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The Army's Role in Overcoming Anti-Access and Area Denial Challenges

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Summary

The U.S. military has become increasingly concerned about the challenges it could face in gaining access to an operational area. Given their global responsibilities, the U.S. armed forces must be prepared to deploy to a wide range of locations that include almost any type of terrain and confront adversaries that span the threat spectrum from very poorly armed bands to peer-level foes. Research indicates that, in most situations, anti-access challenges require a joint solution, in which the capabilities of the different services can be brought to bear based on the threat and the mission. This study examined the nature of those future challenges and the Army's role as part of a larger joint or combined force.

Anti-access (A2) challenges prevent or degrade the ability to enter an operational area. These challenges can be geographic, military, or diplomatic. *Area denial* (AD) refers to threats to forces within the operational area. As they relate to U.S. ground forces (the Army and Marine Corps), AD threats are characterized by the opponent's ability to obstruct the actions of U.S. forces once they have deployed.

The Range of Anti-Access/Area Denial Threats

Irregular Adversaries

Irregular adversaries could be nonstate actors (such as a terrorist group or insurgents who have limited support from a state sponsor) or the armed forces of a very weak nation. It is likely that the A2 capability of such an opponent is limited.

Hybrid Adversaries

Hybrid adversaries have more and better weapons, operate with better command-and-control systems, are better trained, and are capable of simultaneously engaging in irregular and conventional combat. If a hybrid opponent is a nonstate actor, it is likely to have considerable support from a friendly nation or nations. Hezbollah in southern Lebanon in 2006 is the most notable recent example of this kind of opponent. For the purposes of this discussion, we assume that this class of threat includes both nonstate opponents that are capable of fighting in this manner and nation-states that elect to conduct operations in a hybrid mode.

State Adversaries

The U.S. military has historically planned for state adversaries, often assuming that lower-spectrum threats were lesser-included cases. State adversaries are the armed forces of another nation-state that normally operate in a conventional manner, wear uniforms, have formal mili-

tary organizations, and employ the air, land, and naval weapon systems that are usually associated with traditional military forces. Their level of capability can vary enormously; such adversaries range from impoverished countries with obsolete military equipment to formidable potential opponents with large numbers of state-of-the-art military systems. Very few state opponents possess nuclear weapons, perhaps the ultimate A2 capability.

Key Anti-Access/Area Denial Capabilities

The following capabilities are most likely to pose significant A2/AD challenges to joint operations in future scenarios:

- *Long-range precision-strike systems.* The development of Global Positioning System technology has increased the accuracy of both cruise and ballistic missiles. This increase in accuracy has profoundly changed the nature of the threat posed by long-range non-nuclear missiles, particularly against fixed targets (such as ports and airfields).
- *Littoral anti-ship capabilities.* These capabilities include high-quality non-nuclear submarines, fast missile-armed surface craft, and smart coastal and shallow-water mines.
- *High-quality air defenses.* During the famous Yom Kippur War of 1973, the state-of-the-art Soviet-made air defense system that challenged the Israeli Air Force was the SA-6 mobile surface-to-air missile (SAM) system. The SA-6 had a maximum effective range of roughly 25 km. Today, the state of the art in air defense is the Russian-built S-400 (SA-21) SAM. The S-400 has a maximum effective range against non-stealthy aircraft of approximately 400 km. Additionally, the low-altitude threat has become more challenging as improved anti-aircraft guns and shoulder-fired anti-aircraft weapons proliferate.
- *Long-range artillery and rocket systems.* The proliferation of mobile rocket launchers with ranges of more than 50 km can pose a major threat to Army or Marine Corps lodgment areas, such as ports and airfields.

A Joint Approach to Countering Anti-Access/Area Denial Threats

A review of U.S. operations since World War II, combined with the development and examination of possible future scenarios, indicated that—in most situations—the United States would employ a joint, interagency, intergovernmental, or multinational approach to overcoming diplomatic, geographic, and military A2/AD challenges. The capabilities of the different services can be brought to bear in ways that are tailored for each specific operational environment.

There are important interdependencies and synergies between the services in terms of their ability to overcome A2/AD challenges. For example, some threats to the Army's ability to deploy to an operational area must be addressed primarily by the other services (e.g., confronting the threat of enemy submarines and sea mines is the responsibility of the Navy, though the Army may be able to assist naval forces in mitigating those threats).

The Army has capabilities that can be of great value to the Air Force and Navy as they develop joint solutions to overcoming evolving A2 challenges. Specifically, the Army could provide considerable assistance to the Air Force and Navy in suppressing or destroying air defenses that challenge joint air operations. It could also facilitate dispersed operations by the

Air Force to assist the Navy in defeating littoral threats and establishing protected regional enclaves for naval operations.

As the services work together to develop operational concepts and systems to mitigate A2/AD challenges, the Army will play a significant role in this effort.