

UNITED STATES AIR FORCE

FISCAL  
YEAR

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# BUDGET OVERVIEW

SAF/FMB | MARCH 2019

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# **UNITED STATES AIR FORCE**

## **FISCAL YEAR 2020 BUDGET OVERVIEW**

The information contained in the Budget Overview Book is supported by the Air Force J-Books. Preparation of the J-Book report/study cost the Department of Defense a total of approximately \$4,708,000. This includes \$38,000 in expenses and \$4,670,000 in DoD labor.

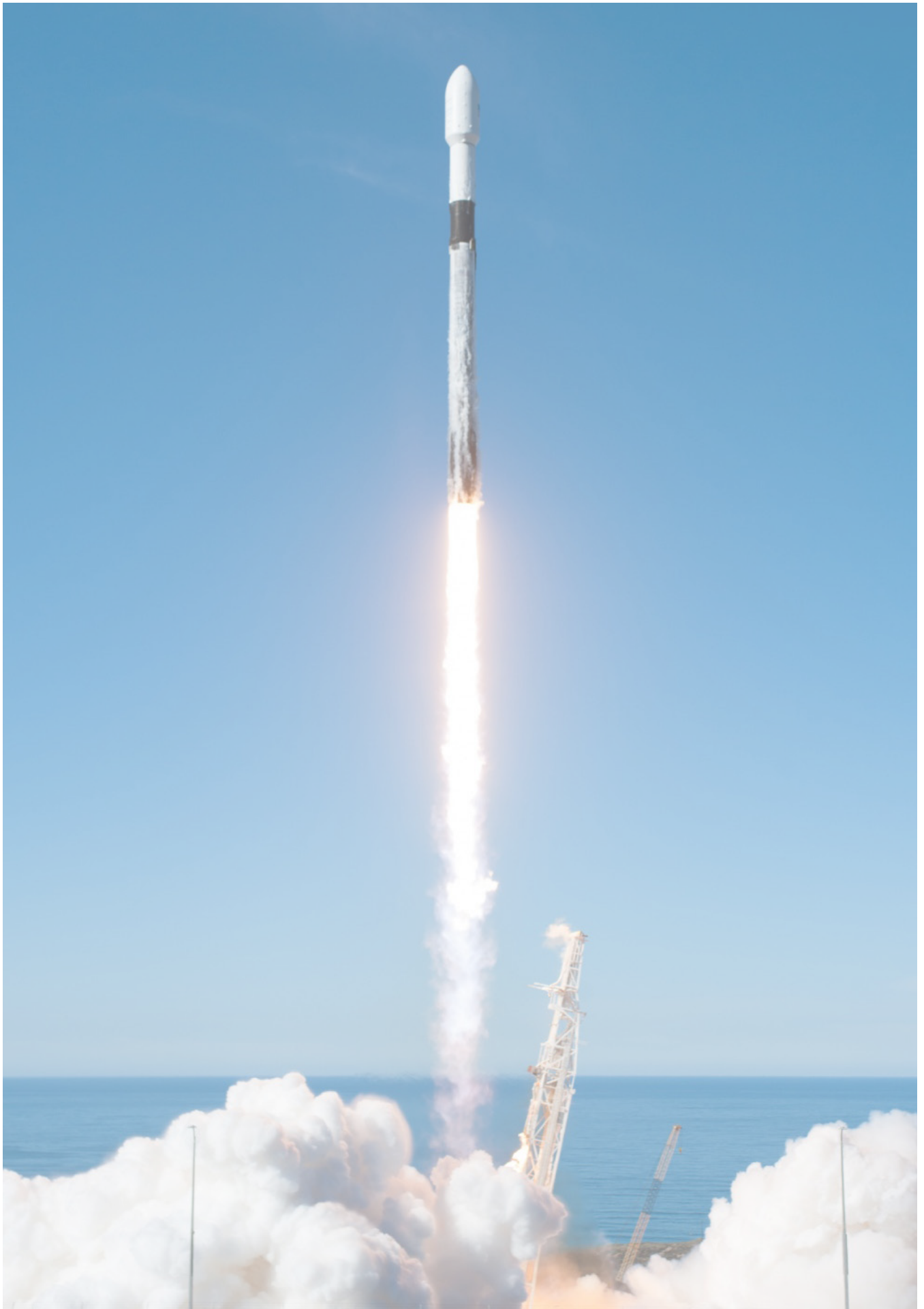
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# TOTAL FORCE (COMPONENTS)

The nation's demand for airpower requires an agile and lethal force able to adapt rapidly to accomplish a wide variety of missions. To achieve this, the Air Force must leverage the combined strengths of the Active, Guard, Reserve, and civilian operate as one Air Force. This seamless integration of our Total Force Airmen enables the Air Force to continue to meet the needs for airpower today and tomorrow.

## ACTIVE DUTY AIR FORCE



The Active component military end-strength comprises approximately 65% of the Air Force's Total Force. The Active Air Force maintains aircraft and bases across the United States and overseas, while supporting all five core missions: Air, Space and Cyber Superiority; Global Intelligence, Surveillance and Reconnaissance; Rapid Global Mobility; Global Strike; and Command and Control. The Active Air Force is the only full time component—the other components are full time when “activated” to support operational requirements.

## AIR NATIONAL GUARD



The Air National Guard comprises approximately 21% of the Total Force and provides almost half of the Air Force's tactical airlift support, combat communications functions, aeromedical evacuations and aerial refueling. The Air National Guard's federal mission is to maintain well-trained, well-equipped units available for prompt mobilization during war and provide assistance during national emergencies. During peacetime, the combat-ready and support units, assigned to most Air Force major commands, carry out missions compatible with training, mobilization readiness, humanitarian and contingency operations.

## AIR FORCE RESERVE



The Air Force Reserve is an agile, combat-ready force, which comprises approximately 14% of the Total Force. Reservists support nuclear deterrence operations, air, space and cyberspace superiority, command and control, global integrated intelligence surveillance reconnaissance, global precision attack, special operations, rapid global mobility and personnel recovery. They also perform space operations, aircraft flight testing, aerial port operations, civil engineer, security forces, military training, communications, mobility support, transportation and services missions. The Reserve components stand shoulder to shoulder with their active duty counterparts to meet mission requirements and are critical for providing the military defense of our nation.

## CIVILIANS

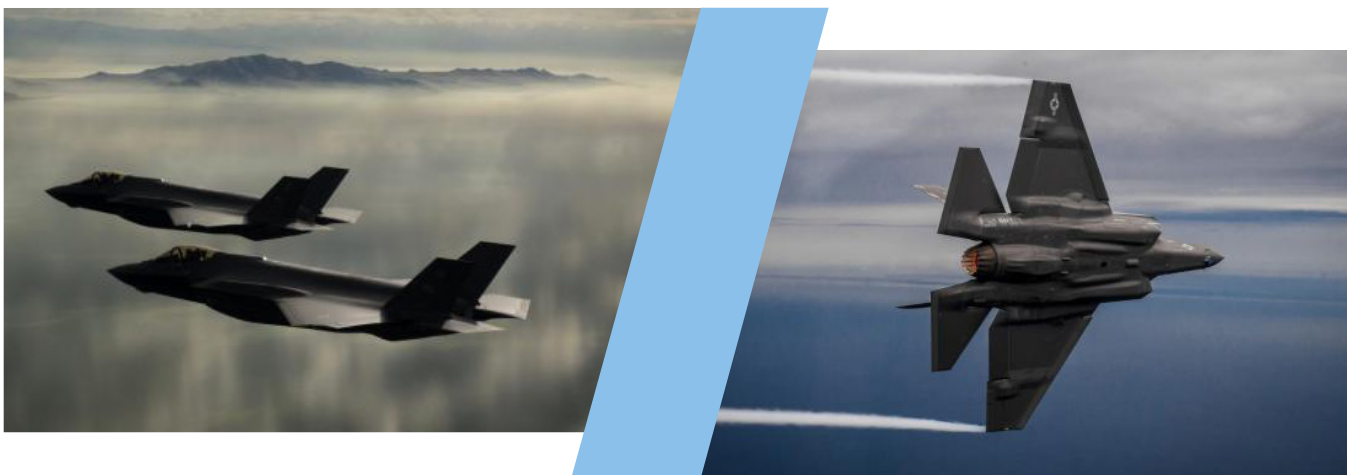
More than 140,000 civilian Airmen work side by side each day with their military counterparts. These civilian Airmen are critical to the Air Force operations. Civilian employees provide a unique perspective, invaluable experience, continuity, and leadership across all Air Force mission sets. Their expertise enhances our capability to solve problems, adapt to challenges and achieve mission success.

## OVERVIEW

Our National Defense Strategy directs a more lethal and ready force, prepared to defeat great power competitors. These great power competitors are challenging U.S. dominance in all warfighting domains: air, land, sea, space, and cyberspace. In Fiscal Year 2020, we will continue to build a more lethal and ready Air Force, while fielding tomorrow's Air Force faster and smarter. Highlights:

**PEOPLE AND TRAINING:** Readiness recovery is first and foremost about people. Our Fiscal Year 2020 budget continues end-strength growth, by adding 4,400 Total Force military Airmen. To address our aircrew shortage, we are implementing initiatives to increase pilot production, training and retention. This budget builds on our progress to produce 1,480 pilots in 2020. In addition, this budget submission funds important support to Airmen and families with a military pay raise, increased housing and subsistence allowances, and family support programs.

This budget proposal includes funds to modernize our live and virtual ranges and infrastructure to provide relevant and realistic training capabilities against our most advanced threats. This includes targeted funding for the Nevada Test and Training Range, Joint Pacific Alaska Range Complex, Utah Test and Training Range, and several smaller range complexes to replicate the capabilities of our peer adversaries. We are expanding contract adversary air from one to three locations, which frees our Airmen to practice their own skills rather than spend time simulating the skills of our adversaries. This budget dedicates 1.1 million peacetime flying hours to train our Airmen to fight alongside allies and partners as vital members of our joint force.



**COST-EFFECTIVE MAINTENANCE AND LOGISTICS:** The budget funds Air Force flying hours to maximum executable levels and prioritize our 204 pacing units to ensure our lead force packages are ready to fight tonight, while also advancing the overall readiness of the force to achieve our readiness goals. This budget includes \$16.4 billion in weapon system sustainment to support our current fleet

and target our priority needs. We will continue focusing on supply inventory, increasing our maintenance capacity, enhancing our training and proficiency, and moderating the operational tempo to help our maintainers meet this goal.

**NUCLEAR DETERRENCE:** The FY 2020 budget reflects the Defense Department commitment to maintain a safe, secure, and effective nuclear deterrent. The Air Force provides two-thirds of our nuclear Triad and 75% of our nuclear command, control, and communications capability. We continue efforts to modernize the nuclear triad, including our nuclear command, control, and communication systems, Long Range Stand Off weapon and Ground-Based Strategic Deterrent. The FY 2020 President's Budget (PB) request continues to fund research and development of our next-generation bomber, the B-21 Raider, which is part of the most visible and flexible leg of the Triad.

