SIGINT IPP Event a "Remarkable" Success

On July 18, Army leaders discussed their newly released SIGINT Strategy at the AOC SIGINT IPP event “Winning the EMS: The Future of Army SIGINT” on Capitol Hill. Rep. Jody Hice hosted a panel discussion featuring LTG Scott Berrier, LTG Stephen Fogarty, MG Robert Walters, BG Jennifer Buckner, and Mr. Alex Cochran. LTG Fogarty mentioned the uniqueness of the panel, commenting that it was “remarkable” that they were all sitting down to have this discussion together, instead of five different talks. The Army, it seems, has come a long way.

LTG Berrier laid out the primary challenge the Army faces in a potential congested spectrum when he said, “future forces must integrate SIGINT, Electronic Warfare, and Cyberspace capabilities to provide situational awareness and enable commanders to deliver kinetic and non-kinetic fires to support their scheme of maneuver.” This includes developing the capabilities for SIGINT, EW, and Cyber to exist together on a single platform. With a training range at Ft. Huachuca and sophisticated simulations, more soldiers will be able to hone their skills in the three disciplines. The Army will also be working with their fellow Services to make sure their equipment is compatible in the joint environment.

Immediately following the panel discussion, the SIGINT IPP held an Industry Solutions Forum (ISF) at the Capitol Hill Club. Sponsors and exhibitors of this industry showcase were Keysight Technologies, BAE Systems, Darkblade Systems, Persistent Systems, Motorola Solutions, Epiq Solutions, and n~ask, Inc. Participants also heard from Mr. Kevin Sherman, SES, USD(I), Military Intelligence Program Resources. His keynote helped attendees better understand how the DoD engages with SIGINT stakeholders in both industry and military to advance the integration of SIGINT, EW, and Cyber. Attendees were then given the time to network and check out the technology being displayed.

An event summary report is underway and will be made available in the coming weeks. The SIGINT IPP and AOC Advocacy are planning more events like this in the future. For more information on the IPP and how to join, please contact Ken Miller, kmiller@crows.org.

Major EW Provision in FY19 NDAA

Electronic warfare received some much-deserved attention in H.R. 5515, the FY19 National Defense Authorization Act (NDAA). On July 23, Congress released the Conference Report accompanying the bill to discuss the reconciliation of differences between the House and Senate versions. While there are several provisions relevant to the EW community, the most important one is Section 1053-Guidance on the Electronic Warfare Mission Area and Joint... (cont.)
Major EW Provision in FY19 NDAA cont.

Electromagnetic Spectrum Operations.

Section 1053 is an amalgamation of provisions from the House NDAA, Senate NDAA, and H.R. 5522 (JEMSORA). It calls for a designated senior official (DSO) to oversee and implement “processes and procedures to develop, integrate, and enhance” EW and JEMS across DoD, the strategy developed by the EW EXCOM, and the newly-created cross-functional team (CFT) for EW. The DSO will also propose EW “governance, management, organizational, and operational reforms to [the] Secretary of Defense, after review and comment by the EW EXCOM.”

The goal of the CFT is to discover gaps in EW and EMS “operations, capabilities, and capacities within the Department across personnel, procedural, and equipment areas.” It will also coordinate with the EW EXCOM to update “The DOD Electronic Warfare Strategy.” They will put out status reports no later than 90 days after the Strategy is updated, and every 180 days after for three years. The content of the status reports can be found in this chart:

- Efforts in support of DoD EW Strategy and DoD Directive 3222.04, plus any actual or anticipated changes/updates and projected timelines
- Assessment of vulnerabilities and capabilities of Joint Forces to conduct JEMS against near-peer adversaries
- Review of roles and functions (plus assumptions) of offices within JS, OSD, and combatant commands who primarily handle EMSO. Analysis of gaps that need to be addressed to implement strategy effectively (with framework and timeline)
- Review of experimentation, testing, and training infrastructure required to develop EMS capabilities. Plan (plus cost and schedule) to conduct joint campaign modeling and wargaming for JEMS

They will also need to produce, in consultation with the Director of the Defense Intelligence Agency (DIA), assessments of Russia and China’s EW capabilities, and an assessment of vulnerabilities with respect to electronic systems, no later than 270 days from the passage of the FY19 NDAA.

Section 1053 also requires the DSO to assess if sufficient funds are requested in the President’s budget for electromagnetic battle management (EMBM) capabilities and the establishment and operation of JEMS cells for the fiscal years 2020 through 2024. The final...
Major EW Provision in FY19 NDAA cont.

provision calls for more training and education among military and civilian employees of the DoD on EW and the EMS.

For a deeper dive into Section 1053, please click HERE. Contact Ken Miller at kmiller@crows.org with any questions.

House, Senate Advance FY2019 Defense Appropriations Legislation

The House and Senate have made significant progress on their respective FY2019 DOD defense spending bills, both of which contain significant funding and guidance for the DOD’s electronic warfare (EW), signals intelligence (SIGINT) and directed energy programs.

Working within the framework of a bi-partisan budget agreement for FY2018 and FY2019, the two defense spending bills are very close in terms of spending – $674.6 billion (House) and $675 billion (Senate). The two spending bills are also not too far apart on spending priorities for EW and directed energy programs. Here is a brief rundown:

**Airborne Electronic Attack (AEA):** The House and Senate bills mostly agreed with the DOD’s request for AEA programs. The House and Senate bills added $95.3 million to the Navy’s $147.4 million EA-18G R&D request to accelerate EA-18G “advanced modes” and “cognitive electronic warfare.” The Senate bill added $13.9 million to begin procurement of this capability. The Senate also provided a $31.6 million R&D program increase for an “EA-18G offensive airborne electronic attack special mission pod.”

