



NGAUS



LEGISLATIVE REPORT

Fiscal Year 2020 National Defense Authorization Act
(S. 1790, as amended)

As of December 20, 2019

OVERVIEW

On December 20, 2019, President Donald Trump signed into law S. 1790, the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2020.* The U.S. House of Representatives passed the legislation on December 11, while the U.S. Senate passed it on December 17.

The NDAA authorizes **\$706.5 billion** for DoD in FY20, which includes **\$635.0 billion** in base and discretionary funding, as well as **\$71.5 billion** in Overseas Contingency Operations (OCO) funding.

LEGISLATIVE CYCLE TIMELINE

Defense Authorizations

President's Budget Release	HASC NDAA	SASC NDAA	House-passed NDAA	Senate-passed NDAA	Conference Committee	Signed Into Law
✓	✓	✓	✓	✓	✓	✓
Current Point						

Defense Appropriations

President's Budget Release	HAC-D Approps.	SAC-D Approps.	House-passed Approps.	Senate-passed Approps.	Conference Committee	Signed Into Law
✓	✓	✓	✓			▲
Current Point						

BILL HIGHLIGHTS

All page references below are within the legislation text document unless otherwise noted.

Army National Guard

- Authorizes Army National Guard end strength at 336,000 soldiers (SEC. 411)
- **\$1.3 billion** for 73 UH-60 Black Hawk M model helicopters for the Army (SEC. 4101)
 - Consistent with FY20 DoD request, which included 64 Black Hawks for the Army National Guard
- **\$976.5 million** for Joint Light Tactical Vehicles (JLTVs) for the Army (SEC. 4101)
 - Consistent with FY20 DoD request, which included 512 JLTVs for the Army National Guard
- **\$169.2 million** for modernization of 25 UH-60 Black Hawk L and V model helicopters for the Army (SEC. 4101)
 - Funding tables include reference to “Increase fielding for ARNG units”
- **\$798.7 million** for modernization of 48 AH-64 Apache Block IIIA helicopters for the Army (SEC. 4101)

**Funding levels and policies cited in this document are authorizations. Policies cited here are final, but final FY20 funding levels will be determined by separate appropriations legislation.*

- **\$131.2 million** for 8 CH-47 helicopters for the Army (SEC. 4101)
 - Authorizes \$46.1 million, an additional \$28.0 million above the DoD request, for advanced procurement of CH-47F Block II helicopters for the Army
- **\$5.7 million** for the High Mobility Multi-purpose Wheeled Vehicle (HMMWV) Recapitalization Program for the Army (SEC. 4101)
- **\$365.8 million** for Army National Guard military construction (MILCON), includes authorization for 15 projects in 14 states (SEC. 4601)
- Additional **\$60.0 million** for Army National Guard MILCON for emergency requirements, includes authorization for projects in Louisiana and Nebraska (SEC. 4603)

Air National Guard

- Authorizes Air National Guard end strength at 107,700 airmen (SEC. 411)
- Authorizes indefinite access to the Defense Environmental Remediation Account (DERA) for the Chief of the National Guard Bureau to address PFOS/PFOA exposure and contamination at National Guard installations (SEC. 316)
 - Prohibits use of firefighting foam containing PFAS after October 1, 2024
- **\$186.0 million** for C-130H modernization (SEC. 4101), includes:
 - \$79.0 million for engine upgrades
 - \$55.0 million for propeller replacements
- **\$75.0 million** for 30 additional F-16 Viper radars for the Air Force (SEC. 4101)
- **\$5.5 billion** for 60 F-35A Lightning II aircraft for the Air Force (SEC. 4101)
- **\$985.5 million** for 8 F-15EX aircraft for the Air Force (SEC. 4101)
- **\$2.1 billion** for 12 KC-46A Pegasus aircraft for the Air Force (SEC. 4101)
- **\$876.0 million** for 12 Combat Rescue Helicopters for the Air Force (SEC. 4101)
 - Requires the Air Force to report on HH-60W Combat Rescue Helicopter fielding plan, including risks and benefits associated with fielding aircraft to the Active Component first and program acceleration options within the current contract (SEC. 150)
- Prohibits the Air Force from retiring or divesting RC-26B aircraft (SEC. 147)
- **\$221.4 million** for Air National Guard MILCON, includes authorization for projects in 7 states and Puerto Rico (SEC. 4601)

Joint-Personnel

- **3.1 percent** increase in basic military pay (SEC. 609)
- Authorizes early retirement credit for National Guard and Reserve servicemembers under 12304b orders (SEC. 604)
- Authorizes TRICARE Reserve Select for National Guard and Reserve servicemembers who serve as federal employees in their civilian capacity beginning in 2030 (SEC. 701)
- Authorizes paid parental leave for all federal civilian employees (SEC. 7602)
- Prevents the Secretary of Defense from imposing a limit on transferability of Post-9/11 GI Bill benefits based on maximum number of years of service (SEC. 578)
- Authorizes the Chief of the National Guard Bureau to conduct inspections of the National Guard with approval of the Secretary of the Army or Secretary of the Air Force (SEC. 517) and requires governors to consult with the Chief of the National Guard Bureau when appointing qualified officers to serve as U.S. Property and Fiscal Officer within their jurisdiction (SEC. 518)
 - SEC. 1037 of the FY20 U.S. Senate NDAA, relating to withdrawal of federal recognition of National Guard units and members, ***was not included*** in the final FY20 NDAA legislation
- **\$122.2 million** for the National Guard Counterdrug Program (SEC. 4501)
- **\$5.3 million** for National Guard Counterdrug schools (SEC. 4501)
- Additional **\$50.0 million** for the National Guard Youth ChalleNGe Program (SEC. 4301)
- Additional **\$30.0 million** for STARBASE (SEC. 4301)

To view the full text of the FY20 NDAA Conference Report (final legislation), please visit:
<https://rules.house.gov/sites/democrats.rules.house.gov/files/CRPT-116hrpt333.pdf>

To view the Joint Explanatory Statement authored by the FY20 NDAA Conference Committee, please visit:
<https://docs.house.gov/billsthisweek/20191209/116hrpt333-JointExplanatoryStatement.pdf>

FY20 NATIONAL GUARD ACCOUNTS OVERVIEW

Army National Guard*

Account	FY19 Levels	FY20 Request	FY20 HASC NDAA	FY20 House NDAA	FY20 HAC Mark	FY20 House Approps.	FY20 SASC NDAA	FY20 Senate NDAA	FY20 SAC Mark	FY20 Senate Approps.	Final NDAA Levels	Change From FY19	Final Levels
End Strength	343,500	336,000	336,000	336,000	336,000	336,000	336,000	336,000	336,000		336,000		
AGR	30,595	30,595	30,595	30,595			30,595	30,595			30,595		
Dual Status Techs.	22,294	22,294	22,294	22,294			22,294	22,294			22,294		
ADOS	17,000		17,000	17,000			17,000	17,000			17,000		
Summary Personnel	\$8,796,228	\$9,010,949			\$8,867,179	\$8,867,179			\$9,115,249				
Personnel Base	\$8,600,945	\$8,808,305			\$8,664,535	\$8,664,535			\$8,912,605				
Personnel OCO	\$195,283	\$202,644			\$202,644	\$202,644			\$202,644				
Summary O&M	\$7,229,560	\$7,712,694	\$7,557,294	\$7,557,294	\$7,531,827	\$7,533,827	\$7,716,894	\$7,716,894	\$7,672,194		\$7,608,933		
O&M Base	\$7,118,831	\$3,335,755	\$7,474,003	\$7,474,003	\$7,448,536	\$7,450,536	\$7,633,603	\$7,633,603	\$7,588,903		\$7,525,642		
O&M OCO	\$110,729	\$4,376,939	\$83,291	\$83,291	\$83,291	\$83,291	\$83,291	\$83,291	\$83,291		\$83,291		
MILCON	\$190,122	\$210,819	\$365,819	\$365,819	\$210,819	\$210,819	\$294,819	\$294,819			\$365,819		
NGREA	\$421,000				\$375,000	\$375,000			\$272,000				

Air National Guard*

Account	FY19 Levels	FY20 Request	FY20 HASC NDAA	FY20 House NDAA	FY20 HAC Mark	FY20 House Approps.	FY20 SASC NDAA	FY20 Senate NDAA	FY20 SAC Mark	FY20 Senate Approps.	Final NDAA Levels	Change from FY19	Final Levels
End Strength	107,100	107,700	107,700	107,700	107,700	107,700	107,700	107,700	107,700		107,700		
AGR	19,861	22,637	22,637	22,637			22,637	22,637			22,637		
Dual Status Techs.	15,861	13,569	13,573	13,573			13,569	13,569			13,569		
ADOS	16,000		16,000	16,000			16,000	16,000			16,000		
Summary Personnel	\$3,704,540	\$4,069,469			\$4,038,145	\$4,038,145			\$4,091,669				
Personnel Base	\$3,699,080	\$4,063,845			\$4,032,521	\$4,032,521			\$4,086,045				
Personnel OCO	\$5,460	\$5,624			\$5,624	\$5,624			\$5,624				
Summary O&M	\$6,436,567	\$6,904,138	\$6,773,571	\$6,773,571	\$6,769,498	\$6,769,498	\$6,904,138	\$6,904,138	\$6,909,701		\$6,834,138		
O&M Base	\$6,420,697	\$3,612,156	\$6,596,662	\$6,596,662	\$6,592,589	\$6,592,589	\$6,727,229	\$6,727,229	\$6,732,792		\$6,657,229		
O&M OCO	\$15,870	\$3,291,982	\$176,909	\$176,909	\$176,909	\$176,909	\$176,909	\$176,909	\$176,909		\$176,909		
MILCON	\$129,126	\$165,971	\$172,971	\$172,971	\$115,971	\$115,971	\$222,971	\$222,971			\$221,471		
NGREA	\$421,000				\$375,000	\$375,000			\$272,000				

*All Dollars in Thousands

Army National Guard*

Account	FY19 Levels		FY20 Request	FY20 HASC NDAA	FY20 House NDAA	FY20 HAC Mark	FY20 House Approps.	FY20 SASC NDAA	FY20 Senate NDAA	FY20 SAC Mark	FY20 Senate Approps.	Final NDAA Levels	Change from FY19	Final Levels
Total MILCON Funding	\$190,122		\$210,819	\$365,819	\$365,819	\$210,819	\$210,819	\$294,819	\$294,819			\$365,819		
MILCON By State	Location	Project	FY20 Request	FY20 HASC NDAA	FY20 House NDAA	FY20 HAC Mark	FY20 House Approps.	FY20 SASC NDAA	FY20 Senate NDAA	FY20 SAC Mark	FY20 Senate Approps.	Final NDAA Levels	Change from FY19	Final Levels
Alabama	Anniston	Army Depot		\$34,000	\$34,000			\$34,000	\$34,000			\$34,000		
	Foley	National Guard Readiness Center	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000			\$12,000		
California	Camp Roberts	Multi-Purpose Gun Range	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000			\$12,000		
Idaho	Orchard Training Area	Railroad Tracks	\$29,000	\$29,000	\$29,000	\$29,000	\$29,000	\$29,000	\$29,000			\$29,000		
Maryland	Havre De Grace	Combined Support Maintenance Shop	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000			\$12,000		
Massachusetts	Camp Edwards	Multi-Purpose Gun Range	\$9,700	\$9,700	\$9,700	\$9,700	\$9,700	\$9,700	\$9,700			\$9,700		
Minnesota	New Ulm	Vehicle Maintenance Shop	\$11,200	\$11,200	\$11,200	\$11,200	\$11,200	\$11,200	\$11,200			\$11,200		
Mississippi	Camp Shelby	Multi-Purpose Gun Range	\$8,100	\$8,100	\$8,100	\$8,100	\$8,100	\$8,100	\$8,100			\$8,100		
Missouri	Springfield	National Guard Readiness Center	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000			\$12,000		
Nebraska	Bellevue	National Guard Readiness Center	\$29,000	\$29,000	\$29,000	\$29,000	\$29,000	\$29,000	\$29,000			\$29,000		
New Hampshire	Concord	National Guard Readiness Center	\$5,950	\$5,950	\$5,950	\$5,950	\$5,950	\$5,950	\$5,950			\$5,950		
New York	Jamaica Armory	National Guard Readiness Center		\$91,000	\$91,000			\$20,000	\$20,000			\$91,000		
Pennsylvania	Moon Township	Combined Support Maintenance Shop	\$23,000	\$23,000	\$23,000	\$23,000	\$23,000	\$23,000	\$23,000			\$23,000		
Vermont	Jericho	Instruction Building		\$30,000	\$30,000			\$30,000	\$30,000			\$30,000		
Washington	Richland	National Guard Readiness Center	\$11,400	\$11,400	\$11,400	\$11,400	\$11,400	\$11,400	\$11,400			\$11,400		
Worldwide/Various		Minor Construction	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000			\$15,000		
		Planning & Design	\$20,469	\$20,469	\$20,469	\$20,469	\$20,469	\$20,469	\$20,469			\$20,469		

**All Dollars in Thousands*

Air National Guard*

Account	FY19 Levels		FY20 Request	FY20 HASC NDAA	FY20 House NDAA	FY20 HAC Mark	FY20 House Approps.	FY20 SASC NDAA	FY20 Senate NDAA	FY20 SAC Mark	FY20 Senate Approps.	Final NDAA Levels	Change From FY19	Final Levels
Total MILCON Funding	\$129,126		\$165,971	\$172,971	\$172,971	\$115,971	\$115,971	\$222,971	\$222,971			\$221,471		
MILCON By State	Location	Project	FY20 Request	FY20 HASC NDAA	FY20 House NDAA	FY20 HAC Mark	FY20 House Approps.	FY20 SASC NDAA	FY20 Senate NDAA	FY20 SAC Mark	FY20 Senate Approps.	Final NDAA Levels	Change from FY19	Final Levels
California	Moffett Air National Guard Base			\$57,000	\$57,000			\$57,000	\$57,000			\$57,000		
Georgia	Savannah/Hilton Head Int'l Airport	Air Dominance Hangar/Shops	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000			\$24,000		
Missouri	Rosecrans Memorial Airport	C-130 Flight Simulator Facility	\$9,500	\$9,500	\$9,500	\$9,500	\$9,500	\$9,500	\$9,500			\$9,500		
Puerto Rico	Luis Munoz IAP (Hurricane Maria)	Comms. Facility	\$12,500					\$12,500	\$12,500			\$12,500		
		Maintenance Hangar	\$37,500					\$37,500	\$37,500			\$36,000		
Wisconsin	Truax Field	F-35 Simulator Facility	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000	\$14,000			\$14,000		
		Flight Alert Shelters	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000			\$20,000		
Worldwide/Various	Minor Construction		\$31,471	\$31,471	\$31,471	\$31,471	\$31,471	\$31,471	\$31,471			\$31,471		
	Planning & Design		\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000			\$17,000		

Army National Guard*

Account	FY19 Levels		Final NDAA Levels	Change from FY19	Final Levels
MILCON for Emergency Requirements	N/A		\$60,000		
MILCON By State	Location	Project	Final NDAA Levels	Change from FY19	Final Levels
Louisiana	Pineville	National Guard Readiness Center	\$16,500		
Nebraska	Ashland	Training Site, Various Facilities	\$35,000		
		Flood Control Levee, Floodwall	\$8,500		

**All Dollars in Thousands*

LEGISLATIVE PROVISIONS

SEC. 141. Modification of Requirement to Preserve Certain C-5 Aircraft.

Section 141(d) of the National Defense Authorization Act for Fiscal Year 2013 (Public Law 112–239; 126 Stat. 1661) is amended:

- (1) in paragraph (1), by striking “until the date that is 30 days after the date on which the briefing under section 144(b) of the National Defense Authorization Act for Fiscal Year 2018 is provided to the congressional defense committees” and inserting “until the date that is 30 days after the date on which the final report and briefing required under section 1712(c)(2) of the National Defense Authorization Act for Fiscal Year 2020 have each been provided to the congressional defense committees;” and
- (2) in paragraph (2)(A), by striking “can be returned to service” and inserting “is inducted into or maintained in type 1000 recallable storage.”

SEC. 143. Requirement to Align Air Force Aviation Force Structure with National Defense Strategy.

Not later than March 1, 2020, the Secretary of the Air Force shall submit to the congressional defense committees an aviation force structure acquisition strategy that aligns with the stated capability and capacity requirements of the Department of the Air Force to meet the National Defense Strategy.

The Secretary of the Air Force may not deviate from the strategy submitted under subsection (a) until (1) the Secretary receives a waiver from the Secretary of Defense, in consultation with the Chairman of the Joint Chiefs of Staff; and (2) the Secretary of Defense provides the congressional defense committees with the waiver approval documentation.

SEC. 145. Limitation on Availability of Funds for F-15EX Program.

Except as provided in subsection (b), none of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2020 for the Air Force may be obligated or expended to procure any F–15EX aircraft, other than the first two prototypes of such aircraft, until a period of 15 days has elapsed following the date on which the Secretary of the Air Force submits to the congressional defense committees a report on the following topics relating to the F–15EX program:

- (1) Acquisition strategy.
- (2) Cost and schedule estimates.
- (3) Test and evaluation strategy.
- (4) Logistics strategy.
- (5) Post-production fielding strategy.

Notwithstanding subsection (a), the Secretary of the Air Force may use the funds described in paragraph (2) to procure long-lead items for up to six additional F–15EX aircraft beyond the first two prototypes of such aircraft.

The funds described in this paragraph are funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2020 for the Air Force for any of the following:

- (A) Research and development, nonrecurring engineering.
- (B) Aircraft procurement.

In this section, the term “F–15EX program” means the F–15EX aircraft program of the Air Force as described in the materials submitted to Congress by the Secretary of Defense in support of the budget of the President for fiscal year 2020 (as submitted to Congress under section 1105(a) of title 21, United States Code).

SEC. 147. Limitation on Availability of Funds for RC-26B aircraft.

Except as provided in subsection (b), none of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2020 for the Air Force may be obligated or expended to retire, divest, realign, or place in storage or on backup aircraft inventory status, or prepare to retire, divest, realign, or place in storage or backup inventory status, any RC–26B aircraft until the date on which the Secretary of the Air Force submits to the congressional defense committees:

- (1) the report required under subsection (c); and
- (2) the certification required under subsection (d).

The limitation in subsection (a) shall not apply to individual RC–26B aircraft that the Secretary of the Air Force determines, on a case-by-case basis, to be no longer mission capable because of mishaps or other damage.

Not later than 90 days after the date of the enactment of this Act, the Secretary of the Air Force shall submit to the congressional defense committees a report that includes the following:

- (1) A survey of any requirements for the Air Force to provide intelligence, surveillance, and reconnaissance support to other military forces and civil authorities that the Air Force and the Air National Guard meet using the RC–26B aircraft.
- (2) An assessment of the extent to which such requirements are appropriate for the Air Force to fulfill.
- (3) The manner in which the Secretary would meet such requirements if the RC–26B aircraft were to be retired.
- (4) A comparison of costs and effectiveness of alternative means of providing intelligence, surveillance, and reconnaissance support to other military forces and civil authorities.
- (5) An assessment of the utility of entering into one or more memoranda of agreement with other military forces and civil authorities to govern the process for providing intelligence, surveillance, and reconnaissance support to those forces and authorities.

Not later than 60 days after the date on which the Secretary of the Air Force submits the report required under subsection (c), the Secretary shall certify to the congressional defense committees (1) whether there are requirements for the Air Force to provide intelligence, surveillance, and reconnaissance support to other military forces and civil authorities that the Air Force meets using the RC–26B aircraft;

and (2) whether the Secretary has identified methods of meeting such requirements that are more effective and more efficient than meeting such requirements through the use of the RC-26B aircraft.

SEC. 150. Air Force Plan for Combat Rescue Helicopter Fielding.

It is the sense of Congress that, given delays to Operational Loss Replacement (OLR) program fielding and the on-time fielding of Combat Rescue Helicopter (CRH), the Air National Guard should retain additional HH-60G helicopters at Air National Guard locations to meet their recommended primary aircraft authorized (PAA) per the Air Force's June 2018 report on Air National Guard HH-60 requirements.

Not later than 45 days after the date of the enactment of this Act, the Secretary of the Air Force shall submit to the congressional defense committees a report on its fielding plan for the CRH program. The report required shall include the following elements:

- (A) A description of the differences in capabilities between the HH-60G, OLR, and CRH helicopters.
- (B) A description of the costs and risks associated with changing the CRH fielding plan to reduce or eliminate inventory shortfalls.
- (C) A description of the measures for accelerating the program available within the current contract.
- (D) A description of the operational risks and benefits associated with fielding the CRH to the active component first, including:
 - (i) how the differing fielding plan may affect deployment schedules;
 - (ii) what capabilities active-component units deploying with the CRH will have that reserve component units deploying with OLR will not; and
 - (iii) an analysis of the potential costs and benefits that could result from accelerating CRH fielding to all units through additional funding in the future years defense program.

