

Avoiding Another Cold War: The Case for Collaboration with China

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November 2008

In Brief

- The United States has the opportunity to guide U.S.-China relations, particularly in the security realm, toward either greater competition or collaboration.
- U.S. policy should be bolder in pushing the relationship toward greater collaboration.
- There are multiple areas where the United States can lead, including proposals for joint Sino-U.S. military experimentation, greater collaboration in space, a “no first use” agreement on cyber-war, greater sea lane security collaboration, and collaborative efforts to provide greater global transparency to the military capabilities and activities of all nations.

One of the fundamental national security challenges in the next decade will be how to deal with China. Some see a military confrontation with China as inevitable growing out of a mélange of competition for petroleum, a clash of cultures, great power rivalries, and perhaps the final apocalyptic battle of freedom and slavery. They argue we must prepare now for the coming war, and devote at least \$800 billion per year to building naval and air power to win the approaching Armageddon -- “there we will be, if we are wise, not with 280 ships but a thousand; not eleven carriers, or nine, but 40, not 183 F-22s, but a thousand...”¹ Hyperbolic rhetoric, yes, and unwise in two respects. If we are destined for armed conflict with China, it is highly doubtful that we should be investing in Cold War weapons for a conflict in the new Information Age. Worse is the assumption that we are destined for conflict. The future of the US-China security relationship is almost entirely up to the United States. If we decide, now, that conflict is inevitable and begin preparing for it we will fulfill that prophecy. We should think and plan much more carefully to prevent it from being fulfilled. This paper suggests some ways of doing it, and assuring a much more secure future.

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Where We Stand Today

US national security policy regarding China is ambivalent. We welcome China's embrace of the international system, modern capitalism, and willingness to work with the United States to prevent nuclear proliferation, stabilize the Korean peninsula, and other issues. At the same time we worry that China's rise economically, politically, and militarily could result in increasing confrontation. So, we act politely and cautiously, waiting to see which way China moves; hoping for increased cooperation, but planning for greater competition. We worry about the future of US-Chinese relations and watch for signals on the direction they will take, almost as if we have lost sight of the tremendous leverage and influence we have in setting the course. However, the truth is that the Chinese acknowledge our economic and military superiority. That puts us in the driver's seat in terms of steering the relationship toward greater competition or greater collaboration.

And the most important factor in which way the relationship goes – whether China moves toward becoming an enemy or partner -- is how we use our superiority over the next five years.

The competitive-collaborative paradox in US-Chinese economic relationships

The collaborative-competitive paradox runs through the US –China economic relationship. On the one hand, China's economic rise now fuels global economic growth, from which the United States benefits greatly. But it has also introduced new tensions that play into the national security concerns of both nations. It is not just the growth of China's international trade that raises the economic paradox; it is also the change in the character of its trade. China's exports a decade ago rested largely on goods generated by intensive labor: clothing, machinery, furniture that flowed into the American economy through outlets from Wal-Mart to the corner hardware store. Now China supplements its labor-intensive products with advanced technology such as computers and other electronic equipment. These products compete more directly with the growing sectors of US production. As is the case with the labor-intensive goods China continues to produce, the quality of its lap-top computers, cell phones, and other products that drive the world's transition to the Information Age is pretty much equal to anything produced in the United States or anywhere else.

China's role is growing in Asian trade and economic networks. It increasingly provides the final assembly stage of Asian (and to a lesser extent global) production networks.² Japan, Korea, Taiwan, Hong Kong, Australia, and New Zealand send the components they produce for assembly in China. This benefits all the participants, and the effect is a symbiotic pooling of technical capabilities in the Asian region. China has pushed to solidify this regional economy with regional free trade agreements; and its foreign trade has grown at the fastest rate within the region. Whether or not this translates into greater strategic and political leverage in Asia is not clear. But it adds a strategic nuance to those who believe China is trying

to build political inhibitions on US military presence in the region and has embarked on a long-term strategy to supplant the United States as the dominant Pacific power.

