# **UC San Diego**

# **SITC Research Briefs**

## **Title**

AirSea Battle and Escalation Risks

### **Permalink**

https://escholarship.org/uc/item/08m367zt

# Journal

SITC-NWC 2012 POlicy Briefs, 2012(Policy Brief 12)

### **Author**

ROVNER, Joshua

# **Publication Date**

2012





# CHANGING MILITARY DYNAMICS IN EAST ASIA POLICY BRIEF 12, JANUARY 2012

AirSea Battle and Escalation Risks

Joshua ROVNER

# **SUMMARY**

While the U.S. Navy previously enjoyed more or less unfettered access to operate in the South China, East China, and Philippine Seas, new Chinese capabilities are likely to make these areas "contested zones." Newly acquired or produced weapons systems could make life very difficult for the Navy in the region. Equipped with a range of new anti-access capabilities, China may even be able to deter the United States from intervening in the case of a war with Taiwan. Given the changes, it is not surprising that U.S. strategists are increasingly focused on solving the anti-access problem. One recently announced solution is AirSea Battle (ASB), an operational concept for integrating naval and air assets in order to overcome anti-access capabilities. This policy brief evaluates the pros and cons of AirSea Battle as it might be applied in a conflict between China and the United States.

The Study of Innovation and Technology in China (SITC) is a project of the University of California Institute on Global Conflict and Cooperation. SITC-NWC Policy Briefs provide analysis and recommendations based on the work of project participants. This material is based upon work supported by, or in part by, the U.S. Army Research Laboratory and the U.S. Army Research Office through the Minerva Initiative under grant #W911NF-09-1-0081. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the U.S. Army Research Laboratory and the U.S. Army Research Office.

# **INTRODUCTION**

In recent years China has invested heavily in capabilities that will make it difficult for the United States to operate in the South China, East China, and Philippine Seas. While the U.S. Navy previously enjoyed more or less unfettered access, new Chinese capabilities are likely to make these areas "contested zones." 1 Among other things, China has produced or acquired anti-satellite weapons, several hundred short- and medium-range ballistic missiles, more advanced submarines, anti-ship cruise missiles, anti-ship ballistic missiles, and a new generation of over-the-horizon radars. These new capabilities could make life very nasty for the Navy within the first and second island chains, and they also potentially put U.S. bases in Japan and Guam at risk. Equipped with a range of new anti-access capabilities, China may be able to deter the United States from intervening in the case of a war with Taiwan. If the United States does intervene, China may be able to badly damage or destroy U.S. assets in theater or force U.S. carrier groups to operate at prohibitively long distances from the Chinese mainland.

Some analysts fear that if the United States cannot overcome Chinese anti-access capabilities, it may not be able to deter Chinese aggression in the first place. Worse, an impotent U.S. maritime presence would throw the regional order into doubt because Washington would not be able to assure long-term allies of its willingness or ability to protect them.

Given all this, it is no surprise that U.S. strategists are increasingly focused on solving the anti-access problem. One well-known solution is AirSea Battle (ASB), an operational concept for integrating naval and air assets in order to overcome the entire range of anti-access capabilities. The concept was announced in spring 2011 by then-Secretary of Defense Robert Gates, but details remain classified. The Center for Strategic and Budgetary Assessments (CSBA) published a long monograph on one possible version of ASB shortly thereafter.

This policy brief evaluates AirSea Battle based on CSBA's description. I recognize that the official version of ASB may differ from the CSBA report. I am also aware that ASB may fall out of favor with the Navy or the Air Force (or both). Nonetheless, there are good reasons to take the CSBA report seriously. First, the fact that some senior Pentagon officials, including Under Secretary of the Navy Robert Work, are former CSBA analysts suggests that the basic concepts in the report are similar to the official version. Second, the

CSBA report demands attention because it remains the most comprehensive treatment of ASB to date. Third, the basic operational approach—a rapid attack against the adversary's command-and-control systems followed by a more deliberate conventional fight—is the same basic pattern that the United States has followed in its recent wars. The difference is that none of those wars have been waged against a nuclear-armed adversary.

