

#### **STUDIES**

# AirSea Battle: A Point-of-Departure Operational Concept

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The US military today faces an emerging major operational challenge, particularly in the Western Pacific Theater of Operations (WPTO). The Chinese People's Liberation Army's (PLA) ongoing efforts to field robust anti-access/area-denial (A2/AD) capabilities are threatening to make US power projection increasingly risky and, in some cases and contexts, prohibitively costly. If this occurs, the United States will find itself effectively locked out of a region that has been declared a vital security interest by every administration in the last sixty years. It will also leave longstanding US allies and partners vulnerable to aggression or, more likely, subtle forms of coercion. Consequently, the United States confronts a strategic choice: either accept this ongoing negative shift in the military balance, or explore options for offsetting it. This paper does just that. It offers a point-of-departure concept designed to maintain a stable military balance in the WPTO, one that offsets the PLA's rapidly improving A2/AD capabilities. We have titled this concept "AirSea Battle," in recognition that this theater of operations is dominated by naval and air forces, and the domains of space and cyberspace.

#### The Unprovoked Challenge

For well over half a century, the United States has been a global power with global interests. These interests include (but are not limited to) extending and defending democratic rule, maintaining access to key trading partners and resources, and reassuring those allies and partners who cooperate with the United States in defending common interests. The United States' ability to project and sustain military power on a large scale has been, and remains, essential to this endeavor.

During much of the Cold War the Soviet Union posed a serious military challenge to US power-projection capabilities. Fortunately, the two superpowers managed to avoid a major war. Nonetheless, the US military's unsurpassed ability to project and sustain large forces overseas was demonstrated in limited wars in Korea, Vietnam and the Persian Gulf, as well as in numerous other, smaller contingencies. In the decade or so following the Soviet Union's collapse the US military's power-projection capabilities in defense of the nation's interests were effectively unchallenged.

This state of affairs is almost certainly ending, with significant consequences for US security. With the spread of advanced military technologies and their exploitation by other militaries, especially China's PLA, the US military's ability to operate in an area of vital interest, the Western Pacific, is being increasingly challenged. While Beijing professes benign intentions, it is an old military maxim that since intentions can change overnight — especially in authoritarian regimes — one must focus on the military capabilities of other states.

Currently there is little indication that China intends to alter its efforts to create "no-go zones" out to the second island chain, which extends as far as Guam and New Guinea. Unless Beijing diverts from its current course of action, or Washington undertakes actions to offset or counterbalance the effects of the PLA's military buildup, the cost incurred by the US military to operate in the Western Pacific will likely rise sharply, perhaps to prohibitive levels, and much sooner than many expect.

Hence the United States' strategic choice: to risk a loss of military access to areas vital to its security — and those of key allies and partners to whom it is committed by treaty or law — or to explore options that can preserve the stable military balance that has seen the region enjoy a period of unparalleled peace and prosperity.

Recently the United States Air Force and Navy agreed to address the issue. Both Service chiefs are committed to pursuing a new operational concept called AirSea Battle which appears designed to assess how US power-projection capabilities can be preserved in the face of growing anti-access/area-denial challenges, to include the most formidable challenge, which is posed by the Chinese military.

This is not to suggest that the United States seeks a confrontation with China, let alone a war. Indeed, even during the period of unparalleled US military dominance following the Cold War, the United States sought to engage China, not attack or coerce it. A "roll-back" of the PLA's military power is not the objective here. Nor is containment of China proposed. Rather, we advocate simply offsetting the PLA's unprovoked and unwarranted military buildup. Doing so requires an examination of how the US military might minimize Beijing's incentives to achieve its geopolitical ambitions through aggression or, more likely, coercion. This requires that the US military sustain its ability to project sufficient power in the region to defend US interests and protect its friends and allies. This is the key to maintaining the stable military balance that has preserved the peace in the Western Pacific.

## What Should An AirSea Battle Concept do?

An AirSea Battle concept first and foremost must address high-end military operations in the WPTO. To be sure, some of the specific initiatives deriving from a viable concept likely would be applicable elsewhere against other A2/AD capable adversaries, just as the Army and Air Force employed AirLand Battle principles designed to deter the Soviet Union in Central Europe very successfully in both Gulf Wars. However, just as the Soviet Union represented the most severe challenge to the US Army and Air Force during the Cold War, today the PLA represents by far the most serious A2/AD challenge to the Air Force and Navy.

As a doctrine for the operational level of war, AirSea Battle should not be seen as a "war-winning" concept in itself. Nor should it be viewed through the lens of a particular scenario, for example, the defense of Taiwan. Instead, it should be considered as helping to set the conditions at the operational level to sustain a stable, favorable conventional military balance throughout the Western Pacific region. This means maintaining an ability to deter China from acts of aggression or coercion in that region and, if necessary, to respond effectively in the event deterrence fails.

