These areas also overlap with some of the nation’s most fertile agricultural lands. Conflicts caused by hard choices between land use for factories and housing and for food production are now common. Building the rectennas at sea would help alleviate some of these disputes. China and its neighbors could compete to see who could build the most robust and cost-effective sea-based rectennas. They would also be able to export these large systems: a system that can survive the typhoons in the South China Sea can also handle the monsoons of the Bay of Bengal or the hurricanes of the Caribbean. Our world’s civilization is going to need all the energy it can get as China and other nations attain Western lifestyles. Clean solar power from space is the most promising of large-scale alternatives. In spite of the major advances that China has made in developing its own space technology, it will be many years before they can realistically contemplate building the off-Earth elements of a solar power satellite, let alone a lunar-based system. Even if NASA administrator Mike Griffin is right and they do manage to land on the Moon before the US gets back there in 2020, building a permanent base and a solar panel manufacturing facility up there is beyond what can reasonably be anticipated. If the US were to invest in space-based solar power it would not be alone. The Japanese have spent considerable sums over the years on this technology and other nations will seek the same advantages described in the NSSO study. America’s space policy makers should, at this stage, not be looking for international partners, but instead should opt for a high level of international transparency. Information about planned demonstration projects, particularly ones on the ISS, should be public and easily accessible. Experts and leaders from NASA and from the Energy and Commerce departments should brief all of the major spacefaring nations, including China. Our world’s civilization is going to need all the energy it can get, especially in about fifty years when China, India, and other rising powers find their populations demanding lifestyles comparable to those they now see the West enjoying. Clean solar power from space is the most promising of large-scale alternatives. Other sources such as nuclear, wind, or terrestrial solar will be useful, but they are limited by both physics and politics. Only space solar power can be delivered in amounts large enough to satisfy the needs of these nations. As a matter of US national security it is imperative that this country be able to fulfill that worldwide demand. Avoiding a large-scale future war over energy is in everyone’s interest.

# No Link- Constellation Aff

**China wants to cooperate with US on Constellation, Top officials urge joint pursuit of manned space flight**

**Space news.com 4/14/11** [“Chinese Government Official Urges U.S.-Chinese Space Cooperation” [http://www.spacenews.com/civil/110414-chinese-official-space-cooperation.html 6/23/11](http://www.spacenews.com/civil/110414-chinese-official-space-cooperation.html%206/23/11)]

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# No Link- Asteroid Mining Aff

**China’s near monopoly , huge demand , and production of finite rare earth metals make asteroid mining key to prevent resource wars**

**Popular Science’10** [“Amid Strained Trade Relations with China, Japan Strikes Rare-Earths Deal with Vietnam” <http://www.popsci.com/science/article/2010-11/amid-strained-trade-relations-china-japan-strikes-rare-earths-deal-vietnam> 6/24/11]

Rare Earth Exports Held at Chinese Loading Docks Though Chinese officials deny it, sources in the industry say Chinese exports of critical rare earth elements bound for the U.S. and Europe are being held up by customs officials in China. In the midst of what’s been shaping up as an undeclared rare earths standoff between China and some of it’s biggest customers in Japan and the West, Vietnamese and Japanese leaders have decided to collaborate in the exploitation of northern Vietnam’s rare earth elements. The deal was hammered out between the two nations’ prime ministers during a meeting on Sunday. Back in September it was reported that Chinese customs officials had halted shipments of rare earths elements to Japan though no official embargo was declared by the Chinese government. Two weeks ago it was further reported that China had expanded the rare earths suspension to include the U.S. and Europe. China exports more than 95 percent of the world’s supply of rare earth elements, which are necessary materials for the manufacture of a vast variety of modern goods, ranging from hybrid car engines to wind turbines to weapons systems to personal electronics. Japan’s decision to seek out non-Chinese sources of rare earths comes as the Geological Society of America considers the role of rare earths in an alternative energy future at the group’s annual meeting on Tuesday. In a paper that will be presented tomorrow, geologist point out that rare earth elements and other scarce metals are the backbones of alternative energy tech like photovoltaic cells, wind turbine magnets, high-capacity battery tech, and fuel cells. Because the U.S. hasn’t tapped its domestic resources of rare earths – and won’t be able to produce an independent supply chain for at least fifteen years according to GAO estimates – any shift to an alternative energy economy would simply trade one foreign dependency for another. That could set the stage for trade wars as China needs more of its neodymium, gallium, zinc, lithium, and various rare earth elements to pursue its ambitious alternative energy plans. Japan will help the Vietnam explore and survey its northern provinces for future rare earth element exploitation and help the Vietnamese develop environmentally friendly technologies for extraction and processing of the elements, but at best it would be a few years before meaningful production and export would begin. The U.S. will keep seeking out rare earths at home and keep leaning on China to keep the exports coming. And global economies will keep its fingers crossed that China does so.

**China interested in mining now, massive support for programs and increase in science and technology fields prove**

**Washington Post ‘08** [“Space Inspires Passion And Practicality in China” [http://www.washingtonpost.com/wp-dyn/content/article/2008/09/23/AR2008092302649.html 6/24/11](http://www.washingtonpost.com/wp-dyn/content/article/2008/09/23/AR2008092302649.html%206/24/11)]

BEIJING -- When he's in Beijing for meetings, Ouyang Ziyuan works out of an office overlooking the new Olympic Green, home to the Water Cube aquatics center and the Bird's Nest national stadium, the latest icons of China's coming of age.

On one wall of that office hangs a large image of the moon; on the wall opposite, there's Mars. Both pictures were shot from U.S. satellites. Ouyang should soon be able to replace one of those with the next icon of China's rise: the highest-resolution map yet of the entire surface of the moon, pieced together from images taken by China's Chang'e lunar probe, named after a mythological Chinese moon goddess. Ouyang is the project's chief scientist.

"Now that we've managed to send men into space, it's time for us to do more with probing the moon, to push forward the development of science and technology," said Ouyang, one of China's most passionate supporters of lunar exploration.

At a casual glance, China's space program seems a tad retro. There's talk of a rover that, within the next decade, could land on the moon, take surface samples and return to Earth. Chinese astronauts will attempt their first-ever spacewalk as early as this week. Americans and Russians surpassed these scientific feats decades ago.

But the "been there, done that" appearance masks the deeper significance of China's multipronged space program. It has developed sophisticated launchers and satellites, which it builds by the dozens and sends skyward for friends and paying clients, conservatively aiming to capture 15 percent of the global market for such services. China is building partnerships to support its manned space program, with hopes of creating its own space station and potentially exploiting the resources of the moon, various asteroids and perhaps even Mars to meet energy and other needs here on Earth. China is experimenting with antisatellite and other space-based capabilities to counter the overwhelming U.S. dominance of extraterrestrial territory. All the while, it is training and inspiring a new generation of engineers and scientists -- hundreds of thousands of them.