Not later than 45 days after the date of the enactment of this Act, the Secretary of the Air Force shall submit to the congressional defense committees a report on the plan to sustain training for initial-entry reserve component HH-60G pilots once the active component of the Air Force has received all of its CRH helicopters. The report required shall include the following elements:

- (A) Projected reserve component aircrew initial HH-60G/OLR qualification training requirements, by year.
- (B) The number of legacy HH-60G/OLR helicopters required to continue providing initial HH-60G qualification training through the 150th Special Operations Wing at Kirtland Air Force Base.
- (C) The number of personnel required to continue providing initial HH-60G/OLR qualification training through the 150th Special Operations Wing at Kirtland Air Force Base.
- (D) The number of flying hours required per pilot to perform "differences training" at home station for initial entry HH-60 pilots receiving CRH training at Kirtland Air Force Base to become qualified in the HH-60G/OLR at their home station.
- (E) The projected effect of using local flying training hours at reserve component units on overall unit training readiness and ability to meet Ready Aircrew Program requirements.

SEC. 153. Sense of Congress on the Light Attack Initiative of the Air Force.

It is the sense of Congress that:

- (1) The United States Special Operations Command has a mission requirement to support foreign internal defense training and a light attack aircraft platform could potentially facilitate meeting that requirement.
- (2) The Secretary of the Air Force should coordinate with the Commander of the United States Special Operations Command to assess how general purpose forces and special operations forces can leverage the light attack aircraft phase three experimentation activities of the Air Force.
- (3) The Secretary of the Air Force, in coordination with the Commander of the United States Special Operations Command, should explore options for coordinating light attack aircraft experiment activities between general purpose forces and special operations forces to maximize efficiency and effectiveness and to further the mission requirements of both forces, including options to transfer a portion of funds authorized for Air Force light attack aircraft experiments to procure aircraft for supporting the combat air advisor mission of the Special Operations Command.

SEC. 165. F-35 Sustainment Cost.

The Under Secretary of Defense for Acquisition and Sustainment shall include in the quarterly report required under section 155 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) the following:

- (1) sustainment cost data related to the F–35 program, including a comparison in itemized format of the cost of legacy aircraft and the cost of the F–35 program, based on a standardized set of criteria; and
- (2) an evaluation and metrics on the extent to which the goals developed pursuant to subsection (b) are being achieved.

The Under Secretary of Defense for Acquisition and Sustainment shall develop and implement a plan for achieving significant reductions in the costs to operate, maintain, and sustain the F–35 system. The plan required shall include the following elements:

- (A) Specific changes in the management and execution of operation and support (O&S) cost elements to engender continuous and measurable process improvements.
- (B) Specific actions the Department will implement in the near, mid, and long terms to reduce O&S costs.
- (C) Firm and achievable timelines for implementing the specific actions and process changes.

Not later than 180 days after the date of the enactment of this Act, the Under Secretary shall submit to the congressional defense committees a report on the baseline plan developed.

SEC. 237. Sensor Data Integration for Fifth Generation Aircraft.

The Secretary of Defense shall ensure that (1) information collected by the passive and active on-board sensors of the F–35 Joint Strike Fighter aircraft is capable of being shared, in real time, with joint service users in cases in which the Joint Force Commander determines that sharing such information would be operationally advantageous; and (2) the Secretary has developed achievable, effective, and

suitable concepts and supporting technical architectures to collect, store, manage, and disseminate information collected by such sensors.

The Comptroller General of the United States shall conduct a study of the sensor data collection and dissemination capability of fifth generation aircraft of the Department of Defense. The study required shall include an assessment of the following:

- (A) the extent to which the Department has established doctrinal, organizational, or technological methods of managing the large amount of sensor data that is currently collected and which may be collected by existing and planned advanced fifth generation aircraft;
- (B) the status of the existing sensor data collection, storage, dissemination, and management capability and capacity of fifth generation aircraft, including the F-35, the F-22, and the B-21; and
- (C) the ability of the F-35 aircraft and other fifth generation aircraft to share information collected by the aircraft in real-time with other joint service users.

Not later than 180 days after the date of the enactment of this Act, the Comptroller General shall provide to the congressional defense committees a briefing on the preliminary findings of the study conducted under this subsection.

The Comptroller General shall provide the final results of the study conducted under this subsection to the congressional defense committees at such time and in such format as is mutually agreed upon by the committees and the Comptroller General at the time of the briefing.

SEC. 238. Sense of Congress on Future Vertical Lift Technologies.

It is the sense of Congress that the Army should continue to invest in research, development, test, and evaluation programs to mature future vertical lift technologies, including programs to improve pilot situational awareness, increase flight operations safety, and reduce operation and maintenance costs.

SEC. 316. Modification of Department of Defense Environmental Restoration Authorities to include Federal Government Facilities used by National Guard.

Section 2707 of title 10, United States Code, is amended by adding at the end the following new subsection:

“(e) **AUTHORITY FOR NATIONAL GUARD PROJECTS.** Notwithstanding subsection (a) of this section and section 2701(c)(1) of this title, the Secretary concerned may use funds described in subsection (c) to carry out an environmental restoration project at a facility in response to perfluorooctanoic acid or perfluorooctane sulfonate contamination under this chapter or CERCLA.”

Section 2700(2) of title 10 is amended (1) by striking “The terms” and inserting “(A) The terms;” and (2) by adding at the end the following new subparagraph, “(B) The term ‘facility’ includes real property that is owned by, leased to, or otherwise possessed by the United States at locations at which military activities are conducted under this title or title 32 (including real property owned or leased by the Federal Government that is licensed to and operated by a State for training for the National Guard).”

Section 2701(c) of title 10 is amended by inserting “or pollutants or contaminants” after “hazardous substances” each place it appears.

Nothing in this section, or the amendments made by this section, shall affect any requirement or authority under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.).

SEC. 322. Replacement of Fluorinated Aqueous Film-Forming Foam with Fluorine-Free Fire-Fighting Agent.

Not later than January 31, 2023, the Secretary of the Navy shall publish a military specification for a fluorine-free fire-fighting agent for use at all military installations and ensure that such agent is available for use by not later than October 1, 2023.

Concurrent with publication of the military specification under paragraph (1), the Secretary of Defense shall submit to the congressional defense committees a report containing a detailed plan for implementing the transition to a fluorine-free fire-fighting agent by not later than October 1, 2023. The report shall include:

- (A) a detailed description of the progress of the Department of Defense to identify a fluorine-free fire-fighting agent for use as a replacement fire-fighting agent at military installations;
- (B) a description of any technology and equipment required to implement the replacement fire-fighting agent;
- (C) funding requirements, by fiscal year, to implement the replacement fire-fighting agent, including funding for the procurement of a replacement fire-fighting agent, required equipment, and infrastructure improvements;
- (D) a detailed timeline of remaining required actions to implement such replacement.

No amount authorized to be appropriated or otherwise made available for the Department of Defense may be obligated or expended after October 1, 2023, to procure fire-fighting foam that contains in excess of one part per billion of perfluoroalkyl substances and polyfluoroalkyl substances.

Fluorinated aqueous film-forming foam may not be used at any military installation on or after the earlier of October 1, 2024 or the date on which the Secretary determines that compliance with the prohibition under this subsection is possible.

Subsections (b) and (c) shall not apply to firefighting foam for use solely onboard ocean-going vessels.

Subject to the limitations under paragraph (2), the Secretary of Defense may waive the prohibition under subsection (c) with respect to the use of fluorinated aqueous film-forming foam, if, by not later than 60 days prior to issuing the waiver, the Secretary:

- (A) provides to the congressional defense committees a briefing on the basis for the waiver and the progress to develop and field a fluorine-free fire-fighting agent that meets the military specifications issued pursuant to subsection (a), which includes:
 - (i) detailed data on the progress made to identify a replacement fluorine-free firefighting agent;
 - (ii) a description of the range of technology and equipment-based solutions analyzed to implement replacement;

- (iii) a description of the funding, by fiscal year, applied towards research, development, test, and evaluation of replacement firefighting agents and equipment based solutions;
- (iv) a description of any completed and projected infrastructure changes;
- (v) a description of acquisition actions made in support of developing and fielding the fluorine-free fire-fighting agent;
- (vi) an updated timeline for the completion of the transition to use of the fluorine-free fire-fighting agent;
- (vii) a list of the categories of installation infrastructure or specific mobile firefighting equipment sets that require the waiver along with the justification;
- (B) submits to the congressional defense committees certification in writing, that:
 - (i) the waiver is necessary for either installation infrastructure, mobile firefighting equipment, or both;
 - (ii) the waiver is necessary for the protection of life and safety;
 - (iii) no agent or equipment solutions are available that meet the military specific issued pursuant to subsection (a);
 - (iv) the military specification issued pursuant to subsection (a) is still valid and does not require revision; and
 - (v) includes details of the measures in place to minimize the release of and exposure to fluorinated compounds in fluorinated aqueous film-forming foam; and
- (C) provides for public notice of the waiver.

The following limitations apply to a waiver issued under this subsection:

- (A) Such a waiver shall apply for a period that does not exceed one year.
- (B) The Secretary may extend such a waiver once for an additional period that does not exceed one year, if the requirements under paragraph (1) are met as of the date of the extension of the waiver.
- (C) The authority to grant a waiver under this subsection may not be delegated below the level of the Secretary of Defense.

SEC. 323. Prohibition of Uncontrolled Release Of Fluorinated Aqueous Film-Forming Foam at Military Installations.

Except as provided by subsection (b), the Secretary of Defense shall prohibit the uncontrolled release of fluorinated aqueous film-forming foam (hereinafter in this section referred to as “AFFF”) at military installations.

Notwithstanding subsection (a), fluorinated AFFF may be released at military installations as follows:

- (1) AFFF may be released for purposes of an emergency response.
- (2) A non-emergency release of AFFF may be made for the purposes of testing of equipment or training of personnel, if complete containment, capture, and proper disposal mechanisms are in place to ensure no AFFF is released into the environment.

SEC. 324. Prohibition on Use of Fluorinated Aqueous Film Forming Foam for Training Exercises.

The Secretary of Defense shall prohibit the use of fluorinated aqueous film forming foam for training exercises at military installations.

SEC. 327. Removal of Barriers that Discourage Investments to Increase Military Installation Resilience.

The Secretary of Defense shall (1) identify and seek to remove barriers that discourage investments to increase military installation resilience; (2) reform policies and programs that unintentionally increased the vulnerability of systems to related extreme weather events; and (3) develop, and update at least once every four years, an adaptation plan to assess how climate impacts affected the ability of the Department of Defense to accomplish its mission, and the short-and long- term actions the Department can take to ensure military installation resilience.

In this section, the term “military installation resilience” has the meaning given such term in section 101(e)(8) of title 10, United States Code.

SEC. 330. SEC. 330. Disposal of Materials Containing Per- And Polyfluoroalkyl Substances or Aqueous Film-Forming Foam.

The Secretary of Defense shall ensure that when materials containing per- and polyfluoroalkyl substances (referred to in this section as “PFAS”) or aqueous film forming foam (referred to in this section as “AFFF”) are disposed, that:

- (1) all incineration is conducted at a temperature range adequate to break down PFAS chemicals while also ensuring the maximum degree of reduction in emission of PFAS, including elimination of such emissions where achievable;
- (2) all incineration is conducted in accordance with the requirements of the Clean Air Act (42 USC 7401 et seq.), including controlling hydrogen fluoride;
- (3) any materials containing PFAS that are designated for disposal are stored in accordance with the requirement under part 264 of title 40, Code of Federal Regulations; and
- (4) all incineration is conducted at a facility that has been permitted to receive waste regulated under subtitle C of the Solid Waste Disposal Act (42 USC 6921 et seq.).

The requirements in subsection (a) only apply to all legacy AFFF formulations containing PFAS, materials contaminated by AFFF release, and spent filters or other PFAS contaminated materials resulting from site remediation or water filtration that (1) have been used by the Department of Defense or a military department; or (2) are being discarded for disposal by means of incineration by the Department of Defense or a military department; or (3) are being removed from sites or facilities owned or operated by the Department of Defense.

SEC. 331. Agreements to Share Monitoring Data Relating to Perfluoroalkyl and Polyfluoroalkyl Substances and Other Contaminants of Concern.

The Secretary of Defense shall seek to enter into agreements with municipalities or municipal drinking water utilities located adjacent to military installations under which both the Secretary and the municipalities and utilities would share monitoring data relating to perfluoroalkyl substances, polyfluoroalkyl substances, and other emerging contaminants of concern collected at the military installation.

The Secretary of Defense shall maintain a publicly available website that provides a clearinghouse for information about the exposure of members of the Armed Forces, their families, and their communities to per- and polyfluoroalkyl substances.

The information provided on the website shall include information on testing, clean-up, and recommended available treatment methodologies.

An agreement under subsection (a) does not negate the responsibility of the Secretary to communicate with the public about drinking water contamination from perfluoroalkyl substances, polyfluoroalkyl substances, and other contaminants.

In this section, the term “military installation” has the meaning given that term in section 2801(c) of title 10, United States Code.

SEC. 332. Cooperative Agreements with States to Address Contamination by Perfluoroalkyl and Polyfluoroalkyl Substances.

Upon request from the Governor or chief executive of a State, the Secretary of Defense shall work expeditiously, pursuant to section 2701(d) of title 10, United States Code, to finalize a cooperative agreement, or amend an existing cooperative agreement to address testing, monitoring, removal, and remedial actions relating to the contamination or suspected contamination of drinking, surface, or ground water from PFAS originating from activities of the Department of Defense by providing the mechanism and funding for the expedited review and approval of documents of the Department related to PFAS investigations and remedial actions from an active or decommissioned military installation, including a facility of the National Guard.

A cooperative agreement finalized or amended under paragraph (1) shall meet or exceed the most stringent of the following standards for PFAS in any environmental media:

- (A) An enforceable State standard, in effect in that State, for drinking, surface, or ground water, as described in section 121(d)(2)(A)(ii) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9621(d)(2)(A)(ii)).
- (B) An enforceable Federal standard for drinking, surface, or ground water, as described in section 121(d)(2)(A)(i) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9621(d)(2)(A)(i)).
- (C) A health advisory under section 1412(b)(1)(F) of the Safe Drinking Water Act (42 U.S.C. 300g–1(b)(1)(F)).

In addition to the requirements for a cooperative agreement under paragraph (1), when otherwise authorized to expend funds for the purpose of addressing ground or surface water contaminated by a perfluorinated compound, the Secretary of Defense may, to expend those funds, enter into a grant agreement, cooperative agreement, or contract with:

- (A) the local water authority with jurisdiction over the contamination site, including:
 - (i) a public water system (as defined in section 1401 of the Safe Drinking Water Act (42 U.S.C. 300f)); and
 - (ii) a publicly owned treatment works (as defined in section 212 of the Federal Water Pollution Control Act (33 U.S.C. 1292)); or
- (B) a State, local, or Tribal government.

Beginning on February 1, 2020, if a cooperative agreement is not finalized or amended under subsection (a) within one year after the request from the Governor or chief executive under that subsection, and annually thereafter, the Secretary of Defense shall submit to the appropriate committees and Members of Congress a report (1) explaining why the agreement has not been finalized or amended, as the case may be; and (2) setting forth a projected timeline for finalizing or amending the agreement.

SEC. 351. Materiel Readiness Metrics and Objectives.

Chapter 2 of title 10, United States Code, is amended by inserting after section 117 the following new section:

“Section 118. Annual report on major weapons systems sustainment

Not later than five days after the date on which the Secretary of Defense submits to Congress the materials in support of the budget of the President for a fiscal year, the Secretary of Defense shall submit to the congressional defense committees an annual report on major weapons systems sustainment for the period covered by the future years defense program specified by section 221 of this title. Such report shall include:

- (1) an assessment of the materiel availability, materiel reliability, and mean down time metrics for each major weapons system;
- (2) a detailed explanation of any factors that could preclude the Department of Defense or any of the military departments from meeting applicable readiness goals or objectives; and
- (3) an assessment of the validity and effectiveness of the definitions used to determine defense readiness, including the terms ‘major weapons system,’ ‘covered asset,’ ‘total and required inventory,’ ‘materiel and operational availability,’ ‘materiel and operational capability,’ and ‘materiel and operational reliability.’”

Not later than March 1, 2020, the Secretary of Defense shall complete a comprehensive assessment of the materiel readiness and weapons systems sustainment of the Department of Defense across the Department organic industrial base and industry partners. The assessment shall include:

- (A) an assessment of the overall readiness strategy of the Department of Defense and the capability of such strategy to measure, track, and assess the readiness of major weapons systems;
- (B) an assessment of the use of objectives and metrics;
- (C) a description of applicable reporting requirements; and
- (D) applicable definitions and common usage of relevant terms, including the terms “major weapons system,” “covered asset,” “total and required inventory,” “materiel and operational availability,” “materiel and operational capability,” “materiel and operational reliability,” and “maintenance costs.”

The Secretary shall provide to the congressional defense committees a briefing on the assessment required by not later than March 1, 2020; and a final report on such assessment by not later than April 1, 2020.

SEC. 358. Requirement for Military Department Inter-Service Depot Maintenance.

If the Secretary of a military department transfers any maintenance action on a platform to a depot under the jurisdiction of the Secretary of another military department, the two Secretaries shall develop and implement a process to ensure the technical compliance and quality control for the work performed.

A process developed under subsection (a) shall include the following requirements:

- (1) The Secretary of the military department with jurisdiction over the depot to which the maintenance action is transferred shall:
 - (A) ensure that the technical specifications, requirements, and standards for work to be performed are provided to such action or depot; and
 - (B) implement procedures to ensure that completed work complies with such specifications, requirements and standards.
- (2) The Secretary who transfers the maintenance activity or depot shall ensure that:
 - (A) the technical specifications and requirements are clearly understood; and
 - (B) the work performed is completed to the technical specifications, requirements, and standards prescribed under paragraph (1), and that the Secretary of the military department with jurisdiction over the depot is informed of any shortcoming or discrepancy.

Not later than 180 days after the date of the enactment of this Act, the Under Secretary of Defense for Acquisition and Sustainment shall submit to the congressional defense committees a report containing a certification that sufficient policy and procedures are in place to ensure quality control when the depot or maintenance activities of one military department support another. The report shall include a description of known shortfalls in existing policies and procedures and actions the Department of Defense is taking to address such shortfalls.

SEC. 411. End Strengths for Selected Reserve.

The Armed Forces are authorized strengths for Selected Reserve personnel of the reserve components as of September 30, 2020, as follows:

- (1) The Army National Guard of the United States, 336,000.
- (2) The Army Reserve, 189,500.
- (3) The Navy Reserve, 59,000.
- (4) The Marine Corps Reserve, 38,500.
- (5) The Air National Guard of the United States, 107,700.
- (6) The Air Force Reserve, 70,100.
- (7) The Coast Guard Reserve, 7,000.

The end strengths prescribed by subsection (a) for the Selected Reserve of any reserve component shall be proportionately reduced by (1) the total authorized strength of units organized to serve as units of the Selected Reserve of such component which are on active duty (other than for training) at the end of the fiscal year; and (2) the total number of individual members not in units organized to serve as units of the Selected Reserve of such component who are on active duty (other than for training or for unsatisfactory participation in training) without their consent at the end of the fiscal year.

Whenever units or individual members of the Selected Reserve of any reserve component are released from active duty during any fiscal year, the end strength prescribed for such fiscal year for the Selected Reserve of such reserve component shall be increased proportionately by the total authorized strengths of such units and by the total number of such individual members.

SEC. 412. End Strengths for Reserves on Active Duty in Support of the Reserves.

Within the end strengths prescribed in section 411(a), the reserve components of the Armed Forces are authorized, as of September 30, 2020, the following number of Reserves to be serving on full-time active duty or full-time duty, in the case of members of the National Guard, for the purpose of organizing, administering, recruiting, instructing, or training the reserve components:

- (1) The Army National Guard of the United States, 30,595.
- (2) The Army Reserve, 16,511.
- (3) The Navy Reserve, 10,155.
- (4) The Marine Corps Reserve, 2,386.
- (5) The Air National Guard of the United States, 22,637.
- (6) The Air Force Reserve, 4,431.

SEC. 413. End Strengths for Military Technicians.

The minimum number of military technicians (dual status) as of the last day of fiscal year 2020 for the reserve components of the Army and the Air Force (notwithstanding section 129 of title 10, United States Code) shall be the following:

- (1) For the Army National Guard of the United States, 22,294.
- (2) For the Army Reserve, 6,492.
- (3) For the Air National Guard of the United States, 13,569.
- (4) For the Air Force Reserve, 8,938.