In the Next Generation Jammer (NGJ) program, both chambers cut the Navy’s $952,000 request to begin production of the NGJ Increment 1 (mid-band pod) program citing the request as “early to need.” The House also cut NGJ Increment 1 R&D funding by $46 million due to schedule delays. This left $413.5 million in the budget line.

The House and Senate bills reduced funding for the NGJ Increment II (low-band pod) program ($115.3 million Navy request) by $5.8 million (House), due to previously funded engineering, and by $26 million (Senate) due to Technology Demonstration contract award delays.

The House provided a $15 million program increase to the Navy’s AEA Systems procurement line for the ALQ-99 Jamming pod Band 6S upgrade. With the additional funds the... (cont.)
House, Senate Advance FY2019 cont.

AEA Systems program totals $40.3 billion.

**Long-Range Anti-Ship Missile (LRASM):** The LRASM program also received significant support from the Senate and the House. In the Navy’s LRASM procurement line ($81.2 million requested) the House cut $11.9 million partly due to “unit cost growth,” but the Senate and House also added $30 million to procure additional missiles. The Senate’s Committee Report noted that “a surface launched variant of the Long Range Anti-Ship Missile [LRASM] offers the potential to increase the fleet’s surface warfare capability at a relatively low cost-per-kill while leveraging existing capability.” The Committee asked for a report from the Deputy Chief of Naval Operations for Warfare Systems “identifying the capabilities the surface launched LRASM could bring to the fleet.” The Senate bill also added $10 million to the B-52 procurement line for “LRASM certification.”

**Shipboard EW:** The Navy’s SLQ-32 (Surface EW Improvement Program – SEWIP) procurement line ($420.3 million requested) was trimmed by both chambers. The SEWIP Block 2 program (electronic support upgrades) was trimmed by $18.2 million in the House for “excessive support growth” and “excessive installation cost growth.” The Senate trimmed the Navy’s $420.3 million SEWIP Block 3 (electronic attack upgrade) procurement line was trimmed by $72.1 million due to “excess systems” and “excess installation funding.” The House bill reduced the Block 3 program budget by $14.2 million for similar reasons.

**F-15 EW:** The House and Senate appropriators were unhappy with the Air Force’s decision to underfund the F-15 Eagle Passive/Active Warning and Survivability System (EPAWSS) for the F-15C. The Senate added $50 million to the Air Force’s request ($147.7 million) to restore EPAWSS production funding for the F-15C, and the House added $67.2 million for the same purpose. In its Committee Report, the HAC stated its intent was to “restore the [F-15’s EW] capability degraded by the fielding of active electronically scanned array radars” and added that it was concerned by the Air Force’s decision to remove production funding that would equip its F-15C fleet with EPAWSS. The Senate bill also added $10 million to the F-15 procurement line for ALQ-128 enhancements and $25 million to F-15E R&D funding for “EW receiver upgrades.”

**Compass Call:** The House added $194 million to the Air Force’s $108.1 million Compass Call procurement and R&D lines to accelerate the procurement and modification of the fourth EC-37B aircraft. In its committee report, the HAC further recommended, that the secretary of the Air Force consider increasing the procurement rate of the EC-37B aircraft to two per year if the plan does not unduly disrupt the operational availability of Compass Call aircraft for combatant commanders.
Moving forward, the House passed its appropriations bill in late June. The Senate bill has been passed by the SAC and was awaiting approval by the full Senate as this issue of JED went to press.

– J. Knowles

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### FY 2019 NDAA Scorecard

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<th>SUPPORT</th>
<th>OPPOSE</th>
<th>FINAL BILL?</th>
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<td>House Sec. 1058-Assessment of Department of Defense Electromagnetic Spectrum Warfare Enterprise</td>
<td>X</td>
<td>Yes Sec. 1053</td>
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<tr>
<td>House Sec. 146-Removal of Waiting Period for Limitation on Availability of Funds for EC-130H Compass Call Recapitalization Program</td>
<td>X</td>
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<tr>
<td>House Sec. 127-Multiyear Procurement Authority for F/A-18E/F Aircraft and EA-18G Aircraft</td>
<td>X</td>
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<td>House Sec. 212-Extension of Directed Energy Prototype Authority</td>
<td>X</td>
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<td>House Sec. 217-Limitation on Use of Funds for Surface Navy Laser Weapon System</td>
<td>X</td>
<td>Yes Sec. 216</td>
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<td>House Sec. 224-Briefing on Use of Quantum Sciences for Military Applications and Other Purposes</td>
<td>X</td>
<td>No</td>
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<tr>
<td>House Sec. 1061-Report on Cyber Enabled Information Operations</td>
<td>X</td>
<td>Yes Sec. 1069</td>
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<td>Senate Sec. 1032-Guidance on the electronic warfare mission area and joint electromagnetic spectrum operations</td>
<td>X</td>
<td>Yes Sec. 1053</td>
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<td>Senate Sec. 925-Cross-functional teams in the Department of Defense</td>
<td>X</td>
<td>Yes Sec. 918 &amp; 1053</td>
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<tr>
<td>Senate Sec. 143 Repeal of funding restriction for EC-130H Compass Call Recapitalization Program and review of program acceleration opportunities</td>
<td>X</td>
<td>Yes Sec. 145</td>
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<td>Senate Sec. 1663-Development of Electromagnetic Battle Management Capability for joint electromagnetic operations</td>
<td>X</td>
<td>No</td>
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<td>Senate Sec. 1661-Assessment of the electronic warfare capabilities of Russia and China</td>
<td>X</td>
<td>Yes Sec. 1053</td>
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<tr>
<td>Senate Sec. 142-B-52H aircraft system modernization report</td>
<td>X</td>
<td>Yes Sec. 148</td>
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