**China willing to cooperate with U.S. on resource extraction from space, US law and anti-sino feelings reason cooperation hasn’t already occured**

**Washington Post ‘08** [“Space Inspires Passion And Practicality in China” [http://www.washingtonpost.com/wp-dyn/content/article/2008/09/23/AR2008092302649.html 6/24/11](http://www.washingtonpost.com/wp-dyn/content/article/2008/09/23/AR2008092302649.html%206/24/11)]

As China gains confidence, officials are becoming a bit more willing to showcase their space acumen. The government announced this summer that it will build a first-ever visitors' center alongside a launch site in Hainan province, an island in southern China. Chen Yao, vice tourism bureau chief of the province, said he expects the center to be completed in 2012. China is unabashed when it thinks about using the space environment for practical purposes. For example, China sent thousands of agricultural seeds into space to see how radiation, zero gravity and other pressures would affect them. Universities and state-owned companies then cultivated the seeds and have produced giant pumpkins, tomatoes, cucumbers and the like. The state-run New China News Agency reported that the vitamin content of vegetables grown from space-bred seeds was 281.5 percent higher than that of ordinary vegetables. Others have declined to follow China's lead, saying the costs are too high and they are skeptical of the benefits. Ouyang does not rule out mining resources on the moon one day or finding ways to get fuel sources such as helium-3 from the moon. "Apart from coal, in less than 100 years all our resources could be finished. As scientists, we have to think of alternatives. It's the right thing to do," Ouyang said. But for now, Ouyang and China's other scientists and engineers are focused on the specific technical challenges of operating in space and conducting basic exploration. Although U.S. space officials say China will be capable in coming years of landing men on the moon, Ouyang said the government has not decided whether to bankroll such an effort. China has already built a solid, homegrown business in manufacturing and launching communication and surveillance satellites, and it is selling those services to countries including Brazil, Venezuela and Nigeria. "It's no accident that these are resource-rich countries," Logsdon said. "China is using its space capabilities as part of its broader diplomatic efforts." China's civilian space budget is stable but not very large; some experts estimate it at about one-tenth NASA's 2008 budget of $17.3 billion. China's budget is expected to grow steadily in coming years, however, as China's economy continues to expand. China is developing a comprehensive, long-term space strategy, through 2050, that will help promote and develop China's economy, technology and other interests, according to research published in July by Yi Zhou. Yi says now is the time for the United States and China to start trying to cooperate in their civilian space programs; until now, U.S. laws have prohibited technology transfers to China, and the two nations' space agencies have no cooperation agreements. The alienation is stark, given that NASA has signed about 4,000 agreements with more than 100 nations and that the China National Space Administration has built relationships with several nations as well as the European Space Agency.

# Link is non-unique

**US aerospace declining now**

**Klomp, 2010 – Major, USAF** [Jeremiah O., April, 2010, Air Command and Staff College, Air University, “Is Space Big Enough For A US-Sino Partnership?” <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA537174&Location=U2&doc=GetTRDoc.pdf>, accessed June 24, 2011]

The United States has long been the preeminent space power for at least the past 50 years. The launch of Sputnik was a catalyst that prompted the US to dedicate massive resources and efforts to achieving and maintaining leadership in space. This strategy worked well during the Cold War. Recently, however, without a peer competitor, priority of maintaining US space dominance has begun to wane. The combination of higher priorities in other areas of foreign affairs and a lack of competition has allowed the US to prioritize space behind other geo-political issues. Interests in the Middle East (Iraq and Afghanistan as well as Israel and Palestine) have taken the majority of available resources in both analysts and capital away from space as a 9 strategic priority. Lacking formal direction, emphasis on space development and progress has been allowed to drift. In nearly all major strategy and policy documents, there is no clear direction as to where space is heading in the immediate or long term future. Neither the National Security Strategy nor National Defense Strategy gives clear guidance to US space programs, and in fact reduces its scope. Space research and development are all but left out of national budgeting plans, with mere maintenance budgets just keeping them alive. Even the US manned space program, the Space Transport System (STS or Space Shuttle) formerly a source of national pride and prestige, is set to retire in 2010 with a follow-on program that has been plagued with delays and setbacks so much that the US will have no manned spaceflight capability for at least seven years. 3 Many of the space manufacturing pipelines kept alive solely by the Space Shuttle program have already been shut down and can only be restarted at great cost in dollars as well as human capital. Budgeting constraints have put NASA, America’s civil space laboratory, in a holding pattern. Without significant budget increases in the near future, our human spaceflight capability will dimish, seriously hampering our civilian space development. Add to that the critical reduction of our space industrial base with regards to rocket building and production, and the future of US space capability looks dim.

**China is inherently rising as an aerospace leader**

**Klomp, 2010 – Major, USAF** [Jeremiah O., April, 2010, Air Command and Staff College, Air University, “Is Space Big Enough For A US-Sino Partnership?” <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA537174&Location=U2&doc=GetTRDoc.pdf>, accessed June 24, 2011]

China’s space capabilities have progressed rapidly in the last 10 years. From putting men in orbit to shooting down an aging weather satellite, it has demonstrated abilities over and above the average space-faring nation. Accomplishing these two feats effectively elevates China to an elite club with only two other members: the United States and Russia. China’s robust economy (including its huge cash reserves) and its nuclear capability give it a unique position as an emerging world power that it would not otherwise have been able to attain. 6 In its quest to further strengthen its place in the international forum, China has launched an aggressive space program that has been very successful and made many significant advances. Their sizeable economic resources are a great aid to their space goals. However, their lack of openness causes much speculation and curiosity as to what their true capabilities are and how they were developed. Since military applications of scientific discoveries are generally not separated by very much time, and the US has little insight into Chinese internal operations, the US has significant reason to exercise caution when considering which direction our China Space strategy should take. While China and the United States have a long history of disagreeing on political and military issues, their economies are inextricably tied together. Space is an area where perhaps the two countries can find common ground to build a meaningful and lasting partnership. There are, however, significant obstacles which must be overcome before such a partnership can be forged.

# Relations Resilient

**Relations Stable - Military deterrent and economic ties prevent conflict**

**Simons, 1-19-11, Pulitzer-winning Journalist**[U.S.-China relations: a newfound maturity, 6-21-11, http://www.usatoday.com/news/opinion/letters/2011-01-20-column20\_ST\_N.htm]

From the American perspective, this will require us to understand that as the Chinese grow wealthier and more content, it is only natural that they should want to protect their wealth and comforts. Upscale homeowners in the United States do this by moving into gated communities and securing their McMansions with alarm systems. China is doing it by, for example, adding J-20 stealth fighters to its arsenal — just as the U.S. Air Force did with the F-22 more than two decades ago. It is no less natural that the arrival of the J-20 at the same time that Defense Secretary Robert Gates was hinting he will eliminate a $14.4 billion program to develop a new Marine Corps landing vehicle makes some Americans jittery. But we may rest assured that with China spending between one-seventh and one-fifth of what the United States does on defense, our security is assured well into the future. Our fighting force is the biggest and most expensive — perhaps even the best — the world has ever known. Chess moves in Southeast Asia As to China's raising its profile in Southeast Asia, this should be viewed primarily in the context of geographic and cultural proximity. In the wake of the Bush administration's largely having ignored this strategic region, Obama is wise to be getting us re-involved. Best of all, as numerous people in the region tell me, we are welcome. Yes, they are happy to have China investing in their economies. And, yes, they are happy to have us doing the same. This is balance of power. It is peaceful competition. It is good for Southeast Asia, good for China and good for the United States. There is a lesson here for Americans: Don't get angry; get going. Pulitzer Prize-winning journalist Lewis M. Simons has covered Asia since 1967

# AT: US-China Collaboration

**1. China and the US will not collaborate on space**

**Whittington. May 8, 2011. Written numerous articles for the Washington Post, USA Today, the LA Times, and the Houston Chronicle.** [Mark, “ White House and Congress Clash Over NASA Funding, Space Cooperation with China.” Yahoo News. <http://news.yahoo.com/s/ac/20110508/pl_ac/8438927_white_house_and_congress_clash_over_nasa_funding_space_cooperation_with_china> accessed June 22nd]

The clash is not limited to funding and of space policy priorities. Space News also reports that the following day, on May 4, Holdren told members of the subcommittee that cooperation with China is seen as critical for prospects for long term space exploration, such as to Mars. This, mildly speaking, was not welcome news to members of the subcommittee. [ For complete coverage of politics and policy, go to Yahoo! Politics ] The problem is that China is currently ruled by a tyrannical regime that violates the human rights of its own people and is engaged in an imperial drive toward super power status at the expense of the United States. Congress has, in fact, passed a law prohibiting most forms of space and science cooperation with the People's Republic of China. The distrust Congress holds toward the administration where it comes to space policy is palatable. Members of Congress have expressed the view that NASA is slow walking the heavy lift launcher. Many are also pretty sure that the White House is trying to circumnavigate the law and is trying to find ways to cooperate with China despite the law. All of this points to the very real possibility that congress will use the power of the purse to restrict White House space policy options and to impose its own will on the future direction of NASA and space exploration. That this clash is happening at all is a direct result of a series of political blunders made by the administration dating back to the cancellation of the Constellation space exploration program and a lack of leadership on the part of the president.

