Dear Colleague,

Yesterday, The Senate Armed Services Committee released the bill text and funding tables of its FY21 National Defense Authorization Act. The bill authorizes $740.5B for national defense, including $636.4B in base funding for the Department of Defense (DoD), $69B for Overseas Contingency Operations (OCO), $8.2B for Military Construction, and $25.9B for national security programs within the Department of Energy. Report language has not yet been released.

The committee passed the bill on June 11 by a vote of 25-2. The full Senate has yet to take up the measure.

Associated funding tables are available [here](#).

**United States Space Force (USSF), US Space Command (USSPACECOM)**

- Fully funds USSPACECOM Operations & Maintenance (O&M) ($249.0M)
- Establishes a Space Force reserve component; delays establishment of a Space National Guard until a study on the issue is completed
- Directs Chairman of the Joint Chiefs of Staff and service chiefs to report on space-related missions and expertise that should remain within each service and whether they require organized or liaised Space Force personnel
- Authorizes voluntary transfer of personnel to the Space Force
- Prohibits transfer of military installations to USSF prior to analysis executed by SECAF and presented to Congress
- Directs USSF to continue working with research institutions to establish critical research infrastructure and develop the future workforce
- Encourages establishment of a space training and readiness command utilizing existing infrastructure
- Directs SECAF to provide a report on the selection process and criteria used to determine the permanent site for Space Command Headquarters
- Includes other technical and conforming amendments needed to continue implementation of the Space Force, including amending existing law to include the Chief of Space Operations (CSO) in the Air Force Secretariat along with the Chief of Staff of the Air Force
• Includes conforming amendments formalizing in law USSPACECOM and its Commander’s role in/on:
  • Certifications regarding integrated tactical warning and attack assessment mission of the Air Force
  • The Council on Oversight of the DoD Positioning, Navigation, and Timing Enterprise
  • The National Space Defense Center (formerly Joint Interagency Combined Space Operations Center (JICSpOC))
  • The National Security Space Satellite Reporting Policy
  • The Space-Based Infrared System and Advanced Extremely High Frequency Programs
• Directs the Space Development Agency (SDA) to transfer from the Office of the Secretary of Defense (OSD) to the USSF by October 1, 2022, maintaining the same organizational reporting requirements and acquisition authorities as the Space Rapid Capabilities Office (SpRCO). Further directs the SDA Director to lead:
  • Development of a resilient military space-based sensing, tracking, and data transport architecture that “primarily uses a proliferated low-Earth orbit; and
  • Integration of next-generation space capabilities, and sensor and tracking components (including a hypersonic and ballistic missile-tracking sensor payload), into such an architecture

MANAGEMENT (0.0%)
• Directs the Secretary of Defense (SECDEF) to report annually on the establishment of any new field operating agency during the preceding year

COMMAND AND CONTROL (+2.2%)

• Fully funds Global Sensor Integrated on Network (GSIN) ($3.7M)
• Fully funds Satellite Control Network (SPACE) ($75.5M)
• Fully funds Space and Missile Test and Evaluation Center ($4.4M)
• Fully funds Enterprise Ground Services ($116.8M)
• Fully funds Space C2 ($149.7M)
• Fully funds NCMC - TW/AA System ($7.0M)
• Directs the Secretary of Defense to submit to Congress a comprehensive plan for the implementation of the findings and recommendations of the congressionally directed report on a nuclear command and control system. Further directs the Secretary to develop and establish a concept of operations or defending the nuclear command and control system from cyber-attacks and a corresponding oversight or governance model for oversight purposes

LAUNCH (+1.5%)

