

Future Warfare in the Western Pacific: From Command of the Commons to Spheres of Influence

BOTTOM LINES

- **WESTERN PACIFIC MILITARY PROGNOSIS.**
 Today's U.S. command of the commons is unsustainable, but neither can China assert military hegemony. Instead, the long-term equilibrium will be a more differentiated pattern of Chinese control of its own airspace, a U.S. sphere of control within a few hundred kilometers of allied coasts, and a contested zone where neither side enjoys wartime freedom of movement comprising much of the South China Sea.
- **IMPLICATIONS FOR U.S. ALLIES.**
 With astute U.S. policies, Chinese anti-access/area denial ("A2/AD") is not a decisive long-term threat to Japan, South Korea, the Philippines, and the Spratley Islands even without the U.S. AirSea Battle strategy. The United States will not need to conduct an ambitious campaign of airstrikes against inland Chinese A2/AD infrastructure to protect most major U.S. Pacific allies. Taiwan, however, lies within a contested zone within which neither China nor the United States will enjoy freedom of movement. If China can exploit ongoing technology trends, then Taiwan—unlike Japan or South Korea—will eventually come within reach of Chinese A2/AD regardless of U.S. countermoves.
- **PRUDENT U.S. MODERNIZATION.**
 Enforcing a U.S. sphere and restricting China to its own will require new U.S. programs for longer-range anti-ship and anti-radar missiles; survivable airborne alternatives to space-based communications, surveillance, and navigation systems; and possibly a new U.S. anti-satellite system. But the very ambitious AirSea Battle modernization agenda is unnecessary.

By Stephen Biddle and Ivan Oelrich

Background

The United States has long enjoyed "command of the commons": worldwide freedom of movement on and under the seas and in the air above 15,000 feet, with the ability to deny this to enemies. This has contributed to a remarkable era of military primacy for U.S. arms against potential state rivals.

Many now fear that this era may be coming to an end in the Western Pacific. For over a generation, China has been fielding a series of inter-related missile, sensor, guidance, and other technologies designed to deny freedom of movement to hostile powers in the air and waters off China's coast. As this program has improved, so has China's ability to restrict hostile access—a strategy known as anti-access and area denial, or A2/AD. Many experts believe that this A2/AD capability could eventually exclude the United States from parts of the Western Pacific that it has traditionally controlled. In fact, some fear that China will ultimately be able to extend a zone of exclusion out to, or beyond, what is often called the "Second Island Chain," a line that connects Japan, Guam, and Papua-New Guinea at distances of up to 3,000 km from China. A Chinese A2/AD capability reaching anywhere near this far would pose major challenges for U.S. security policy.

To avert this, the United States has embarked on an approach often called AirSea Battle. (The Defense Department recently changed the

name of these activities and research to "Joint Concept for Access and Maneuver in the Global Commons," though many outside the government continue to refer to this program as "AirSea Battle.") AirSea Battle (ASB) plans to restore U.S. military access by destroying or disabling the forces China would use to establish area denial, many of which are based on the Chinese mainland, some of them more than 2,000 km inland. ASB would thus require a demanding military campaign to batter down A2/AD by striking targets far afield from the maritime domains to which the U.S. seeks access.

ASB has thus proven highly controversial. Many object to its likely cost. Others cite its potential for escalation: U.S. air and missile strikes against targets deep in the Chinese mainland could easily spur retaliation against U.S. or allied homelands and a possible nuclear war.

Western Pacific Military Prognosis

The need to incur any of these costs or any of these risks, however, turns on the underlying question of exactly how effective Chinese A2/AD can become. Many mainstream arguments, on both sides of the debate, assume that A2/AD represents a substantial threat. ASB advocates would respond to this threat by battering it down; many ASB opponents would avoid it via a distant blockade of China at straits beyond A2/AD's reach; both tend to grant A2/AD an ability to deny U.S. access to large parts of the Western Pacific absent a massive U.S. offensive inland. We ask whether this underlying military assessment is sound. How far will ongoing technology trends allow either side to extend a zone of denial

that excludes hostile forces but permits one's own to maneuver freely? Will such exclusion zones eventually extend far enough to threaten U.S. alliances? If so, which ones, and how gravely? Given this, what represents the best long-term U.S. military strategy?