## AIRSEA BATTLE IN OPERATION

AirSea Battle envisions two broad phases in a war against countries like China with advanced anti-access capabilities. The first phase is a "blinding" attack on key Chinese facilities, including long-range weapons that could target U.S. bases and carrier groups, as well as the radar systems needed to cue them. Kinetic and electronic attacks would also target Chinese satellites and anti-satellite weapons. According to the CSBA report, attacks on Chinese space assets, along with land-based radars and other ISR and communications platforms, would "severely limit China's space-based situational awareness."<sup>2</sup> China would find it extremely difficult to organize forces after such an attack. Equally important would be the prompt strikes on Chinese missile launchers and its command and control nodes. "Countering or thinning the PLA offensive missile threat is a principle AirSea Battle line of operation," the report continues. Not only would the United States regain the advantage, but ASB would also deny China any chance of a rapid and decisive victory. "Success is critical in preventing China from achieving a quick 'knock-out blow.'"3

The second phase would involve efforts to deny Chinese naval breakouts while setting up a distant blockade. Because of the vast distances involved in moving forces across the Indian and Pacific Oceans, the initial attacks would be required to allow time for U.S. forces to arrive in theater. Once in place, they would be used to exert economic pressure on China. As in past conflicts, overcoming anti-access capabilities is the thorniest operational problem for U.S. planners; the war will presumably become much easier after Washington can exploit its material advantages. A protracted conventional war will favor the United States.

AirSea Battle offers several possible benefits. It can help shore up regional deterrence by convincing China that it cannot keep the United States out of any

<sup>1.</sup> On contested zones, see Posen 2003.

<sup>2.</sup> Ibid., 63.

<sup>3.</sup> Ibid., 39.

future conflict. According to this logic, the likelihood of a Chinese attack is inversely proportional to its belief that the United States will intervene to protect its friends and allies, especially Taiwan. Chinese enthusiasm will fizzle if the United States demonstrates the ability to overcome the anti-access problem and operate in contested waters. Publicizing doctrinal innovations may convince China that U.S. leaders will not shy away from a war in the Taiwan Strait, and that it will face very long odds in any future conflict. In addition, AirSea Battle promises a war-winning strategy should deterrence fail. The theory of victory is plausible and alluring: a prompt and aggressive strike will overcome China's much-feared anti-access capabilities and allow the United States to bring its comparative advantages to bear. Finally, ASB may qualify as what is now called a competitive strategy, or one that encourages self-defeating behavior. For example, CSBA claims that the campaign against anti-ship ballistic missiles would include electronic warfare and deception to cause the Chinese military to fire valuable missiles against fake targets. (If China suspects deception, it may not fire them at all.)4 Similarly, the blinding attack would confound Chinese battle damage assessments, forcing it to "expend its valuable missile assets in suboptimal ways."5 In general, AirSea Battle will "contribute to a cost-imposing strategy visà-vis the Chinese military, inducing or encouraging the PLA to invest in areas less dangerous to U.S. forces and operations."6

I focus here on the issues of deterrence and warfighting, setting aside the question of whether AirSea Battle makes sense as a competitive strategy. Advocates of ASB believe that it will deter China from aggression by effectively restoring the conventional balance to what it was in the 1990s, before Beijing began its anti-access program in earnest. Deterrence was stable then because the costs of acting against Taiwan were so high and the likelihood of success so low. China might not have liked the political status quo, but it had no choice but to accept it in the face of overwhelming U.S. military advantages. The deterrence logic is also consistent with the theory that deterrence works when the potential aggressor loses faith in his ability to control events. AirSea Battle is designed to confuse the enemy, thus China may demur from fighting if it fears that it will end up blind in the early stages of conflict. ASB is also attractive as an operational concept because it potentially undermines the logic of the Chinese defense buildup. AirSea Battle is an appealing way to "unsolve" China's operational breakthrough.

### **ESCALATION**

There are major problems, however. The biggest is that AirSea Battle might lead to uncontrolled escalation in the course of a limited war. I say limited war because neither side in a hypothetical U.S.—China conflict would seek the complete capitulation or overthrow of the adversary. Presumably China would be fighting to incorporate Taiwan and the United States to restore the status quo ante. Because Beijing and Washington would have limited objectives, it would be in both sides' interest to keep the war at the conventional level, and for this reason the CSBA report simply assumes that neither side will cross the nuclear threshold.

But within AirSea Battle are the seeds of escalation.8 There are psychological, political, and inadvertent pathways to escalation. A host of psychological factors create escalatory pressures. Cognitive biases may lead one side to misperceive signals of restraint and cause it to fear that the opponent actually has unlimited objectives. Misperceptions are heightened in the fog of war, when information is almost always ambiguous and incomplete. Adversaries are also prone to attribution bias, or the belief that the other side is aggressive because it is inherently greedy or evil. (Attribution bias also causes individuals to forgive their own aggression as being unavoidable, a last resort after trying all other options.) Prospect theory tells us that individuals will fight harder to avoid losing a possession than they will to gain something new. If one side believes that it actually faces a significant loss, rather than simply failing to gain some limited objective, then it will be tempted to risk escalation. All of these factors are exacerbated under tight time constraints and the concentrated stress of war.