• Adds +$30.0M for National Security Space Launch Program (SPACE) RDT&E – EMD for NSSL Phase 3 integration activities program ($591.0M); fully funds National Security Space Launch Program procurement ($1,043.2M)
  • Requires Secretary of the Air Force (SECAF) to ensure launch services procured for Phase two of NSSL acquisition use launch vehicles that meet federal requirements with respect to required payloads to reference orbits and to ensure viability of domestic space launch industrial base
  • Directs SECAF to establish a program to develop technologies and systems requirements for NSSL Phase three
    • States duration of project to develop technologies and systems shall not exceed a span of three years and $250,000,000
    • States program shall terminate October 1, 2027
  • Directs the SECDEF to complete the nonrecurring design validation of previously flown NSSL hardware no later than 540 days after SECAF selects two NSSL providers for Phase two acquisition
  • Requires SECAF to submit a report to Congress addressing impact of NSSL acquisition strategy on foreign countries to enter global commercial space launch market
• Fully funds Rocket Systems Launch Program (SPACE) RDT&E ($18.0M) and procurement ($47.7M)
• Fully funds Spacelift Range System (SPACE) RDT&E ($11.0M) and procurement ($100.5M)
• Does not include funds for Tactically Responsive Launch ($0.0M)
  • Requires SECAF to implement a tactically responsive space launch program and:
    • Ensure long-term continuity for the program across the Future Years Defense Program (FYDP)
• Establish responsive launch concepts of operations
• Develop processes for tactically responsive space launch
• Identify basing capabilities to enable tactically responsive space launch
• Fully funds Space Launch Operations ($177.4M)
• Fully funds Launch Facilities ($0.1M)
• Directs the SECAF to submit an assessment on Space Launch rate no later than 90 days after enactment and biennially thereafter for 5 years. The assessment must contain:
  • Total number of space launch for all national security and federal civil agencies conducted for the previous 2 years
  • Number of space launches by the same sponsors projected for the following 3 years to include number of launches and payloads

**POSITION, NAVIGATION, AND TIMING (PNT) (-4.2%)**

• Cuts -$20.0M from NAVSTAR Global Positioning System (User Equipment) (SPACE) for MGUE program slip ($370.7M); fully funds NAVSTAR GPS Receivers (SPACE) procurement ($38.0M)
• Fully funds GPS III Follow-On (GPS IIF) RDT&E ($263.5M); Fully funds GPS III Follow On procurement ($627.8M)
• Fully funds NAVSTAR Global Positioning System (Space and Control Segments) ($2.0M)
• Fully funds GPS III Space Segment RDT&E ($10.8M); Fully funds GPS III Space Segment procurement ($20.1M)
• Cuts -$65.0M from Global Positioning System III - Operational Control Segment to prioritize funds available to other space missions ($417.0M)
• Fully funds Assured Positioning, Navigation and Timing (PNT) RDT&E ($128.1M); Fully funds Assured Positioning, Navigation and Timing procurement ($147.5M)
• Directs the SECDEF to prioritize critical mission elements, platforms, and weapons systems for operational plans of the Combatant Commands and mature, test, and produce equipment for those priorities to generate resilient survivable alternative positioning, navigation, and timing (PNT) signals; process resilient survivable data; and integrate and deploy such equipment into prioritized systems and platforms
  • Requires the SECDEF to submit such a plan to relevant congressional committees no later than 180 days after enactment
  • Directs SECDEF to consult with the National Security Council, Secretary of Homeland Security, Secretary of Transportation, and heads of other relevant departments or agencies on enabling civilian and commercial adoption of technologies for resilient and survivable PNT capabilities