**MODERNIZATION:** We are investing \$1.5 billion to test and prototype game-changing technologies to cement our warfighting advantage, including hypersonic weapons, directed energy, and adaptive jet propulsion. The FY 2020 budget continues development of Multi-Domain Operations capabilities and continues the transition to the Advanced Battle Management System, a family of systems that will fuse data from multiple platforms across all warfighting domains.

The Air Force remains committed to the F-35 and its game-changing capabilities, and will continue purchasing 48 aircraft each year. Additionally, to maintain our readiness to counter our adversaries, this budget proposes to replace aging F-15C's with a modernized successor by purchasing the F-15EX to complement fifth generation capabilities across a full range of operational challenges. Finally, the FY 2020 budget continues procurement of 12 KC-46 Pegasus tankers, to increase joint and coalition aircraft refueling capability and enable the rapid deployment of aircraft.

**CYBER DOMINANCE:** Our FY 20 budget submission advances how we train and equip cyber forces for Multi-Domain Operations. We are investing in new capabilities to identify network threats and vulnerabilities, and are designing countermeasures to mitigate risks to our weapon systems. This budget continues funding the joint effort to supply Airmen with a Unified Platform, and the Joint Cyber Command and Control system to provide Combatant Commanders cyber situational awareness and battle management of these forces.

**ACCELERATING DEFENDABLE SPACE:** This budget builds upon the advances made in 2019 and further accelerates current efforts to protect and defend our ability to operate in space. This budget proposes a \$14.0 billion investment in our space portfolio in FY 2020, a 17% increase over our FY 2019 budget. Finally, we are devoting greater time and resources to train and develop our space operators because they will be the cornerstone of U.S. Space Command, our newest Combatant Command.

## BUDGET HIGHLIGHTS OVERVIEW

The Air Force 2020 budget request is approximately \$165.6 billion dollars, a 6% increase from the FY 2019 request. Highlights:

Our FY 2020 Operation and Maintenance (O&M) budget includes an over \$4 billion dollar increase from the FY 2019 request. The baseline budget funds flying hours to the maximum executable level. To free Air Force pilots to perform other missions, we continue to expand our Adversary Air contract and prioritize Pacing Platforms in our Weapons System Sustainment portfolio, while maintaining overall high levels of WSS funding to achieve desired readiness gains.

The FY 2020 Military Personnel (MILPERS) funding continues our end-strength growth, further reducing critical gaps in our force. While Air National Guard and Air Force Reserve maintainers still face manning challenges, our FY20 budget continues end-strength growth by adding 4,400 Airmen growing the Total Force military end-strength to just over 510K military members. This request also provides funding to recruit, train and develop Airmen focused on leading in Multi-Domain Operations as part of the Joint and Combined Force. In particular, this budget targets shortfalls in nuclear defenders, intelligence specialists, special warfare Airmen and cyber warriors. This budget also builds on the progress to produce 1,480 pilots in 2020.

The FY 2020 Research, Development, Test and Evaluation (RDT&E) budget invests heavily in game-changing technologies, increases funds for modernization of our nuclear triad, continues the development of future space assets and re-profiles funding to advance the most promising capabilities. Funding continues the development and operational fielding of hypersonics, unmanned autonomous vehicles, artificial intelligence and machine learning systems, and algorithmic warfare. Additionally, the FY 2020 budget continues the development of Next-Generation Overhead Persistent Infrared (OPIR) sensor, and funds GPS-III follow-on satellite, furthering our efforts to move to a defensible space posture.

Our FY 2020 Procurement account continues procurement of F-35As and KC-46As, and initiates the refresh of the F-15 fleet with a new variant. This budget continues to fund the modernization of rotary assets with the HH-60W Combat Rescue Helicopter and the modification of 4th and 5th generation aircraft.

In the FY 2020 budget, the Military Construction (MILCON) request continues to prioritize critical infrastructure requirements to meet mission needs and operational timelines. The Air Force's FY 2020 MILCON budget request contains \$2.3B for Military Construction, approximately \$400M more than FY 2019 enacted funding. These resources will fund Combatant Commander priorities, new weapon system beddowns, and modernization of our research, development and test infrastructure. Additionally, this budget funds the replacement of facilities destroyed by Hurricane Maria on Muniz Air National Guard Base, Puerto Rico.

Our FY 2020 Overseas Contingency Operations (OCO) budget prioritizes on-going operations in Iraq, Afghanistan and Syria, expands efforts to deter Russian aggression through the European Deterrence Initiative, continues global counterterrorism operations and builds military readiness.

**TABLE 1. Air Force Budget Highlights Summary**

FY20 Air Force Budget Request Facts				
<b>Total Air Force (\$M) <sup>1</sup></b>			<b>FY19</b>	<b>FY20 PB</b>
			155,811	165,571
<b>Total Base Budget Request</b>				
Operation and Maintenance (O&M) <sup>2</sup>			49,894	54,577
Military Personnel (MILPERS)			31,879	34,185
Research Development Test & Evaluation (RDT&E)			30,933	35,393
Procurement <sup>3</sup>			26,013	25,922
Military Construction (MILCON)			1,843	2,284
Military Family Housing			396	399
Base Realignment and Closure (BRAC)			67	54
<b>Overseas Contingency Operations (OCO)*</b>			<b>14,788</b>	<b>12,757</b>
<b>General Facts</b>				
			<b>FY19</b>	<b>FY20 PB</b>
Total Aircraft Inventory <sup>4</sup>			5,426	5,500
Flying Hours <sup>5</sup>			1,454,383	1,325,156
<b>Personnel Facts</b>				
			<b>FY19</b>	<b>FY20 PB</b>
Authorized Manpower			648,786	653,725
<b>Military</b>			<b>506,200</b>	<b>510,600</b>
Active			329,100	332,800
Guard			107,100	107,700
Reserve			70,000	70,100
<b>Civilian <sup>6</sup></b>			<b>142,586</b>	<b>143,125</b>
<b>Major Procurement Quantities<sup>7</sup></b>				
	<b>FY19</b>	<b>FY20 PB</b>	<b>FY19</b>	<b>FY20 PB</b>
<b>Aircraft</b>			<b>Weapons</b>	
F-35A	56	48	JDAM	36,000
KC-46A	15	12	Small Diameter Bomb I	5,744
HH-60W CRH	10	12	AGM-114 Hellfire	3,734
MQ-9A	24	12	Small Diameter Bomb II	510
HC/MC-130J <sup>8</sup>	8	8	AGM-158 JASSM-ER	360
F-15EX	0	8	AIM-9X Sidewinder	256
EC-37B	2	1	AIM-120D AMRAAM	187
<b>Space</b>				
National Security Space Launch	5	4		
GPS-III Follow-On	0	1		

Numbers may not add due to rounding

<sup>1</sup> Does not include Pass Through

<sup>2</sup> FY20 PB includes \$27.9B in OCO for Base requirements

<sup>3</sup> FY20 PB includes \$1.7B in OCO for Base Requirements

<sup>4</sup> Includes Total Force Total Aircraft Inventory (TAI) Only - Excl. ALCM, ICBM, LRE, Aerial Target & Ground Control Stations; comprehensive aircraft list in Appendix

<sup>5</sup> Air Force Total Force O&M funded flying hours only, including OCO

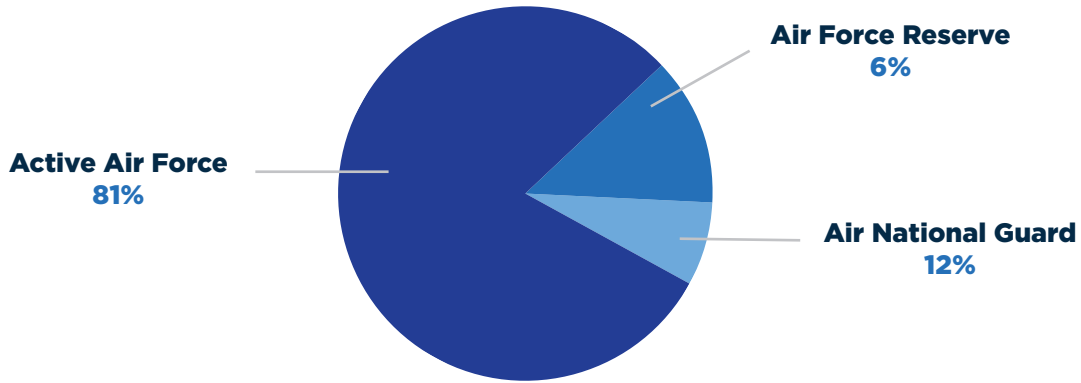
<sup>6</sup> Air Force civilian budget end-strength shown excludes AFWCF and pass-through (Total civilian end-strength FY19:184,257 FY20:189,400)

<sup>7</sup> Quantities include both Base and OCO

<sup>8</sup> FY19: 2 HC-130J and 6 MC-130J, FY20: 0 HC-130J and 8 MC-130J

# OPERATION AND MAINTENANCE (O&M)

Figure 1 depicts the FY 2020 Baseline TOA shown in Table 2 below and displays the relative size of each subsection of this appropriation



**FIGURE 1. O&M - Total Force FY 2020 Baseline Budget Request**

The FY 2020 Operation and Maintenance (O&M) budget funds the day-to-day expenses in support of operational requirements for all Air Force core functions. O&M resources directly support essential combat enablers such as flying operations, space and cyberspace operations, intelligence, logistics, nuclear deterrence, search and rescue, and special operations activities. O&M funds are used to operate, sustain, and maintain aircraft, weapon systems, command and control systems, and airfield and base facilities, to achieve readiness goals and to improve the working and living conditions for Air Force personnel. Additionally, this funding purchases critical supplies, equipment and fuel, funds training and development of Airmen, and is the source of pay and benefits for most civilian personnel. Table 2 displays O&M across the Total Force by component.

**TABLE 2. O&M - Air Force Total Force TOA by Component**

Operation and Maintenance, Air Force Total Force TOA (\$M)	FY19	FY20 PB
Active Air Force *	40,199	44,381
Air Force Reserve	3,226	3,397
Air National Guard	6,469	6,727
Space Force	0	72
<b>Total</b>	<b>49,894</b>	<b>54,577</b>

Numbers may not add due to rounding  
 \* Active includes Environmental & WCF

The FY 2020 O&M budget request of \$54.6B builds on the progress made in FY 2019 to accelerate the readiness of the force, increase lethality, and cost-effectively modernize.