**2. China-US relations declining- no possibility for cooperation**

**Chambers. March 2009. Master’s thesis Naval Postgraduate school.** [Rob W, “ China's Space Program: A New Tool for PRC "Soft Power" in International Relations?” DTIC. http://edocs.nps.edu/npspubs/scholarly/theses/2009/Mar/09Mar\_Chambers.pdf accessed June 25]

 Johnson-Freese’s address to the April 2007 conference “Collective Security in Space: Asian Perspectives on Acceptable Approaches” explained the more pessimistic outlook in greater detail. She cited the three main commissions that color U.S. space policy, namely the “Rumsfeld,” “Cox,” and “Rumsfeld Space” Commissions as bolstering a purported China “threat” in space.271 After the 2007 ASAT test, the “U.S. voices of moderation [which had] made some progress [against the ‘China threat’ camp]…had [been] drowned out”.272 Thus, while there were positive efforts to keep the threat perceptions from spiraling out of control, they were effectively extinguished by the Chinese ASAT demonstration. In her analysis of the 2004 DoD report on Chinese space activities, Johnson-Freese noted that “five out of six Chinese launches were considered militarily relevant breakthroughs, though all but one were civilian launches”.273 Given the downward trend in U.S.-China space relations and the strong anti-China bias from the Pentagon, she pessimistically concluded that chances would be grim for any real improvement “in the near-term and even in the next administration”.274 In addition to the ASAT test and issue of technology transfer are China’s track record on human rights and less-than-effective governance of intellectual property rights, which are often cited as moral and economic reasons to keep Beijing isolated. The “crystal clear” message that China continues to receive from the United States is that the “[U.S.] is not interested in cooperative space programs with China”.275 Thus, the prevailing sentiment that China is a space rival and not a country that the United States can work with in space seems firmly entrenched in some circles, at least for the time being.

# AT US Key to China Space Industry

**China’s space industry rapidly developing without US assistance**

**Cliff. 2011. Senior political scientist at the RAND Corporation, P.H.D. in international relations.** [ Roger with Chad J. R. Ohlandt, Ph.D. Aerospace Engineering and Scientific Computing, and David Yang, Ph.D in politics at Princeton University. “ Ready for Takeoff-China’s Advancing Aerospace Industry.” RAND. <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA539926&Location=U2&doc=GetTRDoc.pdf> accessed June 24]

Foreign involvement in China’s space industry is significantly less than in the aviation manufacturing industry. China is not closely integrated into the supply chains of foreign space companies, and the market for Chinese products and services such as space launches and satellites is small. Although China’s space launch vehicles were originally based on ballistic-missile technology transferred from the Soviet Union, China has advanced far beyond that technology through its own efforts, and foreign assistance has been limited. Chinese space companies have received technical assistance from foreign entities in some specific areas, such as Russian assistance in the area of manned spaceflight, Brazilian assistance in the development of earth-observation satellites, German assistance in the development of communications satellites, and U.S. assistance in launch-vehicle technology. In most cases, however, the advancement of China’s space technology has been the result of purely domestic efforts. China has made significant progress in advancing its space capabilities over the past decade and is making concerted efforts to further expand them. All relevant metrics reveal an accelerating growth trend in the country’s civilian and military space program development. In 83 known spacecraft launches between October 20, 1996, and June 15, 2010, Chinese launch vehicles experienced only one failure—an incomplete burn of a third stage that resulted in an Indonesian communications satellite being put in the wrong orbit in August 2009 (“Long March [Chang Zheng],” 2010). The 83 launches included three successful launches of manned spacecraft, the most recent of which, in September 2008, involved a spacewalk, and two lunar orbiters (“Shenzhou Series,” 2009; “Chang’e Series,” 2010). China’s government is trying to promote China’s growth as a provider of commercial space products and services. In the 1990s, China emerged as a major provider of commercial launch services with its Chang Zheng (“Long March”) series of launch vehicles. From 1990 to 1999, Chinese rockets launched nearly 30 satellites for customers based outside of mainland China. In the late 1990s, however, several Chang Zheng launches failed, and it was revealed that U.S. satellite companies had provided technical assistance to Chinese launch-vehiclemakers (who also make missiles for the Chinese military and for export), resulting in tightened U.S. restrictions on China launching satellites that contain U.S. technology. As a consequence, only a handful of launches have been conducted for customers based outside of mainland China since 1999 (“Long March [Chang Zheng],” 2010). Recently, however, China has developed a domestically designed communications satellite, the European company EADS Astrium has developed a communications satellite that contains no U.S. technology, and as noted above, Chinese launch vehicles have established a remarkable record for reliability since 1996. As a result, the appeal of Chinese space products and services in markets outside the United States is probably increasing. China’s 11th Five-Year Plan, which ended in 2010, called for the greater integration of market mechanisms into the space program to foster competition and to generate products and services that could earn China a larger share of the global commercial space-systems market (“Aerospace Development 11th 5-Year Plan”).

# China crowds out US Market

**America’s space program declining-Chinese space options less expensive**

**Chambers. March 2009. Master’s thesis Naval Postgraduate school.** [Rob W, “ China's Space Program: A New Tool for PRC "Soft Power" in International Relations?” DTIC. http://edocs.nps.edu/npspubs/scholarly/theses/2009/Mar/09Mar\_Chambers.pdf accessed June 25]

China’s competitive edge in space launch is due to several factors. First, it offers insurance for all launches in case of failure through the China Insurance Company.281 Second, its lower wage scales allow it to underbid competing offers by “at least 10 to 15 percent”.282 Third, as part of its outreach to developing nations, it allows a “flexible payment method” as part of the package.283 Taking these factors as a whole, the launch portion can save prospective customers “$50 million per rocket” over the average higherpriced U.S. and European alternatives.284 The French-based Thales Aleniaspace has already taken advantage of this and had China launch six of its satellites since 2006.285 From this perspective, unless Washington starts modifying its space policy (see recommendations in Chapter V), other nations, including China, will continue to eat away at our lead in space. This becomes all the more critical with the decommissioning of the shuttle and our inability to get manned missions to the ISS without paying for Russian flights. Looking to private space enterprises such as Space X, which finally had a successful launch on its fourth Falcon-1 launch, may be a short-term solution. But especially when it comes to manned missions, launcher reliability is paramount. The Russian Soyuz and Chinese Shenzhou are both man-rated space vehicles that have a strong history of success thus far, and may be the only options for the U.S. to continue to send astronauts into space.