**OVERHEAD PERSISTENT INFRARED (OPIR) AND MISSILE DEFENSE (+5.0%)**

• Fully funds Next Generation OPIR RDT&E ($2,318.9M)
• Adds +$18.5M for Ballistic Missile Defense Radars for “Cobra Dane service life extension” ($46.7M)
• Fully funds NUDET Detection System (SPACE) RDT&E ($29.2M) and procurement ($6.6M)
• Fully funds Joint Tactical Ground System ($9.5M)
• Fully funds Space Tracking and Surveillance System ($34.1M)
• Adds +$120.0M for Ballistic Missile Defense System Space Programs for Hypersonic and Ballistic Tracking Space Sensor (HBTSS) ($152.1M)
  • Requires the Director of the SDA to integrate sensor and tracking components including hypersonic and ballistic missile-tracking space sensor payload into the SDA pLEO architecture
  • Directs SECDEF to assign responsibility to the Missile Defense Agency (MDA) for HBTSS payload until end of Fiscal Year 2022
  • Requires SECDEF to determine whether HBTSS payload should move under the USSF after Fiscal Year 2022 within 90 days of enactment
  • Requires USD Comptroller and Director of CAPE to submit a joint certification on whether the HBTSS program is sufficiently funded in future years
  • States on-orbit testing of a hypersonic and ballistic tracking space sensor should begin no later than December 31, 2022, with full operational deployment as soon as technically feasible thereafter, unless certain conditions are met to waive that date
  • Directs the Chair of the Joint Requirements Oversight Council (JROC) to complete an assessment no later than 120 days after enactment on whether efforts being made by the MDA, DARPA, the SDA and the Air Force for space-based tracking capabilities for missile defense align with requirements from USSTRATCOM, USINDOPACOM, USEUCOM and USNORTHCOM
• Fully funds Space Based Infrared System (SBIRS) High EMD ($160.9M)

WEATHER (0.0%)
• Fully funds EO/IR Weather Systems ($131.0M)
• Fully funds Weather System Follow-on ($83.4M)
• Fully funds Weather System Follow-on ($2.5M)
• Fully funds Air Force Weather Services Research ($1.0M)
• Fully funds Weather Service ($23.6M)
• Fully funds Weather Observation Forecast ($33.0M)

SPACE SITUATIONAL AWARENESS (SSA) (+2.2%)
• Fully Funds Space Situation Awareness Systems RDTE BA 04 ($33.4M)
• Fully Funds Space Situation Awareness Operations RDTE BA 05 ($41.9M)
• Fully Funds Space Situation Awareness Systems RDTE BA 05 ($173.1M)
• Provides +$7.0M to Space Situation Awareness Operations RDTE BA 07 for “Commercial SSA” ($51.8M)
• Fully Space Fence procurement ($11.3M)

COMMUNICATIONS (+0.1%)
• Fully funds Protected Tactical Enterprise Service (PTES) RDT&E ($114.4M)
• Fully funds Protected Tactical Service (PTS) RDT&E ($205.2M)
• Fully funds Evolved Strategic SATCOM (ESS) RDT&E ($71.4M)
• Fully funds Advanced EHF MILSATCOM (SPACE) RDT&E ($138.3M) and procurement ($14.8M)
• Fully funds Polar MILSATCOM (SPACE) RDT&E ($190.2M)
• Fully funds MILSATCOM procurement ($14.8M)
• Fully funds Family of Advanced BLoS Terminals (FAB-T) RDT&E ($247.2M) and procurement ($66.2M)
• Fully funds both Navy Satellite Communications (SPACE) RDT&E program elements ($42.0M; $70.1M)
• Fully funds SATCOM Ground Environment (SPACE) ($18.7M)
• Fully funds DISA Teleport Program RDT&E ($3.2M) and procurement ($29.8M)
• Provides additional +$2.4M for Transportable Tactical Command Communications (T2C2) procurement, including +$1.0M for AFRICOM force protection upgrades and +$1.4M for MDTF support requirements ($74.9M)
• Does not include funds for Commercial SATCOM (COMSATCOM) Integration ($0.0M)
• Directs a joint modernization effort, coordinated by the Assistant Secretary of Commerce for Communications and Information, to identify a process to establish goals for the modernization of the infrastructure of covered agencies, including DoD, to manage the use of Federal spectrum by those agencies
• Directs SECDEF to establish a cross-functional team for fifth generation (5G) wireless networking, under the leadership of the DoD Chief information Officer (CIO)
• Directs SECDEF to account for the security risks of 5G and 6G telecommunications network architecture, including the use of telecommunications equipment provided by at-risk vendors such as Huawei and ZTE, in all future overseas basing decisions
• Transfers all functions and responsibilities related to electromagnetic spectrum operations currently with the Commander of US Strategic Command to the Chairman of the Joint Chiefs of Staff