The Air Force is focusing on innovative ways to maintain our aging fleet through modernization of our logistics system to sustain current operational readiness while posturing for future fleet growth. This budget includes \$14.8 billion in weapon system sustainment to support our fleet. This budget continues to prioritize supply inventory, increasing our maintenance capacity, enhancing our training and proficiency, and moderating our operational tempo to help our maintainers to meet readiness goals. Additionally, the FY 2020 budget continues efforts to modernize the Air Force's Information Technology (IT) enterprise to incorporate rapidly changing technologies and transform Air Force IT data delivery management to better support our warfighter

In 2020, the Air Force is implementing an Infrastructure Investment Strategy, which maximizes our return on investment. This strategy shifts emphasis from fixing the worst facilities first, to prioritization based on mission needs and where the biggest benefits exist. Utilizing three primary lines of effort: restoring readiness to power projection platforms, cost effective modernization of infrastructure, and driving innovation to installation management we can accelerate infrastructure readiness, resilience, and modernization. The strategy will reduce cost, and allow us to maximize our \$1.3B, facility sustainment budget increase from FY 2019, enabling the optimization of our bases as power projection platforms.

Our Airmen are shifting their focus to great power competition, and we must train and equip them for the high-end fight. This budget funds recruiting and training efforts aimed at addressing critical skill shortfalls, in areas including, Special Warfare Airmen (formerly Battlefield Airmen), Intelligence, Surveillance and Reconnaissance (ISR), Remotely Piloted Aircraft (RPA), and cyber career fields. This budget also funds improvements to training ranges, simulators, and key infrastructure required to improve the quality of training to prepare for near peer competition. This budget funds an increase to the Adversary Air contract allowing pilots to focus on high-end training.



**Key highlights:**

- » Increases Facility, Sustainment, Restoration and Modernization \$1.3B
- » Funds peacetime flying hours to maximum executable levels; 1.1M hours / \$6.1B
- » Funds Weapon System Sustainment combat coded platforms to increase readiness
- » Continue Enterprise IT transformation to commercial services and standards
- » Invests in Special Warfare Airmen training in support of Full Spectrum Readiness \$143.0M

**TABLE 3. O&M – Air Force Total Force Baseline TOA**

Operation and Maintenance, Air Force Total Force TOA (\$M)	FY19	FY20 PB
Weapon System Sustainment	13,161	14,847
Mission Support	13,333	13,711
Civilian Pay	10,734	10,727
Flying Hour	5,813	6,063
Installation Support	4,083	5,048
Facility Sustainment, Restoration and Modernization	2,769	4,109
Space Force	0	72
<b>Air Force O&amp;M TOA Total</b>	<b>49,893</b>	<b>54,577</b>

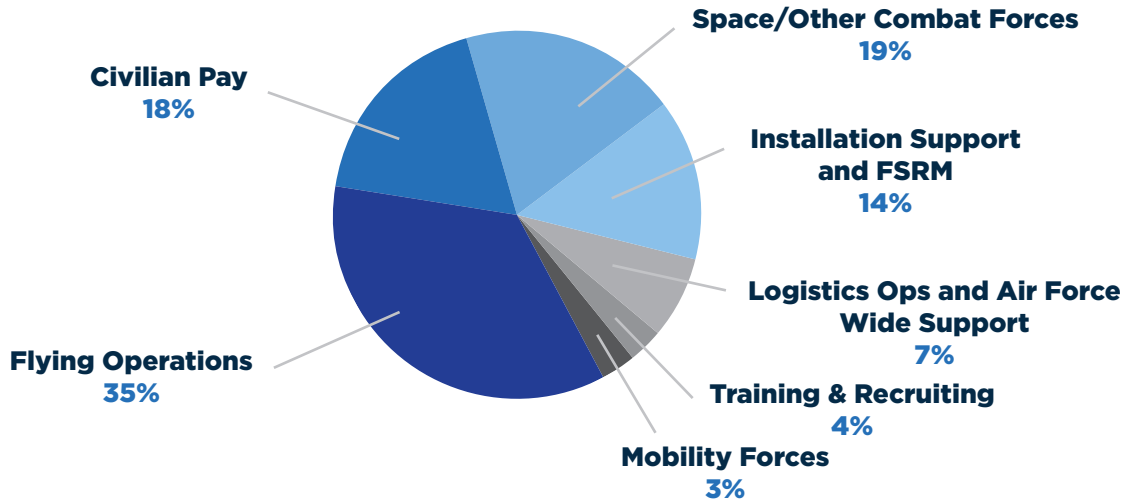
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The tables that follow display the funding request in different categories relevant to Active, Air National Guard and Air Force Reserve components.



# O&M – ACTIVE AIR FORCE

Figure 2 depicts the FY 2020 Baseline TOA shown in Table 4 and displays the relative size of each subsection of this appropriation.



**FIGURE 2. O&M – Active Air Force FY 2020 Baseline Budget Request**

The FY 2020 Active Air Force Operation and Maintenance (O&M) budget funds essential combat enablers such as: intelligence, logistics, weather, air traffic control, search and rescue, airfield, runway and base facility maintenance, civilian pay, and improvements to working and living environments for Air Force personnel. This budget funds 872,552 peacetime flying hours and sustainment of a 4,132 aircraft fleet. The O&M appropriation also funds land-based nuclear and space forces, electronic warfare, irregular warfare and Intelligence, Surveillance and Reconnaissance (ISR) missions.

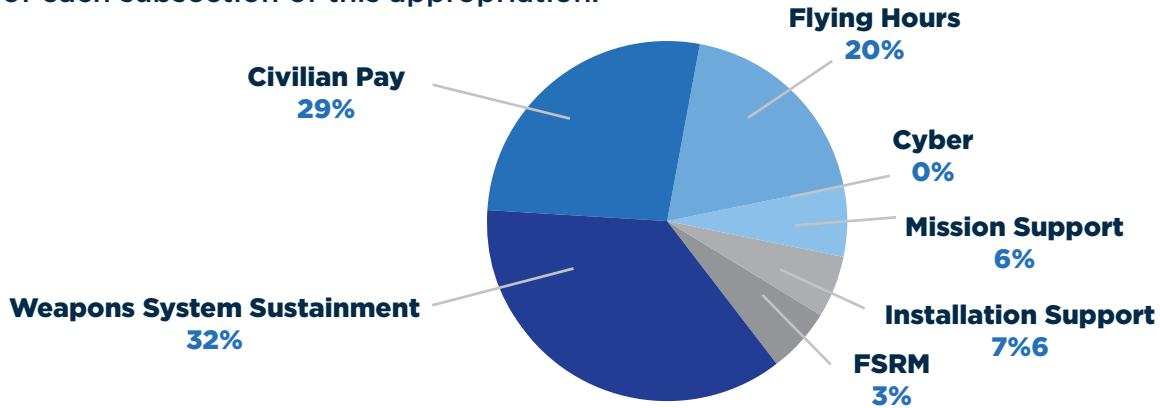
**TABLE 4. O&M – Active Air Force TOA**

Operation and Maintenance, Active Air Force TOA (\$M)	FY19	FY20 PB
Weapons System Sustainment	10,715	11,893
Mission Support	12,578	12,916
Civilian Pay	7,266	7,487
Flying Hours	3,840	4,049
Installation Support	3,448	4,442
FSRM	2,352	3,594
Space Force	0	72
<b>Total</b>	<b>40,199</b>	<b>44,453</b>

Numbers may not add due to rounding

# O&M – AIR NATIONAL GUARD

Figure 3 depicts the FY 2020 Baseline TOA shown in Table 5 and displays the relative size of each subsection of this appropriation.



**FIGURE 3. O&M – Air National Guard FY 2020 Baseline Budget Request**

The Air National Guard O&M appropriation funds the flying and maintenance of ANG aircraft, and the operation of 90 wings. Our FY 2020 budget request funds 165,938 peacetime flying hours, maintains 1,050 aircraft and supports mission training of 107,700 ANG personnel.

**TABLE 5. O&M – Air National Guard TOA**

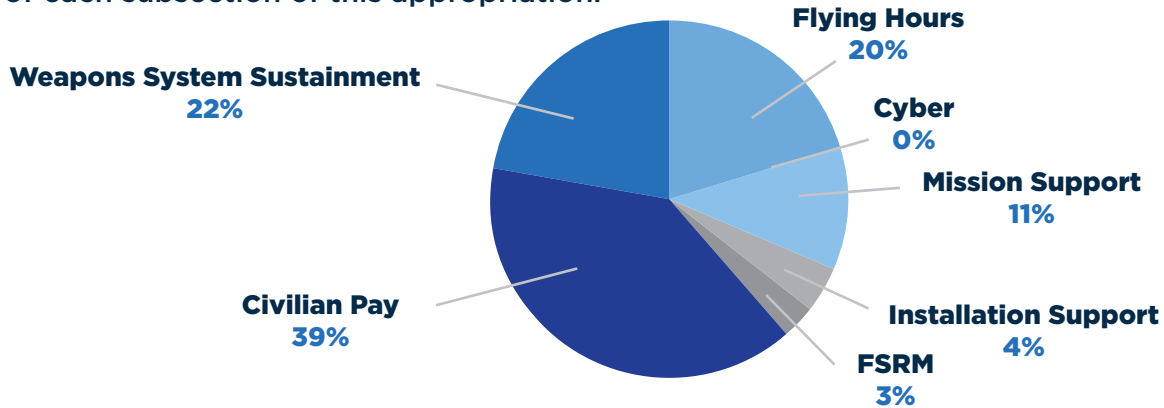
O&M, Air National Guard TOA (\$M)	FY19	FY20 PB
Weapons System Sustainment	1,868	2,203
Mission Support	416	404
Civilian Pay	2,183	1,928
Flying Hours	1,245	1,334
Installation Support	448	457
FSRM	309	401
<b>Total</b>	<b>6,469</b>	<b>6,727</b>

Numbers may not add due to rounding



# O&M – AIR FORCE RESERVE

Figure 4 depicts the FY 2020 Baseline TOA shown in Table 6 and displays the relative size of each subsection of this appropriation.



**FIGURE 4. O&M – Air Force Reserve FY 2020 Baseline Budget Request**

The Air Force Reserve (AFR) O&M appropriation provides funding to train units and assigned personnel for immediate mobilization. The budget request provides for the operation and training of 37 wings, 86,166 peacetime flying hours, and the maintenance of 318 aircraft. Additionally, AFR O&M funding covers Air Reserve Technician (ART) and civil service salaries and provides mission training for 70,100 Reserve personnel.

**TABLE 6. O&M – Air Force Reserve TOA**

O&M, Air Force Reserve TOA (\$M)	FY19	FY20 PB
Weapons System Sustainment	578	751
Mission Support	338	392
Civilian Pay	1,286	1,312
Flying Hours	729	679
Installation Support	188	148
FSRM	107	115
<b>Total</b>	<b>3,226</b>	<b>3,397</b>

Numbers may not add due to rounding



## **O&M – AIR FORCE SPACE FORCE**

On June 18, 2018, President Trump directed the Department of Defense (DoD) to immediately begin the process of establishing the Space Force as the new sixth branch of the Armed Forces. The long-term vision of the DoD is to create a new Military Department for space. DoD first proposes establishing a new Military Service – a new branch of the Armed Forces – within the Department of the Air Force. Allowing the Space Force to mature before proposing a new Department of the Space Force would set the conditions for a smooth transition in the future.