Under no circumstances may a military technician (dual status) employed under the authority of this section be coerced by a State into accepting an offer of realignment or conversion to any other military status, including as a member of the Active, Guard, and Reserve program of a reserve component. If a military technician (dual status) declines to participate in such realignment or conversion, no further action will be taken against the individual or the individual's position.

If, at the end of fiscal year 2019, the Air National Guard of the United States does not meet its full-time support realignment goals for such fiscal year (as presented in the justification materials of the Department of Defense in support of the budget of the President for such fiscal year under section 1105 of title 31, United States Code), the authorized number of military technicians (dual status) of the Air National Guard of the United States under subsection (a)(3) shall be increased by the number equal to the difference between:

- (A) 3,190, which is the number of military technicians (dual status) positions in the Air National Guard of the United States sought to be converted to the Active, Guard, and Reserve program of the Air National Guard during fiscal year 2019; and
- (B) the number of realigned positions achieved in the Air National Guard by the end of fiscal year 2019.

The increase under paragraph (1) in the authorized number of military technician (dual status) positions described in that paragraph may not exceed 2,292.

In the event of an adjustment to the authorized number military technicians (dual status) of the Air National Guard of the United States under this subsection, the number of members of the Air National Guard of the United States authorized by section 412(5) to be on active duty as of September 30, 2020, shall be decreased by the number equal to the number of such adjustment.

Not later than January 1, 2020, the Chief of the National Guard Bureau shall certify to the Committees on Armed Services of the Senate and House of Representatives the number of positions realigned from a military technician (dual status) position to a position in the Active, Guard, and Reserve program of a reserve component in fiscal year 2019.

In subsections (b), (c), and (d):

- (1) The term “realigned position” means any military technician (dual status) position which has been converted or realigned to a position in an Active, Guard, and Reserve program of a reserve component under the full time support rebalancing plan of the Armed Force concerned, regardless of whether such position is encumbered.
- (2) The term “Active, Guard, and Reserve program,” in the case of a reserve component, means the program of the reserve component under which Reserves serve on full-time active duty or full-time duty, in the case of members of the National Guard, for the purpose of organizing, administering, recruiting, instructing, or training such reserve component.

SEC. 414. Maximum Number of Reserve Personnel Authorized to be on Active Duty for Operational Support.

During fiscal year 2020, the maximum number of members of the reserve components of the Armed Forces who may be serving at any time on full-time operational support duty under section 115(b) of title 10, United States Code, is the following:

- (1) The Army National Guard of the United States, 17,000.
- (2) The Army Reserve, 13,000.
- (3) The Navy Reserve, 6,200.
- (4) The Marine Corps Reserve, 3,000.
- (5) The Air National Guard of the United States, 16,000.
- (6) The Air Force Reserve, 14,000.

SEC. 501. Maker of Original Appointments in a Regular or Reserve Component of Commissioned Officers Previously Subject to Original Appointment in Other Type of Component.

MAKER OF REGULAR APPOINTMENTS IN TRANSFER FROM RESERVE ACTIVE-STATUS LIST TO ACTIVE DUTY LIST. Section 531(c) of title 10, United States Code, is amended by striking “the Secretary concerned” and inserting “the Secretary of Defense.”

MAKER OF RESERVE APPOINTMENTS IN TRANSFER FROM ACTIVE-DUTY LIST TO RESERVE ACTIVE-STATUS LIST. Section 12203(b) of such title is amended by striking “the Secretary concerned” and inserting “the Secretary of Defense.”

Not later than April 1, 2020, the Secretary of Defense shall submit to the Committees on Armed Services of the Senate and the House of Representatives a report setting forth the following:

- (1) The average number per fiscal year, during fiscal years 2010 through 2019, of transfers of appointment from regular officer to reserve officer in the Armed Forces, set forth by each of transfers requiring and transfers not requiring appointment by and with the advice and consent of the Senate.
- (2) The average amount of time required per fiscal year, during such fiscal years, for completion of a transfer of appointment from regular officer to reserve officer in situations not requiring appointment by and with the advice and consent of the Senate.
- (3) An assessment of the number of officers who experience a break-in-service due to delays in transfer of appointment from regular officer to reserve officer as a result of the requirement for appointment by and with the advice and consent of the Senate.
- (4) An assessment of the feasibility and advisability of each of the following:
 - (A) Appointment of regular officers as both a regular officer and a reserve officer immediately upon commissioning.
 - (B) Consolidation of the provisions of title 10, United States Code, relating to appointment as a regular or reserve officer in a manner designed to facilitate and improve officer retention.
- (5) Such other recommendations for legislative or administrative action as the Secretary considers appropriate to improve the rapid transfer of appointment of an officer from regular status to reserve status.

SEC. 516. Authority to Defer Mandatory Separation at Age 68 of Officers in Medical Specialties in the Reserve Components.

Section 14703(b) of title 10, United States Code, is amended by:

- (1) striking “An” and inserting “(1) Subject to paragraph (2), an;” and
- (2) adding at the end the following new paragraph (2):

“(2) The Secretary concerned may, with the consent of the officer, retain in an active status an officer in a medical specialty described in subsection (a) beyond the date described in paragraph (1) of this subsection if the Secretary concerned determines that such retention is necessary to the military department concerned. Each such retention shall be made on a case-by-case basis and for such period as the Secretary concerned determines appropriate.”

SEC. 517. Modernization of Inspection Authorities Applicable to the National Guard.

Subsection (a) of section 105 of title 32, United States Code, is amended:

- (1) in the matter preceding paragraph (1):
 - (A) by striking “by him, the Secretary of the Army shall have” and inserting “by such Secretary, the Secretary of the Army and the Secretary of the Air Force shall each have;”
 - (B) by striking “, if necessary;” and
 - (C) by striking “the Regular Army” and inserting “the Regular Army or the Regular Air Force;”
- (2) by striking “Army National Guard” each place it appears and inserting “Army National Guard or Air National Guard;” and
- (3) by striking the flush matter following paragraph (7).

Such section is further amended by adding, “(c) The Chief of the National Guard Bureau may have an inspection described in subsection (a) made by inspectors general, or by commissioned officers of the Army National Guard of the United States or the Air National Guard of the United States detailed for that purpose, on behalf of the Secretary of the Army or the Secretary of the Air Force. Any such inspection may be made only with the approval of the Secretary of the Army or the Secretary of the Air Force, as applicable.”

SEC. 518. Consultation with the Chief of the National Guard Bureau in the Appointment or Designation of National Guard Property and Fiscal Officers.

This section would amend section 708 of title 32, United States Code, to require the Governor of each State, the Commonwealth of Puerto Rico, Guam, and the Virgin Islands, and the commanding general of the National Guard of the District of Columbia to consult the Chief of the National Guard Bureau in appointing a qualified commissioned officer to be the property and fiscal officer of that jurisdiction.

SEC. 550F. GAO Review of USERRA and SCRA.

Not later than January 31, 2021, the Comptroller General of the United States shall conduct a review and submit a report to the Committees on Armed Services of the Senate and House of Representatives regarding what the Comptroller General determines are the effects of the common commercial and governmental practices of including a mandatory arbitration clause in employment and consumer agreements, on the ability of servicemembers to assert claims under and secure redress for violations of chapter 43 of title 38, United States Code (commonly referred to as the “Uniformed Services Employment and Reemployments Rights Act of 1994” and referred to in this section as “USERRA”); and the Servicemembers Civil Relief Act (50 U.S.C. 3901 et seq. (referred to in this section as “SCRA”)).

The report under this section shall include the following:

- (1) Each process by which a servicemember may assert a claim under USERRA or SCRA, including:
 - (A) administrative assistance;
 - (B) support, and dispute resolution processes provided by Federal and State agencies;
 - (C) arbitration; and
 - (D) litigation.
- (2) With regards to each process identified under paragraph (1), an evaluation of:
 - (A) the flexibility the process affords to the servicemember and other parties to the process;
 - (B) the burden on the servicemember and other parties to the process;
 - (C) the financial cost of the process to the servicemember and the other parties;
 - (D) the speed of each process, including the rate at which each claim pursued under such process is resolved;
 - (E) the confidentiality of each process; and
 - (F) the effects of the process.
- (3) Based on data regarding the results of past actions to enforce servicemember rights and benefits under USERRA and SCRA, including data of the Departments of Defense and Labor regarding dispute resolution under USERRA and data of the Department of Justice regarding litigation under SCRA:

- (A) an analysis of the extent to which each of the processes identified in paragraph (1) has been employed to address claims under USERRA or SCRA; and
- (B) the extent to which each such process achieved a final disposition favorable to the servicemember.
- (4) An assessment of general societal trends in the use of mandatory arbitration clauses in employment and consumer agreements, including any trend in a specific industry or employment sector that relies on mandatory arbitration in such contracts and agreements.
- (5) An assessment and explanation of any effect:
 - (A) of the use of mandatory arbitration clauses in employment or consumer agreements on military readiness and deployability; and
 - (B) of USERRA or SCRA on the willingness of employers to employ, and consumer service businesses to provide services to servicemembers and their families.

SEC. 552. Inclusion of Coast Guard in Department of Defense STARBASE Program.

This section would amend section 2193b of title 10, United States Code, to include the Coast Guard in the Department of Defense's STARBASE program.

SEC. 569. Machine Readability and Electronic Transferability of Certificate of Release or Discharge from Active Duty (DD Form 214).

The Secretary of Defense shall modify the Certificate of Release or Discharge from Active Duty (DD Form 214) to (1) be machine readable and electronically transferable; and (2) include a specific block explicitly identified as the location in which a member of the Armed Forces may provide one or more email addresses by which the member may be contacted after discharge or release from active duty.

The Secretary of Defense shall release a revised Certificate of Release or Discharge from Active Duty (DD Form 214), modified pursuant to subsection (a), not later than four years after the date of the enactment of this Act.

Not later than 180 days after the date of the enactment of this Act, the Secretary of Defense shall submit a report to Congress regarding the following:

- (1) What systems of the Department of Defense require an individual to manually enter information from DD Form 214.
- (2) What activities of the Department of Defense require a veteran or former member of the Armed Forces to provide a physical copy of DD Form 214.
- (3) The order of priority for modernizing items identified under paragraphs (1) and (2) as determined by the Secretary.
- (4) The estimated cost, as determined by the Secretary, to automate items identified under paragraphs (1) and (2).

SEC. 570. Records of Service for Reserves.

Not later than September 30, 2020, the Secretary of Defense shall establish and implement a standard record of service for members of the reserve components of the Armed Forces, similar to DD Form 214, that summarizes the record of service of each such member, including dates of active duty service.

In carrying out this section, the Secretary of Defense shall coordinate with the Secretary of Veterans Affairs to ensure that the record established under this section is acceptable as proof of service for former members of the reserve components of the Armed Forces who are eligible for benefits under laws administered by the Secretary of Veterans Affairs to receive such benefits.

SEC. 578. Clarification regarding Eligibility to Transfer Entitlement under Post-9/11 Educational Assistance Program.

Section 3319(j) of title 38, United States Code, is amended by adding at the end the following new paragraph:

“(3) The Secretary of Defense may not prescribe any regulation that would provide for a limitation on eligibility to transfer unused education benefits to family members based on a maximum number of years of service in the Armed Forces.”

SEC. 579. Annual State Report Card.

This section would amend section 1111(h)(1)(C)(ii) of the Elementary and Secondary Education Act to include children of National Guard and Reserve servicemembers in the Military Student Identifier program, which requires states to identify students from military families to ensure schools know which students have parents in the military to help accommodate any unique needs.

SEC. 604. Consideration of Service on Active Duty to Reduce Age of Eligibility to Retired Pay for Non-Regular Service.

This section would amend section 12731(f)(2)(B)(i) of title 10, United States Code, to authorize retirement credit for a servicemember who as a member of the Ready Reserve serves on Active Duty or performs Active service under section 12304(b) of title 10, United States Code. The eligibility age will be reduced below 60 years of age by 3 months for each aggregate of 90 days on which such person serves on such Active Duty or performs such Active service in any fiscal year after January 28, 2008, or in any two consecutive fiscal years after September 30, 2014.

SEC. 609. Increase in Basic Pay.

Effective on January 1, 2020, the rates of monthly basic pay for members of the uniformed services are increased by 3.1 percent.

SEC. 611. One-Year Extension of Certain Expiring Bonus and Special Pay Authorities.

AUTHORITIES RELATING TO RESERVE FORCES. Section 910(g) of title 37, United States Code, relating to income replacement payments for reserve component members experiencing extended and frequent mobilization for active duty service, is amended by striking “December 31, 2019” and inserting “December 31, 2020.”

TITLE 10 AUTHORITIES RELATING TO HEALTH CARE PROFESSIONALS. The following sections of title 10, United States Code, are amended by striking “December 31, 2019” and inserting “December 31, 2020:”

- (1) Section 2130a(a)(1), relating to nurse officer candidate accession program.
- (2) Section 16302(d), relating to repayment of education loans for certain health professionals who serve in the Selected Reserve.

AUTHORITIES RELATING TO NUCLEAR OFFICERS. Section 333(i) of title 37, United States Code, is amended by striking “December 31, 2019” and inserting “December 31, 2020.”

AUTHORITIES RELATING TO TITLE 37 CONSOLIDATED SPECIAL PAY, INCENTIVE PAY, AND BONUS AUTHORITIES. The following sections of title 37, United States Code, are amended by striking “December 31, 2019” and inserting “December 31, 2020:”

- (1) Section 331(h), relating to general bonus authority for enlisted members.
- (2) Section 332(g), relating to general bonus authority for officers.
- (3) Section 334(i), relating to special aviation incentive pay and bonus authorities for officers.
- (4) Section 335(k), relating to special bonus and incentive pay authorities for officers in health professions.
- (5) Section 336(g), relating to contracting bonus for cadets and midshipmen enrolled in the Senior Reserve Officers’ Training Corps.
- (6) Section 351(h), relating to hazardous duty pay.
- (7) Section 352(g), relating to assignment pay or special duty pay.
- (8) Section 353(i), relating to skill incentive pay or proficiency bonus.
- (9) Section 355(h), relating to retention incentives for members qualified in critical military skills or assigned to high priority units.

AUTHORITY TO PROVIDE TEMPORARY INCREASE IN RATES OF BASIC ALLOWANCE FOR HOUSING. Section 403(b)(7)(E) of title 37, United States Code, is amended by striking “December 31, 2019” and inserting “December 31, 2020.”

SEC. 653. Report on Extension to Members of the Reserve Components of the Armed Forces of Special and Incentive Pays for Members of the Armed Forces Not Currently Payable to Members of the Reserve Components.

Not later than one year after the date of the enactment of this Act, the Secretary of Defense shall submit to the congressional defense committees a report setting forth the results of a study, conducted by the Secretary for purposes of the report, on the feasibility and advisability of paying eligible members of the reserve components of the Armed Forces any special or incentive pay for members of the Armed Forces that is not currently payable to members of the reserve components.

The report required by subsection (a) shall set forth the following:

- (1) An estimate of the yearly cost of paying members of the reserve components risk pay and flight pay under sections 334, 334a, and 351 of title 37, United States Code, at the same rate as members on active duty, regardless of the number of periods of instruction or appropriate duty participated in, so long as there is at least one such period of instruction or appropriate duty in the month.
- (2) A statement of the number of members of the reserve components who qualify or potentially qualify for hazardous duty incentive pay based on current professions or required duties, broken out by hazardous duty categories set forth in section 351 of title 37, United States Code.

- (3) If the Secretary determines that payment to eligible members of the reserve components of any special or incentive pay for members of the Armed Forces that is not currently payable to members of the reserve components is feasible and advisable, such recommendations as the Secretary considers appropriate for legislative or administrative action to authorize such payment.

SEC. 701. Modification of Eligibility for TRICARE Reserve Select for Certain Members of the Selected Reserve.

This section would amend section 1076d(a)(2) of title 10, United States Code, to modify eligibility for TRICARE Reserve Select for certain members of the Selected Reserve after December 31, 2029.

SEC. 718. Comprehensive Policy for Provision of Mental Health Care to Members of the Armed Forces.

Not later than 180 days after the date of the enactment of this Act, the Secretary of Defense, acting through the Under Secretary of Defense for Personnel and Readiness, shall develop and implement a comprehensive policy for the provision of mental health care to members of the Armed Forces. The policy shall address each of the following:

- (1) The compliance of health professionals in the military health system engaged in the provision of health care services to members with clinical practice guidelines for:
 - (A) suicide prevention;
 - (B) medication-assisted therapy for alcohol use disorders; and
 - (C) medication-assisted therapy for opioid use disorders.
- (2) The access and availability of mental health care services to members who are victims of sexual assault or domestic violence.
- (3) The availability of naloxone reversal capability on military installations.
- (4) The promotion of referrals of members by civilian health care providers to military medical treatment facilities when such members are:
 - (A) at high risk for suicide and diagnosed with a psychiatric disorder; or
 - (B) receiving treatment for opioid use disorders.
- (5) The provision of comprehensive behavioral health treatment to members of the reserve components that takes into account the unique challenges associated with the deployment pattern of such members and the difficulty such members encounter post-deployment with respect to accessing such treatment in civilian communities.

In developing the policy, the Secretary of Defense shall solicit and consider recommendations from the Secretaries of the military departments and the Chairman of the Joint Chiefs of Staff regarding the feasibility of implementation and execution of particular elements of the policy.

Not later than 18 months after the date of the enactment of this Act, the Secretary of Defense shall submit to the Committees on Armed Services of the Senate and the House of Representatives a report on the implementation of the policy.

SEC. 739. National Guard Suicide Prevention Pilot Program.

The Chief of the National Guard Bureau may carry out a pilot program to expand suicide prevention and intervention efforts at the community level through the use of a mobile application that provides the

capability for a member of the National Guard to receive prompt support, including access to a behavioral health professional, on a smartphone, tablet computer, or other handheld mobile device. The pilot program shall include, subject to such conditions as the Secretary may prescribe:

- (1) the use by members of the National Guard of an existing mobile application that provides the capability described in subsection (a); or
- (2) the development and use of a new mobile application that provides such capability.

The Chief of the National Guard Bureau shall establish requirements with respect to eligibility and participation in the pilot program.

Prior to commencement of the pilot program, the Chief of the National Guard Bureau shall:

- (1) conduct an assessment of existing prevention and intervention efforts of the National Guard in each State that include the use of mobile applications that provide the capability described in subsection (a) to determine best practices for providing immediate and localized care through the use of such mobile applications; and
- (2) determine the feasibility of expanding existing programs on a national scale.

Each entity that participates in the pilot program shall:

- (1) share best practices with other entities participating in the program; and
- (2) annually assess outcomes with respect to members of the National Guard.

The pilot program shall terminate on the date that is three years after the date on which the pilot program commenced. If the Chief of the National Guard Bureau commences the pilot program authorized under subsection (a), not later than 180 days after the date of the commencement of such program, the Chief shall submit to the Committees on Armed Services of the Senate and the House of Representatives a report containing a description of the pilot program and such other matters as the Chief considers appropriate.

Not later than 180 days after the termination of the pilot program, the Chief of the National Guard Bureau shall submit to the Committees on Armed Services of the Senate and the House of Representatives a report on such pilot program. The report shall include the following:

- (i) A description of the pilot program, including any partnerships entered into by the Chief of the National Guard Bureau under the program.
- (ii) An assessment of the effectiveness of the pilot program.
- (iii) A description of costs associated with the implementation of the pilot program.
- (iv) The estimated costs of making the pilot program permanent.
- (v) A recommendation as to whether the pilot program should be extended or made permanent.
- (vi) Such other recommendations for legislative or administrative action as the Chief of the National Guard Bureau considers appropriate.

SEC. 877. Extension of Loan Assistance and Deferral Eligibility to Reservists and Members of the National Guard Beyond Periods of Military Conflict.

This section would amend section 636 of title 15, United States Code, by extending the loan assistance and deferral eligibility to military reservists beyond periods of military conflict. The provision would also require the President of the United States to submit a semi-annual report on the number of loans made under the Military Reservist Economic Injury Disaster Loan program and the dollar volume of those loans.

The amendments made by subsection (a)(1) shall apply to an economic injury suffered or likely to be suffered as the result of an essential employee being ordered to perform active service (as defined in section 101(d)(3) of title 10, United States Code) for a period of more than 30 consecutive days who is discharged or released from such active service on or after the date of enactment of this Act.

SECs. 951-961. United States Space Force Act.

