TOO LITTLE, TO

AirSea Battle concept may lag China's capabilities

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CHINESE INTERNET

It is no secret that long-term U.S. Air Force and Navy planning is focused on China. This alone is straining U.S.-China relations, as well as triggering U.S. domestic criticism from those who regard war with China as inconceivable, and an internal squabble between China-focused planners and "boot-centric" Army and Marine Corps leaders.

The U.S. focus on China—and from all outward signs, China's military focus on the U.S.—has been driven by several factors since the mid-1990s. China's rapid economic and technological progress gives it the resources to compete militarily with the U.S. The Taiwan Strait crisis of 1995-96—in which China's apparent goal of persuading Taiwanese voters to reject its pro-independence government was frustrated, in part, by a U.S. show of force—was one factor that triggered drastic reforms and modernization of China's non-nuclear forces. The Taiwan issue, and the broader concern of military power in what Chinese leaders have historically considered home waters, have led to a visible direction in China's military modernization toward changing the balance in the Western Pacific.

A decade ago, many U.S. analysts were unimpressed by the People's Liberation Army (PLA). One heard snickers about the "million-man swim" required to invade Taiwan. By 2011, such hubris has given way to palpable concern: The PLA has made great strides toward implementing a strategy described in Pentagon documents since 2005 as "anti-access" or "area denial," or the shorthand "A2/AD," to deter or defeat U.S. forces in the Western Pacific.

The elements of this capability include:

- Information exploitation. Digital connectivity, now available from troops to top command levels, has helped implement and refine new joint force operations, especially between the second artillery missile force, the PLA air force and the PLA navy (PLAN). Networks of optical, radar and electronic surveillance satellites, new over-the-horizon (OTH) radar, AWACS and electronic intelligence aircraft plus new passive counter-stealth radar and soon, a 30-plus navigation satellite constellation, enable precision targeting at increasing distances.
- Information attack. In the mid-2000s, U.S. intelligence agencies identified the Advanced Persistent Threat (APT), a pattern of cyberespionage largely traceable to China and aimed mainly at the U.S. defense industry and armed forces.
- Precision air and missile attack. China is developing (and offering for export) an expanding range of guided rockets conforming to the range limits of the Missile Technology Control Regime, while domestically producing guided air-launched weapons—bombs and cruise missiles—and ballistic missiles capable of threatening U.S. bases and naval forces.
- Growing sea denial. PLAN has Asia's most formidable sea-denial capability built around a growing force of 50-80 conventional submarines (SSKs). Soviet-era boats are being replaced by the Song and Yuan classes and imported Russian Kilos (see p. 15). A yet-undesignated new SSK similar in shape to the Kilo was revealed in September. The Songs and Kilos carry sub-launched YJ-82 antiship cruise missiles and the Kilos carry the formidable Novator 3M-54 Club cruise missile family.

This new, large and so far undisclosed Chinese conventional submarine, first observed in 2010, resembles those designed for oceanic operations.

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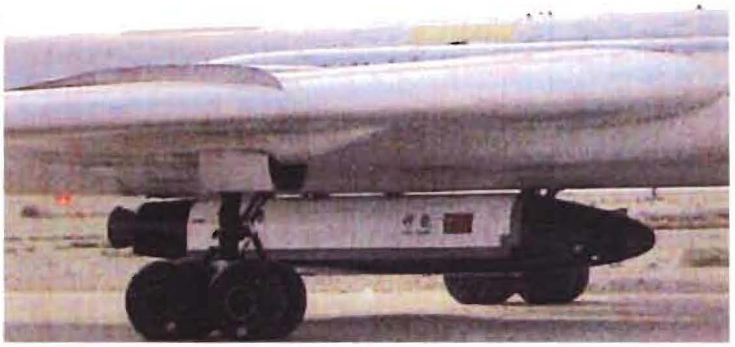

China's efforts to develop a space plane similar to the X-37—an aerodynamic demonstrator is shown under an H-6 bomber—point to its advanced military technology goals.

In the Soviet era, it was commonplace for U.S. intelligence agencies to exaggerate Soviet capabilities and predict that new systems would enter service sooner and in larger numbers than actually happened. A consistent trend in analysis of China's military capabilities is to do the reverse. The emergence of the DF-21D antiship ballistic missile (ASBM) program (around 2007) startled the U.S. Navy, triggering a crash program to retrieve SM-2 Block IV missiles from storage to establish an initial terminal ballistic missile defense (BMD) capability (for a report on antiship missiles, see p. 41).

Late in 2010, U.S. Pacific Command leader Adm. Robert F. Willard made the surprise declaration that the DF-21D had reached initial operational capability, indicating not only that

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the missile and its guided reentry vehicle had been tested but were ready to be used with targeting systems such as OTH radar and ocean reconnaissance satellites. (Around the same time, Chinese documents emerged describing the use of submunitions to disable a carrier and damage its aircraft.)

The same trend has been seen with China's aircraft carrier program, where Western leaders were slow to acknowledge that the former Soviet carrier Varyag was being rehabilitated as (at least) a test and training carrier until Chinese Internet imagery showed this was the case.