Establishing a Space Force is a strategic priority to facilitate the Department’s preparation for the character of warfare in the twenty-first century. A sixth branch of the Armed Forces dedicated to space would catalyze a fundamental transformation of our approach to space from that of a combat support function to a warfighting domain. Establishing a Military Service with dedicated military leadership would further build space warfighting culture; unify and focus development of space doctrine, capabilities, and expertise; and institutionalize advocacy of space priorities to provide for the common defense of all domains.

The FY20 PB resources \$72.4M for the initial stand-up of the new Space Force Headquarters as the first step toward implementing the DoD’s long-term vision. Funding for the headquarters will include 160 personnel billets to establish the initial elements and proposed structure of the U.S. Space Force.

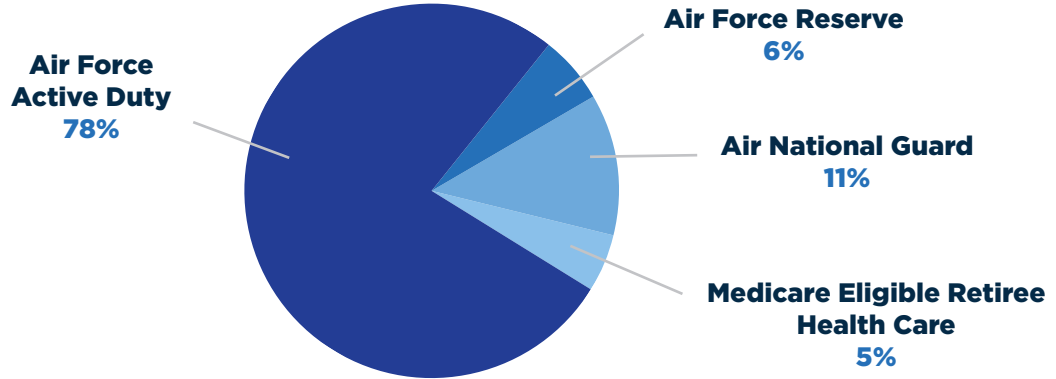
**TABLE 7. O&M – Space Force TOA**

O&M, Space Force TOA (\$M)	FY19	FY20 PB
Mission Support	0	54
Civilian Pay	0	19
<b>Total</b>	<b>0</b>	<b>72</b>

Numbers may not add due to rounding

# MILITARY PERSONNEL (MILPERS)

Figure 6 depicts the FY 2020 Baseline Total Obligation Authority (TOA) request shown in Table 8 below subdivided by component.



**FIGURE 5. MILPERS - Total Force FY 2020 Baseline Budget Request**

The FY 2020 Military Personnel (MILPERS) budget request furthers our progress in restoring readiness and increasing lethality while continuing to deliver unmatched capabilities, by growing end-strength with an additional 4,400 Total Force Military Airmen. It leverages the Active, Guard and Reserve Components to create the Total Force necessary to engage in enduring and emergent operations around the world. The Air Force takes a balanced approach to maintain core capabilities and is committed to retaining the right amount of highly skilled Airmen required to meet current and future needs of the Nation. The FY 2020 appropriation overview and end-strength growth are as follows:

- » Total Force military end-strength of 510,600; increased by 4,400 from FY 2019
- » Active component end-strength of 332,800; increased by 3,700 from FY 2019
- » ANG end-strength of 107,700; increased by 600 from FY 2019
- » AFR component end-strength of 70,100; increased by 100 from FY 2019
- » Provides 2020 calendar year increases of 3.1% for military pay, 3.4% in Basic Allowance for Housing, and 2.4% for Basic Allowance for Subsistence

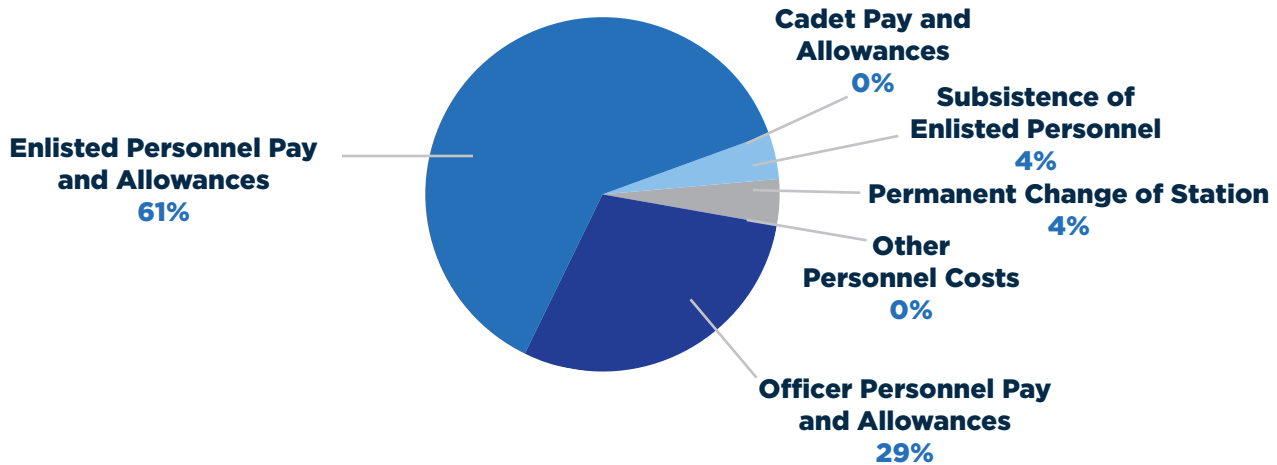
**TABLE 8. MILPERS – Air Force Total Force TOA**

MILPERS, Air Force Total Force TOA (\$M)	FY19	FY20 PB
Air Force Active Duty	24,783	26,445
Air Force Reserve	1,839	2,016
Air National Guard	3,687	4,051
Medicare Eligible Retiree Health Care	1,570	1,674
<b>Total</b>	<b>31,879</b>	<b>34,185</b>

Numbers may not add due to rounding

# MILITARY PERSONNEL – ACTIVE AIR FORCE

Figure 6 depicts the FY 2020 Baseline TOA shown in Table 9 below subdivided into major activities.



**FIGURE 6. MILPERS – Active Air Force FY 2020 Baseline Budget Request**

The FY 2020 Active Air Force MILPERS budgets funds an increase of 3,700 Airmen to the all-volunteer force, increasing the total from 329,100 authorized in the FY 2019 National Defense Authorization Act to 332,800 requested in FY 2020. Continued end-strength growth improves readiness and lethality by providing a more effective and affordable workforce mix. In 2020, the end-strength growth continues to close the gap in pilot production, with an additional 169 pilots increasing the annual production total to 1,480, keeping on track with future production goals. Recently authorized increases in end-strength also helped eliminate a shortage of 4,000 Active Duty maintainers, however the Air National Guard and Air Force Reserves still face maintainer-manning challenges. Additionally, to maximize the effectiveness and readiness of current forces, the Air Force is realigning military positions from support functions to critical military functions with complementary support provided by our civilian workforce in non-military essential missions.

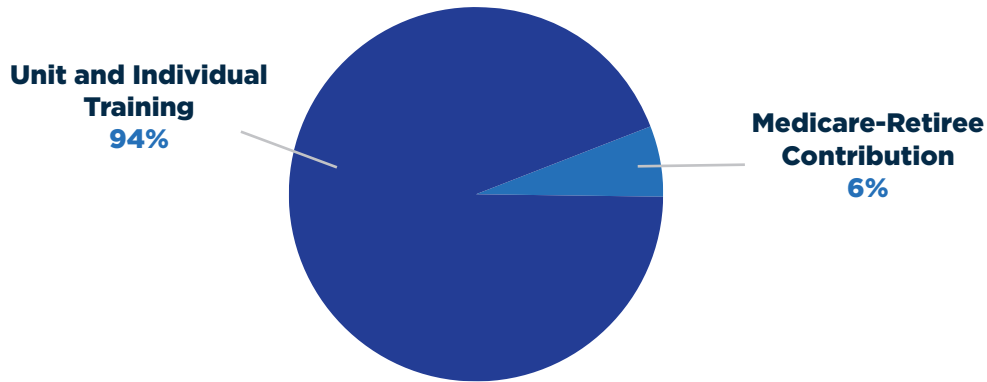
**TABLE 9. MILPERS – Active Air Force TOA**

MILPERS, Air Force TOA (\$M)	FY19	FY20 PB
Officer Personnel Pay and Allowances	7,130	7,755
Enlisted Personnel Pay and Allowances	15,375	16,204
Cadet Pay and Allowances	79	81
Subsistence of Enlisted Personnel	1,006	1,170
Permanent Change of Station	1,096	1,125
Other Personnel Costs	97	110
<b>Subtotal</b>	<b>24,783</b>	<b>26,445</b>
Medicare-Retiree Contribution	1,204	1,282
<b>Total</b>	<b>25,987</b>	<b>27,727</b>

Numbers may not add due to rounding

# MILITARY PERSONNEL - AIR NATIONAL GUARD

Figure 7 depicts the FY 2020 Baseline TOA shown in Table 10 below subdivided into major activities.



**FIGURE 7. MILPERS - Air National Guard FY 2020 Baseline Budget Request**

The Air National Guard MILPERS budget funds direct military compensation, including regular pay and benefits, retired pay accruals, basic allowances for subsistence and housing, recruiting and retention incentives and clothing allowances, for trained units and individual Guardsmen participating in overseas contingency operations and homeland defense. Funding also supports 15-day annual tours, 48 drill periods and active duty tours for training of selected ANG personnel in FY 2020. The budget request includes an end-strength increase of 600 personnel, including more maintenance personnel to support pilot absorption, intelligence personnel directly supporting Distributed Common Ground System units, cyber personnel for protection across Mission Defense Teams, and recruiters. These gains address critical Air Force Specialty Code shortfalls and improve overall readiness.

**TABLE 10. MILPERS - Air National Guard TOA**

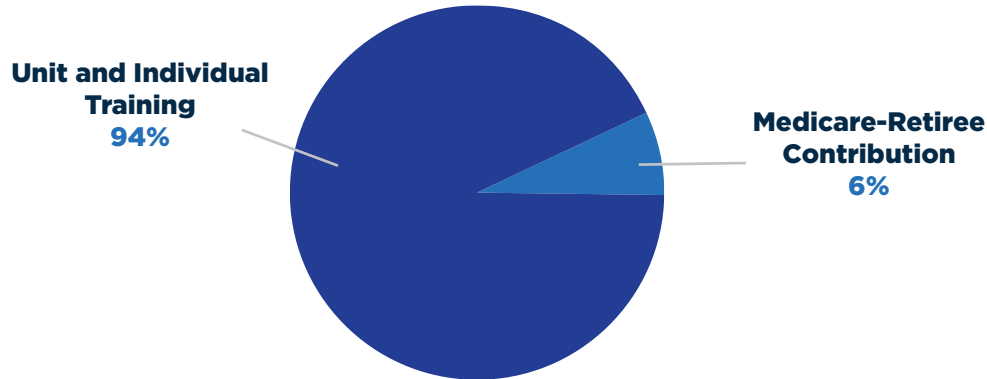
MILPERS, Air National Guard TOA (\$M)	FY19	FY20 PB
Unit and Individual Training	3,687	4,051
<b>Subtotal</b>	<b>3,687</b>	<b>4,051</b>
Medicare-Retiree Contribution	235	253
<b>Total</b>	<b>3,922</b>	<b>4,304</b>

Numbers may not add due to rounding



# MILITARY PERSONNEL – AIR FORCE RESERVE

Figure 8 depicts the FY 2020 Baseline TOA shown in Table 11 below subdivided into major activities.