This section would enact the United States Space Force Act, which would modify title 10, United States Code, to establish the United States Space Force as an Armed Force within the Department of the Air Force. The Secretary of the Air Force is directed to provide to the Congressional defense committees a Total Force management plan in support of the Space Force, which shall be delivered not later than 90 days after the enactment of this Act. It would make multiple technical and conforming changes necessary to the United States Code to:

- (1) Mandate the Space Force include military personnel of the Air Force Space Command and other military personnel of the Air Force as assigned to the Space Force by the Secretary of the Air Force.
- (2) Prohibit the authorization of additional military billets.
- (3) Designate the commander of the Space Force as the Chief of Space Operations (CSO), appointed by the President and confirmed by the Senate. The CSO's rank would be that of general with a 4-year term of command. The CSO would report directly to the Secretary of the Air Force upon enactment of this Act. After 1 year, the CSO would be a member of the Joint Chiefs of Staff.
- (4) Provide the Secretary of Defense with the temporary authority to establish a dual-hatted arrangement wherein the CSO, for the first year after enactment, would also serve as the Commander, U.S. Space Command (SPACECOM).
- (5) Establish the position of the Assistant Secretary of Defense (ASD) for Space Policy within the Office of the Secretary of Defense.
- (6) Rename the Principal Assistant to the Secretary of the Air Force for Space as the Assistant Secretary for Space Acquisition and Integration (ASAF/SP), who would report directly to the Secretary of the Air Force and serve as the senior architect for space systems and programs across the Department of Defense, providing advice to the service acquisition executive (SAE) of the Air Force (the existing Assistant Secretary of the Air Force for Acquisition).
 - (a) The conferees direct the Secretary of the Air Force to provide to the congressional defense committees a report on whether and, if so, how to implement an alternative acquisition system, due not later than March 31, 2020. The report should include an assessment of the feasibility of a new acquisition system specifically tailored for space systems and programs, including with respect to procuring space vehicles, ground segments relating to such vehicles, and satellite terminals.

- (b) The conferees also direct the Secretary to submit, not later than 120 days after the enactment of this Act, to the congressional defense committees a report with recommendations on the integration of acquisition authority for the NRO into acquisition authority of the Air Force for space systems and programs.
- (7) Establish a Space Force Acquisition Council (SAC) within the Office of the Secretary of the Air Force that would oversee, direct, and manage Air Force acquisitions for space in order to ensure integration across the national security space enterprise.

The conferees direct the Secretary of the Air Force and Secretary of Defense to submit the following reports and briefings to the congressional defense committees on the establishment of the United States Space Force not later than 180 days after the date of the enactment of this Act:

- (1) A report and accompanying briefing on a comprehensive plan for the organizational structure of the Space Force, to be submitted by the Secretary of the Air Force not later than February 1, 2020.
- (2) A report and accompanying briefing on the anticipated funding requirements for the establishment of the Space Force and for its operations and activities from fiscal year 2021 through fiscal year 2025, to be submitted by the Secretary of Defense not later than February 1, 2020. The report should include the budget activity, line number, line item, line item title, and a description of the requirements specific to the Space Force for each account.
- (3) A report setting forth a comprehensive legislative proposal for amendments to the laws under the jurisdiction of the congressional defense committees to fully integrate the Space Force as an Armed Force, and the regular and reserve military and the civilian personnel of the Space Force, into current law, to be submitted by the Secretary of Defense not later than 60 days after the date of the enactment of this Act.
- (4) A plan to ensure the quality of the military and civilian personnel of the Space Force.

The conferees also direct the Secretary of Defense, in coordination with the Director of National Intelligence, to submit to the congressional defense committees a report containing the results of a review on processes designed to achieve more effective integration of capabilities among the NRO, National Security Agency, National Geospatial Intelligence Agency (NGA), and SPACECOM for joint operations. This report should be submitted not later than 180 days after the enactment of this Act.

Finally, these sections would limit the total amount of funds to be obligated and expended in fiscal year 2020 for the establishment of the Space Force to the amount requested for the Space Force in the President's budget request for fiscal year 2020. These sections would also require the Secretary of the Air Force to implement the establishment of the United States Space Force not later than 18 months after the date of the enactment of this Act. Additionally, these sections would require the Secretary and the CSO to jointly provide to the congressional defense committees briefings on the status of the current missions, operations and activities, manpower requirements, budget and funding requirements, and implementation not later than 60 days after the date of the enactment of this Act and every 60 days thereafter until March 31, 2023.

The conferees note that nothing in this provision is intended to be construed as mandating any changes to the mission or operations of the NRO or NGA.

SEC. 1005. Inclusion of Certain Military Construction Projects in Annual Reports on Unfunded Priorities of the Armed Forces and the Combatant Commands.

This section would amend section 222a of title 10, United States Code, to require the military services and combatant commands to submit separate lists of unfunded priorities for military construction. This provision would require the lists to be in priority order.

SEC. 1022. Extension of Authority for Joint Task Forces to Provide Support to Law Enforcement Agencies Conducting Counter-Terrorism Activities.

Subsection (b) of section 1022 of

25 the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136; 10 U.S.C. 271 note) is amended by striking “2020” and inserting “2022.”

Subsection (e) of such section is amended (1) in paragraph (1), by inserting a period at the end; and (2) by adding at the end the following paragraph (2):

“(2) For purposes of applying the definition of transnational organized crime under paragraph (1) to this section, the term ‘illegal means’, as it appears in such definition, includes the trafficking of money, human trafficking, illicit financial flows, illegal trade in natural resources and wildlife, trade in illegal drugs and weapons, and other forms of illegal means determined by the Secretary of Defense.”

SEC. 1106. Performance of Civilian Functions by Military Personnel.

Subparagraph (B) of paragraph (1) of subsection (g) of section 129a of title 10, United States Code, is amended to read as follows:

“(B) such functions may be performed by military personnel for a period that does not exceed one year if the Secretary of the military department concerned determines that:

- (i) the performance of such functions by military personnel is required to address critical staffing needs resulting from a reduction in personnel or budgetary resources by reason of an Act of Congress; and
- (ii) the military department concerned is in compliance with the policies, procedures, and analysis required by this section and section 129 of this title.”

SEC. 1403. Drug Interdiction and Counter-drug Activities, Defense-wide.

Funds are hereby authorized to be appropriated for the Department of Defense for fiscal year 2020 for expenses, not otherwise provided for, for Drug Interdiction and Counter-Drug Activities, Defense-wide, as specified in the funding table in section 4501.

SEC. 1517. Drug Interdiction and Counter-drug Activities, Defense-wide (OCO).

Funds are hereby authorized to be appropriated for the Department of Defense for fiscal year 2020 for expenses, not otherwise provided for, for Drug Interdiction and Counter-Drug Activities, Defense-wide, as specified in the funding table in section 4502.

SEC. 1714. Army Aviation Strategic Plan and Modernization Roadmap.

The Secretary of the Army shall develop a comprehensive strategic plan for Army aviation, which shall (A) ensure the alignment between requirements, both current and future, and Army budget submissions

to meet such requirements; and (B) inform the preparation of future defense program and budget requests by the Secretary, and the consideration of such requests by Congress.

The plan required shall include the following:

- (A) an assessment of all missions for Army aviation, both current missions and those missions necessary to support the national defense strategy and the U.S. Army in Multi-Domain Operations 2028 concept.
- (B) An analysis of platforms, capabilities, and capacities necessary to fulfill such current and future Army aviation missions.
- (C) The anticipated life cycle budget associated with each platform, capability, and capacity requirement for both current and future requirements.
- (D) An analysis showing operational, budget, and schedule trade-offs between sustainment of currently fielded capabilities, modernization of currently fielded capabilities, and development and production of new capabilities.

Not later than March 30, 2020, the Secretary of the Army shall submit to the congressional defense committees a report containing (1) the comprehensive strategic plan required; and (2) a sustainment and modernization plan for carrying out such strategic plan through fiscal year 2028.

SEC. 1720. Report on National Guard and United States Northern Command Capacity to Meet Homeland Defense and Security Incidents.

Not later than September 30, 2020, the Chief of the National Guard Bureau shall, in consultation with the Commander of United States Northern Command, submit to the congressional defense committees a report setting forth the following:

- (1) A clarification of the roles and missions, structure, capabilities, and training of the National Guard and the United States Northern Command, and an identification of emerging gaps and shortfalls in light of current homeland security threats to our country.
- (2) A list of the resources that each State and Territory National Guard has at its disposal that are available to respond to a homeland defense or security incident, with particular focus on a multi-State electromagnetic pulse event.
- (3) The readiness and resourcing status of forces listed pursuant to paragraph (2).
- (4) The current strengths and areas of improvement in working with State and Federal interagency partners.
- (5) The current assessments that address National Guard readiness and resourcing of regular United States Northern Command forces postured to respond to homeland defense and security incidents.
- (6) A roadmap to 2040 that addresses readiness across the spectrum of long-range emerging threats facing the United States.

SEC. 2601. Authorized Army National Guard Construction and Land Acquisition Projects.

Using amounts appropriated pursuant to the authorization of appropriations in section 2606 and available for the National Guard and Reserve as specified in the funding table in section 4601, the Secretary of the Army may acquire real property and carry out military construction projects for the Army National Guard locations inside the United States.

SEC. 2604. Authorized Army National Guard Construction and Land Acquisition Projects.

Using amounts appropriated pursuant to the authorization of appropriations in section 2606 and available for the National Guard and Reserve as specified in the funding table in section 4601, the Secretary of the Air Force may acquire real property and carry out military construction projects for the Air National Guard locations inside the United States.

SEC. 2702. Prohibition on Conducting Additional Base Realignment and Closure (BRAC) Round.

Nothing in this Act shall be construed to authorize an additional Base Realignment and Closure (BRAC) round.

SEC. 2867. Designation of Sumpter Smith Joint National Guard Base.

This section would designate the Sumpter Smith Air National Guard Base in Birmingham, Alabama, as the “Sumpter Smith Joint National Guard Base.”

SEC. 2913. Authorization of Emergency Army National Guard Construction and Land Acquisition Projects.

Subject to subsection (b), using amounts appropriated pursuant to the authorization of appropriations in section 2915 and available for military construction projects inside the United States as specified in the funding table in section 4603, the Secretary of the Army may acquire real property and carry out military construction projects for the following installations or locations inside the United States:

Pineville, Louisiana.....	\$16,500,000
Ashland, Nebraska.....	\$43,500,000

Not later than 90 days after the date of the enactment of this Act, the Secretary of the Army shall submit to the congressional defense committees a report containing a plan to carry out the military construction projects authorized by this section. The plan shall include an explanation of how each military construction project will incorporate mitigation measures that reduce the threat from extreme weather events, mean sea level fluctuation, flooding, and any other known environmental threat to resilience, including a list of any areas in which there is a variance from the local building requirements and an explanation of the reason for the variance. The plan shall also include a Department of Defense Form 1391 for each proposed project. The Secretary may not commence a project until the report required from the Secretary has been submitted.

U.S. HOUSE OF REPRESENTATIVES REPORT LANGUAGE

CH-47F Chinook Block II

The budget request contained \$18.2 million in advanced procurement for the CH-47F Block II program. The CH-47F Block II program is designed to upgrade the current CH-47F Block I heavy-lift rotorcraft to improve readiness and commonality, extend the useful life of the Block I version, and restore additional payload capacity for the airframe. The committee understands the budget request fully funds the completion of the engineering and manufacturing development (EMD) phase of the Block II program, and that subject to successful completion of the EMD phase, the Army plans to conduct a Milestone C low-rate production decision beginning in fiscal year 2021. However, the committee notes the current Future Years Defense Program (FYDP) provides no follow-on procurement funding for the CH-47 Block II program. Further, the committee notes that the formal analysis of alternatives for the

CH-47 Block II indicated the Army must begin to remanufacture or recapitalize CH-47 Block I rotorcraft between fiscal years 2024 and 2028 and sustain full-rate production of 12 aircraft per year by fiscal year 2030 in order to maintain fleet readiness. Given the lack of programmed funding in the FYDP for CH-47 Block II production, the committee is concerned about potential impacts this could have on the heavy-lift rotorcraft industrial base, as well as the effects this could have on the Army's long-term plans to maintain fleet readiness beyond the FYDP.

Therefore, the committee recommends \$46.2 million, an increase of \$28.0 million, in CH-47 Helicopter advanced procurement for the CH-47F Block II aircraft.

Further, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by September 2, 2019, on the potential readiness impacts to the current CH-47F fleet should Block II production be delayed post-FYDP, a cost-benefit analysis comparing CH-47 Block II upgrade program to CH-47F remanufacture and recapitalization efforts, the impacts to current MH-47G aircraft production given the delay of Block II production, analysis used to assess the strategic risk to the industrial base including the supplier base, and the current strategy for modernizing the heavy-lift rotorcraft fleet.

High Mobility Multipurpose Wheeled Vehicle recapitalization

The committee encourages the Secretary of the Army to use the funds made available for High Mobility Multipurpose Wheeled Vehicle (HMMWV) modernization or recapitalization to procure new HMMWVs or fully restore HMMWVs to a "like-new" zero-hours, zero-miles condition through the installation of a new, modernized powertrain. The committee believes that modernizing or recapitalizing HMMWVs with a more capable powertrain could better support future advanced technology insertions as well as other capability upgrades to the HMMWV fleet, which in turn should reduce sustainment costs and logistics challenges associated with obsolete, expensive, or less-suitable parts.

A-10 aircraft

The budget request contained \$168.9 million for A-10 aircraft modifications and upgrades, of which \$100.0 million was included for the new A-10 wing replacement program to begin procurement of 112 sets of additional wings. This procurement would retrofit the remaining A-10 fleet giving the Air Force a total of 281 A-10 aircraft to 2030 and beyond.

The committee continues to believe that sustainment of the 281-aircraft A-10 fleet provides the Air Force a cost- and mission-effective close air support capacity and capability that will meet joint force requirements. The committee recognizes that A-10 fleet modernization requires future display system upgrades for better identification of friendly and enemy forces. Additional modernization also requires updates to weapon delivery and management systems, along with an upgraded electronic warfare suite, that will keep pace with advancements in threat surface-to-air technology and provide better protection for pilots. Finally, the committee encourages the Air Force to explore upgraded communications systems with improved interconnectivity and security to support data-gathering enhancements for aircraft and engine structural integrity monitoring.

The committee looks forward to receiving the test and evaluation report from the Director, Operational Test and Evaluation regarding the F-35A and A-10C test comparison required by section 134 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114-328). The committee recalls

that the committee report accompanying the National Defense Authorization Act for Fiscal Year 2019 (H. Rept. 115–676) required the Secretary of the Air Force to submit a report to the House Committee on Armed Services on the cost of the additional 112 A–10 replacement wings using a second contract compared to the cost of exercising the option to procure the 112 A–10 replacement wings on the original contract. The committee understands that this report will be made available after the new contract for A–10 wings is awarded later in fiscal year 2019. Finally, the committee encourages the Secretary of the Air Force to consider a multiyear contracting strategy for the next wing replacement program that could achieve significant cost savings for the A–10 wing replacement program.

Air National Guard F-16 Radar Upgrades

The committee recognizes that F–16s will remain a critical component of the Air National Guard (ANG) inventory through the 2040s making it essential to maintain the operational viability of these aircraft. The committee further recognizes that Active Electronically Scanned Array (AESA) radar upgrades for the F–16 make the aircraft more survivable and lethal in a combat environment when deployed, provides increased capability for homeland defense and aerospace control alert missions, as well as reduces maintenance and logistics challenges.

The committee strongly supports continuing the F–16 AESA radar upgrades for both the Air Force and ANG, including the use of National Guard and Reserve Equipment Account funding referenced elsewhere in this Act. Furthermore, the committee directs the Chief of Staff of the Air Force, in coordination with the Chief of the National Guard Bureau, to provide a report to the House Armed Services Committee not later than February 1, 2020, that details an operational risk assessment, requirements determination, and acquisition and fielding strategy with associated funding profiles for upgrading the ANG’s F–16s with AESA radars.

C-130H aircraft propellers and engines

The committee notes that the C–130H aircraft that are flown primarily by the Air National Guard and Air Force Reserve continue to provide critical tactical airlift capabilities and will continue to support this mission for years to come. The committee is disappointed with the amount of time it has taken for the Air Force to address a safety of flight issue with the legacy propeller system of the C–130H. The inherent danger associated with legacy propellers came to light in the mishap report from the KC–130T Hercules aircraft of the United States Marine Corps Reserve that crashed in Leflore County, Mississippi, killing 17 service members. The Air Force convened an additional review board which identified a potential hazard with propellers that were produced before 1971. This review appears arbitrary considering that the failed blade on the Marine Corps mishap C–130T was manufactured in 1983.

Procurement of new composite propeller blades is the obvious solution to this serious safety of flight and readiness issue. The Air Force has moved slowly in addressing the issue and still refers to the propeller upgrade as a performance enhancement and not a safety requirement. A new composite blade would also decrease maintenance time and improve logistics support, which will result in increased readiness. Delays are unacceptable considering the inherent safety of flight and readiness risks surrounding this issue.

Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services by October 31, 2019, on the long-awaited acquisition strategy for procuring new blades. This plan should include estimated costs, timelines, and a unit upgrade schedule,

as well as a plan to expedite procurement for squadrons scheduled to deploy in CY2020. The briefing should also include the Air Force plan to incorporate C-130H T-56 Series 3.5 Engine Enhancement Packages. Congress has repeatedly added additional funds for these upgrades and the Air Force has yet to budget for them despite the demonstrated performance benefits and fuel efficiencies.

E-8 Joint Surveillance Target Attack Radar System re-engining program

The budget request included \$28.7 million for the E-8C Joint Surveillance Target and Attack Radar System (JSTARS) but no funding to address re-engining.

The committee understands that recently-completed analyses of the E-8C JSTARS platform updated and extended the service life projection concluding that the JSTARS fleet can operate well into the 2030s and potentially beyond. As such, the committee supports the requested funding for E-8C JSTARS modernization and sustainment as necessary to ensure that the platform remains operational and capable for the remainder of its service life. However, the committee is concerned that the funding requested in the fiscal year 2020 Air Force budget fails to address the E-8C propulsion system, which the committee understands is the number one issue driving excessive non-mission capable maintenance metrics for the fleet. The committee is concerned that, without a substantive solution, issues associated with the propulsion system will continue to drive up costs and hinder availability.

The committee recommends \$56.7 million, an increase of \$28.0 million, in Aircraft Procurement, Air Force, for JSTARS re-engining.

F-15C/F-15EX

The budget request contained \$1.1 billion for development and procurement of eight F-15EX aircraft.

Air Force officials testified before the Subcommittee on Tactical Air and Land Forces on May 2, 2019, about their concerns with the current tactical aircraft inventory capacity and capability to fully execute and support the air superiority mission as required by the 2018 National Defense Strategy. The committee notes that the Air Force's capacity and capability concerns are based on the combination of having procured only 187 F-22 aircraft compounded by the earlier than expected deterioration of the current fleet of F-15C aircraft, which the F-22 was intended to replace. The Air Force testified that two-thirds of the F-15C fleet is past its certified service life and that 13 percent of the combat-coded aircraft are grounded due to failed aircraft structural integrity inspections. The committee understands that the Air Force considered a range of options to mitigate the identified capability and capacity gaps for the air superiority mission, to include extending the service life of the F-15C fleet and increasing the production rate of F-35A aircraft.

The committee notes that analysis by the Department of Defense determined that a service life extension on the F-15C fleet would provide a limited return on investment for the amount of financial and other resources required to complete a successful life extension program to address the known structural integrity and mission systems issues or the cost and schedule risk associated with emergent fleet issues that are unknown but may be identified as each aircraft enters the service life inspection and extension program. The committee notes that the Navy realized unexpected and excessive cost and schedule growth during the service life extension program for the legacy fleet of F/A-18A/B/C/D aircraft.

The committee understands that the Department's analysis evaluated increasing F-35A production quantities but determined that although the F-35A and F-15EX aircraft have similar procurement costs, the difference in operations and sustainment costs between the two aircraft is notable. Furthermore, the committee notes that the Department's analysis evaluated other aspects of current performance related to the F-35A program outlined by the committee elsewhere in this title and that the Department decided to forego this option due to affordability concerns.

Therefore, the committee supports the Department's decision to procure the F-15EX aircraft to mitigate warfighter risk and to fill current and projected air superiority mission gaps. Additionally, the committee includes a provision elsewhere in this title that would require the Secretary of Defense to designate the F-15EX program as a major program within the F-15 program element, and would require the Secretary to provide additional acquisition documentation to the congressional defense committees before proceeding apace with procurement of F-15EX aircraft.

Tanker force structure and modernization

The committee notes that the Department of Defense Mobility Capability Requirement Study identified a tanker force structure inventory requirement of 479 aircraft. Integral to this capability is the delivery of mission capable KC-46A aircraft and the continued development of additional tanker aircraft after the expiration of the current KC-46A contract with lot 13 in 2027. The committee notes that the Secretary of the Air Force has completed a capability-based assessment and signed out the initial capability document for the requirements associated with the next-generation tanker, but has not started an analysis of alternatives. The committee believes that the Secretary of the Air Force has several viable options to ensure future tanker capability, to include acquiring a non-developmental commercial derivative tanker while "bridging" from the end of the KC-46A production to the new developmental tanker.