Another trade related concern is a presumed US-Chinese competition for petroleum. Clearly, Chinese demand for it is high and growing, one of the factors that contributes to the price increases that America sees at the gas pumps. As the global demand for petroleum goes up – driven largely by the increased demand in the United States and China – some see a long-term competition for influence over the Middle East oil producing areas and elsewhere. That, they suggest, is behind China's new naval capabilities and diplomatic initiatives. Others, however, see the fact that both the United States and China will remain large net oil importers over the next decade as a basis for collaboration rather than competition. This view points to shared interests in a stable Middle East, alternative energy technologies, and increased global oil production at moderate costs. Working together, they believe, has a better chance of meeting these interests than competing. The issue here highlights another aspect of the global commons: whether to collaborate in maintaining open access to a common resource or compete for control of it.

Finally, China's trade surplus raises suspicions, particularly with respect to the Chinese interest in sovereign wealth funds.³ China has been a major buyer of US Treasury bonds to finance the US budget deficit, but doesn't say much about its investment strategies. That keeps the suspicions of some grand Chinese strategic plot to undercut US power simmering.

The collaboration-competition paradox in military affairs

Public discussion of the military relationship between the United States and China tends to focus on potential competition. It is driven by the Congressionally-mandated Secretary of Defense *Annual Report to Congress on Chinese Military Capabilities*, first delivered to Congress in 2000 and every year since 2002, and the bi-annual Chinese Peoples Liberation Army (PLA) Defense White Paper series begun in 1998. Both of these documents focus on American domestic audiences. Each has evolved, but both attribute less than benign motivations to the other potential protagonist. The PLA tends to interpret US military operations and capabilities as driven by an effort to maintain hegemony, contain China, and support separatist efforts – to keep China down. The Secretary of Defense's Report to Congress tends to interpret Chinese military operations and capabilities as driven by the effort to dominate Asia and develop asymmetric military capabilities that are an effective counter to US military power – to push America out. Both note the other's interest in preemption, and in the military use of space and cyberspace.

Yet both China and the United States are aware of the potential of these two interpretations to slip into confrontations and have taken steps to counter inadvertent slides toward conflict. These include the 1998 consultation mechanisms agreement to strengthen military maritime security, the agreements on reciprocal observers of military experiences, and combined military exercises. Official visits have increased dramatically since the late 1990s, and the US Commander of Pacific Command has

established a hot line with the PLA headquarters. In November, 2007 U.S. Defense Secretary Robert Gates and Chinese Defense Minister Cao Gang Chuan agreed to expand military exchanges at all levels. Meanwhile, Chinese and American diplomats interact in the Geneva Disarmament Conference and elsewhere as both governments cautiously expand their discussions of confidence building efforts.

Collaborating to Avoid a Descent toward War

Both nations could be bolder in dealing with what they both do not want to happen, namely, a deeper and accelerating descent into the competitive side of their relationship. We could skip over the cautious, symbolic gradualism of “confidence building measures”. This does not require formal alliances, and it still demands careful assessment of how to do it. But it begins with collaborating on tough issues.

We should begin with transparency. There is a fairly long-standing discrepancy between what Chinese official publications say about their military budgets and expenditures and estimates by the US government. US government and western research institutes generally estimate the Chinese spend three to five times the official Chinese statements. Some factors that account for the discrepancies are fairly clear. The Chinese do not include data on purchases of foreign weapons systems; funding for paramilitaries (such as the People’s Armed Police); government subsidies of the military-industrial complex; some aspects of research and development; or revenue earned outside of the budget. Some estimates provided by non-Chinese sources attempt to express Chinese military expenditures in terms of US dollars via purchasing power parity, essentially a formula that tries to normalize for differences in purchasing power in different economies. The technique is not very good at “normalizing” military expenditures. Depending on how you apply the formula, you can get estimates of actual Chinese military expenditures that come close to what the United States spends on its military.⁴

The debate over transparency is essentially a political, not a military issue. The United States military focuses on the military *capabilities* of other nations and the Pentagon’s interest in what other nations say they spend is outweighed by the attempt to know what potential opponents have, how they operate, how they train, and what systems and capabilities they are trying to obtain. The lack of transparency regarding China’s military budget has far more impact on the domestic political debate inside the United States than it does on US military planning or operations. It becomes largely a political rationale for the argument that the Chinese “hide” their military expenditures because they are up to something nefarious, that they are planning to achieve military and political leverage over the United States, and that they are getting ready to go to war with the United States. So, while China’s lack of transparency may not pose any military threat to the United States, *per se*, it can have the important political effect of orienting the United States more toward distrust and competition and less toward cooperation in its foreign and national security policies regarding China.