**FIGURE 8. MILPERS – Air Force Reserve FY 2020 Baseline Budget Request**

The Air Force Reserve (AFR) MILPERS budget funds direct military compensation, including regular pay, allowances, and benefits for trained units and individual Reservist who augment the Active component to fulfill military mission requirements. The Reserve component end-strength increases in overall size by 100 in the FY 2020 budget request, increasing positions in special operations intelligence, squadron support and space specialties. This increase continues our efforts to right size the force, strengthening our squadrons and continues readiness recovery.

**TABLE 11. MILPERS – Air Force Reserve TOA**

MILPERS, Air Force Reserve TOA (\$M)	FY19	FY20 PB
Unit and Individual Training	1,839	2,016
<b>Subtotal</b>	<b>1,839</b>	<b>2,016</b>
Medicare-Retiree Contribution	131	138
<b>Total</b>	<b>1,970</b>	<b>2,154</b>

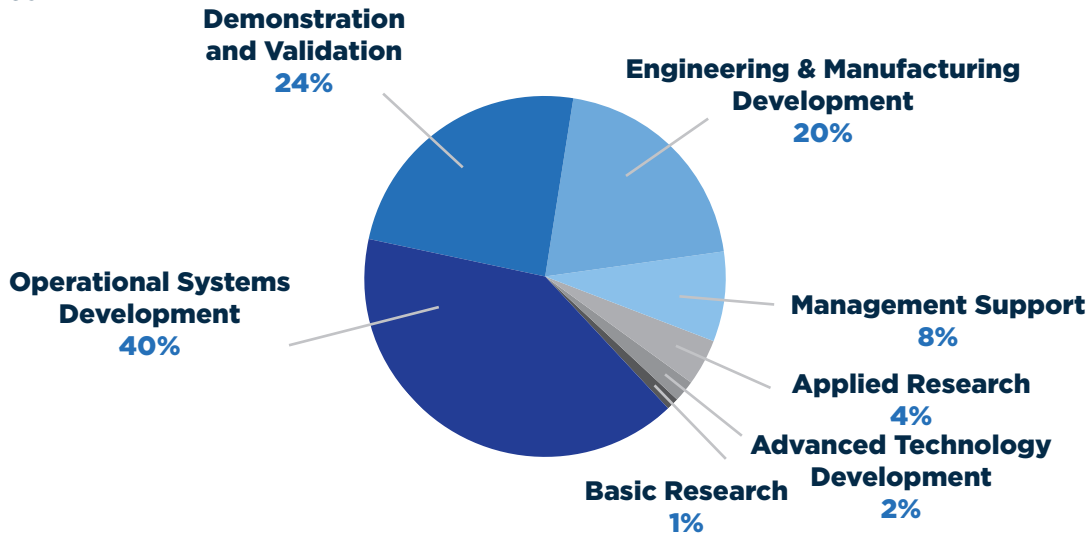
Numbers may not add due to rounding





# RESEARCH DEVELOPMENT TEST AND EVALUATION (RDT&E)

Figure 9 depicts the FY 2020 Baseline TOA shown in Table 12 below subdivided into major categories.



**FIGURE 9. RDT&E FY 2020 Baseline Budget Request**

The Research, Development, Test and Evaluation appropriation funds the following seven budget activities: basic and applied scientific research, advanced technology development, demonstration and validation, engineering and manufacturing development, operational system development, and management support. Basic research activities are scientific studies and experimentation related to long-term national security, while Applied research is the systematic study to understand how to meet specific national security requirements. The Advanced Technology and Development activities include the integration of subsystems and components into prototypes for field experiments and tests in a simulated environment. The Advanced Technology Development and Prototype Analysis activities involve efforts that expedite subsystem maturity prior to integration into major systems, and may include risk reduction initiatives. The Demonstration and Validation activities conduct engineering and manufacturing of developing tasks to meet validated requirements prior to full-rate production. The Management and Support activities fund administration of RDT&E activities to sustain, and modernize installations or operations. Finally, the Operational Systems Development activities include efforts to upgrade fielded systems, or systems approved for full rate production, with funding anticipated within two fiscal years.

**TABLE 12. RDT&E TOA**

<b>RDT&amp;E TOA (\$M)</b>	<b>FY19</b>	<b>FY20 PB</b>
Operational Systems Development	12,920	14,306
Demonstration and Validation	6,626	8,436
Engineering & Manufacturing Development	5,454	6,929
Management Support	2,963	2,917
Applied Research	1,481	1,436
Advanced Technology Development	929	839
Basic Research	561	530
<b>Total</b>	<b>30,933</b>	<b>35,393</b>

Numbers may not add due to rounding

Faced with an eroding technological advantage in an international environment of great power competition, the FY 2020 budget invests heavily in innovation by funding game-changing technologies, the modernization of our nuclear force, and the transformation of major space capabilities to better perform in a contested environment. The FY 2020 request continues development of the B-21 Raider Long Range Strike Bomber and Global Positioning System III Follow On, and increases funding for the VC-25B Presidential Aircraft Recapitalization (PAR) to replace the aging VC-25A, commonly known as Air Force One. Additionally, funding continues the Next Generation Air Dominance Study, an operational system study to advance air superiority through capability improvements to maintain our lethal edge against global threats. Finally, the FY 2020 budget request funds the Advanced Pilot Trainer, new training aircraft, and ground based training systems aimed to restore readiness by replacing aging training aircraft, simulators, academics, and computer based training systems.

The FY 2020 budget request increases developmental prototyping efforts, essential to understand requirements, inform critical utility decisions, evaluate technical feasibility, and to expedite fielding of capabilities to the warfighter. The Air Force has prototyping efforts in adaptive engines, hypersonics, space capabilities, cyber/electronic warfare, and low-cost aircraft technologies. The Air Force also continues to explore Light Attack Aircraft options as a cost-effective replacement for sustaining counterterrorism and irregular warfare missions. Additionally, funding continues development and engineering for the Long Range Stand Off Missile system capable of delivering a nuclear effect on strategic targets and invests in the Ground Based Strategic Deterrent to continue Inter-continental Ballistic Missile modernization and mitigate ground-based deterrent degradation.

The FY 2020 budget accelerates our efforts to move to a defensible space posture, which is critical as our adversaries continue to develop capabilities to counter our advantages in space. This budget invests in the survivable and resilient Next Generation Overhead Persistent Infrared system and continues modernization of our GPS satellites communications systems and space warfighting enterprise.

The table below summarizes the major developments funded in this request.

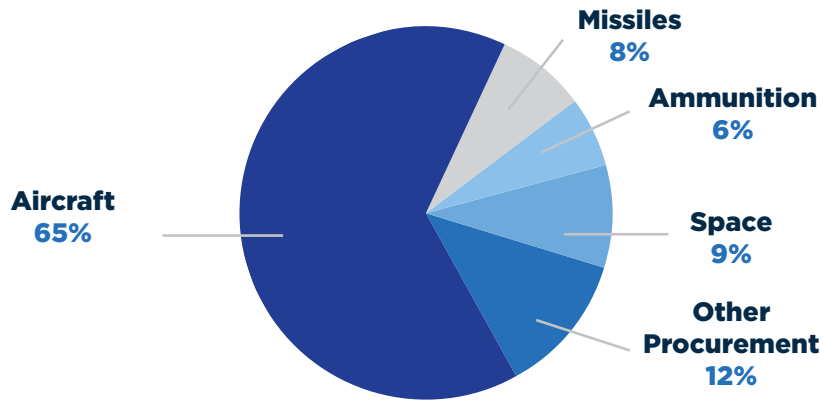
**TABLE 13. Significant RDT&E Programs**

<b>Program Highlights</b>		
<b>\$ Millions</b>		
	<b>FY19</b>	<b>FY20 PB</b>
<b>Aircraft</b>		
B-21	2,279	3,004
PAR	658	758
F-35A Capability Develop & Deliv	504	794
Advanced Pilot Trainer (T-X)	246	348
<b>Space</b>		
Next-Gen OPIR	643	1,395
<b>Nuclear</b>		
Long Range Stand Off Missile	665	713
Ground Based Strategic Deterrent	414	570
<b>Other</b>		
Next Generation Air Dominance	430	1,000
Hypersonics Prototyping	509	576

Numbers may not add due to rounding

# PROCUREMENT

Figure 10 depicts the FY 2020 Baseline TOA shown in Table 14 below subdivided into major activities.



**FIGURE 10. Procurement FY 2020 Baseline Budget Request**

The Procurement portfolio delivers both immediate and future capabilities through investment across four specific appropriations: Aircraft, Space, Missile, and Other Procurement. The Air Force seeks to satisfy national security requirements by investing in more lethal and cost-effective capabilities, as well as modernization and recapitalization efforts. To meet those needs, the FY 2020 budget request funds 5th generation aircraft such as the F-35A, and invests in modernizing the refueling fleet with the KC-46A. The following pages discuss the procurement appropriations in more detail.

**TABLE 14. Procurement TOA**

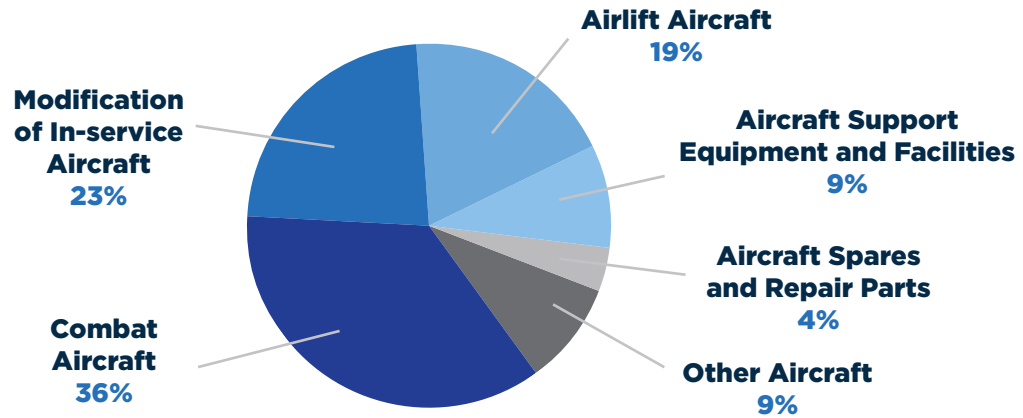
Procurement TOA (\$M)	FY19	FY20 PB
Aircraft	17,084	16,750
Space	2,329	2,414
Missile	1,718	2,040
Ammunition	1,486	1,668
Other Procurement	3,396	3,050
<b>Total</b>	<b>26,013</b>	<b>25,922</b>

Numbers may not add due to rounding



# PROCUREMENT - AIRCRAFT

Figure 11 depicts the FY 2020 Baseline TOA shown in Table 15 subdivided into major categories.