Therefore, the committee directs the Secretary of the Air Force to submit a report to the congressional defense committees by September 30, 2020, on a 30-year vision for the tanker force structure. The report shall include the following:

- (1) the current KC-46A tanker acquisition timeline through lot 13;
- (2) future tanker production options to include an acquisition timeline comparison of a "bridging" non-developmental commercial derivative tanker and new tanker development; and
- (3) modernization options for the entire tanker force structure through the 30-year vision timeline.

Additionally, the committee continues to support the fixed-price development and production of the KC-46A contract. The committee believes that there have been several lessons learned with unique fixed-price type contracts that were employed in this contract. Therefore, in accordance with a recommendation included in the Government Accountability Office (GAO) report entitled "KC-46 Tanker Modernization: Aircraft Delivery Has Begun, but Deficiencies Could Affect Operations and Will Take Time to Correct" (GAO-19-480), the committee directs the Secretary of the Air Force to submit a report to the congressional defense committees by March 1, 2020, on the lessons learned regarding the utilization of a fixed-price contract for development.

F-35 Joint Strike Fighter program

The budget request contained \$10.3 billion for the procurement of 78 F-35 aircraft, and associated spares, modifications, depot activations, and advanced procurement for fiscal year 2021 aircraft for the

Air Force, Navy, and Marine Corps. The budget request contained \$1.6 billion for research and development related to the conclusion of system design and development, deployability and suitability initiatives, Block 4 and Continuous Capability Development and Delivery (C2D2), and dual-capable aircraft efforts. The committee notes that the unfunded priority lists for the Air Force, Navy, and Marine Corps contained 12 F-35A, 2 F-35C, and 2 F-35B/2 F-35C aircraft, respectively.

The committee supports the F-35 program and believes it is a necessary and essential capability within the tactical aircraft portfolio for the United States and its foreign partners and allies. The committee is concerned, however, that many substantial challenges are unresolved across the F-35 system enterprise as was highlighted in two recent Government Accountability Office reports (GAO-19-321 and GAO-19-341) as well as during testimony at the May 2, 2019, Subcommittee on Tactical Air and Land Forces hearing on Air Force acquisition and modernization programs. It is clear that unless the F-35 program can demonstrate measurable progress in reducing costs and inefficiencies associated with the production line, concurrency with new parts procurement and fielded parts repairs, global supply chain management and distribution activities, operations and sustainment costs, the Autonomic Logistics Information System, and Block 4 development and subsequent fielding utilizing the C2D2 construct, the Department of Defense and other F-35 partners and customers may not be able to achieve total inventory objective requirements. The committee is also concerned about the F-35 program's readiness to achieve a favorable full-rate production review scheduled at the end of 2019. The program may not be demonstrating satisfactory control of manufacturing processes and production line efficiencies, acceptable performance and reliability related to post-production activities and validated requirements, and adequate and effective sustainment and support systems in place to meet demands of all F-35 customers.

Consequently, the committee includes three provisions elsewhere in this title that would authorize the F-35 program to procure economic quantities of production material to reduce costs; increase congressional oversight and program transparency related to costs for capability development and fielding; and ensure that the F-35 program has established suitable, measurable, and achievable performance metrics across various elements of the program.

Future Vertical Lift

The budget request included \$459.0 million in PE 63801A for Future Vertical Lift (FVL) platform research and development. Of this amount, \$427.0 million was requested for development of the Future Attack Reconnaissance Aircraft (FARA), a new scout helicopter, while \$30.2 million was requested for the Future Long-Range Assault Aircraft (FLRAA), the planned replacement for the UH-60 Black Hawk helicopter.

Future Vertical Lift (FVL) is the Army's initiative to develop and field next-generation rotary wing aviation technologies and platforms through rapid prototyping and streamlined acquisition processes. The committee supports FVL's near-term goals and objectives of developing modern capabilities to replace the OH-58 Kiowa scout reconnaissance helicopter and the UH-60 Black Hawk utility helicopter.

The committee understands the Army awarded five Other Transaction Authority contracts in April 2019 for FARA prototypes and intends to down-select to two competitors in March 2020. However, the Army failed to include funds to bridge the gap between the Joint Multi-Role Technology Demonstration

(JMR–TD) for transformational vertical lift capabilities and the planned start of the Future Long-Range Assault Aircraft. Instead, the Army included \$75.0 million in its unfunded priority list to accelerate FLRAA through an extension of the JMR–TD program. The committee believes additional details are required in order to make an informed evaluation of the Army’s near and long term objectives for the Army aviation enterprise. The committee expects the aviation modernization strategy required elsewhere in this Act to help clarify these questions.

Improved Turbine Engine Program

The budget request included \$206.4 million in PE 67139A for the Improved Turbine Engine Program (ITEP).

The committee continues to support development of the Army’s Improved Turbine Engine Program. ITEP was initiated as a competitive development and acquisition program to provide a more fuel efficient and powerful helicopter engine enhancing the performance and operational readiness of the Army’s UH–60 Black Hawk and AH–64 Apache fleets. The committee has supported significant Army investments into competitive technology development programs for turbine engines over the past decade and is encouraged by the significant progress the Army has made in maturing technologies that would lower ITEP programmatic risks. The committee also notes that ITEP will benefit the Army’s future vertical lift development efforts, in particular, the Future Attack Reconnaissance Aircraft (FARA) program.

The committee understands that the engineering and manufacturing development phase of ITEP is fully funded through fiscal year 2024 and that maintaining schedule to meet both the current and future platform integration timelines is crucial to the Army’s aviation modernization enterprise. The committee expects the Army to maintain the current ITEP schedule as any delays will affect the planned delivery of new capability and Army aviation future readiness.

The committee recommends \$206.4 million, the full amount requested, in PE 67139A for ITEP.

Light attack and armed reconnaissance experimentation

The budget request contained \$35.0 million in PE27100F for continuation of Light-Attack Armed Reconnaissance (LAAR) experimentation.

The committee notes that the Air Force plans to apply \$100.0 million in fiscal year 2018 appropriated funding, and plans to request reprogramming authority to realign \$25.0 million in fiscal year 2019 appropriated funding, to purchase six test article LAAR platforms (three AT–6 and three A–29 aircraft) to continue Phase 3 experimentation activities.

The committee notes that the Air Force is not ready to make a decision on a potential procurement for LAAR without completing additional analyses on all potential solutions in order to find a solution that fits tactical, operational, and strategic requirements for a wide variety of allies and partners. The Air Force determined after the conclusion of Phase 2 experimentation that the results gained thus far have not provided enough information, nor has the LAAR experiment strategy explored other platforms that could fill lesser contingency and international partner mission requirements. The committee further notes that the Air Force believes continued experimentation during Phase 3 will allow for additional consideration of current and emerging unmanned, rotorcraft, and turbojet technologies to assess cost-

effectiveness and capability sufficiency to ensure that a future LAAR platform or platforms will maximize meeting a diverse set of mission requirements and capability gaps.

The committee appreciates the deliberate and methodical approach the Secretary of the Air Force is taking through experimentation and data analysis to fully inform a future procurement decision for LAAR capabilities and this new mission area. However, prior to entering Phase 3 experimentation activities, the committee expects the Secretary to establish and document the Phase 3 experimentation strategy, design, goals, objectives, and metrics. The committee also expects the Secretary to consult with the Commander, Special Operations Command to assess how both general purpose forces and special operations forces can leverage experimentation activities. The committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services not later than September 1, 2019, on the scope and plans for Phase 3 experimentation.

Military rotorcraft safety

The committee recognizes that military rotorcraft operate in hazardous conditions using special tactics, techniques, and procedures that can lead to increased risk for pilots and their crews. The committee is aware of the significant risk that uncharted wires and obstacles pose to military rotorcraft, especially those flown by special operations forces and combat search and rescue elements. The committee also notes that military rotorcraft face safety and readiness challenges stemming from excessive aircraft vibration. The committee further understands that current vibration mitigation efforts often seek to mask or absorb vibrations without resulting in an actual decrease in vibration. The committee is concerned that there is insufficient focus on developing and fielding effective technology for detecting uncharted wires and obstacles, as well as insufficient focus on developing materiel solutions to help mitigate excessive vibration in legacy rotorcraft platforms.

The committee directs the Secretary of Defense, in coordination with the Secretaries of the Army, Navy, and Air Force, to provide a briefing to the House Committee on Armed Services by February 1, 2020, on Department-wide efforts to identify, develop, and procure capabilities related to the detection and avoidance of uncharted wires and obstacles, as well as efforts to mitigate excessive vibration in rotorcraft. The briefing should include to the maximum extent practicable an evaluation of current commercially available systems for obstacle detection and analysis of any tools, processes, software, or methodologies currently being evaluated towards mitigating vibration levels.

C-17 Sustainment

The committee recognizes the critical capability of the C-17 Globemaster III, which provides strategic and tactical airlift, medical evacuation and aerial deliveries in support of combat and humanitarian missions around the world. The committee further recognizes that the existing sustainment C-17 Globemaster III strategy, which is a performance-based logistics contract, has resulted in consistent mission readiness rates that exceed 80% and fully conforms with the percentage limitations on performance of depot-level maintenance (50/50 requirements) of Section 2466 of Title 10, United States Code.

The committee is aware that at a time when aviation readiness rates on other fleets have been lagging, the Air Force is considering changing the sustainment strategy for C-17. The committee notes that Section 2337 of Title 10, United States Code, requires a periodic review product support arrangement to ensure the arrangements are consistent with the overall product support strategy. The committee

understands that the Air Force contracted PricewaterhouseCoopers (PWC) to conduct an independent Product Support Business Case Analysis of the C-17 sustainment strategy and that analysis has been completed and delivered to the Air Force. The committee directs the Secretary of the Air Force to provide the PWC business case analysis on C-17 sustainment to the House Committee on Armed Services no later than June 30, 2019.

The committee further directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services no later than July 31, 2019, detailing the Air Force's analysis and decision-making related to changes to C-17 sustainment.

Comptroller General Report on F-35 Sustainment

The committee recognizes the importance of the F-35 Lightning II program to U.S. national defense and cooperation with foreign allies and partners. The F-35 is replacing a variety of aircraft in the Air Force, Navy, and Marine Corps, representing the future of tactical air for the Department of Defense. The F-35 program is the most ambitious and expensive weapon system in the Department's history, with total life-cycle costs estimated by the Department to be in excess of \$1.0 trillion. While the F-35 brings advanced, fifth-generation aviation capabilities to our military, the program faces sustainment challenges in areas including repair capacity, global spare parts availability and capability, mission capability, and functionality of its Autonomic Logistics Information System. In addition, affordability concerns have led the military services to identify a need to reduce total operation and support costs per aircraft by 43 percent for the Air Force, 24 percent for the Marine Corps, and 5 percent for the Navy.

Given the significance of the F-35 program to the future of tactical air for the military, the Department's need to operate and deploy the F-35 on a widespread basis in the coming years, the involvement of international partners and foreign military sales customers, and the importance of maintaining affordability, the committee directs the Comptroller General of the United States to review the Department's sustainment efforts related to the F-35 to include issues such as:

- (1) the status of the F-35 Lightning II aircraft program sustainment strategy.
- (2) Department oversight and prime contractor management of key sustainment functions.
- (3) the Department's ability to reduce costs or maintain affordability for F-35 fleet sustainment.
- (4) other matters regarding F-35 sustainment and affordability that the Comptroller General determines of critical importance to the long-term viability of the program.

The committee directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than March 1, 2020, with the preliminary findings of the Comptroller General's review, with successive reports to follow on March 1, 2021, and March 1, 2022, respectively.

Report on the National Guard's Equipment Reimbursement Policies

In accordance with National Guard Regulations, State Adjutant General have the authority to use federal equipment during State Active Duty (SAD) missions, and the United States Property and Fiscal Officers have the responsibility to seek reimbursement for the use of that equipment. Comptrollers who have received these reimbursements from the states had been depositing them in three different ways: to current fiscal year operation and maintenance accounts of the National Guard, to the operation and maintenance accounts of the National Guard for the fiscal year during which the SAD mission took

place, and to the General Fund of the U.S. Treasury. The committee is aware of a recent legal interpretation and updated policy guidance that requires all reimbursements to be deposited in the General Fund of the U.S. Treasury. The committee is concerned that this new policy may adversely impact maintenance and sustainment of equipment used for SAD missions.

The committee understands that the Chief of the National Guard Bureau has been working with the State Adjutant Generals to identify potential legislative changes that may be necessary to allow reimbursements to be retained and utilized by the National Guard. Therefore, the committee directs the Chief of the National Guard Bureau to provide a report to the House Committee on Armed Services, not later than March 1, 2020. At minimum, the report should provide details on the amount of reimbursements for SAD missions deposited to the U.S. Treasury in fiscal year 2019 and, if required, a legislative proposal that would ensure reimbursed funds could be utilized for the maintenance and sustainment of equipment utilized in SAD missions.

Best Practices for Cleanup and Disposal of PFOS- and PFOA-Contaminated Groundwater, Soils, and Filters and Gaps That Require Further Study

The committee notes that the class of man-made chemicals known as per- and polyfluoroalkyl substances have presented particular challenges with respect to cleanup and disposal. The committee further notes that as the Department of Defense transitions from cutting off exposure to perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) to cleanup actions under the Comprehensive Environmental Response, Compensation, and Liability Act, the Department must conduct these actions in a manner that is effective in protecting human health and the environment.

The committee understands that further research and study are required to develop disposal methodologies beyond high-heat incineration, which is the only known way to dispose of PFOS- and PFOA-contaminated materials. The committee notes that this method of disposal presents concerns about whether the chemicals are adequately broken down and about the production of hydrogen fluoride gas as a by-product of that incineration.

Accordingly, the committee directs the Under Secretary of Defense for Acquisition and Sustainment to provide a briefing to the House Committee on Armed Services by November 1, 2019, on the Department's understanding of best practices for the cleanup and disposal of PFOS- and PFOA-contaminated soils, and disposal of spent filters and Aqueous Film Forming Foam. The briefing should include a discussion of current research on these chemicals being conducted by the Strategic Environmental Research and Development Program or Environmental Security Technology Certification Program and what areas require additional research.

National Guard Unit Equipped Flying Squadrons

The committee recognizes that the Air National Guard enterprise is based on established Capstone Principles that notionally set the foundational framework for mission allocation in the 54 states and territories. One of those Capstone Principles is to allocate at least one unit-equipped wing and flying squadron to each state. New Mexico is one of three states—New Mexico, Virginia, and Washington—that have an operational flying mission, but due to the classic associate construct they lack ownership of aircraft. The committee therefore directs the Secretary of the Air Force, in consultation with the Chief of the National Guard Bureau, to report back to the committee by December 15, 2019 to present additional options for achieving an operational flying mission in each state.

Report on Air National Guard Control Grades

The committee recognizes the challenges the Air National Guard (ANG) faces in recruiting and retaining qualified airmen for fulltime positions due to the statutory control grade cap. To alleviate this limitation, the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) increased the control grade cap for O–4 through O–6, E–8s, and E–9s. While units across the country felt the positive impact of this cap increase, they continue to face personnel challenges. With the current numbers and distribution, there are fewer control grades than the unit manning document positions. Therefore, organizations are unable to place service members of the correct rank into the corresponding positions. The committee directs the Director of the Air National Guard to perform a by-unit audit to determine the true number of control grade deficiencies and necessary increases and provide a report to the House Committee on Armed Services not later than June 1, 2020, with audit results.

Report on Army Active Component Support of the Reserve Component

The Committee notes that efforts to achieve Army active and reserve component integration have made significant progress. However, both Congressionally-mandated and Department of Defense-led efforts to provide active component support for Army reserve components have failed. Uniformed full-time personnel assigned to Army reserve component units should bring relevant, operational experience from the active component and return to the active force with a greater understanding of the reserve component. The current Army Active Guard and Reserve (AGR) program does not integrate components at the unit level and does not capitalize on the potential benefits of personnel exchange. Therefore, the Committee directs the Secretary of the Army to report to the House Armed Services Committee no later than January 1, 2020 on the current force structure of AGR personnel, the impact of increased active component support to the reserve component, ways to incentivize active service in the reserve components, and any recommended changes to the Active Guard and Reserve (AGR) program.

Report to the Defense Committees on the National Guard’s Role in Current and Future Space Strategy

The committee recognizes that National Guardsmen and women across the country provide a unique skillset that accommodates the role of space in modern defense, and the needs of the overall force in the years ahead. While the National Guard has served and will continue to serve a role in space operations, the Department has yet to adequately define the role of the National Guard in future DoD space strategy. Therefore, the committee directs the Chief of the National Guard Bureau, in consultation with the Secretary of Defense to provide a detailed report to the Defense Congressional Committees on the Guard’s role in space, and the department’s intentions for the guard in future space planning.

Reserve Component Duty Status Reform

The committee notes that the Office of the Secretary of Defense continues to refine and coordinate legislative language to fulfill the requirement of section 513 of the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115–91) to reduce the number of statutory authorities by which members of the Reserve Component of the Armed Forces may be ordered to Active Duty. The committee continues to support the completion of the required legislative provision and encourages the Secretary of Defense to continue the necessary coordination with all stakeholders, to include the States’ Adjutants General, to complete this legislative proposal for inclusion in the National Defense Authorization Act for Fiscal Year 2021.

Maternity Leave Parity for National Guard and Reserve Components

The committee notes that the Department of Defense established policies for maternity leave in 2016, authorizing 12 weeks fully paid maternity leave after normal pregnancy and childbirth. The committee further notes that such paid leave is not given to female services members in inactive duty status within the National Guard and reserve components, and that these service members are still required to attend unit training assemblies to receive military service pay and retirement points. Therefore, the committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services by May 1, 2020, on the barriers, benefits, and feasibility of providing compensation and credit for retired pay to members of the National Guard and reserve components in inactive duty status.

Report on Access to Health Care Services for Reserve and National Guard Who Disclose Sexual Assault

The Committee is concerned that if a Reserve Component (RC) service member is sexually assaulted while not in an active status, they are ineligible for DoD medical care (to include psychological health care) to treat symptoms from the trauma. Sexual assault, regardless when it occurs, is likely to impact duty performance and degrade mission effectiveness, and RC service members often execute military missions alongside their active duty counterparts. Medical treatment, to include psychological health treatment, can assist in recovery and enhance mission effectiveness and should be available regardless of service member's duty status. The Committee directs the Secretary of Defense to report to the House Committee on Armed Services by January 1, 2020 on the feasibility of providing medical care, to include psychological care, to members of the RC who are sexually assaulted while not in an active status.

TRICARE Reserve Select Study

The committee remains concerned about Reserve Component service members using limited training time to address required health evaluations. The consumption of training time for purposes like medical preparedness that is not directly related to military readiness training may inhibit unit lethality. The lack of a TRICARE Reserve Select option for dual-status technicians impacts Reserve Component recruiting and retention efforts. The committee therefore directs the Secretary of Defense to submit a report to the Committee on Armed Services of the House of Representatives not later than April 1, 2020, that includes the following:

- (1) administrative, policy, statutory, and technical changes that could reduce the administrative burden on the military;
- (2) the program cost associated with providing TRICARE Reserve Select for medical, dental, and vision care to dual-status technicians;
- (3) the out-of-pocket costs involved with providing TRICARE Reserve Select for medical, dental, and vision care to dual-status technicians compared to the Federal Employees Health Benefits Program;
- (4) the amount of funding currently budgeted for Reserve Component health care;
- (5) the readiness and quality of life impacts associated with providing Reserve Component service members with TRICARE Reserve Select; and
- (6) an economic analysis of whether the cost of providing TRICARE Reserve Select for dual-status technicians is feasible when considering the readiness and time constraints of Reserve Component service members.

Briefing on National Guard Readiness and Ability to Meet Modern Threats From Area Disasters and Weapons of Mass Destruction

The Committee is aware that since the 1998 report on the National Guard's ability to respond to threats from Weapons of Mass Destruction (WMDs) there has been a significant evolution of threats emanating from technological revolutions, asymmetric threats, new chemical and biological threats, cyber threats, electromagnetic pulse (EMP) threats, UAV and drone technology, and security at the border and at ports of entry.

Further, as the Committee observed in response to Hurricanes Maria, Harvey, and Michael, the recent California wildfires, and other wide-area natural disasters, synchronizing the flow of forces and resources in disaster response and recovery operations requires seamless planning and operations on behalf of U.S. Northern Command (NORTHCOM) and the National Guard, including all six phases of shaping, anticipating, responding, operating, stabilizing, and transitioning afflicted areas and populations.

In light of these evolving threats, it is appropriate to re-examine the National Guard Homeland Defense and Security enterprise. The Committee believes it is important that each State and Territory be given the opportunity to develop detailed plans relating to their own special circumstances, under the guidance of the National Guard Bureau.

