

STUDIES

Winning the Invisible War: Gaining an Enduring U.S. Advantage in the Electromagnetic Spectrum

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The proliferation and growing sophistication of civilian and military EMS capabilities has resulted in an increasingly congested and contested electromagnetic environment for which the U.S. military is unprepared. Over the past decade, several government and external assessments found that the U.S. military is falling behind Chinese and Russian forces in electronic warfare (EW) and that U.S. forces will be challenged to achieve EMS superiority in future conflicts.

To address these concerns, the U.S. Department of Defense initiated an ongoing series of actions to improve its EW doctrine and capabilities. This study will argue these efforts have been unfocused and are likely to fail at delivering EMS superiority. If DoD does not mount a new more strategic and proactive approach to fighting in the EMS and developing the requisite capabilities, adversaries could be emboldened to continue their ongoing efforts to gain territory and influence on their peripheries at the expense of U.S. allies and partners. Demonstrating the ability to survive and fight in a contested EMS could help U.S. forces slow Chinese and Russian sub-conventional or gray-zone operations and deter or dissuade these competitors from more aggressive approaches to their objectives.