**2. Cheaper Chinese costs crowd out US space market**

**Chambers. March 2009. Master’s thesis Naval Postgraduate school.** [Rob W, “ China's Space Program: A New Tool for PRC "Soft Power" in International Relations?” DTIC. http://edocs.nps.edu/npspubs/scholarly/theses/2009/Mar/09Mar\_Chambers.pdf accessed June 25]

Over the past decade or so, the Bush administration and Congress, which “remained reluctant to loosen these [ITAR] restrictions,” had the “net effect…to strengthen relations between other satellite producers (such as Russia and the United Kingdom) and a growing list of clients in East Asia, South Asia, and the Middle East”.322 This also includes France and China, which have teamed together to produce “small, communication satellites that don’t include U.S. parts and therefore exempt from a complex web of U.S. technology-export controls [ITAR]. They are as much as 40 percent cheaper to assemble, test and launch than rival American models”.323 Even Europe, with its long military alliance and historical ties to the United States, is not reacting favorably to U.S. ITAR controls. Vincent Sabathier, former French space attaché, notes, “Very little cooperation regarding space-based security applications goes on between Europe and the United States. Meanwhile, ITAR itself has created barriers to prevent such cooperation”.324 In addition to the dramatic rise of “ITAR-free” space commerce, a report by the Center for Strategic and International Studies noted that “Not only have these requirements [ITAR] harmed our domestic technological and manufacturing base, but they have had a drastic negative effect on both the hard and soft power utilization of space”.325

# China can’t develop-pilot shortage

**China aerospace development slow- lack of pilots**

**China.org.cn. June 24, 2011.** [“ Boeing: China to need 72,700 airline pilots by 2030.” China.org.cn. http://www.china.org.cn/business/2011-06/24/content\_22851084.htm accessed June 25]

Boeing Co. predicted in a recent report that China will need a total of 72,700 new commercial airline pilots and 108,300 maintenance technicians by the year 2030. According to Boeing's 2011 Pilot and Technician Outlook, as the global commercial fleet size is expected to increase to more than 39,500 airplanes over the next 20 years, the world aviation industry will require 460,000 new commercial airline pilots and 650,000 new commercial airline maintenance technicians by 2030. Boeing predicted that the aviation industry will need an average of 23,000 new pilots and 32,500 new technicians every year over the next 20 years. Boeing prejected that the largest demand for pilots and technicians will be in the Asia Pacific region with an expected need for 182,300 pilots and 247,400 technicians. China alone account for about 40 percent of the total need in the region. North America will need 82,800 pilots and 134,800 technicians while Europe will require 92,500 pilots and 129,600 technicians, according to the report. Boeing called on the world aviation industry to invest, evolve and adapt to meet the expected exponential growth in demand for qualified aviation personnel. "To meet the demand for capable, well-trained people, Boeing and the aviation industry need to move with the speed of technology to provide the tools, training and work environment that tech-savvy pilots and technicians will expect from us," said Sherry Carbary, vice president of Boeing Flight Services. "We are adapting our technologies, devices and training methods to attract new people to the industry. That means new-tech solutions, including online and mobile computing that is engaging, realistic, portable and accessible to meet the learning styles of today's and future generations," Carbary said. Pilot shortages have long been one of the factors that drag down the development of China's commercial aviation industry.

# \*\*\*Impacts\*\*\*

# 2ac AT: ASAT Impact

**No impact to ASATs – Chinese officials**

**Larson, 2009 - Foreign Service Ofﬁcer with the US Department of State, lieutenant colonel in the US Air Force Reserves** [Garold, October 19, 2009, US Mission, “U.S. Statement on Peaceful Use of Outer Space – Thematic Debate of UNGA first Committee,” <http://geneva.usmission.gov/2009/10/19/outerspace/>, accessed June 21, 2011]

In this regard, we note again that a senior Chinese Ministry of Foreign Affairs official provided assurances last year to the United States that China will not conduct future ASAT tests in space. This commitment by China is an important step forward, and the international community expects China to live up to its pledge to act responsibly in outer space.

# No Impact- Dollar Dump

**China would not dump US assets even if relations were bad – would destroy China's economy as well**

**Dunaway, 11/16/09 – Adjunct Senior Fellow for International Economics** [Steven, Council on Foreign Relations, “The U.S.-China Economic Relationship: Separating Facts from Myths”, http://www.cfr.org/china/us-china-economic-relationship-separating-facts-myths/p20757, accessed 6/21/11]

Alternatively, China could choose to start dumping its stock of U.S. securities. The result would be appreciation of other major currencies (depending on where China would decide to park its reserve assets); upward pressure on U.S. interest rates; and the possibility of financial market disruptions if China dumped its U.S. dollar assets rapidly. However, the U.S. Federal Reserve could limit the rise in U.S. interest rates and would be able to ensure adequate liquidity to prevent market disruptions. But a decision to dump Treasuries would have a large effect on China itself. The country would incur a substantial capital loss on its reserve assets. The Chinese authorities are deeply concerned about such a loss, and are very unlikely to decide to dump U.S. assets. In fact, the discussion initiated by China regarding the need for an alternative official reserve asset is motivated by its concerns about potential losses on its U.S. dollar holdings. Myth No. 2: The United States is heavily dependent on cheap Chinese goods. This is not really true. Only roughly 15 percent of U.S. imports come from China. Moreover, all of the basic types of manufactured consumer goods that China exports to the United States (clothing, textiles, footwear, toys, small appliances, etc.) can be imported from other countries or could be produced domestically. The prices for goods that could substitute for products from China would be higher, but the difference in costs would be relatively small. Competition among producers has become fiercer, and as a result cost differentials between goods from China and other suppliers are narrowing. Dependence actually runs the other way. China is highly dependent on U.S. demand for its products. Economic growth in China is heavily dependent on exports. Although China has been able to achieve its 8 percent GDP growth target in 2009 owing to the stimulus to domestic demand provided by government policy actions, the country will struggle to meet this objective in 2010 and succeeding years if demand for its exports in the United States does not pick up.

**Trade would remain strong even if relations collapsed – US and China economic ties are vital to both countries**

**Korea Times, 3/14/10** [Korea Times, “China's Bad Bet Against America”, LexisNexis Academic, accessed 6/22/11]

Second, the fact that China holds so many dollars is not a true source of power, because the interdependence in the economic relationship is symmetrical. True, if China dumped its dollars on world markets, it could bring the American economy to its knees, but in doing so it would bring itself to its ankles. China would not only lose the value of its dollar reserves, but would suffer major unemployment. When interdependence is balanced, it does not constitute a source of power.

# No Impact - Econ Resilient

Economy’s resilient – Japan crisis proves no impact

Chang 3/13 (Gordon G, author of Nuclear Showdown: North Korea Takes On the World, has testified before the U.S.-China Economic and Security Review Commission and has delivered to the Commission a report on the future of China’s economy, “The Japanese Disaster: What’s Next for Japan? For Us?”, 2011, <http://blogs.forbes.com/gordonchang/2011/03/13/the-japanese-disaster-whats-next-for-japan-for-us-2/>)

But what is the assessment for the rest of the world? Will Japan’s crisis lead to a global one? The international system is remarkably resilient, able to slough off troubles. Aided by a rebound in international commerce—the value of trade looks like it increased a remarkable 9.5% last year—the global economy bounced back quickly from the terrifying downturn that began in 2008. Preliminary figures from the Central Intelligence Agency show global output in 2010 reached $62.2 trillion, an increase of 4.6%.