Political pressures might also lead to escalation, especially if one or both governments fear that regime change will be the penalty for losing. Escalation is also possible if the issues at stake are wrapped up in nationalism or ideological principles that inflate the value of the object. Political leaders will be hard pressed to accept even a limited defeat in these cases, especially if military outcome is particularly lopsided and humiliating. Rather than negotiating an end to the war,

<sup>4.</sup> Ibid., 63.

<sup>5.</sup> Ibid., 39.

<sup>6.</sup> Ibid., 16..

<sup>7.</sup> George and Smoke 1974, 519–33.

<sup>8.</sup> Van Tol et al. 2010, 50.

they might gamble for resurrection by escalating to the nuclear level.<sup>9</sup>

Finally, inadvertent escalation may occur when conventional attacks put the adversary's capacity for nuclear retaliation at risk. Under these conditions, the target state might reasonably worry that the attack is only the first phase of a larger war. There may be no way to offer credible reassurances that it is not. Fearing the destruction or incapacitation of its nuclear deterrent force, the target state might face a "use it or lose it" dilemma. Inadvertent escalation is especially likely if key command and control nodes are particularly vulnerable or if conventional and nuclear target sets are overlapping or indistinguishable. It is also more likely if the target state's leadership prefers offensive to defensive operations; for these leaders, escalating the war would be much more tempting than standing pat in the face of what looks like a disarming strike.<sup>10</sup>

AirSea Battle opens all three pathways to escalation. It deliberately seeks to create confusion at the start of the war, making it very hard for the adversary to accurately interpret intrawar signals of restraint and declarations of limited intent. Because ASBalso includes deception, U.S. pledges about keeping objectives limited would be treated with great skepticism. Effective deterrence requires not only threats but also credible assurances that the target will not be punished if it complies. There is little reason to exercise restraint absent such promises.<sup>11</sup> AirSea Battle carries implicit threats without offering any complementary assurances. Making matters worse is the fact that all of the psychological problems described above would be activated if the United States implemented ASB. In addition to the danger of misperceptions in the confusing aftermath of a blinding attack, attribution bias would almost surely cause the Chinese leadership to suspect the worst about the United States. They might ask why the United States, a distant and secure power, would resort to such an extraordinary attack. They might answer their own question by concluding that Washington desires permanent hegemony in Asia and will attack the Chinese mainland to secure it. Prospect theory would also likely kick in because China would suddenly fear losing an object of great national value.

AirSea Battle would exacerbate the domestic problem for the Chinese Communist Party, creating political incentives to use nuclear weapons in a limited war. The CCP long gave up its ideological claim to legitimacy, abandoning communism and settling instead for a combination of nationalism and export-led economic growth. In the event of an economic slowdown-all economies slow down eventually—the CCP will only have nationalism to fall back on. In these circumstances the party might become more risk-acceptant and aggressive toward Taiwan in order to rally domestic support.<sup>12</sup> In the absence of ideological or economic credentials, the Party might not be able to survive the loss of a critical symbol of Chinese nationalism. Thus, if it were on the verge of a monumentally humiliating loss, the CCP might well escalate the war rather than risking the end of its regime. ASB promises such a loss. It is hard to imagine a more humiliating outcome than being blinded and befuddled, forced to wait as the United States slowly husbands naval power offshore. The CCP would have to be very clever or very ruthless to stay in power after such a defeat, and Chinese leaders might be willing to take terrible risks rather than face this dilemma.

Finally, AirSea Battle runs the risk of inadvertent escalation. China has been developing a nuclear doctrine of assured retaliation for the last twenty years. Under Mao, China settled on a posture of minimal deterrence without giving nuclear strategy too much thought. It now seems to have determined that it can effectively deter other powers with a relatively small number of nuclear weapons, but only if it can assure the survivability of its arsenal. It has thus invested in technologies like solid fueled weapons and mobile launchers that provide security against a disarming first strike.<sup>13</sup> ASB, if it works, may remove that sense of security. The targets in the hypothetical first strike would include China's ballistic missiles and fixed and mobile launchers, as well as space- and ground-based facilities for targeting and guidance. While U.S. planners might be confident that they can distinguish conventional from nuclear targets, Chinese officials might not be, especially because their ballistic missile stockpile would be at the top of the target list.