SCIENCE AND TECHNOLOGY (S&T) (+7.3%)

• Directs an increase of +$3.0M for Space Technology for a Small satellite mission operations facility ($133.9M)
• Fully funds Space Systems Prototype Transitions (SSPT) ($142.8M)
• Fully funds the Space Rapid Capabilities Office ($103.5M)
• Fully funds the Space Test Program (STP) ($26.5M)
• Fully funds Space Innovation, Integration and Rapid Technology Development ($44.7M)
• Fully funds Army Space Systems Integration ($26.2M)
• Fully funds Space Science and Technology Research and Development ($72.4M)
• Provides overall increase of +$110.0M in Space Technology Development and Prototyping, including a decrease of -$20.0M due to the execution of HBTSS and an increase of +$130.0M for the space-based target custody layer ($325.9M)
• Fully funds both Space Systems Prototype Transitions (SSPT) RDT&E program
• Fully funds Space Programs and Technology ($158.4M)
• Cuts -$20.0M from Advanced Aerospace Systems due to OpFires lack of transition pathway ($212.0M)
• Fully funds Low Earth Orbit (LEO) Satellite Capability ($22.7M)
• Adds +$236.0M for Tech Transitions Program ($455.3M), including:
  • +$6.0M for Small Satellite Acceleration
  • +$46.0M for Initial Polar MILSATCOM Capability

SPACE CONTROL (0.0%)

• Fully funds Space Control Technology ($35.6M)
• Fully funds Counterspace Systems ($54.7M)
• Fully funds AF TENCAP ($21.6M)
• Fully funds the National Space Defense Center ($2.7M)
• Fully funds Space Superiority Intelligence RDT&E ($16.8M)

ADVANCED BATTLE MANAGEMENT SYSTEM (ABMS) AND JOINT ALL-DOMAIN COMMAND & CONTROL (JADC2)

• Fully funds the Advanced Battle Management System (ABMS) program ($302.3M)
• Requires SECAF to develop an analysis of current and future combatant command targeting requirements and command control capabilities for ABMS, to be approved by the Joint Requirements Oversight Council (JROC)
• Directs SECAF to submit to Congress a list of programs, projects and activities that contributes to ABMS; the final Analysis of Alternatives for ABMS; and the requirements for the network data architecture required for MDC2
  • Fences 75% of FY21 AF O&M funds until the respective documentation is submitted to Congress and subsequently verified by the Vice Chairman of the Joint Chiefs
• Requires JROC to produce requirements for the JADC2 program by October 1, 2020
  • Requires the Chief of Staff of the Air Force to submit a certification to Congress that current JADC2 efforts will meet requirements set out by the JROC
  • Directs the Chief of each other military service to submit to Congress a certification that their multi-domain command and control efforts are compatible with JADC2
  • Directs SECDEF to incorporate the expected costs across the Department in future budget submissions
• Directs the Under Secretary of Defense for Acquisition & Sustainment (USD (A&S)) in coordination with the JADC2 cross functional team to prescribe regulations and issue guidance on modular open systems architecture requirements
  • Directs the USD(A&S) to establish and maintain a repository for interfaces, syntax and properties, documentation and communication implementations of prescribed requirements
  • Directs the Joint Staff Director of Command, Control,
Computers/Cyber and the DoD CIO, through the JADC2 Cross Functional Team, to conduct demonstrations and conduct assessments of technology developed under DARPA’s System of Systems Integration Technology and Experimentation program, and their applicability to JADC2

We will provide updates as the report language is made available. Please contact us with any questions.

Regards,

Velos