



ASSOCIATION OF OLD CROWS ADVOCACY NEWSLETTER AUGUST 24, 2020

A Closer Look: S. 4049, the FY 2021 National Defense Authorization Act (Senate version)

On July 23, the Senate passed S. 4049, its version of the National Defense Authorization Act (NDAA), by a bipartisan vote of 86-14. The bill provides funding guidance and authorities to the US military, prioritizes resources and provides oversight for national defense activities through the Department of Defense and related agencies. S. 4049 authorizes \$731.3 billion for national defense, which includes \$69 billion in Overseas Contingency Operations (OCO) funding. This amount comes in only \$7.8 million below the President's request and \$1.4 billion above FY 2020.

Division A Funding

Category	S. 4049	FY 2021 President's Request	FY 2020
Procurement	\$134,014,838	\$130,684,160	\$133,100,265
RDT&E	\$106,660,645	\$106,224,793	\$102,309,845
O&M	\$195,573,380	\$196,630,496	\$201,918,920
MILPER	\$156,348,755	\$158,896,845	\$150,493,318

The AOC will continue to track the same procurement and RDT&E accounts as noted in our review of the House Defense Appropriations Act (see Defense Budget tables, [here](#)). Below are funding highlights from S. 4049:

- \$749.4 million for the E2-D Hawkeye, including \$123.2 in advanced procurement
- \$176.6 million for the Navy's Next Generation Jammer
- \$8.1 million for the Army's Terrestrial Layer System
- \$3.9 million in additional funding for Multi-Domain Task Force Electronic Warfare tools.
- \$55.7 million in Other Procurement, Army, for Defensive Cyber Operations, including an additional \$900,000 for unfunded Cyber Defense and EW tools requirements.
- \$330.8 million for the Surface Electronic Warfare Improvement Program (SEWIP), a reduction of \$56.4 million for Early to Need items

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A Closer Look (cont)

- \$116.4 million for Army RDT&E Network C3I Technology, including an additional \$2 million for multi-drone multi-sensor intelligence, surveillance, and reconnaissance capability
- \$105.8 million for the Navy's Ground/Air Task Oriented Radar (G/ATOR), an increase of \$83.6 million for demonstration and analysis activities
- \$26 million in USAF RDT&E for Directed Energy Prototyping, including an additional \$5 million for DE capabilities for counter-unmanned aerial systems (C-UAS)

The House passed its version of the NDAA, H.R. 6395, on July 21. The next step will be for the House and Senate to appoint conferees to meet in a Conference Committee to agree to a common version - a Conference Report - that must pass both the House and Senate unamended before receiving the President's signature. This step will likely take place in September, but House and Senate leadership are already meeting to iron out the differences. Due to the uncertain legislative calendar in the fall, expect a final NDAA during a post-election lame duck session of Congress. However, unlike the appropriations process, the NDAA process has ended with a signed agreement for the past 59 years.

NDAA Signage History

Fiscal Year	Bill	Date Signed
FY 2020	S 1790	12/20/19
FY 2019	HR 5515	08/13/18
FY 2018	HR 2810	12/12/17
FY 2017	S 2943	12/23/16
FY 2016	S 1356	11/25/15
FY 2015	HR 3979	12/19/14

S. 4049 Items of Special Interest

In addition to program funding, S. 4049 includes significant policy and oversight recommendations. Below is the Top 10 "Watch List" the AOC is tracking as the bill moves to Conference Committee. You can see the complete Items of Interest list, [here](#), and the report language of each provision, [here](#).

For questions, comments, or additional information on any of the above topics, please contact Ken Miller, AOC Director of Advocacy and Outreach, at kmiller@crowds.org.

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S. 4049 Items of Interest Watch List

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Sec 128 - Report on strategy to use ALQ-249 Next Generation Jammer to ensure full spectrum electromagnetic superiority	12
Sec 173 - Transfer from Commander of United States Strategic Command to Chairman of the Joint Chiefs of Staff of responsibilities and functions relating to electromagnetic spectrum operations	17
Sec. 181 - Requirement to accelerate the fielding and development of counter unmanned aerial system efforts across the Joint Force (sec. 181)	20
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Sec. 212 - Governance of fifth-generation wireless networking in the Department of Defense	68
Sec. 801 - Policy recommendations for implementation of Executive Order 13806 (Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain Resiliency)	238
Sec. 861 - Implementation of Modular Open Systems Architecture requirements	247

S. 4049 Highlight: Transfer of EMSO to a Chairman's Controlled Activity (JCC)

Of special note is **Sec. 173** that transitions EMSO responsibilities from United States Strategic Command (USSTRATCOM) to the Chairman of the Joint Chiefs of Staff (CJCS) as a Chairman's Controlled Activity (CCA). The bill provides an initial one year window, but allow the CJCS to submit an "appropriate" transition plan to Congress based upon several determinations and calls for the Vice Chairman of the Joint Chiefs of Staff (VCJCS) to assume responsibility for functions transitioned under this provision. Finally, the bill establishes a thorough evaluation of EMSO across all services and combatant commands and provide a semiannual briefing to Congress through CY 2025.

The Senate Armed Services Committee (SASC), in its FY 2019 NDAA bill, ordered the creation of an Cross Functional Team (CFT) for EW. This provision was later merged in the Conference Report with Rep. Don Bacon's Joint Electromagnetic Spectrum Readiness Act, much of which was included in the House NDAA that year. This led to the creation of what is today the Electromagnetic Spectrum Operations Cross-Functional Team (EMSO CFT), led by VCJCS and

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S. 4049 Highlight: Transfer of EMSO to a Chairman's Controlled Activity (JCC) (cont)

and directed through the Joint Staff (J8). The EMSO CFT is set to release a unified EMS Superiority Strategy. An Implementation Plan will follow within 180 days following the release of the strategy. Section 173 identifies oversight of this strategy and implementation plan as a key function of this new permanent governance structure.