# No impact - Chinese weaponization

**No risk of China taking action-China expects U.S. to weaponize space**

**Grossman ‘5** professor of journalism at the State University of New York, written extensively on Space [Karl, “Master of Space” [http://www.hartford-hwp.com/archives/27c/537.html 6/27/11](http://www.hartford-hwp.com/archives/27c/537.html%206/27/11)]

ON NOVEMBER 1, THE GENERAL ASSEMBLY of the United Nations voted to reaffirm the Outer Space Treaty—the fundamental international law that establishes that space should be reserved for peaceful uses. Almost 140 nations voted for the resolution entitled Prevention of an Arms Race in Outer Space. It recognizes the common interest of all mankind in the exploration and use of outer space for peaceful purposes, reaffirms the will of all states that the exploration and use of outer space shall be for peaceful purposes and shall be carried out for the benefit and in the interest of all countries, and declares that prevention of an arms race in outer space would avert a grave danger for international peace and security. Only two nations declined to support this bill—the United States and Israel. Both abstained. For the United States, the issue goes way beyond missile defense. The U.S. military explicitly says it wants to control space to protect its economic interests and establish superiority over the world. Several documents reveal the plans. Take Vision for 2020, a 1996 report of the U.S. Space Command, which coordinates the use of Army, Navy, and Air Force space forces and was set up in 1985 to help institutionalize the use of space. The multicolored cover of Vision for 2020 shows a weapon shooting a laser beam from space and zapping a target below. The report opens with the following: U.S. Space Command—dominating the space dimension of military operations to protect U.S. interests and investment. Integrating Space Forces into warfighting capabilities across the full spectrum of conflict. A century ago, Nations built navies to protect and enhance their commercial interests by ruling the seas, the report notes. Now it is time to rule space. The medium of space is the fourth medium of warfare—along with land, sea, and air, it proclaims on page three. The emerging synergy of space superiority with land, sea, and air superiority will lead to Full Spectrum Dominance. The Air Force publishes similar pamph-lets. Space is the ultimate 'high ground,' declares Guardians of the High Frontier, a 1997 report by the Air Force Space Command. Proudly displayed in that report is a Space Command uniform patch and motto: Master of Space. Nuclear power is crucial to this scenario. In the next two decades, new technologies will allow the fielding of space-based weapons of devastating effectiveness to be used to deliver energy and mass as force projection in tactical and strategic conflict, says New World Vistas: Air and Space Power for the 2lst Century, a 1996 U.S. Air Force board report. These advances will enable lasers with reasonable mass and cost to effect very many kills. . . . Setting the emotional issues of nuclear power aside, this technology offers a viable alternative for large amounts of power in space. Corporate interests are directly involved in helping set the U.S. space doctrine—a fact the military flaunts. In its 1998 Long Range Plan, the U.S. Space Command acknowledges seventy-five participating corporations—including Aerojet, Hughes Space, Lockheed Martin, and TRW. The P.R. spin is that the U.S. military push into space is about missile defense or defense of U.S. space satellites. But the volumes of material coming out of the military are concerned mainly with offense—with using space to establish military domination over the world below. It's politically sensitive, but it's going to happen. Some people don't want to hear this, and it sure isn't in vogue, but—absolutely—we're going to fight in space, General Joseph W. Ashy, the former commander-in-chief of the U.S. Space Command told Aviation Week and Space Technology in 1996. We're going to fight from space, and we're going to fight into space. That's why the U.S. has development programs in directed energy and hit-to-kill mechanisms. We will engage terrestrial targets someday—ships, airplanes, land targets—from space. Space is increasingly at the center of our national and economic security, agreed General Richard B. Myers, current commander-in-chief of the U.S. Space Command, in a speech entitled Implementing Our Vision for Space Control, which he delivered in April 1999 to the U.S. Space Foundation in Colorado Springs, Colorado. The threat, ladies and gentlemen, I believe is real, he said. It's a threat to our economic well-being. This is why we must work together to find common ground between commercial imperatives and the President's tasking to me for space control and protection. With regard to space dominance, we have it, we like it, and we're going to keep it, said Keith Hall, Assistant Secretary of the Air Force for Space, in a 1997 speech to the National Space Club. Space is in the nation's economic interest. In Congress, one avid booster of U.S. space dominance is Senator Bob Smith, Republican of New Hampshire. Smith believes that national security depends on space supremacy. He is interested in breaking up the Air Force and creating a Space Force. Even the Council on Foreign Relations—usually characterized as centrist—has come on board. In 1998, it published a booklet entitled Space, Commerce, and National Security, written by Air Force Colonel Frank Klotz, a military fellow at the council. The most immediate task of the United States in the years ahead is to sustain and extend its leadership in the increasingly intertwined fields of military and commercial space. This requires a robust and continuous presence in space, says the report. The U.S. government is pouring massive amounts of public money—an estimated $6 billion a year, not counting what is secretly spent—into the military development of space. And the United States has signed a multimillion dollar contract with TRW and Boeing to build a Space-Based Laser Readiness Demonstrator. The military's poster for this laser shows it firing a ray into space while above it an American flag somehow manages to wave. THE GLOBAL NETWORK AGAINST WEAPONS & NUCLEAR POWER IN SPACE is challenging these plans. Next April, the Global Network will come to Washington, D.C., for a protest, including a demonstration at the U.S. Treasury to stress how much money is being spent by the United States on military activities in space. If the U.S. is allowed to move the arms race into space, there will be no return, says Bruce Gagnon, coordinator for the Global Network, based in Gainesville, Florida. We have this one chance, this one moment in history, to stop the weaponization of space from happening. The peace movement must move quickly, boldly, and publicly. Above all, we must guard against the misuse of outer space, said Kofi Annan as he opened the 1999 U.N. conference on space militarization in Vienna. We must not allow this century, so plagued with war and suffering, to pass on its legacy, when the technology at our disposal will be even more awesome. We cannot view the expanse of space as another battleground for our Earthly conflicts. But, as the new century dawns, that is exactly what the U.S. military is doing.

**No war - China far behind US in technology**

**Desker, 6/4/08 – Dean of S Rajaratnam School of International Studies** [Barry, The International Institute for Strategic Studies, “Why War is Unlikely in Asia: Facing the Challenge from China”, http://www.iiss.org/conferences/global-strategic-challenges-as-played-out-in-asia/asias-strategic-challenges-in-search-of-a-common-agenda/conference-papers/fifth-session-conflict-in-asia/why-war-in-asia-remains-unlikely-barry-desker/, accessed 6/21/11]

The PLA has increasingly pursued the acquisition of weapons for asymmetric warfare. The PLA mimics the United States in terms of the ambition and scope of its transformational efforts – and therefore challenges the U.S. military at its own game. Nevertheless, we should note that China, despite a “deliberate and focused course of military modernization,” is still at least two decades behind the United States in terms of defence capabilities and technology. There is very little evidence that the Chinese military is engaged in an RMA-like overhaul of its organizational or institutional structures. While the Chinese military is certainly acquiring new and better equipment, its RMA-related activities are embryonic and equipment upgrades by themselves do not constitute an RMA. China’s current military buildup is still more indicative of a process of evolutionary, steady-state, and sustaining – rather than disruptive or revolutionary – innovation and change. In conclusion, war in the Asia-Pacific is unlikely but the emergence of East Asia, especially China, will require adjustments by the West, just as Asian societies have had to adjust to Western norms and values during the American century. The challenge for liberal democracies like the United States will be to embark on a course of self-restraint.

# China Cooperation Impact Turn

**China cooperation bad – they would steal our technology, then use it against us**

**Klomp, 2010 – Major, USAF** [Jeremiah O., April, 2010, Air Command and Staff College, Air University, “Is Space Big Enough For A US-Sino Partnership?” <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA537174&Location=U2&doc=GetTRDoc.pdf>, accessed June 24, 2011]

Since China is potentially one of our key peer competitors in the future, it does not seem wise to give them any additional advantage by first showing our hand to them, and then aiding them in the development of their own capabilities which would then likely be used against us. 22 Any collaboration with China would have to be strictly monitored to prevent either side from sharing or gathering more information than intended. Such actions would undermine relations, rather than improve them. Proliferation issues provide perhaps the strongest rationale against collaboration with China. Their historical lack of respect for intellectual property, as well as demonstrated willingness to engage in ‘unintentional technology transfers’ and outright piracy are strong detractors to a partnership in which cutting-edge technology would be used and/or shared. However, regarding intelligence gathering, partnering with China may give us some insight into the levels to which Chinese space has advanced and allow us to more accurately determine the 20 stages of their development and help us refine our strategy towards them. China has traditionally maintained a close hold an all things military, particularly with their space programs. Pursuing a partner-type relationship might help open a dialogue that would otherwise be stifled.