**FIGURE 11. Aircraft Procurement FY 2020 Baseline Budget Request**

Aircraft Procurement funds acquisition and modification of aircraft, ground support equipment, training devices, and spare parts. The Air Force remains committed to the F-35 with its game-changing technology and this FY 2020 budget continues the procurement of 48 F-35A Joint Strike Fighters each year. However, to remain ready to perform in all domains, across the spectrum of conflict, this budget proposes procurement of 8 F-15EX aircraft to replace aging F-15Cs and continues modernization of F-22A, F-15, and F-16 aircraft.



Our aerial refueling capability underwrites the global nature of Air Force power and enables the rapid deployment of aircraft and resources. The FY 2020 budget request funds the procurement of an additional 12 KC-46A tankers. Our budget request supports personnel recovery and special operations through procurement of 8 MC-130J aircraft and 12 HH-60W Combat Rescue Helicopters to replace and augment aging fleets of combat HC-130P/N, special operations MC-130E/H/P/W, and HH-60G helicopters.

The Air Force must retain a technological edge by equipping our Airmen with highly advanced and lethal tools to prevail in the high-end fight. This budget continues investment in command and control (C2) modernization, by improving engine, cockpit and communication systems of the E-3 Airborne Warning Command and Control aircraft (AWACS) fleet. The budget also funds procurement of an EC-37B Compass Call rehost, as well as, modifications to digital narrow band, counter radar subsystems, and the next generation special purpose emitter array (SPEAR) sub-system.

As the Air Force prepares for near-peer conflict, our capabilities remain in high demand. The Air Force continues to invest in Intelligence, Surveillance and Reconnaissance (ISR), procuring 12 medium-altitude MQ-9A Reapers in 2020. To maintain intelligence collection parity across a range of military operations the budget funds upgrades to the RQ-4 Global Hawk and RC-135 Rivet Joint.

The table below summarizes funding for Aircraft Procurement by budget activity.

**TABLE 15. Procurement, Aircraft TOA**

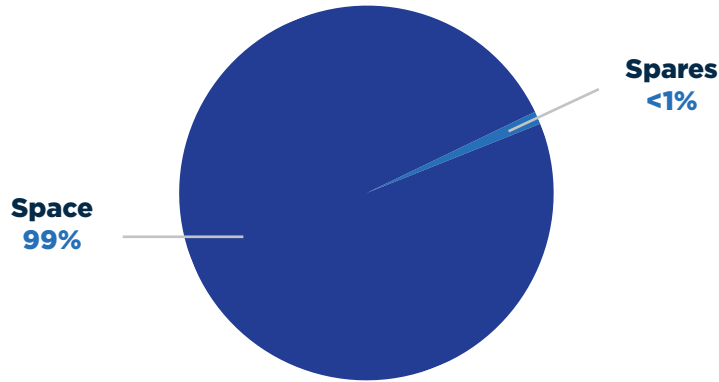
Procurement, Aircraft TOA (\$M)	FY19	FY20 PB
Combat Aircraft	5,392	5,980
Modification of In-service Aircraft	3,931	3,854
Airlift Aircraft	4,008	3,158
Aircraft Support Equipment and Facilities	1,709	1,568
Aircraft Spares and Repair Parts	821	708
Other Aircraft	1,224	1,482
<b>Total</b>	<b>17,084</b>	<b>16,750</b>

Numbers may not add due to rounding



# PROCUREMENT - SPACE

Figure 12 depicts the FY 2020 Baseline TOA shown in Table 16 below subdivided into major categories.



**FIGURE 12. Space Procurement FY 2020 Baseline Budget Request**

The Space Procurement appropriation funds acquisition of spacecraft and terminals, ground control systems, and related communications security products. This procurement budget further accelerates our efforts to protect and defend our ability to operate in space. The FY 2020 budget funds four launch services for the National Security Space Launch program. Additionally, FY 2020 procures the first GPS III follow-on satellite.

The FY 2020 Space Procurement Appropriation Baseline TOA is shown in Table 16 below.

**TABLE 16. Procurement, Space TOA**

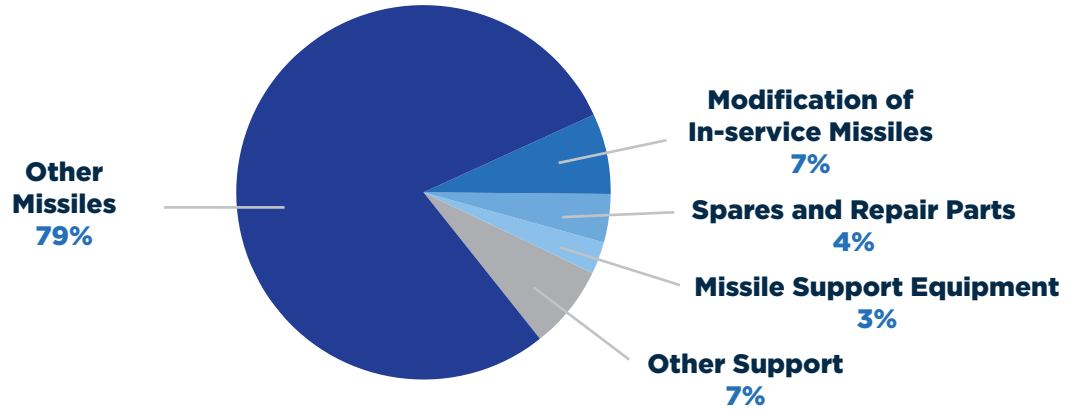
Procurement, Space TOA (\$M)	FY19	FY20 PB
Space	2,313	2,407
Spares <sup>1</sup>	17	7
<b>Total</b>	<b>2,329</b>	<b>2,414</b>

Numbers may not add due to rounding  
<sup>1</sup> Space Procurement Spares began in FY 17



# PROCUREMENT - MISSILE

Figure 13 depicts the FY 2020 Baseline TOA shown in Table 17 below subdivided into major categories.



**FIGURE 13. Missile Procurement FY 2020 Baseline Budget Request**

The Missile Procurement appropriation funds acquisition and modification of missiles, spare parts, and support equipment. The FY 2020 budget funds preferred munitions to industrial production capacity, emphasizing those munitions most relevant to the high-end fight. In FY 2020, to supply current operations and replenish stockpiles the Air Force will increase procurement of Small Diameter Bombs (SDB), SDB-I to 7,078, SDB-II to 1,175, and Joint Air-to-Surface Standoff Missile-Extended Range (JASSM-ER) to 430. The Air Force continues to procure Predator Hellfire air-to-ground missiles designed to launch from aircraft at targets on land or sea. The Air Force will also procure 355 AIM-9X Sidewinder and 220 AIM-120D Advanced Medium-Range Air-to-Air Missiles (AMRAAM) to sustain the Air Force’s air dominance and global precision attack capabilities.

**TABLE 17. Procurement, Missile TOA**

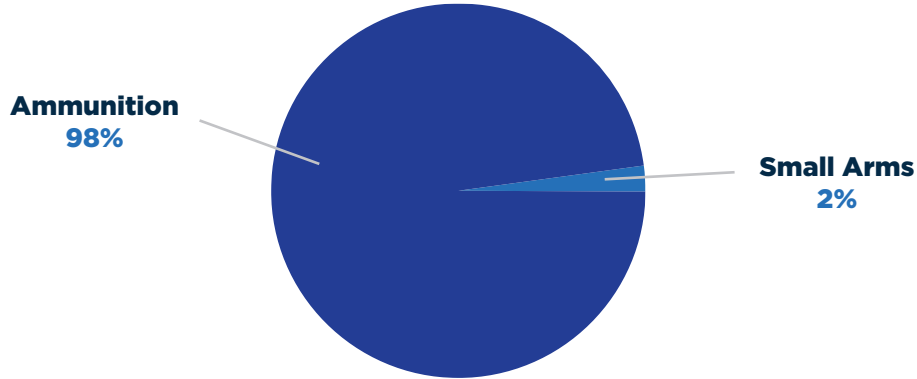
Procurement, Missile TOA (\$M)	FY19	FY20 PB
Other Missiles	1,226	1,607
Modification of In-service Missiles	192	148
Spares and Repair Parts	97	84
Missile Support Equipment	14	56
Other Support	189	145
<b>Total</b>	<b>1,718</b>	<b>2,040</b>

Numbers may not add due to rounding



# PROCUREMENT - AMMUNITION

Figure 14 depicts the FY 2020 Baseline TOA shown in Table 18 below subdivided into major categories.



**FIGURE 14. Ammunition Procurement FY 2020 Baseline Budget Request**

The Ammunition Procurement appropriation funds procurement, production, and modification of ammunition. The portfolio primarily supports the Global Strike core function and includes ammunition, rockets, bombs, flares, fuses, cartridges, and related training devices. This budget maximizes munitions acquisitions critical to the high-end fight, which includes procurement of 37,000 Joint Direct Attack Munition (JDAM) and 5,400 Advanced Precision Kill Weapon System (APKWS). These weapons improve lethality through greater precision, reduced collateral damage, and increased standoff range to enhance crew survivability.

**TABLE 18. Procurement, Ammunition TOA**

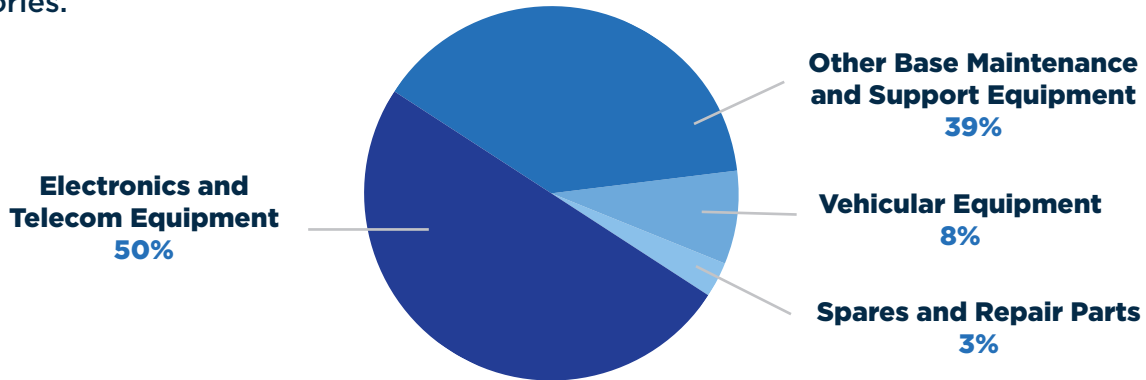
Procurement, Ammunition TOA (\$M)	FY19	FY20 PB
Ammunition	1,421	1,630
Small Arms	65	37
<b>Total</b>	<b>1,486</b>	<b>1,668</b>

Numbers may not add due to rounding



# PROCUREMENT - OTHER

Figure 15 depicts the FY 2020 Baseline TOA shown in Table 19 below subdivided into major categories.