The Committee directs the Chief of the National Guard Bureau, and the Commander of NORTHCOM, to provide a briefing to the House Committee on Armed Services, no later than April 15, 2020, detailing the following:

- (1) a clarification of the roles and missions, structure, capabilities, and training of the National Guard and NORTHCOM and identification of emerging gaps and shortfalls in light of current homeland security threats to our country;
- (2) an overview of the resources that each State and Territory National Guard has at its disposal that are available to respond to a homeland defense or security incident;
- (3) the readiness and resourcing status of the resources listed in (2);
- (4) the current strengths and areas of improvement in working with State and Federal interagency partners;
- (5) the current assessments in place that address Guard readiness and resourcing of NORTHCOM Title 10 forces postured to respond to homeland defense and security incidents, and;
- (6) a roadmap that addresses readiness across the spectrum of long-range emerging threats facing the United States.

Briefing on Support to Civil Authorities in Support of Natural Disasters and Law Enforcement with Aerial Platforms and Satellites

The committee recognizes that the Department of Defense provides resources at the request of States, territories, and other Federal agencies in support of natural disasters and matters of law enforcement. Some of this support comes in the form of unmanned and manned aerial systems supporting search and rescue operations, natural disasters (to include preemptive measures), and through collaboration between the Department and other Federal agencies. The committee also recognizes that the Department utilizes some of its space-based resources to assist in wildfire support (to include detection) and other natural disasters. The committee is concerned that there is a lack of understanding of the policy, procedures, and overall availability of Department resources.

Therefore, the committee directs the Secretary of Defense, in coordination with the Chief of the National Guard Bureau and the Director of the National Geospatial-Intelligence Agency, to provide an unclassified briefing to the House Committee on Armed Services and, as appropriate, the Committee on Homeland Security, not later than September 30, 2019, on the availability of Department resources, focusing on aerial and satellite platforms in support of natural disasters and law enforcement, the assets that are currently available, and how States, territories, and Federal agencies request or access these resources.

The briefing should provide:

- (1) an explanation of Unmanned Aerial Systems (UAS), piloted platforms, and satellite support the Department provides or can provide to States and other Federal agencies, including examples of support provided, length of time to approve requests, whether any requests were disapproved and the reason that such requests were disapproved, during calendar year 2018.
- (2) an overview of programs, including satellite systems, that provide wildfire support to States and Federal agencies, including how long such programs have been in operation, the processes by which States access such programs, and whether such programs provide detection and early warning as well as support during wildfires. The overview shall include examples of the support the Department provided in calendar year 2018 to wildfire suppression and wildfire detection.
- (3) an overview of current policies regarding the use of such systems and platforms by States and Federal agencies and the procedures a State or Federal agency must follow to obtain Department support for natural disasters and search and rescue operations, including whether UAS require additional approvals, and the amount of time to obtain additional approvals. Further, a discussion of whether such procedures can be streamlined, and whether different authorities exist when requesting use of unmanned systems versus manned systems.
- (4) a description of the different categories of the Department's UAS, how the different categories are managed, and if certain UAS categories affect the Department's ability to provide support to a State or Federal agency.
- (5) a description of how the Department shares imagery collected by manned aircraft and UAS with Federal, State, and local disaster responders, including whether such imagery is shared in real time.
- (6) an explanation of any restrictions on the use of UAS under the "Guidance for the Domestic Use of Unmanned Aircraft Systems in U.S. National Airspace," August 18, 2018, and Department of Defense Instruction (DODI) 3025.18 "Defense Support to Civil Authorities," or other relevant Department of Defense guidance.
- (7) a description of how the Department (Active Duty, National Guard, and the Reserves) supports other Federal agencies with UAS assets, specifically the Department of Homeland Security (DHS) and Custom and Border Protection (CBP), including examples of requests that were supported or not supported and an explanation for such determinations.
- (8) a description of policies and laws that facilitate or restrict Department support to DHS or CBP, and a description of any systems in place that enable long-range planning to support DHS and CBP support requests.
- (9) an analysis of how the Department of Defense can improve access and knowledge of resources to States, territories, and other Federal agencies and whether there are plans to make more assets available in the future.

Chemical, Biological, Radiological, Nuclear Response Enterprise

The committee recognizes that a robust Chemical, Biological, Radiological, and Nuclear (CBRN) Response Enterprise is critical to the Nation's security. U.S. Northern Command plays an integral role in domestic CBRN response, and the committee applauds the role of the National Guard in the planning and response. The committee also notes the importance of coordinated combined training and operations between the Department of Defense and civilian first responders and agencies, including the Department of Homeland Security and the Department of Health and Human Services. To further enhance this collaboration, the committee believes the Department of Defense and other Federal and State agencies that sponsor first responder training should coordinate CBRN training opportunities to maximize the effectiveness of such events. As the Department of Defense continues to execute unit-level and enterprise-wide training events, including exercises in major metropolitan cities, the Department of Defense should consider including State and local first responders on a space-available basis. As noted in the Blue Ribbon Study Panel on Biodefense report released in October 2018, this would better integrate the Department of Defense response to a CBRN event with the overall Federal response. The committee encourages the Department of Defense, in coordination with Department of Homeland Security and Department of Health and Human Services, to increase engagement with State and local emergency first responders related to training and expert advice on CBRN emergency response activities, technology, and exercises.

Report on Supporting Requirements for the Air Force's Proposed Increase in Force Structure

The committee is concerned that the current size and structure of the Air Force does not support the National Defense Strategy. The committee acknowledges the Air Force's recent force structure assessment, called "The Air Force We Need," which provides a case and framework that would, if adopted and resourced, grow the Air Force from 312 to 386 operational squadrons. While the committee understands the assessment's analysis and conclusions and the case it makes to grow the size of the Air Force, it also notes the limitations associated with an analysis of operational squadrons only. Further, the committee is concerned that the requirement for 386 operational squadrons as illustrated in the assessment will only be realized through the alignment of resources to these requirements through future Air Force budgets and encourages the Air Force to develop a more comprehensive analysis that would fully integrate planning for 386 operational squadrons into future budgets.

Therefore, the committee directs the Secretary of the Air Force, in consultation with the Secretary of Defense, Chairman of the Joint Chiefs of Staff, and the secretaries of the other military departments to provide a report to the congressional defense committees not later than March 1, 2020, that builds on the analysis completed in the "Air Force We Need" assessment, and details the supporting resources and support personnel requirements necessary to execute a force sized at 386 operational squadrons. This analysis and report should include associated, realigned, or additional infrastructure requirements, maintenance and other supporting personnel requirements, depot production, industrial base support, and additional details the Secretary feels necessary to fully identify, evaluate, and estimate the costs of the changes required within the larger Air Force enterprise to meet the requirements of the National Defense Strategy.

National Guard and Reserve Equipment

The budget request contained no funding for a National Guard and Reserve Component equipment account. The committee has long been concerned about the availability of modern equipment needed to ensure the relevance and readiness of the National Guard and Reserve Components as an operational

reserve and for their domestic support missions. The committee notes that the National Guard and Reserve Equipment Report for Fiscal Year 2020 identifies continuing shortages in modernized equipment and challenges associated with efficiently fulfilling combat readiness training requirements.

The committee believes additional funds would help manage strategic risk and eliminate identified critical dual-use equipment shortfalls. The committee expects these funds to be used for the purposes of, but not limited to, the procurement of High Mobility Multipurpose Wheeled Vehicles; Family of Medium Tactical Vehicle trucks; Family of Heavy Tactical Vehicle trucks; F-16 Active Electronically Scanned Array radar; Ground Based Sense and Avoid radars; C-130H NP2000 Propeller Upgrades; C-130 Air National Guard Recapitalization; UH-60M Black Hawk helicopters; UH-72 Lakota helicopters; aviation crashworthy, ballistic-tolerant auxiliary fuel systems; and other critical dual-use, unfunded procurement items for the National Guard and Reserve Components.

The committee recommends \$415.0 million for National Guard and Reserve equipment.

Pilot Program Authority to Enhance Cybersecurity and Resiliency of Critical Infrastructure

The committee supports the ongoing relationship and collaboration between the Department of Defense and the Department of Homeland Security to enhance cybersecurity and resiliency of critical infrastructure, as evidenced by the pilot program authorized in section 1650 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115-232). The committee believes that state and non-state adversaries continue to conduct cyber operations that hold critical infrastructure and key resources at risk, and notes with concern the under-use of this authority since both departments have yet to maintain a sustained and recurring relationship of technical personnel.

The committee is supportive of the signed memorandum of understanding (MOU) between the two departments, including an agreement to jointly prioritize high-value national functions and non-Department of Defense-owned mission-critical infrastructure deemed to be most important to the military. The committee views this aspect of the MOU as central to the complementary cybersecurity roles and missions of the Department of Defense and Department of Homeland Security, and notes that the Department of Defense's "defend forward" posture can inform and guide Department of Homeland Security efforts to anticipate adversary action and understand potential risks to critical infrastructure.

Therefore, in order to ensure maturation and development of a sustained and recurring relationship that enhances cybersecurity cooperation, the committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services by March 2, 2020, on the use and implementation of the pilot program authorized in section 1650, including any implementation mechanisms, lines of effort, joint principles, and plans for maintaining a sustained and recurring relationship between the Department of Defense and the Department of Homeland Security after termination of the authority on September 30, 2022.

Explanation of Funding Adjustments (Guard and Reserve Forces Facilities, Military Construction)

The committee recommends the inclusion of funding for several projects requested by the Department of the Army and Department of the Air Force for their Reserve Components but not contained in the budget request for military construction and family housing. These increases include:

- (1) \$91.0 million for a National Guard Readiness Center at Jamaica Armory, New York;
- (2) \$57.0 million for a Fuels/Corrosion Control Hangar and Shops at Moffett Air National Guard Base, California;
- (3) \$34.0 million for an Enlisted Transient Barracks at Anniston, Alabama;
- (4) \$30.0 million for a General Instruction Building at Jericho, Vermont;
- (5) \$15.0 million for an AES Training Admin Facility at Joint Base Andrews, Maryland; and
- (6) \$9.8 million for an Aerial Port Facility at Minneapolis-St. Paul International Airport, Minnesota.

In addition, the committee recommends a reduction of funding for several projects contained in the budget request submitted by the Department of the Air Force for military construction for their Reserve Components. These reductions are:

- (1) \$37.5 million for a Maintenance Hangar at Luis Munoz-Marin International Airport, Puerto Rico. The committee supports the requirement for this project and provides the full project authorization of \$37.5 million included in the budget request. However, the committee believes the Department cannot begin construction and cannot expend the requested funding in fiscal year 2020. Therefore, the committee recommends no funds, a reduction of \$37.5 million, for this project; and
- (2) \$12.5 million for a Communications Facility at Luis Munoz-Marin International Airport, Puerto Rico. The committee supports the requirement for this project and provides the full project authorization of \$12.5 million included in the budget request. However, the committee believes the Department cannot begin construction and cannot expend the requested funding in fiscal year 2020. Therefore, the committee recommends no funds, a reduction of \$12.5 million, for this project.

U.S. SENATE REPORT LANGUAGE

AH-64 Apache Block IIIB New Build

The budget request included \$0.0 million in line number 10 of Aircraft Procurement, Army (APA), for AH-64 Apache Block IIIB New Build.

The committee recognizes the importance of the Army's efforts to modernize and equip both the active component and the Army National Guard with the most advanced and capable attack helicopters in support of the National Defense Strategy. Consequently, the Army should field the Block IIIB aircraft as quickly as possible across the 24 attack battalions in the active component and the Army National Guard.

Therefore, the committee recommends an increase of \$105.0 million in line number 10 of APA for the procurement of three AH-64 Apache Block IIIB New Build aircraft.

UH-60M Blackhawk

The budget request included \$1.4 billion in line number 12 of Aircraft Procurement, Army (APA), for 73 UH-60M Blackhawk aircraft.

The committee recognizes the importance of the Army's efforts to field the most advanced and capable utility helicopters in support of the National Defense Strategy. However, the committee is concerned

about the utility helicopter industrial base and the dramatic downturn in production of UH–60M aircraft through the proposed future years defense program. Further, the committee believes that the Army should take advantage of the current multiyear contract that will expire in fiscal year 2021 and more equitably distribute procurement to limit a steep production cut from fiscal year 2020 to fiscal year 2021.

Therefore, the committee recommends a decrease of \$140.0 million for 7 active component aircraft in line number 12 of APA for the procurement of UH–60M aircraft.

UH–60V Conversion

The budget request included \$169.2 million in line number 14 of Aircraft Procurement, Army (APA), for UH–60 Blackhawk L and V Models.

The committee recognizes the importance of the Army’s efforts to field the most advanced and capable utility helicopters for the Army National Guard in support of the National Defense Strategy. As such, the Army should accelerate the conversion of Blackhawks to the upgraded V model, which provides enhanced situational awareness, as quickly as possible to optimize training and reduce operation and sustainment costs.

Therefore, the committee recommends an increase of \$35.0 million in line number 14 of APA for the conversion of 8 additional UH–60V aircraft.

Abrams upgrade program

The budget request included \$1.8 billion in line number 14 of Weapons & Tracked Combat Vehicles (WTCV), Army, for the upgrade of 165 Abrams tanks to the M1A2 SEPv3.

The M1A2 SEPv3 program is vital to the lethality and survivability of the Army’s armored brigade combat team. The M1A2 SEPv3 incorporates multiple improvements such as: turret and hull armor upgrades for enhanced crew survivability; the Total Integrated Engine Revitalization program and upgraded transmission for improved power pack reliability and durability; improved computer systems including microprocessors, color flat panel displays, and memory capacity; and Block 1 second generation Forward Looking Infra-Red technology. The committee strongly supports the Abrams Upgrade Program and its alignment to the National Defense Strategy. However, the committee believes that funding could be better balanced throughout the future years defense program to reduce industrial base turbulence.

Therefore, the committee recommends a decrease of \$35.0 million in line number 14 of WTCV, Army.

Joint Light Tactical Vehicle

The budget request included \$996.0 million in line number 6 of Other Procurement, Army (OPA), for the procurement of 2,530 Joint Light Tactical Vehicles (JLTV).

The Army has requested a zero sum realignment of \$4.5 million from line number 6 of OPA to PE 65812A in Research, Development, Test, and Evaluation, Army, in order to complete the developmental portion of the Training, Aids, Devices, Simulators and Simulation Hands-On Trainers requirement for the JLTV.

Therefore, the committee recommends a decrease of \$4.5 million in line number 6 of OPA.

Joint Light Tactical Vehicle

The budget request included \$996.0 million in line 6 of Other Procurement, Army (OPA), for the procurement of 2,530 Joint Light Tactical Vehicles (JLTV).

The JLTV is capable of performing multiple mission roles and is designed to provide protected, sustained, and networked mobility for personnel and payloads across the full range of military operations.

However, the committee believes that the Army should make a full rate production decision as soon as possible. Therefore, the committee recommends a decrease of \$35.0 million in line 6 of OPA.

F-35A

The budget request included \$4.3 billion in line number 1 of Aircraft Procurement, Air Force (APAF), for 48 F-35 aircraft.

The committee recognizes the importance of the Air Force's efforts to modernize and equip itself with the most advanced and capable aircraft in support of the National Defense Strategy. However, the committee is concerned about the quantity and timing of procurement of fifth generation aircraft and understands that the Chief of Staff of the Air Force has placed additional aircraft on his unfunded priority list.

Therefore, the committee recommends an increase of \$1.1 billion in line number 1 of APA for the procurement of 12 additional F-35 aircraft.

F-35 advanced procurement

The budget request included \$655.5 million in line number 2 of Aircraft Procurement, Air Force (APAF), for advanced procurement of F-35 aircraft.

The committee recognizes the importance of the Air Force's efforts to modernize and equip itself with the most advanced and capable aircraft in support of the National Defense Strategy. However, the committee is concerned about the quantity and timing of procurement of fifth generation aircraft and understands that the Chief of Staff of the Air Force has placed additional aircraft on his unfunded priority list.

Therefore, the committee recommends an increase of \$156.0 million in line number 2 of APAF for advanced procurement to support 12 additional F-35A aircraft.

F-15X

The budget request included \$1.1 billion in line number 3 of Aircraft Procurement, Air Force (APAF), for 8 F-15X aircraft.

The committee recognizes the importance of the Air Force's efforts to modernize its aging air superiority fighters. The committee also understands that the use of existing non-developmental aircraft already in inventory allows for the continued readiness of current F-15 squadrons. However, the

committee is concerned that the associated non-recurring engineering costs, as programmed, are above what should be for a non-developmental aircraft.

Therefore, the committee recommends a decrease of \$162.0 million in line number 3 of APAF.

KC-46

The budget request included \$2.2 billion in line number 5 of Aircraft Procurement, Air Force (APAF), for 12 KC-46 aircraft.

The committee recognizes the importance of the Air Force's efforts to modernize and equip itself with the most advanced and capable aircraft in support of the National Defense Strategy. However, the committee is concerned about the quantity and timing of procurement of tanker aircraft and understands that the Chief of Staff of the Air Force has placed additional aircraft on his unfunded priority list.

Therefore, the committee recommends an increase of \$471.0 million in line 5 of APAF for the procurement of 3 additional KC-46 aircraft.

F-15 ADCP

The budget request included \$481.1 million in line number 25 of Aircraft Procurement, Air Force (APAF), for the procurement of new avionics radars.

The committee recognizes the importance of the Air Force efforts to modernize the legacy 4th generation fleet in support of the National Defense Strategy. The committee also understands the Air Force's intention to recapitalize the F-15 fleet with new F-15X aircraft.

Therefore, the committee recommends a decrease of \$75.1 million in line 25 of APAF as a reduction of the procurement of F-15 avionics.

F-15 IFF modernization

The budget request included \$481.1 million in line number 25 of Aircraft Procurement, Air Force (APAF), for procurement of new IFF.

The committee recognizes the importance of the Air Force efforts to modernize the legacy fourth generation fleet in support of the National Defense Strategy. The committee also understands the Air Force's intention to recapitalize the F-15 fleet with new F-15X aircraft.

Therefore, the committee recommends a decrease of \$29.6 million in line 25 of APAF as a reduction of the procurement of F-15 IFF.

F-15 Longerons

The budget request included \$481.1 million in line number 25 of Aircraft Procurement, Air Force (APAF), for the procurement of 64 F-15 Longerons.

The committee recognizes the importance of the Air Force efforts to modernize the legacy fourth generation fleet in support of the National Defense Strategy. The committee also understands the Air Force's intention to recapitalize the F-15 fleet with new F-15X aircraft.

Therefore, the committee recommends a decrease of \$24.6 million in line number 25 of APAF as a reduction of the procurement of F-15 Longérons.

F-15 Radar

The budget request included \$481.1 million in line 25 of Aircraft Procurement, Air Force (APAF), for procurement of new radars.

The committee recognizes the importance of the Air Force efforts to modernize the legacy 4th generation fleet in support of the National Defense Strategy. The committee also understands the Air Force's intention to recapitalize the F-15 fleet with new F-15X aircraft.

Therefore, the committee recommends a decrease of \$23.7 million in line number 25 of APAF as a reduction of the procurement of F-15 radars.

F-16 modernization

The budget request included \$234.8 million in line number 26 of Aircraft Procurement, Air Force (APAF).

The committee recognizes the importance of the Air Force's efforts to modernize its fourth generation fighter fleet and equip itself with the most advanced and capable radars in support of the National Defense Strategy. However, the committee is concerned about the quantity and timing of procurement of advanced radars for the entire F-16 fleet.

Therefore, the committee recommends an increase of \$75.0 million in line number 26 of APA for the procurement of 30 additional radars.

F-15C EPAWSS

The budget request included \$149.0 million in line number 31 of Aircraft Procurement, Air Force (APAF), for F-15 Eagle Passive Active Warning Survivability System (EPAWSS).

The committee recognizes the importance of the Air Force's efforts to modernize and equip itself with the most advanced electronic warfare capability available in support of the National Defense Strategy. However, the committee also understands the Air Force's intention to recapitalize the F-15 fleet with new F-15X aircraft already equipped with the EPAWSS.

Therefore, the committee recommends a decrease of \$67.2 million in line number 31 of APAF as a reduction of the procurement of additional F-15 EPAWSS kits.

A-10 Modernization

The committee is encouraged that the Air Force is executing a modernization strategy to provide unmatched air power and believes that modernizing the A-10 fleet is integral to this strategy. The committee also believes that upgrades to weapons delivery, management systems, and the electronic warfare and communications suite that keep pace with threat advancements and proliferation are critical to the continued success of the weapons system.

The committee notes that these enhancements and the aircraft wing replacements will maintain the effectiveness of the A-10C through the 2030s. Therefore, the committee recommends that continuous funding for the modernization of the A-10C be provided from fiscal year 2020 through fiscal year 2030 in order to achieve upgrades that are long overdue.