In particular, survivable long-range reconnaissance, surveillance, and target acquisition (RSTA) is both the heart of A2/AD and its binding constraint on effectiveness. Space-based radar is potentially effective in this role but is inescapably vulnerable in the long run; airborne radar protected by defensive SAMs (surface-to-air missiles) will eventually be the limiting factor on A2/AD's reach. In a long-run competition, such radars (together with the long-range precision missiles whose fire they direct) will give air and maritime defenders increasing advantages, but those advantages will be strongest over controlled landmasses and weaken over distance. As both sides deploy A2/AD capabilities, this will increasingly replace today's American command of the global commons not with Chinese hegemony but with a more differentiated pattern of control, with a U.S. sphere of influence around allied landmasses, a Chinese sphere of influence over its own mainland, and contested battlespace covering much of the South and East China Seas wherein neither power enjoys wartime freedom of surface or air movement.

What A2/AD can do, however, is to replace an era of U.S. command of the global commons with an era that sees more differentiated control—one that involves a U.S. sphere of influence around allied landmasses, a Chinese sphere of influence over its own mainland, and contested zones covering much of the South and East China Seas wherein neither power enjoys wartime freedom of surface or air movement.

Implications for U.S. Allies

This in turn implies that, with astute U.S. policies, A2/AD is not a long-term threat to most U.S. allies in the region. Japan, South Korea, and the Philippines are all either mostly or entirely beyond the prospective reach of Chinese air and sea control given appropriate allied military choices.

Taiwan, by contrast, is well within the future reach of Chinese A2/AD in a way that U.S. arms could not likely prevent. For Taiwan—unlike Japan, South Korea, and the Philippines—U.S. military power is unlikely to be able to ensure access for seaborne trade as key Chinese technologies mature. This will not necessarily expose Taiwan to a credible invasion threat: the same technologies that enable Chinese A2/AD will enable Taiwan, with U.S. assistance, to extend its own A2/AD exclusion zone around the Taiwanese landmass in a way that will make a Chinese amphibious invasion prohibitively costly. But while Chinese military shipping will not be able to survive long enough to sustain an invasion, China can prevent Taiwanese or neutral shipping from sustaining the Taiwanese economy. The fate of Taiwan in such a contest would rest first on the threat of distant blockade by the United States against Chinese seaborne trade, and second on the relative vulnerability of insular Taiwan and continental China to trade cutoffs. If AirSea Battle could preempt Chinese A2/AD this scenario could be avoided—but it cannot.

Prudent U.S. Modernization

Limiting Chinese A2/AD to the projection above will require a combination of U.S. policy decisions and a handful of modernization initia-

tives. The United States will require a new, longer-range anti-radiation missile designed to destroy airborne radars from launch points beyond the radar's acquisition limit. The United States will require new anti-ship missiles with the range to exploit U.S. target acquisition potential and enable the United States to establish its own A2/AD zone against China. And the United States would need an effective anti-satellite (ASAT) capability to neutralize any satellite-based sea surveillance systems China may deploy, and a policy decision to allow U.S. ASAT use in wartime. It will also be important to limit U.S. military vulnerability to Chinese anti-satellite systems by improving airborne or other alternatives to the use of space for surveillance, navigation, communications, and targeting.

It is just as important, however, to be clear on what is not needed. In particular, the costs and risks of AirSea Battle are not required for U.S. security in the Pacific, nor must the United States redesign the Navy and Air Force to cope with Chinese A2/AD. Several more limited, incremental changes are necessary, but transformational change is not required to meet the threat of A2/AD in the Western Pacific. ♦

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