One approach to shaving the discrepancy in budget estimates could be to establish a joint “experts group” on military expenditures similar to the statistics expert group in the Sino-US Joint Commission on Commerce and Trade. This joint group stemmed from a similar difference between the two nations

on how to measure the trade deficit. While it never fully resolved the differences, it did help explain why the United States and China kept coming up with different numbers and therefore helped allay suspicions on both sides regarding motivations. A defense budget experts group could have similar effects.

But why not focus the effort to obtain greater transparency where it actually counts – on military capabilities rather than the expenditures to get them? If that becomes the question, then the thrust of the congressional constraints imposed in 2000 – on interactions in the areas of advanced logistics, surveillance, power projection, nuclear operations and on experiments in transformation – are counterproductive. Enhanced interaction in what Congress sought to curtail is probably the best way to obtain more transparency to Chinese military capabilities, strategy, planning, and thought.

We ought to consider, seriously and with dispatch, offering to China the kind of military personnel exchanges that we have with other countries in military education, training, and tours of duty (which, with Canada, the United Kingdom, Germany, Australia, Israel, Norway, Singapore, and other nations, include mutual officer personnel exchanges and assignments to units or facilities for periods of up to 2 years). It is not clear that the Chinese would accept. Some analysts argue that while the United States seeks to develop greater trust from the bottom-up, the Chinese prefer to do so from the top down. But, until fairly recently, the United States has been reticent to push too hard in favor of rapid and expansive personnel exchanges. This is largely because we have seen the problem as a security management issue rather than as an issue of dealing with and solving common problems.

If we shift the emphasis to the notion of security collaboration, it changes the perspective on the broad issue of transparency. Take, for example, the idea of joint experimentation with military transformation. The idea of collaborating with the Chinese in military transformation is a non-starter in the context of security management. But in terms of what may be a common interest in moving toward more effective, smaller, less expensive, highly adaptive forces that are more capable of operating effectively *together* it is intriguing. Why this could be the case flows from the changing character of warfare.

As we and the rest of the world shift away from Industrial Age military forces, military value increasingly shifts toward forces that are inherently able to tie into and incorporate the accelerating rate of change driven by information technology. It is not only that the technology changes faster. It is also the fact that to keep up with the changes, force structure, organization, and operational doctrine must change faster also. And to do this requires experimentation.

Experimentation is fundamentally different from military demonstrations and exercises (on which our security management emphasis with China currently focuses). The latter revolve around how militaries do things now and all militaries try to show that what they do, they do very well. They frown on mistakes and surprises. Exercises and demonstrations are therefore of interest for deterrence purposes (“look how powerful we are”) and transparency or intelligence on capabilities (“seeing how you use your forces helps me understand their strengths and weaknesses”). Experiments, on the other hand, concentrate on finding different solutions and new approaches. Mistakes and surprises – discovering

the unexpected -- are valued because they help reach solutions that are not only different and new, but better. A large number of experiments, and a large number of experimenters, can generate higher value out of the experimentation process faster – if they share information on their experiments. That is, of course, the foundation for good science and development, and the reason the rate of scientific discovery is accelerating. To militaries that are seeking transformation (our current terminology), a revolution in military affairs (what we used to call it), or “informationalization” (as the Chinese refer to it) proliferating experimentation collaboratively (sharing the results of their experiments) is the best and fastest way of reaching these goals with the least risk of being “surprised “ by another’s military force.