Bradley Program

The budget request included \$638.8 million in line 5 of Weapons & Tracked Combat Vehicles (WTCV), for the procurement of upgrades to the family of Bradley Fighting Vehicles. As an integral part of the Army's Armored Brigade Combat Team (ABCT), the Bradley is being modernized in a program approved by the Army Acquisition Executive in July 2011 to enhance survivability, mobility, and lethality by procurement of hardware for modifications. These modifications include two Engineering Change Proposals in this plan, with the Bradley A4 upgrade being the most significant.

As the Army works to align itself with the National Defense Strategy and its focus on near-peer competition, the committee understands that the Army plans to gradually phase out the Bradley and replace it with a new Optionally Manned Fighting Vehicle (OMFV). To achieve this strategy, the Army has formulated a plan to end M2A4 production in fiscal year 2022, following the procurement of 859 vehicles (fielding 5 ABCTs plus 1 prepositioned set), which will enable sufficient funding for the procurement of the OMFV.

The committee supports the Army's planning and budgeting to achieve force modernization with the OMFV and understands that it will take at least 6 years to develop and begin fielding the OMFV. The committee also notes that the Bradley A4 upgrade program is essential to ensuring that the ABCT remains relevant for the next 3 decades. Nonetheless, the committee encourages the Army to ensure that the Bradley industrial base is properly maintained until the Army has a high level of confidence that the OMFV program will not be delayed.

Therefore, the committee supports the procurement of upgrades for the family of Bradley Fighting Vehicle modernization across five ABCTs, efforts to sustain the entire fleet, and the incorporation of an Active Protection System into the fleet.

CH-47F Block II Program

The budget request contained \$174.4 million in PE 67137A within Research, Development, Test, and Evaluation (RDT&E), Army for the CH-47 Block II program. The CH-47F Block II program is designed to upgrade the current CH-47F Block I heavy-lift rotorcraft in order to improve readiness and commonality, extend the useful life of the Block I helicopter, and restore additional payload capacity for the airframe. The committee understands that the budget request fully funds the completion of the Engineering and Manufacturing Development (EMD) phase of the Block II program. The committee also understands that, subject to successful completion of the EMD phase, the Army plans to conduct a Milestone C low-rate production decision beginning in fiscal year 2021. However, the committee notes that the current Future Years Defense Program (FYDP) provides no additional procurement funding for the CH-47 Block II program.

Further, the committee notes that the formal Analysis of Alternatives for the CH-47 Block II indicated that, in order to maintain fleet readiness, the Army must begin to remanufacture CH-47 Block I rotorcraft between fiscal years 2024 and 2028 and sustain full-rate production of 12 aircraft per year by

fiscal year 2030. The committee is concerned about the impact from the lack of programmed funding in the FYDP for CH-47 Block II production on the heavy-lift rotorcraft industrial base and the Army's long-term plans to maintain fleet readiness post-FYDP.

Therefore, the committee directs the Secretary of the Army to provide a briefing by October 1, 2019, on the following topics: potential readiness impacts to the current CH-47F fleet should Block II production be delayed post-FYDP; a cost-benefit analysis comparing the CH-47 Block II upgrade program to CH-47F remanufacture efforts; the impacts to current MH-47G aircraft production given the delay of Block II production; the analysis the Army used to assess the strategic risk to the industrial base, including the supplier base; and the Army's current strategy for modernizing the heavy-lift rotorcraft fleet.

Close Combat Lethality Task Force

In February 2018, the Secretary of Defense established the Close Combat Lethality Task Force (CCLTF), a cross-functional task force charged with improving combat capabilities of infantry formations to increase lethality, survivability, and resiliency on the battlefield. The CCLTF has focused its efforts on reforming manpower policy, improving training, and fielding cutting-edge equipment and weapons systems for these formations. These efforts are particularly noteworthy as technology proliferation has eroded the comparative advantage of these forces, and, with renewed great power competition, it is imperative that the Department of Defense focus on investments that support close combat formations that historically account for the majority of U.S. casualties.

Therefore, the committee urges the Department to continue its support of the CCLTF, including through sufficient resourcing of the task force and by maintaining the exceptional quality of its leadership as well as the direct reporting relationship to the Secretary of Defense and the Deputy Secretary of Defense.

Future Vertical Lift Capability Set 3 Potential Acceleration

The budget request included \$31.9 million in PE 63801A within Research, Development, Test, and Evaluation (RDT&E), Army for the continued development of the Future Long Range Assault Aircraft (FLRAA) as part of the Army's Future Vertical Lift (FVL) family of systems. The FVL family of systems consists of aircraft across five capability sets based on size, and the FLRAA effort is capability set three.

The committee understands that the FLRAA platform will replace a portion of the Army's utility helicopter fleet to provide considerable capability improvements in speed, range, agility, endurance, and sustainability as compared to current legacy utility helicopters. The committee notes that the current acquisition strategy for the FLRAA represents a traditional approach. However, the committee understands that the Army is considering multiple courses of action to accelerate this program through the use of acquisition reform authorities. Further, the committee understands that the Army is nearing completion of the Joint Multi-Role Technology Demonstration (JMR-TD) effort that successfully demonstrated several transformational vertical lift capabilities and technologies.

Given the substantial investment and knowledge gained by the successful JMR-TD, the committee expects the Army to possess a much better understanding of the technology readiness levels required for the FLRAA development program. As such, the committee believes that the Army should be in a position to reasonably accelerate the FLRAA schedule and acquisition strategy. The committee encourages the Secretary of the Army to consider using a more tailored acquisition approach for the

FLRAA program, to include developing prototypes to expedite the procurement of critical technologies. The committee expects that, following any such prototyping effort, the Army would pursue a follow-on production contract using competitive procedures.

Therefore, the committee directs the Secretary of the Army to provide a briefing, not later than October 1, 2019, to the Committees on Armed Services of the Senate and House of Representatives that details a course of action to accelerate the FLRAA program, to include potential use of tailored acquisition strategies, procedures, and authorities with appropriate oversight, management, and technical rigor.

Improved Turbine Engine Program

The Improved Turbine Engine Program (ITEP) is an acquisition program to develop a more powerful engine that would enhance performance at high altitudes and at elevated temperatures while improving operational readiness of the current UH-60 Blackhawk and AH-64 Apache helicopter fleets. The ITEP also has a goal to improve fuel efficiency, which will ease the mission of sustainment forces.

The committee notes that this program represents a cost-effective approach to modernizing aviation assets. Therefore, the committee encourages the Army to pursue opportunities to accelerate the fielding of this capability.

MQ-1 Gray Eagle Briefing

The committee notes the significant capability that the MQ-1 Gray Eagle fleet of unmanned aircraft systems (UAS) provides to the Army. This capability is game-changing and reduces risk for Army soldiers by providing extended surveillance coverage and the ability to self-transit to distant locations by virtue of its long endurance and ease of use, itself deriving from its automatic takeoff and landing system, which the aircraft to be launched and recovered with minimal operator interaction.

The current fleet consists of over 200 Gray Eagle aircraft, half of which are the original configuration and the other half are the Gray Eagle Extended Range (GE-ER) configuration. The GE-ER is the next-generation advanced derivative, providing longer-endurance UAS surveillance, communications relay, and weapons delivery missions in support of maneuver.

However, the committee is concerned that a mixed fleet of Gray Eagle aircraft may not be sufficient to meeting ever increasing operational requirements.

Therefore, the committee directs the Secretary of the Army to provide a briefing, not later than October 1, 2019, to the Senate Armed Services Committee on the capabilities and capacity of the MQ-1 Gray Eagle fleet. The briefing shall include:

- (1) A fleet optimization plan to meet long-term surveillance requirements in multi-domain operations in support of the National Defense Strategy;
- (2) Potential readiness impacts to the Army of operating a mixed fleet of Gray Eagle aircraft; and
- (3) Cost-benefit analysis comparing operations of the current mixed fleet of aircraft to operations of a pure GE-ER fleet.

Multi-year Block Buy for F-35

The committee notes that both the production and sustainment costs for the F-35 program continue to decrease. However, the committee believes that further savings may be realized through multiyear block buy contracts.

Therefore, the committee directs the Under Secretary of Defense for Acquisition and Sustainment, no later than February 1, 2020, to deliver a report to the congressional defense committees that examines the business case for a combined domestic and international 3-to-5 year multiyear contract for procurement of the F-35A/B/C, beginning with Lot 15. The report shall include: analysis of the appropriate government furnished equipment, such as propulsion systems savings; an assessment of the design stability and technical risk, given the Block 4 changes introduced to the baseline beginning in Lot 15; and an evaluation of the potential to achieve significant net savings for the Department of Defense and international partners through economies of scale. Additionally, the report shall articulate the optimal multiyear contract length for the F-35.

Tactical Wheeled Vehicle Industrial Base

The committee is concerned that the fiscal year 2020 budget request reduced funding from what was planned in the future years defense program for the majority of the Army's tactical wheeled vehicle fleets, including the Joint Light Tactical Vehicles, the Family of Medium Tactical Vehicles, and the Heavy Expanded Mobile Tactical Trucks. The committee acknowledges that reducing funding across the light, medium, and heavy tactical wheeled vehicle fleet could threaten the fragile networks of suppliers, many of which are small businesses. Such businesses may be forced to exit the defense industry or cease operations altogether. In addition, if production does not support minimum sustaining rates for the tactical wheeled vehicle industrial base, it would impact overall readiness rates by reducing the availability of parts and spares.

Therefore, the committee encourages the Army to pursue predictable funding levels in the future for the tactical wheeled vehicle industrial base in order to avoid production breaks that could adversely impact Army readiness and modernization efforts.

Western Army Aviation Training Site (WAATS) for FMS

The committee acknowledges that the Western Army Aviation Training Site (WAATS) in Marana, Arizona, is a premier rotary wing training location and is integral to the mission of the U.S. Army Aviation Center of Excellence (USAACE) to provide trained and ready aircrews in support the National Defense Strategy. However, the committee notes that the required increase of U.S. personnel throughput at the USAACE due to pilot shortages in the Active-Duty component, Army National Guard, and Army Reserve limits the available training quotas of foreign military students sent by our allies and partners.

The WAATS currently provides both rated and nonrated crew flight training for both U.S. and foreign military students in UH-60 Blackhawk and UH-72 Lakota aircraft courses and possesses excess capacity to assist USAACE throughput. Additionally, the WAATS provides hundreds of square miles of airspace specifically dedicated to aviation training and an above average number of days allowing flight operations.

Therefore, the committee requires the Secretary of the Army to brief the Senate Armed Services Committee, not later than October, 1, 2019, on the aviation training at the WAATS and include the:

- (1) Forecasted schedule for UH–60 and UH–72 flight training courses in fiscal years 2020–2023;
- (2) Feasibility and suitability of the WAATS to conduct all foreign military flight training for UH–60 and UH–72 courses;
- (3) Excess capacity at the WAATS, including classrooms, simulators, hangar space, and aircraft parking; and
- (4) Potential expansion of training missions at the WAATS.

Future Long Range Assault Aircraft (FLRAA)

The budget request included \$459.3 million in Research, Development, Test, and Evaluation (RDT&E), Army, for PE 63801A Aviation Advanced Development, of which \$31.9 million is for the Future Long Range Assault Aircraft (FLRAA) and Capability Set 3 (CS3).

The Army also identified on the unfunded priority list a shortfall in funding of \$75.6 million for PE 63801A to accelerate the CS3 program. The committee notes that the current acquisition strategy for FLRAA/CS3 represents a traditional approach; however, the committee understands that the Army is considering multiple courses of action to accelerate this program through the use of acquisition reform authorities. Further, the committee understands that the Army recently completed the Joint Multi-Role Technology Demonstration effort that successfully demonstrated several transformational vertical lift capabilities and technologies. As such, the committee believes that the Army should be in a position to reasonably accelerate the FLRAA/CS3 schedule and acquisition strategy.

Therefore, the committee recommends an increase of \$75.6 million in RDT&E, Army, for PE 63801A.

Light Attack Experiment

The budget request included \$35.0 million in Research, Development, Test, and Evaluation (RDT&E), Air Force, for PE 27100F Light Attack Armed Reconnaissance Squadrons.

The committee supports the increase of combat capability and readiness at a reduced cost and the development of advanced capabilities for close air support, armed reconnaissance, strike coordination and reconnaissance, airborne forward air control, and interdiction. The committee also supports the Department of Defense's intent to lower the cost of countering violent extremism in accordance with the National Security Strategy. However, the committee is concerned that the pace of research and prototyping in this area has not kept pace with the threat or the current capability available to the Department.

Additionally, the committee is aware that, on a modern battlefield, it is expected that friendly forces will be in close proximity to the enemy and will require integrated joint fires in order to achieve the effects demanded by the Joint Force Commander. The committee believes that the Department of Defense has been slow to develop and field capabilities to provide battlefield situational awareness of enemy and friendly actors. The committee is also aware of current technical solutions that would provide the required identification of friend and foe in environments, like that in which close air support is demanded, in which the friendly forces are in close proximity to the enemy.

Therefore, the committee recommends an increase of \$50.0 million in RDT&E, Air Force, for PE27100F to conduct additional RDT&E.

Computer Modeling of PFAS

The budget request included \$62.2 million in Research, Development, Test, and Evaluation (RDT&E), Defense-wide, for PE 62251D8Z applied research for the advancement of science and technology priorities.

The committee notes the potential for advanced computer modeling to improve the characterization and understanding of per- and poly-fluoroalkyl substances (PFAS) and supports an increase in applied research in computational biology research efforts to meet long-term national security needs in support of the National Defense Strategy.

Therefore, the committee recommends an increase of \$2.0 million in RDT&E, Defense-wide, for PE 62251D8Z for government-university-industry partnerships in computer modeling of PFAS.

Light Attack Experiment

The committee supports the increase of combat capability and readiness at a reduced cost and the development of advanced capabilities for close air support, armed reconnaissance, strike coordination and reconnaissance, airborne forward air control, and interdiction. The committee also supports the Department of Defense's intent to lower the cost of countering violent extremism in accordance with the National Security Strategy. However, the committee is concerned that the pace of research and prototyping in this area has not kept up with the threat or the current capability available to the Department.

Therefore, the committee directs the Secretary of the Air Force to deliver a briefing, no later than March 30, 2020, to the congressional defense committees on the acceleration of the light attack experiment using existing aircraft and any other aircraft that the Chief of Staff of the Air Force deems appropriate and capable of reaching initial operating capability by 2023.

Army National Guard Facilities Sustainment Disaster Recovery Increase

The budget request included \$3.3 billion in Operation and Maintenance, Army National Guard (OMARNG), of which \$1.1 billion was for SAG 132 Facilities Sustainment, Restoration & Modernization.

The committee notes that the Army National Guard has increasing facilities sustainment costs due to the catastrophic flooding in Nebraska impacting Camp Ashland and other guard equities.

Accordingly, the committee recommends an increase of \$7.2 million in OMARNG for SAG 132 Facilities Sustainment, Restoration & Modernization for disaster recovery.

Army National Guard Recruiting and Advertising Decrease

The budget request included \$3.3 billion in Operation and Maintenance, Army National Guard (OMARNG), of which \$250.4 million was for SAG 434 Other Personnel Support.

The committee notes that the Army National Guard requested \$3.5 million in addition to its baseline marketing budget of \$77.5 million and \$3.5 million in addition to its baseline recruiting budget of \$7.9 million. The committee further notes that the request represents a 4.5 percent increase to marketing and a 44.3 percent increase to recruiting. When compared to its end strength increases over the future years defense program, the committee believes that this request is ahead of need.

Accordingly, the committee recommends a decrease of \$3.0 million in OMARNG for SAG 434. The committee notes that the specific decreases recommended are \$1.5 million for marketing and \$1.5 million for recruiting.

US CYBERCOM

The budget request included \$323.1 million in Operation and Maintenance, Air Force (OMAF), for SAG 015E US CYBERCOM.

The committee is aware of the growing capabilities needed to counter adversaries in the cyberspace domain as highlighted in the National Defense Strategy. The committee recognizes the need to improve the capabilities of Cyber National Mission Force and therefore supports the request of U.S. Cyber Command (CYBERCOM) to re-align certain funds to support the Cyber National Mission Force Capability Acceleration Plan. The committee also supports CYBERCOM's request to increase funding for the Cyber National Mission Force Mobile and Modular Hunt Forward Kit and the ETERNALDARKNESS program.

Therefore, the committee recommends an increase of \$1.5 million to accelerate the development of Cyber National Mission Force capabilities, an increase of \$5.3 million for the Cyber National Mission Force Mobile and Modular Hunt Forward Kit, and an increase of \$18.0 million for ETERNALDARKNESS in OMAF for SAG 015E.

Innovative Readiness Training Increase

The budget request included \$37.4 billion in Operation and Maintenance, Defense-Wide (OMDW), of which \$165.7 million was for SAG 4GT3 Civil Military Programs.

The committee notes that \$15.7 million of the request for Civil Military Programs was for Innovative Readiness Training (IRT). The committee is aware that the Armed Forces continue to face readiness challenges due to budgetary constraints. The committee continues to recognize the value of IRT, which affords to the Armed Forces the most realistic joint training opportunities for National Guard, Reserve, and Active-Duty members.

The committee understands that IRT offers complex and challenging training opportunities for domestic and international crises. The committee is also aware that Alaska, Arizona, Arkansas, California, Colorado, Hawaii, Indiana, Kentucky, Louisiana, Maine, Minnesota, Missouri, Montana, Nebraska, New Jersey, New Mexico, New York, North Carolina, North Dakota, South Dakota, Texas, Virginia, West Virginia, and Wyoming all use IRT.

Accordingly, the committee recommends an increase of \$14.3 million in OMDW for SAG 4GT3 for IRT.

STARBASE Program

The budget request included \$34.7 billion for Operation and Maintenance, Defense-wide (OMDW), of which \$165.7 million was for SAG 4GT3 Civil Military Programs.

The committee notes that the Science and Technology Academies Reinforcing Basic Aviation and Space Exploration (STARBASE) program is a highly effective program that improves the knowledge and skills of students in kindergarten through 12th grade in science, technology, engineering, and mathematics. Therefore, the committee recommends an increase of \$15.0 million for SAG 4GT3 Civil Military Programs for the STARBASE program.

National Commission on Military Aviation Safety

The budget request included \$1.6 billion in Operation and Maintenance, Defense-wide (OMDW), for SAG 4GTN Office of the Secretary of Defense.

Elsewhere in this Act, the committee is recommending a provision that extends the term for the National Commission on Military Aviation Safety. The committee notes that this extension will require additional funding.

Accordingly, the committee recommends an increase of \$3.0 million in OMDW for SAG 4GTN for the National Commission on Military Aviation Safety.

Arctic Search and Rescue

The committee is aware that growing international interest and changing environmental conditions in the Arctic have led to increased commercial and governmental activity in the High North. With this steady surge, the committee believes the capabilities of the United States to conduct search and rescue operations throughout the Arctic needs to be commensurate for the activity in the region. The committee notes that the Department of Defense's Report to Congress on Strategy to Protect United States National Security Interests in the Arctic Region, a report required by section 1068 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92), identified the need for additional personnel recovery capability in this region. Specifically, the report calls for "forward-deployed/based assets in a sustainable location and/or rapidly deployable air drop response/sustainment packages suitable to remote land, cold water, or ice pack operating environments."

The committee understands that the 176th Wing of the Alaska National Guard is the closest and only dedicated response force with the refueling capability to respond to a search and rescue incident in the Arctic. The committee notes that the unit currently possesses 2 air-dropped, palletized Arctic Sustainment Packages to enable the survival of 50 individuals for 3 or more days in extreme Arctic conditions.

Accordingly, the committee encourages the Department of Defense to review how additional resources could benefit search and rescue operations throughout the Arctic region.

National Guard Unit Equipped Flying Squadrons

The committee recognizes that the Air National Guard enterprise is based on established capstone principles that notionally set the foundational framework for mission allocation in the 54 states and territories. One of those Capstone Principles is to allocate at least one unit-equipped wing and flying

squadron to each State. New Mexico is one of three states-the others being Virginia and Washington-that have an operational flying mission, but, due to the classic associate construct, it lacks ownership of aircraft. Therefore, the committee directs the Secretary of the Air Force, in consultation with the Chief of the National Guard Bureau, to report to the committee within 60 days of the date of the enactment of this Act to present additional options for achieving an operational flying mission in each State.

Report on Future Combat Search and Rescue in Support of National Defense Strategy

The committee acknowledges that the Air Force is the only service with a Combat Search and Rescue (CSAR) capability to provide to a Joint Force Commander and is concerned with maintaining this critical mission in the face of great power competition. Therefore, the committee directs the Chief of Staff of the Air Force to complete a comprehensive study on the future combat search and rescue mission in the near peer threat environment expected in the 2030s. Prior to any realignment of rescue assets and by September 30, 2020, the Chief of Staff of the Air Force shall present the findings and recommendations of the study to the congressional defense committees. This study shall address:

- (1) The evolving threat environment and its significance to the CSAR mission;
- (2) The optimal organizational responsibility for CSAR and components of a task force;
- (3) Alternative solutions to maintaining the social contract with isolated personnel (IP) that a rescue force is available to return the IP to friendly forces;
- (4) Title 10 service responsibilities and joint force mission sets, to include command and control, planning and execution, and IP recovery; and
- (5) Any other matters that the Chief of Staff deems relevant.