The other basic problem with AirSea Battle is that it gets in the way of victory. Advocates of ASB argue that it provides a war-winning strategy, but in fact it will almost certainly complicate the process of war termination. As discussed above, it might prove to be impossible for Washington to signal restraint or make credible promises about its limited goal of returning to the status quo ante. Wars become protracted when suspicious enemies cannot afford to believe such commitments. <sup>14</sup> U.S. leaders might believe they can achieve

<sup>9.</sup> Downs and Rocke 1994.

<sup>10.</sup> Posen 1992.

<sup>11.</sup> Schelling 1966, 74–5.

<sup>12.</sup> Christensen 2001.

<sup>13.</sup> Fravel and Medeiros 2010.

<sup>14.</sup> Reiter 2009

a durable settlement based on limited objectives, but Beijing is likely to fear that Washington will expand its aims at a later date, especially given its recent enthusiasm for regime change. Under these conditions, China will tolerate severe punishment rather than suing for peace. Domestic politics are also likely to prove an obstacle if the CCP cannot save face after suffering an extraordinary setback at the outset of the war, knowing that the Chinese public expects an equally prompt and decisive victory. And if the Party itself is thrown into disarray, there might not be anyone with whom to negotiate. Crafting a durable settlement with a fractured polity in the aftermath of an intense nationalist war may prove impossible.

All of this is related to a basic mismatch: AirSea Battle advocates brute force attacks for the purpose of a limited, coercive war. Most wars are exercises in coercion, in which states try to compel their enemies to do their will. Brute force wars, on the other hand, occur when states determine that their enemies are utterly intractable. Rather than try to cause a change in the enemy's behavior, brute force involves smashing the enemy until he is no longer a threat. In the case of a war with China, the United States would clearly have limited coercive intentions. Rather than trying to destroy the PLA's fighting power or destroy the Chinese state, Washington would aim to compel Beijing to return to the status quo ante or, at most, force it to recognize Taiwanese independence and relinquish some of its maritime and territorial claims. But the approach envisioned by CSBA might look very much like the first stage of a brute force war, because Chinese situational awareness would be utterly compromised after a blinding attack. Its defenses would also be seriously jeopardized while the United States methodically moves superior forces across the Indian and Pacific Oceans. The upshot for China would be extreme vulnerability and large incentives to gamble on escalation. The upshot for the United States might be something like a catastrophic victory.

### REFERENCES

- Christensen, Thomas J. 2001. Posing Problems Without Catching Up: China's Rise and Challenges for U.S. Security Policy. *International Security* 25 (4): 5–40. Available at <a href="http://muse.jhu.edu/journals/international\_security/v025/25.4christensen.html">http://muse.jhu.edu/journals/international\_security/v025/25.4christensen.html</a>>.
- Downs, George W., and David M. Rocke. 1994. Conflict, Agency, and Gambling for Resurrection: The Principal Agent Problem Goes to War. *American Journal of Political Science* 38 (2): 362–80.
- Fravel, M. Taylor, and Evan S. Medeiros. China's Search for Assured Retaliation: The Evolution of China's Nuclear Strategy and Force Structure. *International Security* 35 (2): 48–87.
- George, Alexander L., and Richard Smoke. 1974. *Deterrence in American Foreign Policy: Theory and Practice*. New York: Columbia University Press.
- Posen, Barry R. 1992. *Inadvertent Escalation: Conventional War and Nuclear Risks*. Ithaca, NY: Cornell University Press.
- Posen, Barry R. 2003. Command of the Commons: The Military Foundation of U.S. Hegemony. *International Security* 28 (1): 5–46.
- Reiter, Dan. 2009. *How Wars End.* Princeton, NJ: Princeton University Press.
- Schelling, Thomas. 1966. *Arms and Influence*. New Haven, CT: Yale University Press.
- Van Tol, Jan, Mark Gunzinger, Andrew Krepinevich, and Jim Thomas. 2010. *AirSea Battle: A Point-of-Departure Operational Concept*. Washington, DC: Center for Strategic and Budgetary Assessments. Available at <a href="http://www.csbaonline.org/publications/2010/05/airsea-battle-concept">http://www.csbaonline.org/publications/2010/05/airsea-battle-concept</a>.

**Joshua ROVNER** is an Associate Professor of Strategy and Policy at the U.S. Naval War College. The views expressed here are solely those of the author. They do not necessarily represent the views of the Naval War College, the U.S. Navy, or the Department of Defense.