If we and the Chinese see each other as enemies, then, of course, we are condemned to attempting to manage our security relationship and to a new arms race, with all the waste, danger, and loss that entails. If we believe we can collaborate to deal with common problems – from terrorism to removing the basis of the disparities of wealth and liberty that breed the fears and hatreds that spawn war – then joint, transparent military experimentation is a logical, fruitful approach.

A No-First National Cyberattack Statement or Agreement

The United States and China rely extensively on computer networks to maintain communications, electrical grids, water supplies, business and civil infrastructures. Both nations assess the vulnerability of their systems to disruption, shutdown, and misinformation and come away concerned that an opponent could successfully undertake cyber attacks that bring about both huge financial losses and potentially catastrophic loss of human life. This raises a mutual interest in preventing the use of cyber technology as a “weapon of mass disruption”, and, in turn, to agreements not to be the first to launch such attacks.⁵

Reaching such an agreement with China would not be easy, in large part because ubiquity and anonymity distinguish the cyber domain. That is, reliance on cybernetics is expanding so dramatically it is increasingly difficult to reach an understanding of just what cyberspace encompasses and how its burgeoning, morphing, and dynamism are integrating private and governmental networks. At the same time, as the great contest between hackers and network security systems demonstrates daily, the identities of actual hackers and cyberattackers are not always easy to determine. Meanwhile, both the PLA and US Air Force are institutionalizing thought and planning for military operations in cyberspace to protect their military forces from cyberattack and to disrupt an opponent’s military operations.

But a cyberattack designed to bring about catastrophic, national destruction is different from hacking and information and electronic warfare at the tactical and operational levels of armed conflict. For one thing, only a hostile nation state is likely to be able to successfully launch that kind of cyberattack, and if it did, the identity of the attacker would probably be knowable. In effect, a strategic national cyberattack by the United States or China on the other would likely elicit a similarly destructive retaliatory attack, not only in-kind, but perhaps involving other weapons of mass destruction. So, would there be anything to gain? Perhaps. For one thing, because of our economy’s greater dependence on cybernetics, we have more to lose in a cyberattack exchange than does China. Cyberattacks on China would disrupt and

probably slow its transition to a modern economy; cyberattacks on the United States could remove our modern economy. And because we are dominant militarily, the Chinese are particularly sensitive to the possibility of pre-emptive offensive actions by the United States. In that situation, serious no-first use discussions and, if they work out satisfactorily, an agreement, may do a great deal to build the trust we need if we are to add weight to the collaborative side of the scale.

Collaborative Sea Lane Protection

The US Navy's new maritime strategy seeks to promote maritime cooperation to, among other things, build a "thousand ship force" to police the commons of the seas. The concept emerged in 2005, focusing on sea lane protection, eliminating piracy, attacking terrorism, and constraining the movement of weapons of mass destruction materials. China has acknowledged a common interest in each of these areas. Admiral Michael Mullen, currently the Chairman of the Joint Chiefs of Staff and the prime architect of the new maritime strategy when he was the Chief of Naval Operations, has discussed the ideas behind the thousand ship force concept with senior Chinese military officials. Mullen has been upfront on why he thinks expanding cooperation in these areas has value for the United States: it can free more US naval assets for military contingencies. These discussions are part of what the US Navy refers to as the Global Maritime Partnership Initiative, or "GMPI." The overall effort and concept here are exactly the kind of ideas we should be discussing with the Chinese as part of the drive toward the collaborative side of the US-China relationship.

Not everyone agrees. Those in the United States who see the future of the US-China security relationship as essentially competitive worry about collaboration as opening a new channel of intelligence to US maritime power and a potential means of diplomatic leverage in areas where the two nations differ in policies. It is easy to suspect a great deal of internal commentary along the lines of "What if the Chinese use the US interest in deriving help from them to wrest concessions from us on arms sales to Taiwan, technology transfer and other US-Chinese discussions or negotiations???" There are probably similar arguments within the PLA cautioning against potential US intelligence efforts against the PLA Navy, nefarious efforts to "embarrass" China by demonstrating the edge US naval power has over China, or trying to assert operational control over Chinese forces through ostensible cooperative undertakings.