AirSea Battle must support overall US strategy for preserving stability in the WPTO. It must address the critical emerging challenges and opportunities that the PLA's projected A2/AD capabilities will present, and to which currently envisioned US forces do not appear to offer a suitable response. It must account for the WPTO's geophysical features, particularly its vast distances compared to Europe or the Persian Gulf region and the scarcity of US forward bases, which comprise a small number of very large and effectively undefended sites located on a handful of isolated islands, all within range of the PLA's rapidly growing missile forces and other strike systems.

AirSea Battle must account for geostrategic factors, such as US treaty and legal obligations to defend formal allies and friends in the region, as well. Even more importantly, AirSea Battle is not a US-only concept. Allies such as Japan and Australia, and possibly others, must play important enabling roles in sustaining a stable military balance.

### Operational Problems Posed By A2/AD Systems

In crafting an AirSea Battle concept, it is necessary to identify specific operational-level problems a robust A2/AD system would present over the planning horizon, which for DoD is typically the next ten to twenty years. This paper assumes that China will continue enhancing its A2/AD capabilities. Chinese military writings suggest that in the event of conflict, the PLA would conduct large-scale preemptive attacks designed to inflict severe damage on US forces based or operating in the WPTO; keep other US air and naval forces well out of range or unable to penetrate into the homeland; disrupt US command and control (C2) networks; and heavily constrain US operational logistics by destroying major supply nodes and the relatively few US logistics ships. The overall Chinese strategy appears designed to inflict substantial losses on US forces in a very short period of time, thereby lengthening US operational timelines and highlighting the United States' inability to defend its allies. Once this is accomplished, China would assume the strategic defense and confront the United States with the prospect of either paying a very high (and perhaps prohibitive) cost for reversing its gains, or accepting Beijing's fait accompli.

US ground, air and naval forces have long been accustomed to operating from sanctuary. Their main operating bases, ports and facilities have been largely invulnerable to serious conventional attack since World War II. Navy surface and carrier aviation forces are accustomed to operating from sanctuary at sea, enabled by the near-absence of hostile long-range detection and targeting capabilities and capable enemy navies. And US communications, ISR, and precision-guided munitions (PGM) are heavily dependent on high-bandwidth connectivity for command and control, target detection, precision strike, and post-strike battle damage assessment operations. This connectivity is highly reliant on long-haul space-based assets that have hitherto also been accorded sanctuary status, save for the occasional modest localized jamming. The same can be said with respect to cyberspace which, despite numerous and consistent probes by China and other states, and by nonstate entities and individuals, has never been seriously compromised. The growing Chinese A2/AD capabilities, to include its cyber weapons, threaten to violate these long-standing sanctuaries. As this occurs, the consequences for US forces would include:

- Loss of forward sanctuaries in physical domains and virtual domains (including space, cyberspace, and the electromagnetic spectrum);
- Denial of access to areas of operations; and consequently
- Loss of strategic and operational initiative.

While the favorable, stable military balance that has existed in the Western Pacific for the last two decades is deteriorating, neither the Defense Department's planning nor its defense program have been sufficiently modified to account for this fact. Thus DoD continues emphasizing investments that assume it will enjoy sanctuary status as described above, such as short-range rather than long-range strike systems; vulnerable communications satellites; and elaborate — but fragile — battle networks. This is done at the expense of investing in (among other badly needed capabilities) penetrating, long-endurance ISR and strike capabilities, aerial tankers, forward base hardening, the combat logistics force (CLF) and directed-energy weapons for missile defense.

#### The Substance of An AirSea Battle Concept

Our candidate AirSea Battle operational concept describes a WPTO military campaign against the challenge described above, to include its principal components, required missions and tasks, how these would be accomplished, and by what forces. Its successful execution would depend on myriad factors, to include the active and substantial participation of key allies and partners, and the Defense Department's ability to make significant changes in its program of record.

The AirSea Battle campaign has two stages. The initial stage, commencing with the outbreak of hostilities, comprises four distinct lines of operation:

- Withstanding the initial attack and limiting damage to US and allied forces and bases;
- Executing a blinding campaign against PLA battle networks;
- Executing a suppression campaign against PLA long-range ISR and strike systems;
- Seizing and sustaining the initiative in the air, sea, space and cyber domains.

These lines of operation and their key sub-components have differing execution timelines. While some would unfold in parallel, the initiation of others would depend on progress being made in other aspects of the campaign. Many forces and capabilities would be in high demand across multiple lines of operation, forcing tough decisions regarding their employment.