# 2ac China militarization turn

**Turn: Chinese space militarization will increase deterrence, preventing war**

**Chase, 2011 – Ph.D. in international relations from Johns Hopkins, MA in China studies from SAIS, Johns Hopkins** [Michael S., March 25, 2011, Jamestown Foundation Publication, “Defense and Deterrence in China’s Military Space Strategy” <http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews%5Btt_news%5D=37699&tx_ttnews%5BbackPid%5D=25&cHash=e3f0fcd233f563e2364ad7bc49425244>, accessed June 21, 2011]

Within this broad context, Bao outlines a Chinese approach to space deterrence, one in which "an active defense will entail a robust deterrent force that has the ability to inflict unacceptable damage on an adversary" [20]. According to Bao, "under the conditions of American strategic dominance in space, reliable deterrents in space will decrease the possibility of the United States attacking Chinese space assets." Specifically, he writes, China "will develop anti-satellite and space weapons capable of effectively taking out an enemy’s space system, in order to constitute a reliable and credible defense strategy." This suggests that in addition to denying an enemy the ability to use its space systems in a war with China and countering the possibility of space-based missile defense capabilities undermining China’s nuclear deterrent, another of the missions for China’s counter-space capabilities could be protecting China’s own space systems by deterring an adversary from attacking them.

# AT: China Military Modernization

**Alt cause: US BMD development causes a Chinese nuclear attack**

**Blazejewski, 2008 –** **JD/MPA degree in NYU School of Law, previous work in American Civil Liberties Union (ACLU), Cleary Gottlieb Steen & Hamilton LLP, and the Democratic staff of the House Ways and Means Committee.** [Kenneth S., 2008, “Space Weaponization and US-China Relations,” <http://www.au.af.mil/au/ssq/2008/Spring/blazejewski.pdf>,” Date accessed 6/26/2011]

On this account, China’s primary concern with US space weaponization is its contribution to a US multilayered missile defense shield. Indeed, China’s campaign for PAROS negotiation at the CD seems to intensify after each new development in United States BMD plans. Although China could respond to a BMD shield with effective countermeasures, future technological developments may permit the BMD system to vitiate China’s nuclear deterrent. In the case of a conflict over Taiwan, for example, a US space-based BMD system could prove very valuable to the United States. According to this view, if the United States decides to advance with such a BMD program, China will respond so as to maintain its nuclear deterrence. It will modernize its ICBM fleet (a program it has already initiated), develop further countermeasures to circumvent the BMD shield, and develop the means to launch multiple ASAT attacks. Ultimately, an arms race could ensue. This, however, would not be China’s chosen outcome. Its development of space weapons is merely a counter- strategy to what it views as likely US space weaponization. China would much prefer that the United States negotiate a PAROS agreement not to build the BMD shield. If this were the case, China’s January ASAT test would appear to be an attempt to get the United States to the negotiating table. By launching the ASAT, China sought to put the United States on notice that any attempt to weaponize outer space would lead to this mutually undesirable path.

# 2ac AT: Chinese First Strike Impact

**No impact: no risk of a Chinese first strike**

**Shixiu 2007 - senior fellow of military theory studies and international relations at the Institute for Military Thought Studies, Academy of Military Sciences of the PLA** [Bao, Winter 2007, China Security, “Emerging Threat,” <http://www.wsichina.org/cs5_1.pdf>, accessed June 21, 2011]

First and foremost, a deterrent in space will vigorously maintain “active defense” as its central strategy as it has for all other areas of national defense. Active defense is “defensive” but also “active.” It is defensive in that China will never conduct a first strike or take on offensive stance and will make every effort to prevent others from attacking China in space. That is, China will maintain a stance of second strike. But the Chinese strategy must also be active– and require China to possess the ability to launch “effective” counterattacks. In other words, an active defense will entail a robust deterrent force that has the ability to inflict unacceptable damage on an adversary.

# Deterrence Turn

**US Space Deterrence is at risk; plan key to solve for deterrence. Possessing offensive capabilities supersedes diplomacy & relations efforts.**

**MacDonald 3-18-2009**, Senior Director of the Nonproliferation and Arms Control Program with the USIP Center for Conflict Analysis and Prevention, MacDonald is an honors graduate in aerospace engineering from Princeton University.  He also received two Masters Degrees from Princeton, one in aerospace engineering with a specialty in rocket propulsion, and the second in public and international affairs. [Bruce W. Macdonald, Testimony of Bruce W. MacDonald-Before the Strategic Forces Subcommittee, <http://www.usip.org/experts/bruce-w-macdonald>, 6-22-11]

Should the U.S. Have Offensive Space Capabilities? This is a question that lends itself to simplistic answers on both sides of the question. If it is possible to establish a space regime where no one had offensive space weapons, we should certainly do so. If we can maintain space deterrence by other than offensive means, we should certainly do so. We must think long and hard before we deploy a major offensive space capability. But if there are no feasible alternatives, then we should develop a limited offensive capability, in a deterrence context. Limited, tactical applications may also be possible but must be fully understood first. The U.S. and China have already crossed a space Rubicon of sorts. ASAT capabilities already developed cannot be un-invented, and missile defense, with inherent ASAT capabilities, is here to stay. This is reality. U.S. security crucially depends on space and will do so even more in the future, and such capabilities must be preserved. Defensive steps can help, but ultimately it is difficult to protect space assets. We also can and should decentralize our space assets, putting our space eggs in more baskets to reduce our vulnerability, which would help, but likely not resolve, our problem. Arms control and other diplomatic steps certainly have a larger role to play and can help limit some of these threats. But verification issues make a comprehensive diplomatic-only solution seem improbable at present, which means the U.S. may need at least some offensive space capabilities, though we should tread carefully and thoughtfully into this new, highly uncertain world.

# National Defense Turn

**Plan enhances the space program – key to national defense**

**Mac’Donald 3-18-2009**, Senior Director of the Nonproliferation and Arms Control Program with the USIP Center for Conflict Analysis and Prevention, MacDonald is an honors graduate in aerospace engineering from Princeton University.  He also received two Masters Degrees from Princeton, one in aerospace engineering with a specialty in rocket propulsion, and the second in public and international affairs. [Bruce W. Macdonald, Testimony of Bruce W. MacDonald-Before the Strategic Forces Subcommittee, <http://www.usip.org/experts/bruce-w-macdonald>, 6-22-11]

While America has been a space-faring nation for over 50 years, the essential and growing role that space plays as a foundational feature in our conventional military superiority, our strategic nuclear strength, and our civilian economy is too little understood. The rivers of information and other services our space assets provide allow our military decision-making and weapons to be far more effective than in the past, vital advantages across the spectrum of potential conflict. It is no wonder that current U.S. space policy for the first time calls our space assets “vital to our national interests.” Yet more serious than this lack of public understanding about space is the serious shortfall in understanding within the military space community of the larger implications of this space importance. The threats to our space assets, and hence to our vital national interests, come in many forms, some hostile, some not. One of the biggest threats we face is what we just don’t know: about objects in space, the intentions of those who put them there, and the very strategic landscape of space itself – how it operates, where it poses strategic dangers, and what we need to look out for. And this is dangerous.