Such concerns on both sides are overblown, in part because of how its architects structured the GMPI. They started from the assumption that all established maritime nations (like the United States) and particularly emerging maritime nations (like China) share common interests in curbing piracy, assuring access to and use of sea lanes, and preventing the surreptitious transfer of WMD materials, human smuggling, illegal immigration, and illegal drug trafficking. In short, it assumes that maritime and emerging maritime nations see great individual value in maintaining the seas as a global commons and realize that the chances of doing so are much higher if they work in concert. The authors of the GMPI crafted it as fundamentally voluntary, intending to coordinate national, international, and private-industry efforts to provide platforms, people, and protocols.

As a voluntary undertaking, the GMPI would work toward developing a network of ship-based, aerial, and land-based sensors – from simple radars to sophisticated methods for detecting illicit activities – that could, again on a voluntary basis, share what they collect. The arrangements would not be implemented hierarchically. A new, collaborative framework would replace the traditional military structured command and control framework. Special relationships between countries could be maintained, no single solution would necessarily be applied to issues or challenges.⁶

Proponents of the GMPI postulate it as an initial step toward expanded cooperation in other areas. These could include disaster relief, fishing and the extraction of other ocean and seabed resources, maritime safety, oceanography, hydrography, port and container security, and perhaps ship construction, weather and sea forecasting, and climate research. None of this would come automatically or without controversy, for there are vested interests in all these areas from parties that would prefer to keep things just as they are right now. And taken together, all the areas of potential collaborative growth may not be sufficient to overcome the suspicion and distrust that fuel fear and competition. But there is much truth in what Admiral Dennis Blair, a former Commander of the Pacific Command, portrayed as the value of the “habit of cooperation:” the more you cooperate, the more you value cooperation and expand it into new areas.⁷

Collaborative Use of Space

On January 11, 2007, the Chinese demonstrated a hit-to-kill anti-satellite capability by destroying a weather satellite China had put in orbit eight years earlier. The result was a new cloud of debris, much of which will continue to orbit the poles for a decade, expressions of concern by US officials, and – perhaps coincidental, but maybe not – the successful intercept and destruction of an old US reconnaissance satellite by a missile fired from a US Navy destroyer roughly a year later. The question is, have we and China begun an arms race in space?

Not yet. But space, like cyberspace, is one of the domains where doing so is not farfetched. If we do, it will add significant weight to the competitive side of the scale. This is in part because the United States military, designed for expeditionary operations overseas, relies heavily on space-based assets for communications, navigation, and intelligence. When people – including members of the PLA -- talk about “asymmetric counters” to US military power, the notion of the American reliance on space, lower costs of knocking satellites out of the sky compared to getting them up there, and whether space is where to find the American Achilles heel almost always comes up. We rely heavily on space and most people know we do. For our part, we have made it pretty clear that we could consider attacks on our military space-based assets very serious and respond with disproportionate force that we would not necessarily limit to the attacker’s own space-based assets.

The concern with weapons and war in space is not new. It dates back to at least the 1950s, and while the United States and Soviet Union were both developing anti-satellite weapons starting in the 1960s, by the 1970s, we had reached a modus vivendi of sorts. Both of us recognized that it was important to know

what the other was doing, and for the other to know we knew. We recognized that notion in treaties, agreeing that we would not attack National Technical Means (NTM), a euphemism referring to satellites for verifying compliance of the Strategic Arms Limitation Treaties, all the time understanding that such satellites could provide a wide range of military information. So, almost from the start of the space age, we've used space for military purposes – observation, navigation, and communications – without weaponizing it.

Over the last couple of decades, the use of space-based assets for observation, navigation, and communications has become an intimate part of globalization, making space a 21st century commons. And that opens up interest and possibly enhanced utility of two concepts: a code of conduct for space and a collaborative global information umbrella, both initiated by China and the United States, but open to the rest of the world.

