



Graphic illustration by Regina Ali, DOD

IAC MAC Success Story

IAC MAC Applies Proven Space Domain Methodologies to Fast-Track Joint Staff’s Electromagnetic Spectrum (EMS) Campaign-Level Modeling and Analysis Plan

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<p>Customer:</p>	<p>United States Strategic Command J81/Advanced Warfare Capabilities Division</p>
<p>Challenge:</p>	<p>In response to a provision in the Joint EMS Operations (JEMSO) Readiness Act of 2018, United States Strategic Command (USSTRATCOM) required an EMS modeling and analysis initiative starting in Fiscal Year 2020 to develop a capability for campaign-level modeling and analysis for JEMSO. As noted during his 24 October 2019 confirmation hearing with the Senate Armed Services Committee, Admiral Charles Richard, Commander of USSTRATCOM, “our military’s ability to operate in an electro-magnetic spectrum is being contested...it is no longer a permissive environment.” Shortly after USSTRATCOM kicked off the EMS campaign-level modeling and analysis initiative, the Joint Staff (JS) approached USSTRATCOM for help in addressing a 2019 National Defense Authorization Act (NDAA) assignment to develop a “Plan to Conduct Campaign Modeling and Wargaming for Joint Electromagnetic Spectrum Operations (JEMSO)”. Some of the J81 government team viewed the task for this request to develop a plan as a multi-month to yearlong effort.</p>
<p>Approach:</p>	<p>Leveraging an analysis and planning approach that previously supported USSTRATCOM, and now United States Space Command (USSPACECOM), on space domain modeling and analysis, IAC MAC applied proven principles and</p>

	<p>methodologies to draft a plan based on the new USSTRATCOM EMS modeling and analysis initiative. Within the plan, IAC MAC identified objectives and integration efforts necessary to achieve the plan's objectives, which includes connecting spectrum-dependent capabilities to warfighter missions and mission outcomes. Further, IAC MAC structured the plan across multiple lines of effort, identifying tasks for the various providers and partners to the USSTRATCOM-led initiative. The plan sets forth an approach to improve integration of the EMS and its effects in modeling and analysis of joint operations. It will increase insight into the impacts of contested EMS on warfighting operations and better inform senior leader decisions.</p>
Value:	<p>Despite the J8's expectations for a drawn out project, IAC MAC completed a draft plan to conduct campaign modeling and wargaming for JEMSO within only two weeks, then fast tracked it through general officers/flag officers (GOFOs) review. The streamlined development resulted in GOFOs endorsing the plan only one month after USSTRATCOM received the initial tasker. The JS subsequently used the plan as the basis for answering the 2019 NDAA Congressional tasking. In recognition of the plan developed by IAC MAC, the JS identified the USSTRATCOM-led initiative as one of the explicit tasks necessary to implement the DOD EMS Superiority Strategy released in October 2020.</p>

Prepared by Booz Allen Hamilton under contract FA8075-18-D-0004.