**Dominance in space is key to maintain the US military & the US economy**

**Mac’Donald 3-18-2009**, Senior Director of the Nonproliferation and Arms Control Program with the USIP Center for Conflict Analysis and Prevention, MacDonald is an honors graduate in aerospace engineering from Princeton University.  He also received two Masters Degrees from Princeton, one in aerospace engineering with a specialty in rocket propulsion, and the second in public and international affairs. [Bruce W. Macdonald, Testimony of Bruce W. MacDonald-Before the Strategic Forces Subcommittee, <http://www.usip.org/experts/bruce-w-macdonald>, 6-22-11]

Our overall goal should be to shape the space domain to the advantage of the United States, and to do so in ways that are stabilizing and enhance U.S. security. The U.S. has an overriding interest in maintaining the safety, survival, and function of its space assets so that the profound military, civilian, and commercial benefits they enable can continue to be available to the United States and its allies.These vital space assets face three forms of threats, all of them worrisome and growing:

# AT: New Cold War/International Divisions

**Not unique: Divisions in UN now - Libya**

**Borger in 5/18/2011, diplomatic editor** [Julian, Guardian, “Libya no-fly resolution reveals global split in UN,” http://www.guardian.co.uk/world/2011/mar/18/libya-no-fly-resolution-split]

The UN security council vote on a Libyan no-fly resolution revealed a global split which is likely to have long-term implications. In the short term, it was a victory for Britain, France and the US, which pushed through an extraordinarily sweeping resolution giving them and their allies a blank cheque on military action in Libya, short of putting troops on the ground. Russia and China abstained rather than use their veto, due largely to the influence of the Arab League. It would have been hard to reject the official voice of the region. However, the Arab League's role on this occasion arose from a particular set of circumstances, largely revolving around the unpopularity of Muammar Gaddafi and his regime. In the long term, Washington, London and Paris might worry about the decision of Brazil, India and Germany to abstain. The German vote was a reminder that western solidarity cannot be taken for granted after Iraq. More importantly, Brazil and India – two rapidly growing powers widely backed for permanent seats in a reformed security council – showed that their geopolitical instincts lie with Russia and China. For them issues of sovereignty and non-interference trumped human rights concerns. The grouping of Brazil, Russia, India and China is solid enough to have its own acronym: Bric. It conceded the battle this time, but sent a signal that in future it will be harder for the west to have its way. This is how sides were taken in the UN security council and the military preparations that followed … The no-fly coalition Britain David Cameron has surprised many by his enthusiasm for humanitarian intervention, having insisted days earlier: "I am not a naive neocon who thinks you can drop democracy out of an aeroplane at 40,000ft." However, he appeared to be not only haunted by Iraq and the failure to gain a UN mandate, but also by his party's failure to intervene in Bosnia to save Muslims from slaughter in the 1990s. The bullish determination he has shown has also helped bury memories of his government's botched early response to the Libyan crisis, which had William Hague claiming Gaddafi had fled to Venezuela. France Nicolas Sarkozy also has something to bury: his government's failure to foresee the Arab uprising and the impression it gave early on of siding with the region's dictators. Sarkozy's political instinct and inclination towards grand gestures has helped put Paris back in the driving seat. The president also has some past form as a humanitarian interventionist. He hired Bernard Kouchner, a human rights activist, as his first foreign minister, though Kouchner was kept on a tight rein and squeezed out of his job last year. United States A late but decisive member of the no-fly zone lobby, Barack Obama's White House was torn for weeks between interventionists in the state department and its own ranks, and the pragmatism of the defence secretary, Robert Gates, and his generals. The sudden promotion of an aggressively worded resolution came after the rapid advances of Gaddafi's troops brought home the possibility of a bloodbath in Benghazi, and Arab League support for a no-fly zone defused some fears of alienating the Arab and Islamic world. The United Arab Emirates and Qatar Both Gulf states have their reasons for wanting to see the back of Gaddafi. They see him as a destabilising influence in the Arab world, and feel deceived by Libyan promises of reform. Gaddafi outraged the UAE by backing Iran over disputed islands in the Gulf. Qatar was furious over Tripoli's treatment of al-Jazeera, including the shooting dead of one of its television journalists. The abstainers Germany Abstention was driven by scepticism over whether a no-fly zone would work and possible irritation by the brash militancy of London and Paris. Germany's ambassador to the UN pointedly warned against the "optimistic assumption" of quick results and low casualties. Domestic concerns play an important role, however. Angela Merkel's party has to fight six regional elections this year, and faces an electorate that is deeply disenchanted with military involvement in Afghanistan, Germany's first combat role overseas since World War II. But Merkel's cautious approach carries its own risks. It isolates Germany in Europe, and there has been a groundswell in public opinion for intervention against Gaddafi. The chancellor may have calculated that such enthusiasm could very quickly evaporate as soon as anything went wrong in the enforcement of a no-fly zone. Merkel quickly moved to counterbalance her decision by offering to fly surveillance patrols over Afghanistan. Russia and China Both countries have consistently opposed any infringement of national sovereignty on humanitarian grounds, seeing it as a possible precedent for action against them over Chechnya and Tibet. They also suspect that humanitarian intervention is a means by which the US can flex its military muscle to maintain its dominant superpower status. Beijing is particularly nervous about disturbing an important source of oil, on which its rapid growth is absolutely dependent. The surprise on this occasion was that Moscow and China abstained, largely influenced by the Arab League, the region's formal representative. Brazil and India The two emerging powers see humanitarian interventions primarily as violations by rich, powerful countries of the sovereignty of weaker, poorer countries. Like China and Russia, they suspect the US and its western European allies of imposing human rights judgments selectively

# Space Race Turn

**Not unique: space race now**

**Cordell, 2011 – Program Manager at General Dynamics, Space Systems** [Bruce, 2/12/2011, 21stCenturyWaves, “The Cold War-style Arms Race in Asia and the New Space Age,” <http://21stcenturywaves.com/tag/general-dynamics/>, Accessed 6/27/2011]

The current Asia-Pacific arms race is reminiscent of the 1950s Cold War U.S.-Soviet arms race that triggered the first Space Race to the Moon. The fact that it’s occurring now among China and other vibrant asian economies — one long business cycle after the original Space Race — suggests the stage is being set for a new Space Age by 2015. By then the U.S. economy should also be booming.

**Chinese modernization now – US space action key to solve ASAT war**

**Ritter 2-13-2008, TIME Magazine -** Time is the world's largest weekly news magazine, and has a domestic audience of 20 million and a global audience of 25 million. [Peter Ritter, the New Space Race: China vs. US, TIME Magazine Co., http://www.time.com/time/world/article/0,8599,1712812,00.html#ixzz1PwaLgLsa, June 22, 2011]

China's manned space program, codenamed Project 921, is indeed a matter of considerable national pride for a country that sees space exploration as confirmation of superpower status. China is pouring substantial resources into space research, according to Dean Cheng, an Asian affairs specialist at the U.S.-based Center for Naval Analysis. With a budget estimated at up to $2 billion a year, China's space program is roughly comparable to Japan's. Later this year, China plans to launch its third manned space mission — a prelude to a possible lunar foray by 2024. With President George W. Bush vowing to return American astronauts to the moon by 2020, some competition is perhaps inevitable. China's space program lags far behind that of the U.S., of course. "They're basically recreating the Apollo missions 50 years on," says Joan Johnson-Freese, chair of the National Security Studies Department at the U.S. Naval War College and an expert on China's space development. "It's a tortoise-and-hare race. They're happy plodding along slowly and creating this perception of a space race." But there may be more at stake than national honor. Some analysts say that China's attempts to access American space technology are less about boosting its space program than upgrading its military. China is already focusing on space as a potential battlefield. A recent Pentagon estimate of China's military capabilities said that China is investing heavily in anti-satellite weaponry. In January 2007, China demonstrated that it was able to destroy orbiting satellites when it brought down one of its own weather satellites with a missile.