“Rules of the Road for Space”

We could open treaty negotiations with China regarding the military use of space. The Chinese (and Russians) have said that's what they want. China has argued for the peaceful use of outer space in the United Nations' Conference. But a better approach would be that taken by the Incidents at Sea Agreement, an executive agreement that establishes “rules of the road”. A code of conduct for space would skirt the thorny issue of what a “weapon” in space is (is a maneuverable surveillance satellite a “weapon” because it could theoretically be made to collide with another nation's satellite, or crash onto a target on the surface?). Instead it would deal with “behavior.” It could create special caution and safety areas around satellites, provide notification measures, and restrict actions that produce dangerous debris. As an executive agreement, it would have the same legal standing as treaties, but would be far simpler than a treaty negotiation under UN auspices. It is a traditional solution to managing the access to and maintenance of a commons. It could be the initial step back from the precipice of competition for control of space; a step toward collaboration that offers the beneficence of the commons of space to all mankind.

Collaborative Global Information Umbrella

We could go further. For example, why not collaborate in providing a global information umbrella to the world? Our abilities to collect information from across the electromagnetic spectrum, to process it, integrate the data, and understand it are getting quite impressive. And that of China and other nations is getting better, too.

The notion of sharing it has also grown. A decade ago few people thought of monitoring the seas in the communal way we and other nations do for international airspace. Yet today, militaries, insurance companies, industries, coast guards, and law enforcement agencies talk seriously about “maritime operations centers” where nations and private concerns contribute information and data to build a more comprehensive, timely, awareness of common issues, including piracy, pollution, weather, military

exercises, and trafficking. The Combined Joint Interagency Task Force (South) in Key West, Florida has worked for a decade and a half with Caribbean nations in exchanging information on drug trafficking in the region. The Italian Navy runs a Virtual Regional Maritime Traffic Centre in which 25 different participants exchange data. Fourteen nations combine information at Singapore's Regional Cooperation Agreement on Combating Piracy and Armed Robbery against ships in Asia. Similarly, a number of web-based virtual crisis centers have emerged over the last decade providing satellite images, and near-real time updates on natural disasters.⁸ In short, there is a growing network of public and private information centers that deal with events, crises, disasters, and potential disasters that are global in their effects and therefore of interest and concern to mankind generally. If we and the Chinese would collaboratively share large portions of private military and national security information, we would greatly accelerate the growing transparency that cements the world together in this new information age.

To do this would require a willingness to share much more of what we gather from classified sources and technology. By revealing more of what we can see, hear, and integrate, we would have to be prepared to also reveal more of the sources and methods we use in the process. And, we would also have to be prepared to be challenged by different interpretations and explanations of what we revealed. But much of our reservation is a holdover from an earlier age. While we do not want others to know everything we know, the return we will get from opening the spigot exceeds the price.

Understanding the Chinese

Perhaps the single-most important factor in the future of US-Chinese relations is developing mutual understanding of each other. Understanding does not mean accepting or condoning those Chinese policies or actions that conflict with ours or go against the grain of democracy, human rights, and governance that we believe in. But understanding is the best foundation for maintaining productive interactions and rational as opposed to emotive decisions.

Clearly, we in the United States benefit greatly from expanded, direct interaction with the Chinese, and the new push for more official exchanges is a very good thing, and overdue. But, we need to expand the interaction as much as possible and make it as substantive, continuous, and candid, as we can. Official interactions will always be needed and the symbolic, ritualistic, and authenticating function they perform will always be useful. We need to bolster them with robust unofficial networks for direct exploratory discussions.

The US-Chinese national security relationship is reminiscent of the US-Soviet relationship in the late 1950s. Then, we believed that although the Soviets were coming on fast, the United States maintained the strategic high ground in nuclear power and, more importantly, in the unmatched ability to devastate the Soviet Union with strategic airpower. Sputnik changed that presumption. Amid the "shock", accusations of a missile gap, and public hand wringing, President Eisenhower proposed—and Congress supported—a broad American educational effort to reassert American leadership in science while also raising the public's understanding of the evolving global security situation. The effort was embodied in

the National Defense Education Act and the surge of support for American education, focused primarily at the university and post-graduate levels it generated ranks with the post-World War GI bill in terms of benefit to the nation.