Report on Perfluorooctane Sulfonate and Perfluorooctanoic Acid Contamination on Military Installations

The committee directs the Secretary of Defense, in coordination with the Commandant of the Coast Guard, to submit to the congressional defense committees, not later than March 1, 2020, a report listing military and Coast Guard installations or facilities potentially germane to the Perfluorooctane Sulfonate (PFOS) and Perfluorooctanoic Acid Lifetime Drinking Water (PFOA) Health Advisories established by the Environmental Protection Agency and those whose drinking water supply may exceed the PFOA and PFOS levels recommended in these advisories. The Secretary shall consult with the Administrator of the Environmental Protection Agency and affected States, tribes, and local governments, using information on PFOA and PFOS manufacturing and use.

Concurrent Use of Montgomery G.I. Bill and Department of Defense-funded Tuition Assistance

The benefits provided by the Montgomery G.I. Bill and Department of Defense-funded tuition assistance are valuable incentives that can help the military meet its recruiting and retention goals by providing financial means for servicemembers to complete college courses. The committee is aware that due to a Department of Defense (DOD) policy change to DOD Instruction 1322.25 in July 2014, reserve component members receiving tuition assistance are no longer allowed to receive Montgomery G.I. Bill—Selected Reserve (MGIB–SR) benefits for the same college course. The committee is aware that tuition assistance is paid directly to schools and is authorized only for tuition while the MGIB–SR benefits are paid directly to servicemembers and may be used to cover education-related costs such as books, fees, and housing. Therefore, the committee encourages the DOD to re-evaluate this policy and strongly consider reinstating simultaneous use of tuition assistance and MGIB–SR for reserve component members.

Full Time Support Manpower Study

The committee directs the Secretary of Defense to conduct a manpower study of the full time support requirements of the Department of Defense to determine the proper allocation of military technicians (dual status), Active Guard and Reserve personnel, and Federal civilian employees employed under title 5, United States Code, under the supervision of State Adjutants General. The Secretary shall submit the results of this review to the Committees on Armed Services of the Senate and House of Representatives by no later than April 1, 2021.

Tuition Assistance in the Reserves and National Guard

Tuition assistance is a valuable incentive that can help the military meet its recruiting and retention goals. The committee is aware that there may be differences in how each military department implements its tuition assistance program, particularly as it pertains to the Reserves and National Guard, which often struggle to achieve authorized end strength levels. Therefore, the committee encourages the Secretary of the Air Force and the Secretary of the Army to review their respective tuition assistance policies to identify and rectify any inconsistencies that may adversely affect the Air National Guard, Air Force Reserve, Army National Guard, and Army Reserve.

Blended Retirement System Implementation Study

The committee notes that the period for eligible members to elect whether to transition to the new Blended Retirement System (BRS) has concluded and that all new recruits are now automatically enrolled in the system. To monitor the effectiveness of the BRS on both recruitment and retention of the all-volunteer force, the committee directs the Secretary of Defense, in coordination with the Secretaries of the military departments and the service chiefs, to review the implementation of the BRS and provide details regarding ongoing decisions associated with the new retirement system by submitting a report, no later than May 1, 2020, that provides the following information:

- (1) An assessment of the BRS transition period, to include an enumeration of members who elected to transition into the BRS broken out by service, grade, gender, race, marital status, occupation, duty location, and other pertinent demographics; the proportion of members who elected to transition by demographic; and whether the differences in choice structure (e.g. Marines were required to elect to either remain in the legacy retirement system or switch to BRS) contributed to disparities in enrollment rates between the Services.
- (2) An analysis of Thrift Savings Plan (TSP) matching contributions, to include the TSP contribution level of servicemembers enrolled in the BRS broken out by demographic information; whether servicemembers who receive special pay or incentives are more inclined to contribute and receive matching contributions; the extent to which the Services are supporting servicemembers in making sound financial decisions regarding matching contributions; and whether actual TSP contribution rates and investment choices are creating a wealth disparity in retirement among servicemembers.
- (3) An explanation of planned continuation pay policy, to include the method the Services will use to determine continuation pay levels, to include details on how the Services will determine when a member will receive notification of the continuation pay offer, the amount of the multiplier, the timing of payment, whether the pay will vary by occupation, skill, or other factors, and the duration of the required service obligation; and an econometric analysis of possible methods to increase the effectiveness and efficiency of continuation pay.

- (4) An analysis of BRS impacts, including whether the BRS has affected or is likely to affect historic recruitment and retention trends; and an assessment of the tools inherent in DOD BRS policy that will allow the Services to achieve necessary recruitment and retention levels.
- (5) Recommendations for statutory change necessary to address issues of fairness and equity identified by the review.

Excess Storage Capacity at Army National Guard Installations

The committee is aware that Department of Defense (DOD) facilities are able to maintain unique secure storage capabilities as well as have excess storage capacity that could also be used for public-private partnership opportunities. For example, the committee understands that Camp Navajo, Arizona, has significant excess capacity that could enable public-private partnerships to offer additional revenue to Camp Navajo, the Arizona National Guard, and the surrounding community. The committee recognizes the value that public-private partnerships between the DOD and appropriate non-profit or commercial entities would bring to the installation and encourages the Army to consider expanding these partnerships.

Accordingly, the committee directs the Secretary of the Army to provide a briefing to the congressional defense committees, no later than November 1, 2019, outlining specific National Guard installations that have requested to use excess storage capacity for public-private partnerships. The briefing should include general considerations that could impact any public-private storage agreements with non-DOD entities. Additionally, the briefing should include any land conveyances that may be required for any installations on a case-by-case basis.

LEGISLATIVE PROVISIONS NOT ADOPTED

Modification on limitation on use of funds for KC-46A aircraft

The House amendment contained a provision (sec. 122) that would amend section 146 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115-232), to limit the use of funds for KC-46A aircraft pending submittal of certification, to include a military flight release.

The Senate bill contained no similar provision.

The House recedes.

Increase in funding for civil military programs

The House amendment contained a provision (sec. 303) that would increase the funding for Operation and Maintenance, Defense-Wide for Civil Military Programs by \$50.0 million to support the National Guard Youth Challenge Program.

The Senate bill contained no similar provision.

The House recedes.

Comptroller General study on PFAS contamination

The House amendment contained a provision (sec. 330C) that would require the Comptroller General of the United States to conduct a review on the Department of Defense's efforts to clean up per- and polyfluoroalkyl substances contamination in and around military bases.

*The Senate bill contained no similar provision.
The House recedes.*

The conferees direct the Comptroller General of the United States to conduct a review of the efforts of the Department of Defense to clean up Perfluorooctanoic acid (PFOA) and Perfluorooctane sulfonate (PFOS) contamination in and around military bases as well as the Department's efforts to mitigate the public health impact of the contamination. The study shall include an assessment of:

- (1) When the Department discovered that drinking water sources used by members of the Armed Forces and residents of communities surrounding military bases were contaminated with PFOS and/or PFOA;
- (2) After learning that the drinking water was contaminated, when the Department notified members of the Armed Forces and residents of communities surrounding military bases that their drinking water is contaminated with per- and polyfluoroalkyl substances (PFAS);
- (3) After providing such notification, how much time lapsed before those affected were given alternative sources of drinking water;
- (4) The number of installations and surrounding communities currently drinking water that is contaminated with PFOS and/or PFOA above the Environmental Protection Agency's advisory limit;
- (5) The amount of money the Department has spent on cleaning up PFOS and PFOA contamination through the date of enactment of this Act;
- (6) The number of sites where the Department has taken action to remediate PFAS contamination or other materials as a result of the use of firefighting foam on military bases;
- (7) Factors that might limit or prevent the Department from remediating PFAS contamination or other materials as a result of the use of firefighting foam on military bases;
- (8) The estimated total cost of clean-up of PFOS and PFOA;
- (9) The cost to the Department to discontinue the use of PFAS in firefighting foam and to develop and procure viable replacements that meet military specifications;
- (10) The number of members of the Armed Forces who have been exposed to PFOS or PFOA in their drinking water above the EPA's Health Advisory levels during their military service;
- (11) An evaluation of what the Department could have done better to mitigate the release of PFOS or PFOA contamination into the environment and expose servicemembers; and
- (12) Any other elements the Comptroller General may deem necessary.

The Comptroller General shall provide, to the congressional defense committees, the Committee on Energy and Commerce of the House of Representatives, and the Committee on the Environment and Public Works of the Senate, a briefing on the preliminary findings not later than 1 year after the date of the enactment of this Act. The final results of the study shall be provided by a time mutually agreed upon by the committees and the Comptroller General.

Prohibition on use of perfluoroalkyl substances and polyfluoroalkyl substances for land-based applications of firefighting foam

The House amendment contained a provision (sec. 330E) that would prohibit the Secretary of Defense from using firefighting foam containing perfluoroalkyl and polyfluoroalkyl substances for land-based applications not later than October 1, 2023.

The Senate bill contained no similar provision.
The House recedes.

Pilot program on reduction of effects of military aviation noise on private residences

The House amendment contained a provision (sec. 358) that would authorize a five-year pilot program for the purpose of mitigating the effects of military aviation noise on private residences in the vicinity of the military installations from which they operate.

The Senate bill contained no similar provision.
The House recedes.

The conferees remain concerned about the impact of military aviation noise on the communities surrounding military installations. The conferees note that community support is an important enabler of readiness. The conferees encourage the military services to find innovative ways to address the community concerns about military aviation noise, maximize transparency, and increase dialog with concerned community members.

Sense of Congress regarding the National Guard Youth Challenge Program

The House amendment contained a provision (sec. 519) that would express the sense of Congress that the National Guard youth Challenge Program provides a vital service to at-risk youth and would encourage the Secretary of Defense to use the authority provided in section 519 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) to use equipment and facilities of the Department of Defense in this program.

The Senate bill contained no similar provision.
The House recedes.

The conferees reiterate the importance of the National Guard Youth Challenge Program and good work the program accomplishes. Additionally, the conferees continue to encourage the Secretary of Defense to utilize authority provided by the John S. McCain National Defense Authorization Act for Fiscal Year 2019 to use Department of Defense equipment for the purpose of supporting the National Guard Youth Challenge.

National Guard support to major disasters

The House amendment contained a provision (sec. 520D) that would amend section 502 of title 32, United States Code, to authorize the Secretary concerned to order a member of the National Guard to perform duties related to operations or missions authorized by the President or the Secretary of Defense to respond to large scale, complex, and catastrophic disasters. The provision would also establish a permanent authorization of appropriations for sums necessary to carry out National Guard disaster response if a state of emergency has been declared by the respective Governor and the President of the United States.

The Senate bill contained no similar provision.
The House recedes.

Report regarding National Guard Youth ChalleNGe Program

The House amendment contained a provision (sec. 520F) that would require the Secretary of Defense to submit a report to the congressional defense committees regarding the resources and authorities the Secretary determines necessary to identify the effects on graduates of the National Guard Youth Challenge Program.

The Senate bill contained no similar provision.

The House recedes.

The conferees note that section 509 of title 32, United States Code, already requires the Secretary of Defense to submit an annual report on the design, conduct, and effectiveness of the National Guard Youth Challenge Program.

Temporary authority to use Air Force reserve component personnel to provide training and instruction regarding pilot training

The House amendment contained a provision (sec. 520H) that would authorize the Secretary of the Air Force to utilize certain reserve component full time support personnel to provide pilot training to Active Duty servicemembers and foreign military personnel who are in the United States.

The Senate bill contained no similar provision.

The House recedes.

The conferees note that reserve component full time support personnel are expressly provided by law to organize, administer, recruit, instruct, or train reserve component units and personnel. To provide an exception to this long-standing requirement would be to undermine the necessary distinction between the active and reserve components.

Limitation on waiver of rights and protections under Servicemembers Civil Relief Act

The House amendment contained a provision (sec. 550I) that would amend section 107(a) of the Servicemembers Civil Relief Act (Public Law 109-189) to restrict the ability of a servicemember or other covered individual to voluntarily waive their rights and protections provided by the Servicemembers Civil Relief Act.

The Senate contained no similar provision.

The House recedes.

Direct employment pilot program for members of the National Guard and Reserve, veterans, their spouses and dependents, and members of gold star families

The House amendment contained a provision (sec. 579) that would enable the Secretary of Defense to create a pilot program that would allow States to establish or expand job placement programs, and related employment services, for unemployed guardsmen, reservists, military spouses, and veterans.

The Senate bill contained no similar provision.

The House recedes.

Sense of Congress regarding the High-Altitude Army National Guard Aviation Training Site

The House amendment contained a provision (sec. 599C) that would express the sense of Congress that military aviation training in Colorado is critical to the national security of the United States and the readiness of the Armed Forces.

The Senate bill contained no similar provision.

The House recedes.

The conferees express their strong support for military aviation training in Colorado and, in particular, the High-Altitude Army National Guard Aviation Training Site (HAATS). The conferees further note that HAATS is the only Department of Defense school where rotary-wing aviators in the Armed Forces, and the militaries of foreign allies, learn how to safely fly rotary-wing aircraft in mountainous, high-altitude environments.

Report on operational medical and dental personnel requirements

The House amendment contained a provision (sec. 749) that would require the Secretary of Defense to submit a report to the congressional defense committees, not later than January 1, 2021, on the operational medical and dental personnel requirements of the Department.

The Senate bill contained no similar provision.

The House recedes.

Repeal of Secretary of Defense review of curricula and program structures of National Guard counterdrug schools

The House amendment contained a provision (sec. 1013) that would repeal the Secretary of Defense's review of National Guard counterdrug school curricula and program structures.

The Senate bill contained no similar provision.

The House recedes.

The conferees note the importance of the National Guard counterdrug schools in the development, training, and maintenance of skills for Federal, State, local, and foreign government officials to combat illicit trafficking. The conferees direct the Secretary of Defense to provide a briefing to the House and Senate Armed Services Committees no later than 90 days after enactment of this Act on the Department of Defense review of the curricula and program structures of the National Guard counterdrug schools. The briefing shall include the following:

- (1) An overview of the National Guard counterdrug schools.
- (2) An overview of the Department's guidance related to the National Guard counterdrug program.
- (3) An explanation of the Department's guidance specifically related to the curricula and program structures of the National Guard counterdrug schools.
- (4) A description of the Department's goals, objectives, and effect-based measures of performance related to the National Guard counterdrug schools.
- (5) An initial evaluation of the establishment of the National Guard Bureau counterdrug schools executive steering committees, the committees' progress toward implementing guidance, and the structure to incorporate feedback regarding such guidance from the States.

- (6) An initial evaluation of curricula requirements identified by State counterdrug coordinators.
- (7) An initial evaluation of the National Guard counterdrug schools activity plans received from States.
- (8) A cost analysis of the metrics used to explain how any savings and efficiencies will be achieved by any changes made, including an analysis of the elimination of contracted positions.
- (9) Any other matters the Secretary considers appropriate.

Enhancement of authorities on forfeiture of Federal benefits by the National Guard

The Senate bill contained a provision (sec. 1037) that would amend section 108 of title 32, United States Code, to provide that the availability of Federal funds provided to the National Guard of individual States is contingent upon compliance with Federal law and policy applicable to the National Guard. The provision would also authorize the President to withdraw Federal recognition of National Guard units and members for failure to comply with Federal law and policy and would authorize the President to bar units and individuals from receiving Federal funds if the unit or individuals fail to comply with Federal law and policy.

The House amendment contained no similar provision.

The Senate recedes.

Comptroller General of the United States report on the effects of continuing resolutions on readiness and planning of the Department of Defense

The Senate bill contained a provision (sec. 6011) that would require the Comptroller General of the United States to provide a report to the congressional defense committees on the effects of continuing resolutions on the readiness and financial efficiency of the Department of Defense.

The House amendment contained no similar provision.

The Senate recedes.

The conferees note that the Department of Defense has spent more than 1,000 days under continuing resolutions over the past 10 years. Despite strong anecdotal evidence of negative readiness effects and significant financial waste created by continuing resolutions, a comprehensive tally of their costs, direct and indirect, has not yet been performed. Therefore, the conferees direct the Comptroller General of the United States to deliver a briefing to the congressional defense committees and the Budget Committees of the Senate and the House of Representatives no later than March 1, 2020, with a report to follow by a date agreed at the time of the briefing.

The report shall examine (1) the extent to which continuing resolutions impact Department of Defense purchasing power; (2) the extent to which preparing for and operating under continuing resolutions negatively affect the efficient usage of personnel time, including that of Senior Executive Service personnel and general and flag officers; (3) the extent to which continuing resolutions negatively affect the Department's ability to hire; (4) the extent to which the Department has requested and received anomalies for continuing resolutions since 2010; (5) the extent to which continuing resolutions have delayed acquisition programs; (5) the extent to which the Department has experienced funding misalignments between appropriations accounts due to continuing resolutions.

Review and report on construction of new, or maintenance of existing, direct fuel pipeline connections at Air National Guard and Air Force Reserve installations

The House amendment contained a provision (sec. 2607) that would require the Secretary of the Air Force, in conjunction with the Defense Logistics Agency (DLA), to complete a review on the construction of new, or maintenance of existing, direct fuel pipeline connections at Air National Guard (ANG) and Air Force Reserve (AFRES) installations.

*The Senate bill contained no similar provision.
The House recedes.*

The conferees direct the Secretary of the Air Force, in conjunction with the DLA, to complete a review on the construction of new, or maintenance of existing, direct fuel pipeline connections at ANG and AFRES installations not later than 180 days after the date of the enactment of this Act. The review should contain the following elements:

- (1) An analysis of the extent to which the Air Force and DLA have identified direct fuel pipeline projects as an effective and efficient way to enhance the ability of regular component, ANG, and AFRES installations to improve the readiness of affected units and help them to meet their mission requirements. This should include an assessment of how the ANG and AFRES facilities, across all States and territories, can leverage such connections to better support current and emerging air refueling requirements.
- (2) An assessment of how direct fuel pipeline connections enhance the resiliency and efficiency of the installations and help meet existing DLA requirements for secondary storage and other fuel requirements.
- (3) A list of ANG and AFRES installations that do not currently have a direct connection pipeline but have access to such a pipeline within reasonable proximity (less than 5 miles) to the facility.
- (4) An overview and summary of the current process for considering such proposals, including the factors used to consider requests, the weight provided to each factor, and a list of ANG and AFRES installations that have sought funding for projects to create direct access to a national fuel pipeline or to maintain access to such pipelines over the last 5 years.
- (5) A list of the total instances in the past 5 years in which projects for direct fuel pipeline connections have been approved for regular component, ANG, or AFRES installations, including the costs of each project and the justification for such approval.
- (6) A list of ANG and AFFRES installations with current pipeline connections that the Air Force or DLA has determined should no longer be used, including:
 - (A) An analysis of the justifications for each determination, such as decisions to switch from pipelines to trucks as the primary fuel delivery method;
 - (B) An assessment of whether these determinations fairly weigh the costs and benefits of building or maintaining a pipeline tap as a practical primary or secondary fuel delivery method for the installation compared to railroad, barge terminal, or truck delivery; and
 - (C) An assessment of whether these determinations fairly consider or weigh how direct fuel pipeline connections increase security for the fuel supply by reducing the threat of interruption, how the connections enhance mission reliability by providing access to greater fuel storage capability, and the ability of such projects once completed to better support the domestic and global operations of the ANG or AFRES installation.

- (7) An assessment of how costs associated with each direct fuel pipeline connection project is considered by the Air Force or DLA and the weight given to such costs in the final analysis.
- (8) An assessment of the effectiveness or usefulness of guidance or technical assistance provided to installations that request or propose direct fuel pipeline connection projects and recommendations for additional ways to provide assistance to ensure the Air Force and DLA receive the most up-to-date information about the costs and benefits of proposed projects from installations.
- (9) An assessment of the available funding sources through the Air Force, DLA, other Department of Defense entities, or other mechanisms, such as a public-private partnership or enhanced use lease, that can support direct fuel pipeline connection projects either in whole or in part.
- (10) An assessment of the extent to which direct fuel pipeline connection projects have been incorporated in any comprehensive plan the Air Force has developed or will develop regarding investments needed to improve regular component, ANG, and AFRES installations to meet the Department's needs.

The conferees further direct the Secretary to provide a final report containing the results of the review to the congressional defense committees not later than 1 year after the date of enactment of this Act. The report should include recommendations on how the Air Force can better expedite and support the use of fuel pipelines at ANG and AFRES installations. The recommendations should include options for accelerating the development and consideration of such projects where most feasible and appropriate, including whether costs savings could be obtained by including such projects as part of other related projects already authorized at an installation.