**FIGURE 15. Other Procurement FY 2020 Baseline Budget Request**

The Other Procurement appropriation funds the purchase and modification of ground electronic systems, information systems and physical security systems, in addition to communication and base support equipment, and vehicles. FY 2020 focuses on modernizing and replacing equipment to support improved communications in Multi-Domain Operations to build a more lethal and ready force.

FY 2020 improves our cyberspace capabilities by strengthening our network operations by providing increased cyber mission assurance with proactive defense activities and increased network situational awareness. To address emerging cyber threats the Air Force is upgrading the mainstay of the cyberspace network, the Base Information Transport Infrastructure (BITI), on 33 Active, Guard, and Reserve sites. We are also increasing protection of personnel, nuclear assets, and facilities through the Base Physical Security Systems (BPSS) program. To address evolving adversarial threats to Air Force assets in FY 2020 this budget funds procurement of Counter-Small Unmanned Aircraft System (C-sUAS) capabilities and Integrated Base Defense Security Systems (IBDSS).

The Air Force continues to field the upgrade of the Minimum Essential Emergency Communications Network (MEECN), which provides effective, protected communications between the President and the strategic deterrence forces in stressed environments. This budget continues the procurement of the Battlefield Airborne Communications Node (BACN) which enables interoperability of systems and real-time information flow, strengthening our alliances and critical to operations in the joint environment.

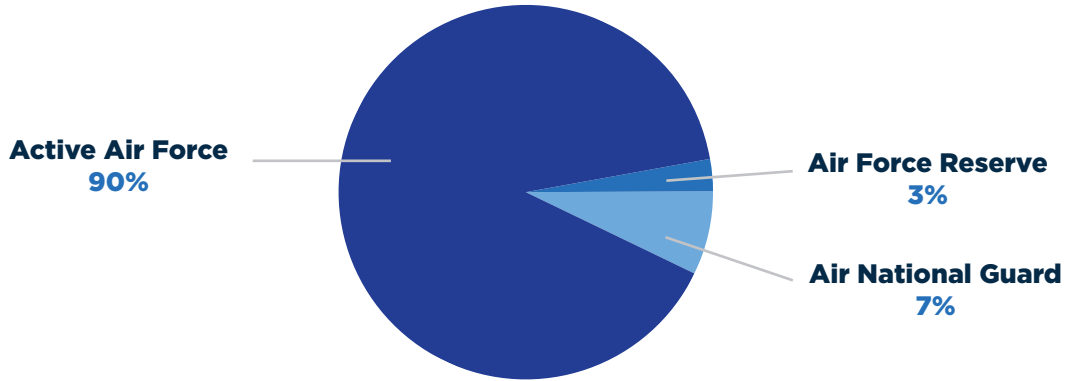
**TABLE 19. Procurement, Other TOA**

Procurement, Other TOA (\$M)	FY19	FY20 PB
Electronics and Telecom Equipment	1,386	1,538
Other Base Maintenance and Support Equipment	1,586	1,199
Vehicular Equipment	337	231
Spares and Repair Parts	86	81
<b>Total</b>	<b>3,396</b>	<b>3,050</b>

Numbers may not add due to rounding

# MILITARY CONSTRUCTION (MILCON)

Figure 16 depicts the FY 2020 Baseline TOA shown below in Table 20 below subdivided by component.



**FIGURE 16. MILCON FY 2020 Baseline Budget Request**

Resilient installations are a critical component of Air Force operations because infrastructure is the backbone of the Air Force’s power projection and readiness-building platform because we fight from out bases. The Air Force continues to prioritize Military Construction (MILCON) investments to ensure critical infrastructure requirements meet mission needs and operational timelines. The Air Force’s FY 2020 MILCON budget request contains \$2.3B for Military Construction, approximately \$400M more than the FY 2019 enacted funding. These resources will fund infrastructure for existing missions, Combatant Commander priorities, and new weapon system beddowns.

**TABLE 20. MILCON TOA**

MILCON TOA (\$M)	FY19	FY20 PB
Active Air Force	1,537	2,058
Air Force Reserve	123	60
Air National Guard	183	166
<b>Total</b>	<b>1,843</b>	<b>2,284</b>

Numbers may not add due to rounding



## MILCON – ACTIVE AIR FORCE

The FY 2020 Active Air Force MILCON budget request addresses infrastructure needs for existing missions, Combatant Commanders' highest construction priorities, and supports new mission beddowns. In total, the Air Force's FY 2020 budget request represents a balanced approach to ensure critical infrastructure requirements meet mission needs and operational timelines.

In FY 2020 the Air Force will recapitalize and consolidate several existing facilities (\$5.5M) on Minot AFB, North Dakota to improve nuclear deterrence through quicker crew response and security support for the ICBM missile alert and launch sites. Additionally, the FY 2020 budget request provides funding for the construction of a UH1-N Replacement Facility (\$22.4M) at Kirtland AFB, New Mexico, a Weapons Generation Facility (\$235.0M) at Malmstrom AFB, Montana.

This budget proposal includes funds to modernize our existing live and virtual ranges and infrastructure to provide relevant and realistic training capabilities against our most advanced threats. This request funds the C-130H/J Fuselage Trainer Facility (\$47.0M) at Little Rock AFB, Arkansas, the Special Warfare Aquatic Training Center (\$69.0M) and a Basic Military Training Dormitory (\$110.0M) at Joint Base San Antonio, Texas.

The FY 2020 budget request supports Combatant Command MILCON requirements, particularly in the Indo-Pacific Region, and funds the limited beddown of new missions. In support of weather diverts and to comply with DoD's standards in the Indo-Pacific region, the FY 2020 budget funds construction of a Parking Apron (\$98.0M), fuel tanks with a pipeline/hydrant system (\$109.0M) and Phase 1 of airfield development (\$109.0M) on the island of Tinian, part of the Mariana Islands. Additionally, the budget funds construction of jet fuel storage tanks (\$59.0M) in Australia, fuel receipt and distribution tanks (\$12.4M) on Yokota AFB, Japan and the third of three planned Munitions Storage Igloos (\$65.0M) at Andersen AFB, Guam. These efforts support the munitions beddown and transition of requirements in the Indo-Pacific Area of Operations.

The budget supports the beddown of the Ground Based Strategic Deterrent (GBSD) Mission Integration Facility (\$108.0M) at Hill AFB, Utah a new mission within the nuclear enterprise. The budget also funds new construction of a covered F-35A Munitions Assembly Storage Facility (\$8.6M) at Nellis AFB, Nevada to facilitate live-fire combat employment training. Additionally, this budget provides funds (\$86.0M) for construction of the Presidential Aircraft Recapitalization Complex (total project cost: \$254.0M) at Joint Base Andrews, Maryland, which includes a large aircraft hangar, aircraft access taxiway and parking apron.

The Air Force continues to closely partner with industry and allies to further technologies and to determine the best strategy going forward. The Air Force's FY 2020 budget request funds for construction of the Massachusetts Institute of Technology - Lincoln Laboratory (MIT-LL) research infrastructure, consolidating the distributed compound semiconductor and advanced packaging laboratories into a single purpose-built facility (\$135.0M). This project will enhance our ability to design, fabricate and field advanced electronic prototypes to enable a wide range of missions imperative to national security.

The Active Air Force FY 2020 budget request is summarized in Table 21, while a comprehensive MILCON project list is included in Table 24.

**TABLE 21. MILCON, Active Air Force TOA**

MILCON, Air Force Active TOA (\$M)	FY19	FY20 PB
Major Construction	1,301	1,837
Minor Construction	39	80
Planning and Design	198	142
<b>Total</b>	<b>1,537</b>	<b>2,058</b>

Numbers may not add due to rounding



## MILCON – AIR NATIONAL GUARD

The FY 2020 Air National Guard (ANG) MILCON budget request includes projects for vital recapitalization requirements, combatant command support and supports force structure and mission realignments. Air National Guard recapitalization efforts include a new hangar and maintenance shops to support the Consolidated Joint Air Dominance Center (\$24.M) at Savannah International Airport, Georgia and recovery projects (\$50.0M) at Luis Munoz International Airport, Puerto Rico to replace hangar and communications facilities destroyed in 2017 by Hurricane Maria. A new alert shelter (\$20.0M) at Truax Field, Wisconsin will allow the Guard to provide necessary combatant command support to NORTHCOM and a new F-35 flight simulator facility (\$14.0M) at the same location furthers progress to operate F-35s at that location. Finally, to support a mission realignment at Rosecrans Memorial Airport, Missouri, this budget funds construction of a C 130 flight simulator facility.

**TABLE 22. MILCON, Air National Guard TOA**

MILCON, Air National Guard TOA (\$M)	FY19	FY20 PB
Major Construction	141	118
Minor Construction	24	31
Planning and Design	19	17
<b>Total</b>	<b>183</b>	<b>166</b>

Numbers may not add due to rounding

## MILCON – AIR FORCE RESERVE

The FY 2020 Air Force Reserve (AFR) MILCON budget funds our priority requirement, the Consolidated Mission Complex Phase 3 (\$43.0M), which supports current mission beddowns at Robins AFB, Georgia.

**TABLE 23. MILCON, Air Force Reserve TOA**

MILCON, Air Force Reserve TOA (\$M)	FY19	FY20 PB
Major Construction	115	43
Minor Construction	3	12
Planning and Design	4	5
<b>Total</b>	<b>123</b>	<b>60</b>