We need another such effort. This time to dramatically expand our national understanding of the information age, the globalization it is driving, and how China (and the rest of the world) is reacting. The rapid pace of social and cultural change in China during the past two decades makes cross-cultural competent assessments increasingly demanding and imperative. The security relationship between the United States and China is emerging as the central issue in US national security, and it's going to be here for some time. We need a national effort to develop the understanding that is absolutely essential if we and our children are to deal with it successfully.

NOTES

1 Mark Helprin, "The Challenge from China," Wall Street Journal, May 13, 2008.

2 See the discussion in Nicholas Lardy, et.al., "China in the World Economy: Opportunity or Threat?," C. Fred Bergsten, Bates Gill, Nicholas Lardy, and Derek Mitchell, *China: the Balance Sheet* (New York: PublicAffairs for the Center for Strategic and International Studies and the Institute for International Economics, 2006.)

3 *The Economist*, "The Invasion of the Sovereign Wealth Funds," January 17, 2008. Currently the value of the assets owned by sovereign wealth funds is about 2 percent of the total global market value (roughly \$55 trillion). But the roughly \$3 trillion available to the top 20 funds for investments is not exactly chicken-feed, exceeds that in the hedge fund industry, and carries at least a lot of implied influence.

4 See, for example, John Tkacik, "A Chinese Military Superpower?" The Heritage Foundation, <http://www.heritage.org/Research/AsiaandthePacific/wm1389.cfm>

5 Key elements of information technology fall into three major categories: the Internet; embedded/real-time computing (e.g., avionics systems for aircraft control; air traffic control; Supervisory Control and Data Acquisition [SCADA] systems controlling the distribution of electricity, gas, and water; the switching systems of the conventional telecommunications infrastructure; bank teller machine networks; floodgates); and dedicated computing devices (e.g., desktop computers). Each of these elements plays a different role in national life, and each is subject to different kinds of attack. From: Seymour E. Goodman and Herbert S. Lin (eds), *Toward a Safer and More Secure Cyberspace* (Washington, DC: National Academies Press, 2007). http://www.cyber.st.dhs.gov/docs/Toward_a_Safer_and_More_Secure_Cyberspace-Full_report.pdf

6 Eric McVadon, "Cooperation on High Seas", *China Security*, 3:4, Autumn 2007, p.5 <http://www.wsichina.org/cs8.pdf>

7 Wendell Minnick, "Habits of Cooperation: Former PACOM Chief Calls for US, Chinese Militaries to Work Together More", *Defense News*, April 30, 2007

8 See, for example, AlertNet (<http://www.alertnet.org/>), International Crisis Group (<http://www.crisisgroup.org/home/index.cfm>), and the United Nations Office for the Coordination of Human Affairs (<http://ochaonline.un.org/>)

Building a New American Arsenal

The American Security Project (ASP) is a bipartisan initiative to educate the American public about the changing nature of national security in the 21st century.

Gone are the days when a nation's strength could be measured by bombers and battleships. Security in this new era requires a New American Arsenal harnessing all of America's strengths: the force of our diplomacy; the might of our military; the vigor of our economy; and the power of our ideals.

We believe that America must lead other nations in the pursuit of our common goals and shared security. We must confront international challenges with all the tools at our disposal. We must address emerging problems before they become security crises. And to do this, we must forge a new bipartisan consensus at home.

ASP brings together prominent American leaders, current and former members of Congress, retired military officers, and former government officials. Staff direct research on a broad range of issues and engages and empowers the American public by taking its findings directly to them.

We live in a time when the threats to our security are as complex and diverse as terrorism, the spread of weapons of mass destruction, climate change, failed and failing states, disease, and pandemics. The same-old solutions and partisan bickering won't do. America needs an honest dialogue about security that is as robust as it is realistic.

ASP exists to promote that dialogue, to forge consensus, and to spur constructive action so that America meets the challenges to its security while seizing the opportunities the new century offers.



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