The EMSO CFT has made significant progress in advocating an enduring EMS governance structure and influencing necessary budget and acquisition reforms; however, by its nature, the EMSO CFT is not a permanent office. Furthermore, there has been a long-standing gap in EMSO leadership and questions surrounding whether USSTRATCOM is the appropriate body to manage EMSO responsibilities across the DoD. Sec. 173 is key reform that could provide a permanent home for EMSO-related organizations presently spread across DoD and the Combatant Commands. This push by the Senate may be the right measure of accountability to advance enduring governance and close the leadership gap.

S. 4049 Highlight: Electronic Warfare Training Gets a Boost

The SASC Report to S. 4049 also includes two provisions aimed at improving EW training. The first provision is on the readiness of an EW Red Team and the second focuses on a Joint EW Training Range. The first requires the Secretary of Defense to brief the congressional defense committees on progress and remaining gaps in training EW red teams to ensure they have the systems and tactics, techniques and procedures (TTPs) to fully prepare the Joint Force through realistic training.

The second provision requires a plan to Congress for the establishment of a Joint Electronic Warfare Training Range that would address concerns about spectrum encroachment and security of sensitive technologies, and provide dedicated space for a broad range of EW training exercises. Over the past 15 years, studies have repeatedly called for addressing gaps in EW leadership and training. The Senate NDAA once again takes significant steps to hold DoD accountable for addressing these problem sets.

S. 4049 Highlight: SASC Orders Review of FCC Decision on Ligado

In April the FCC made a quick unanimous ruling over a weekend to authorize Ligado Networks LLC to provide a mobile broadband network using frequencies adjacent to those used for military GPS. The AOC has followed this decision over the past decade and **opposed** this

S. 4049 Highlight: SASC Orders Review of FCC Decision on Ligado (cont)

decision. The FCC ruling was notable especially in light of DoD's strong opposition to it as expressed in an interagency memorandum cosigned by 13 national security stakeholders across numerous federal agencies. During a Committee hearing following the decision, the SASC raised concerns about the disparate analysis drawn from testing and mitigation accommodations by Ligado. Section 234 of the SASC NDAA report authorizes an independent review by the National Academies of Science, Engineering, and Medicine to conduct an independent technical review the different approaches used for evaluation of potential harmful interference. The expectation is that this academic evaluation will provide a common approach to better address implementation of the FCC Order and mitigate technical problems that may arise.

S. 4049 Highlight: Strengthening the Defense Industrial Base and Supply Chain Resiliency

In July 2017, the President issued Executive Order 13806 - Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain Resiliency. The implementation of this EO was a topic during a Vacuum Electronic Devices (VED) Industry Partnership Project **meeting** at the 56th Annual AOC International Symposium and Convention. Representatives from the Office of the Undersecretary of Defense for Acquisition and Sustainment (USD(A&S)) Industrial Policy discussed three key findings from, including (1) an over reliance on sole foreign sources for unique and proprietary advanced materials; (2) foreign trade policies that cause injury to domestic companies; and (3) an over reliance on China for strategic and critical materials. The SASC NDAA report calls for a national approach that can effectively address these concerns.

Stakeholder Opportunity: Army posts invitation for Cyber Quest 2021

The Army Futures Command and the Cyber Center of Excellence released an invitation to government, industry and academia partners to showcase emerging cyber, EW, intelligence, and networking technologies at Cyber Quest 2021. This will be the 6th year for this initiative that provides a realistic, operationally-based environment to demonstrate to innovative solutions to critical capability gaps facing Cyber, EW and SIGINT forces. Deadline to submit proposal is September 25, 2020.

Stakeholder Opportunity: Army Releases RFI on Air Launched Effects (ALE) Program

On August 12, the Army released a Request for Information (RFI) for its ALE program, a family of small and large unmanned air launched systems that operate as a team to detect, identify, locate, report (DILR) and deliver lethal and nonlethal effects against threats across multiple scenarios and domains in a complex operating environment. The Pre-RFP response is due by September 14. It is expected that there will be a Virtual Industry Day on September 28.

Stakeholder Opportunity: Request for White Paper (RWP) by C5 on MDSS HADES

Last week, the Consortium for Command, Control and Communications in Cyberspace (C5) released an RWP on Multi-Domain Sensing System (MDSS) High Accuracy Detection and Exploitation System (HADES) Electronic Intelligence (ELINT) and Communication Intelligence (COMINT) Sensors. The MDSS is necessary to “mitigate the Army’s deep sensing gap by providing platform agnostic survivable sensors that support Multi-Domain Operations (MDO), including Large Scale Ground Combat Operations, while fulfilling sensing gaps for Indicators and Warnings, Long-Range Precision Fires (LRPF) targeting and Situational Understanding.

The HADES is part of the overarching Army MDSS system of systems and will provide multiple sensing capabilities by developing and integrating sensor capabilities on medium to high altitude platforms that will comprise a survivable sensing suite in MDO. These will allow stand-off operations to detect, locate, identify and track critical targets for the ground commander. Presently, this effort for HADES is focused on ELINT and COMINT sensors. Part 1 unclassified White Paper submissions are due September 22.

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