The follow-on second stage would comprise various operations designed to support US strategy by creating options to resolve a prolonged conventional conflict on favorable terms. These would include:

- Executing a protracted campaign that includes sustaining and exploiting the initiative in various domains;
- · Conducting "distant blockade" operations;
- Sustaining operational logistics; and
- Ramping up industrial production (especially precision-guided munitions).

There would not necessarily be a clean break between stages. Some follow-on operations would simply be continuations of those already ongoing. Nor would there be a clear temporal distinction between stages, in that certain second-stage operations may be conducted while first-stage operations are under way.

#### **Candidate AirSea Battle Initiatives**

Neither the Defense Department's Program of Record forces and modernization profile, nor current Air Force and Navy concepts of operations accord sufficient weight to the capabilities needed to execute an AirSea Battle campaign successfully along the lines of the one described in this report. This report recommends multiple initiatives the Air Force and the Navy should undertake, mostly on a dual-Service basis, to field the necessary forces and capabilities for AirSea Battle. These include initiatives on:

Mitigating the missile threat to Guam and other selected bases, and to maritime forces;

- Correcting the PLA-US imbalance in long-range strike for high-value and/or time-sensitive targets, to include developing and fielding greater penetrating and stand-off long-range ISR and precision strike capabilities and capacities;
- Enhancing capabilities for undersea operations, to include submarines, submersible robotic systems, and mines;
- Offsetting the vulnerabilities of space-based C2, communications, and ISR capabilities and capacities, to include fielding high-capacity airborne C3 relay networks to back up space-based systems;
- Emphasizing future standardization and interoperability of data links, data structures, and C2 and ISR infrastructures;
- Increasing emphasis on and investment in cross-Service electronic warfare capabilities and capacities;
- Enhancing cyber warfare offensive and defensive capabilities; and
- Developing and fielding directed-energy weapons.

#### The Core of AirSea Battle

AirSea Battle rests fundamentally on the tight integration of Air Force and Navy operations in the WPTO—each Service plays a key enabling role for the other in accomplishing critical missions. Some important instances of mutual support include:

- Air Force counter-space operations to blind PLA space-based ocean surveillance systems, thereby
  preventing the PLA from targeting high-value Navy surface units, including carriers, thereby
  enabling Navy operational freedom of maneuver in the maritime domain (Navy platforms could
  aid counter-space operations in support of the Air Force space control missions if required);
- Navy AEGIS ships supplementing other missile-defense assets in defense of Air Force forward bases and Japan;

- Navy submarine-based and carrier-based (if operating long-range air platforms) ISR and strike support against PLA IADS systems to degrade them and thereby enable Air Force strikes;
- Air Force long-range penetrating strike operations to destroy PLA ground-based long-range
  maritime surveillance systems and long-range ballistic missile launchers (both anti-ship and landattack) to expand the Navy's freedom of maneuver and reduce strikes on US and allied bases and
  facilities;
- Navy carrier-based fighters' progressive rollback of PLA manned and unmanned airborne ISR
  platforms and fighters to enable the forward operation of Air Force tankers and other support
  aircraft; and
- Air Force support of the ASW campaign through offensive mining by stealthy bombers and persistent non-stealthy bomber strike support of Navy ships conducting distant blockade operations.

#### **Needed: A Sense of Urgency**

If a stable military balance is to be preserved in the WPTO, the United States and its regional allies should begin now to develop an AirSea Battle concept and field the forces needed to execute it. The PLA's ongoing military buildup shows no signs of abating, and is of growing concern to regional governments. Adding to this unease is the perception that despite Defense Secretary Robert Gates' efforts to forge a balanced defense posture, at present the balance seems to be between addressing the demands of modern irregular warfare and continuing to field forces more designed for waging the kinds of security threats that are fading into history rather than those now emerging, especially in the form of A2/AD challenges.

There are encouraging signs the Department of Defense intends to place serious emphasis and persistent focus on developing the AirSea Battle concept as a signal of US commitment to security in the Western Pacific and to reassure regional partners in the near-term. Secretary Gates has authorized the Air Force and Navy to craft an AirSea Battle concept, and the chiefs of both Services have endorsed the effort.

Finally, AirSea Battle should be encouraged for reasons independent of the WPTO. The ability of the Air Force and Navy to execute highly integrated operations will enhance their effectiveness across a range of contingencies, while the long-term cost efficiencies appear highly desirable from a budgetary perspective. However, while such reasons might be sufficient to justify AirSea Battle, it is the growing military imbalance in the Western Pacific that makes it necessary.