Even a conservative estimate of the J-20 fighter (*DTI* February, p. 32) casts doubt on U.S. Defense Secretary Robert Gates's assertion in 2009 that China would have no operational stealth fighters before 2020. In the Western Pacific context, the J-20's size and design suggest that one mission could be to threaten U.S. aircraft such as the E-3 AWACS, or Rivet Joint signals intelligence aircraft and tankers, without which U.S. tactical air assets would be rendered useless.

U.S. officials have tended to view this increasing A2/AD force through the prism of a potential conflict over the future of Taiwan or a contest for dominance in the Western Pacific. In the event of a conflict, it is assumed the PLA would launch cyberstrikes against regional U.S. and allied military facilities and U.S. political and military leadership, while directing air, naval and special forces strikes against nearby American facilities in Okinawa and Guam. Should Washington refuse to sue for peace, and deploy forces into the theater, the PLA would fashion joint missile, air and submarine strikes to deter or defeat naval and air forces.

CPMIEC CONCEPT

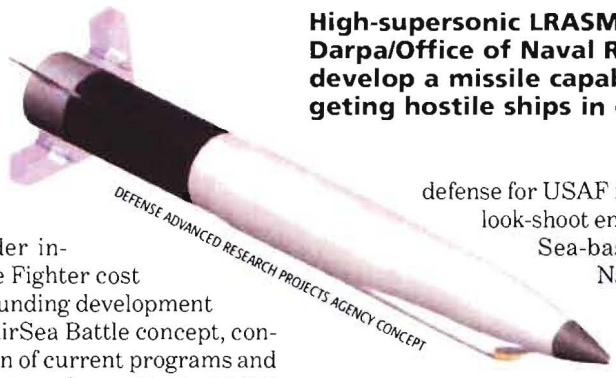
China's CPMIEC released details of the movable, 500-km HK-JM2 VHF radar in February. Such radars defeat some stealth technology and can cue surface-to-air missile-tracking radars.

U.S. options in response do not include the rapid development and deployment of major new weapons, with limited R&D and procurement resources under increased pressure from Joint Strike Fighter cost overruns (see p. 28 for issues surrounding development of a new bomber). The emerging AirSea Battle concept, consequently, relies on the reorientation of current programs and the use of networking to ensure freedom of operation in A2/AD environments—the euphemism for a hostile Western Pacific.

The Center for Strategic and Budgetary Assessments (CSBA) has issued some of the key documents behind the AirSea Battle. They should not be taken lightly since former CSBA staff, including Deputy Navy Secretary Robert Work, occupy key positions in Washington. CSBA's most comprehensive report stresses that "AirSea Battle, as a doctrine for the operational level of war, cannot and 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 military operational level to sustain a stable, favorable conventional military balance throughout the Western Pacific region."

So it is not about fighting China, but maintaining a military balance to sustain stability in the region—but it is a military concept for combat operations, which responds to visible Chinese developments and China's lack of transparency about strategy and intentions. Some of the key "air-sea" linkages mentioned by CSBA and others include:

- Air Force counter-space operations to blind PLA space-based ocean surveillance systems and prevent targeting of ASBMs. (This may be why USAF is developing the X-37B agile space vehicle and why, according to the Heritage Foundation's Dean Cheng, Chinese defense bloggers are upset about it.)
- In January, it was announced that the Air Force Joint Stars (Surveillance Target Attack Radar System) aircraft had completed a demonstration of the Network Enabled Weapon architecture, in which moving ships were tracked by Joint Stars and hit with AGM-154C glide bombs released from F/A-18s.
- Navy Aegis ships in the BMD role would provide a front line of defense for USAF forward bases and permit shoot-look-shoot engagements of incoming missiles. Sea-based BMD has driven a shift in Navy fleet planning in recent years, with curtailment of the DDG-1000 and its replacement by a BMD-optimized version of the Burke-class frigate.



DEFENSE ADVANCED RESEARCH PROJECTS AGENCY CONCEPT

High-supersonic LRASM-B missile is part of a Darpa/Office of Naval Research program to develop a missile capable of autonomously targeting hostile ships in commercial sea lanes.

- Long-range penetrating strikes would destroy PLA ground-based, long-range maritime surveillance systems (such as OTH radars) and missiles aimed at ships and bases. Concurrently, Navy submarine-based strike support against PLA integrated air-defense systems would pave the way for Air Force strikes.

Another example of air-sea collaboration would be the development of an airborne infrared sensor capability for BMD based on long-endurance, land-based unmanned aerial vehicles, to fill the gap until a space-based system is available in the 2020s. Either system allows the new Burke, armed in the future with the Next Generation Aegis Missile (formerly the SM-3 Block IIB), to be as or more effective than the now-abandoned CG-X missile cruiser.

The U.S. Defense Advanced Research Projects Agency's (Darpa's) Long-Range Anti-Shipping Missile (LRASM) project is also aimed at air-sea warfare deficiencies. LRASM is a three-part program that encompasses two airframe/propulsion approaches, both developed by divisions of Lockheed Martin Mis-