**US is losing the space race**

**Vieru 5-13-11,** Science Editor for Softpedia - possesses a biology, physics and chemistry background. [Tudor Vieru, How China's Space Program Affects the US, SoftNews NET SRL, http://news.softpedia.com/news/How-China-s-Space-Program-Affects-the-US-200147.shtml, 6-22-11]

At a congressional hearing held on Wednesday, May 11, experts from across the board met to discuss the implications that the Chinese military and civilian space plans have on the United States and its own capabilities. This is becoming really important, as the Asian nation is ramping up its space capabilities considerably. It already sent orbiters to the Moon and astronomers into space, and carried out its first spacewalk three years ago. For 2011, the China National Space Administration (CNSA) plans to conduct the first orbital docking maneuver, which will enable it to push forward with plans to construct the nation's first space station.

**Plan is key to win space race – now is key**

**Wheeler 3-31-06, Space Staff Writer** [Larry Wheeler, U.S. Losing Unofficial Space Race Congressmen Say, Florida Today, http://www.space.com/1232-losing-unofficial-space-race-congressmen.html, June 21st, 2011]

WASHINGTON - Some congressmen believe the United States and China are in an unacknowledged space race that this country could lose if it doesn't spend more money on the civilian space program. The communist nation's military runs its manned space program, employs an estimated 200,000 workers and has set a goal of putting an astronaut on the moon by 2017. By contrast, the National Aeronautics and Space Administration is a civilian government program with a limited budget that directly employs fewer than 20,000 civil servants and has lost the commanding lead it once held over the rest of the world in human space exploration. "We have a space race going on right now and the American people are totally unaware of all this," said Rep. Tom DeLay, the Texas Republican whose district includes Johnson Space Center near Houston.

**Plan is key to solve Chinese heg**

**Vieru 5-13-11,** Science Editor for Softpedia - possesses a biology, physics and chemistry background. [Tudor Vieru, How China's Space Program Affects the US, SoftNews NET SRL, http://news.softpedia.com/news/How-China-s-Space-Program-Affects-the-US-200147.shtml, 6-22-11]

This is another aspect that is making the US uneasy. China never made it a secret that its space facilities will have military applications as well, in addition to civilian and scientific ones. At the same time, the country already demonstrated a couple of years back that it has the ability to destroy satellites. At the new hearing, called “The Implications of China's Military and Civil Space Programs,” attendants discussed all this and more, weighing all the factors involved with the Chinese space programs. “There's still a lack of clear understanding of what Beijing's goals are, and how we interact with those,” conference attendant Ben Baseley-Walker tells Space. He is a member of the non-profit organization Secure World Foundation, which is committed to space sustainability. According to George Washington University (GWU) Space Policy Institute visiting scholar Alanna Krolikowski, the Asian nation plans to have its first space station complete by 2015 to 2022. After that, it will undoubtedly set its eyes on the Moon. China now plans to have a concept study detailing the requirements of a Moon landing ready by 2020, so that it could then get on with planning the landing. The reason why these developments are dangerous to the US is because they challenge the American dominance in space. This dominance gives the US a huge tactical advantage on the battlefield. If China manages to out-compete the United States, than that advantage will be transfer to Asia.

**China Cooperation bad – leads China to win the space race**

**Baker & Pollpeter, 12-13-04,** researchers with the RAND Corporation, a nonprofit research organization; global policy think tank first formed to offer research and analysis to the United States armed forces by Douglas Aircraft Company. It is currently financed by the U.S. government. [John C. Baker & Kevin L. Pollpeter, A Future for U.S.-China Space Cooperation?, RAND Co., http://www.rand.org/commentary/2004/12/13/SN.html, 6-22-11]

The Chinese would expect to benefit from cooperation with the more advanced U.S. space program, gaining increased prestige and taking a great leap forward by getting access to U.S. knowledge, experience and technology. However, because most space technologies and skills are dual-use in nature — meaning they also can be used to develop space systems for military use — America wants to be sure China doesn't use space cooperation as a tool to strengthen its military might. China has strong military reasons to become a major space power and many Chinese writings on space argue that China should develop space weapons in addition to militarizing space. These technologies could be used against U.S. forces if an armed conflict arises over Taiwan.

# 2ac AT: space war impact

**No impact to massive war – space weapons don’t have the power of nuclear or conventional weapons**

**Chase, 2011 – Ph.D. in international relations from Johns Hopkins, MA in China studies from SAIS, Johns Hopkins** [Michael S., March 25, 2011, Jamestown Foundation Publication, “Defense and Deterrence in China’s Military Space Strategy” <http://www.jamestown.org/programs/chinabrief/single/?tx_ttnews%5Btt_news%5D=37699&tx_ttnews%5BbackPid%5D=25&cHash=e3f0fcd233f563e2364ad7bc49425244>, accessed June 21, 2011]

China’s development of a space deterrence strategy can thus proceed from a starting point that draws on the strategic guidance of Mao and Deng and resembles Cold War deterrence theory, at least at a general level. Chinese writers, like their Western counterparts, conclude that strategic deterrence requires a country to meet three basic conditions: the possession of deterrent capabilities; the will to use them; and the ability to communicate to an adversary that it has the capabilities and the determination to use them if necessary. Yet, Bao argues that space force deterrence will differ from nuclear deterrence in some key respects. According to Bao, "[although] there will be a taboo on the use of space weapons, the threshold of their use will be lower than that of nuclear weapons because of their conventional characteristics. Space debris may threaten the space assets of other ‘third party’ countries, but the level of destruction, especially in terms of human life, could be far less than nuclear weapons or potentially even conventional weapons."

# International Space Station Participation (?)

**1. China’s participation in the ISS won’t increase relations-Empirically denied**

**Day.** January **2008. American space historian and policy analyst and served as an investigator for the Columbia Accident Investigation Board** [Dwayne A, “The China gambit.” The Space Review. http://www.thespacereview.com/article/1042/1, Accessed 6/26/11]

The fourth point about gaining a partner instead of a competitor is probably of lesser importance. Just as the ISS has not changed the United States’ overall strategic relationship with Russia, cooperating with China in space will not fundamentally alter the two powers’ strategic positions. There may be some benefits of sharing scientific data, but we already have examples where cooperation does not prevent countries from pursuing redundant scientific efforts—for example, we could share all of our lunar science data with India, but they would still want to build their own spacecraft. And there are benefits to competition as well in spurring innovation, or simply encouraging China to spend money on something peaceful, like human spaceflight. So the benefits of cooperation for its own sake are not readily apparent.

**2. China’s participation in the ISS does not guarantee them spending money on the plan**

**Day.** January **2008. American space historian and policy analyst and served as an investigator for the Columbia Accident Investigation Board** [Dwayne A, “The China gambit.” The Space Review. http://www.thespacereview.com/article/1042/1, Accessed 6/26/11]

As for helping to defray the costs of the ISS, it is doubtful that engaging China could have any effects on this. The long history of space cooperation demonstrates that it does not save any money. At best, it expands capabilities, providing opportunities that one country could not afford on its own. For example, the European Space Agency provided the Huygens Titan lander. This did not save the United States money on the Cassini spacecraft, and probably increased the cost and complexity of the mission, but it added a component that NASA could not afford on its own. Similarly, Russian cooperation on ISS was vital to keeping the station operating after the shuttle Columbia accident. So China is not going to save the United States money on ISS, but it is possible that at some point in the future China could add something (perhaps launch of the grounded, but highly desirable centrifuge module?) that could benefit the United States.