Numbers may not add due to rounding

**TABLE 24. Worldwide Base MILCON Project List**

State/Country	Installation	Project	FY20 Request (\$K)
Alaska	Eielson	F-35A Storage Facility	8,600
Arkansas	Little Rock	C-130H/J Fuselage Trainer Facility	47,000
Australia	RAAF Tindal	Jet Fuel Storage Tanks	59,000
Australia	RAAF Tindal	Earth Covered Magazine	11,600
California	Travis	KC-46A Alter B181/B185/B187 Squadron Operations	6,600
California	Travis	KC-46A Regional Maintenance Training Facility	19,500
Colorado	Schriever	Consolidated Space Operations Facility	148,000
Cyprus	RAF Akrotiri	Dormitory	27,000
Guam	Andersen	Munitions Storage Igloos Phase 3	65,000
Illinois	Scott	Joint Operations and Mission Planning Center	100,000
Japan	Yokota	Fuel Receipt and Distribution Upgrade	12,400
Jordan	Muwaffaq-Salti AB	Air Traffic Control Center	24,000
Jordan	Muwaffaq-Salti AB	Munitions Storage Area	42,000
Mariana Islands	Tinian	Parking Apron	98,000
Mariana Islands	Tinian	Air Traffic Control Tower	109,000
Mariana Islands	Tinian	Fuel Tanks with Receipt Pipeline and Hydrant	109,000
Maryland	Andrews	Presidential Aircraft Recap Complex	86,000
Massachusetts	Hanscom	MIT-Lincoln Laboratory (West Lab CSL/MIF)	135,000
Montana	Malmstrom	Weapons Storage and Maintenance Facility	235,000
Nevada	Nellis	F-35A Munitions Assembly Conveyor Facility	8,200
Nevada	Nellis	365th Intelligence Survey Recon Facility	57,000
New Mexico	Kirtland	Combat Rescue Helicopter Simulator	15,500
New Mexico	Kirtland	UH-1 Replacement Facility	22,400
North Dakota	Minot	Consolidated Helo/TRF Alert Facility	5,500
Texas	JB San Antonio	T-X Ground Based Training System Simulator	9,300
Texas	JB San Antonio	T-X Training System Centralized Training Facility	19,000
Texas	JB San Antonio	Basic Military Training Recruit Dormitory	110,000
Texas	JB San Antonio	Battlefield Airmen Aquatic Training Facility	69,000
Utah	Hill	Joint Advanced Tactical Missile Facility	6,500
Utah	Hill	GBSD Mission Integration Facility	108,000
United Kingdom	RAF Lakenheath	F-35 PGM Facility	14,300
Washington	Fairchild	Consolidated Total Force Integrated Base Operations	31,000
Wyoming	F.E. Warren	Consolidated Squadron Operations /TRF Alert Facility	18,100
Worldwide Unspecified	Various Worldwide Locations	Unspecified Minor Military Construction	79,682
Worldwide Unspecified	Various Worldwide Locations	Planning & Design	142,148
<b>Active Total</b>			<b>2,058,330</b>
Georgia	Savannah International Airport	Consolidated Joint Air Dominance Hangar/Shops	24,000
Missouri	Rosecrans Memorial Airport	C-130 Flight Simulator Facility	9,500
Puerto Rico	Luis Munoz Marin International Airport	Rebuild after Hurricane Maria Communications Facility	12,500
Puerto Rico	Luis Munoz Marin International Airport	Rebuild after Hurricane Maria Maintenance Hangar	37,500
Wisconsin	Truax Field	Fighter Alert Shelters	20,000
Wisconsin	Traux Field	F-35 Simulator Facility	14,000
Worldwide Unspecified	Unspecified Worldwide Locations	Unspecified Minor Construction	31,471
Worldwide Unspecified	Various Worldwide Locations	Planning & Design	17,000
<b>Guard Total</b>			<b>165,971</b>
Georgia	Robins	Consolidated Mission Complex Phase 3	43,000
Worldwide Unspecified	Unspecified Worldwide Locations	Unspecified Minor Construction	12,146
Worldwide Unspecified	Unspecified Worldwide Locations	Planning & Design	4,604
<b>Reserve Total</b>			<b>59,750</b>

## MILITARY FAMILY HOUSING

The FY 2020 Military Family Housing budget request continues efforts to provide quality homes and support services to service members across the globe. The Air Force utilizes a Family Housing Master Plan as a strategic planning tool to prioritize budgetary requirements. The FY 2020 budget request supports our Airmen and their families housing needs through perpetual oversight of privatized housing, sustainment of our government-owned inventory, and leasing of homes as required.

**TABLE 25. Military Family Housing TOA**

MFH TOA (\$M)	FY19	FY20 PB
MFH Operations and Maintenance	317	295
MFH-Construction Improvements	75	100
MFH-Construction Planning and Design	3	3
<b>Total</b>	<b>396</b>	<b>399</b>

Numbers may not add due to rounding

## BASE REALIGNMENT AND CLOSURE

The Air Force implemented all Base Realignment and Closure actions as described in the Defense Base Closure and Realignment Commission reports to the President. The FY 2020 budget request continues environmental restoration at remaining BRAC locations. The Air Force continues to align cleanup resources with environmental restoration and property transfer at installations closed under previous BRAC actions. The program focuses on protecting human life and the environment through execution of projects resulting in the transfer of acreage and achievement of environmental compliance remediation goals. In addition to achieving environmental goals, these projects provide beneficial reuse of property and meet legally enforceable requirements.

Funding for this appropriation is displayed in Table 29 below.

**TABLE 26. BRAC TOA**

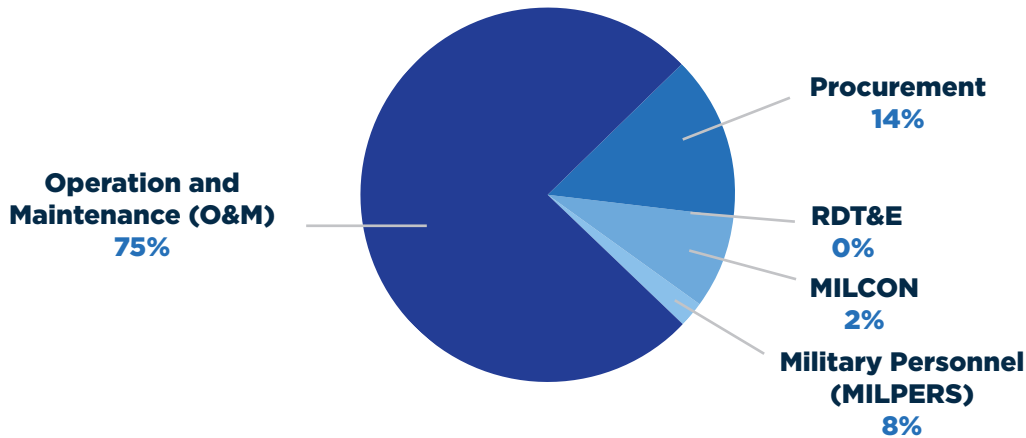
BRAC TOA (\$M)	FY19	FY20 PB
DOD Base Closure Account	67	54
<b>Total</b>	<b>67</b>	<b>54</b>

Numbers may not add due to rounding



# OVERSEAS CONTINGENCY OPERATIONS (OCO)

Figure 17 depicts the FY 2020 Baseline TOA shown below in Table 27 below subdivided into major activities. Major OCO MILCON projects are also depicted in Table 28.



**FIGURE 17. OCO FY 2020 Baseline Budget Request**

The Air Force serves as an integral Joint team partner in Overseas Contingency Operations, responsible for leveraging the domains of air, space and cyberspace. The Air Force continues to lead the fight against Violent Extremist Organizations (VEO), while still heavily engaged in Afghanistan. Current operations, INHERENT RESOLVE and Counter-ISIS continue to require engagement of numerous aircraft. In addition to Direct War and Enduring OCO requirements, which remain from prior years, the FY 2020 budget request includes a significant portion of traditional base requirements categorized as OCO for Base.

The Direct War and Enduring OCO request is approximately \$2B less than the FY 2019 request due to fewer MQ-9 purchases and fewer munitions funded in these categories of OCO. The FY 2020 request includes \$1.8B of Direct War cost including funding to supports readiness for contingency operations. The Direct War budget also includes procurement funds to replenish certain missile stockpiles, including 2,328 Hellfire missiles and 19 Joint Air-Surface Standoff Missiles.

The FY 2020 \$10.9B Enduring OCO request includes Operation and Maintenance support at six enduring locations, procurement of nine MQ-9s, and supports the European Deterrence Initiative projects. The Enduring OCO request funds seven projects in Europe including \$491M of airfield upgrades, and increased fuel and munitions storage facilities.

In FY 2020, the budget request includes \$29.6B in OCO for Base requirements. The OCO for Base requirement is OCO funding for base requirements in support of the National Defense Strategy. This budget requests these OCO to comply with the base budget defense caps included in the Budget Control Act of 2011.

The FY 2020 OCO request includes funding in support of the below operations/lines of effort:

- » **Afghanistan**
  - » Operation FREEDOM SENTINEL (OFS)
- » **Syria/Iraq**
  - » Operation INHERENT RESOLVE (OIR)
- » **Combined Joint Task Force - Horn of Africa (CJTF-HOA)**
- » **European Deterrence Initiative (EDI)**

**TABLE 27. OCO TOA**

OCO, Air Force Total (\$M) <sup>1</sup>	FY19	FY20 PB
Operation and Maintenance (O&M) <sup>2</sup>	9,897	9,584
Procurement <sup>3</sup>	3,286	1,779
Aircraft	955	309
Missile	494	202
Ammunition	1,372	939
Other	466	329
Military Personnel (MILPERS)	991	1,030
MILCON	415	315
RDT&E	199	50
<b>Subtotal</b>	<b>14,788</b>	<b>12,757</b>
OCO For Base Requirements	-	29,580
<b>Total OCO Request</b>	<b>14,788</b>	<b>42,337</b>

Numbers may not add due to rounding

<sup>1</sup> Includes Enduring OCO and Direct OCO

<sup>2</sup> Includes TOA O&M & Defense Working Capital Fund

<sup>3</sup> Sum of Aircraft, Missile, Ammunition, Other and Space sub categories

**TABLE 28. Worldwide OCO MILCON Project List**

STATE/COUNTRY	INSTALLATION	PROJECT	REQUESTED (\$K)
Iceland	Keflavik Air Base	European Deterrence Initiative - Airfield Upgrades	32,000
Iceland	Keflavik Air Base	European Deterrence Initiative - Airfield Upgrades- Hot Cargo Pad	18,000
Iceland	Keflavik Air Base	European Deterrence Initiative - Airfield Upgrades	7,000
Poland	Lask Air Base	European Deterrence Initiative - Hot Cargo Pad Upgrades	29,000
Poland	Powidz Air Base	European Deterrence Initiative - Deployable Air Base System Facilities	107,000
Poland	Powidz Air Base	European Deterrence Initiative - Munitions Storage Area	39,000
Spain	Moron Air Bases	European Deterrence Initiative - Hot Cargo Pad	8,500
Worldwide Unspecified Locations	Worldwide Unspecified Locations	Unspecified Minor Military Construction	12,800
Worldwide Unspecified Locations	Worldwide Unspecified Locations	Planning and Design	61,000
<b>Active MILCON OCO Total</b>			<b>314,300</b>



## WORKING CAPITAL FUND

The Defense Working Capital Fund (DWCF) exists to carry out specific mission activities in a market-like financial framework, providing customers common goods and services in the most efficient way possible. Operating within the DWCF, the Air Force Working Capital Fund operates on a break-even basis. The Transportation Working Capital Fund is a part of the AFWCF budget submission because the Air Force is executive agent for cash oversight; however, United States Transportation Command has operational responsibility

AFWCF services and products are integral to readiness and sustainability of air, space, and cyberspace assets and support the ability to deploy forces around the globe. The AFWCF conducts business in two primary areas: depot maintenance and supply management. Depots provide the equipment, skills, and repair services necessary to keep forces operating. Supply management activities procure and manage inventories of consumable and repairable spare parts necessary to maintain mission readiness of all force structure elements.

Successful AFWCF operations are essential for readiness, by ensuring the warfighter receives the right item, at the right place and time, for the lowest cost. The FY 2020 AFWCF budget supports Air Force core functions through supply and maintenance activities, which procure and manage spares, base supplies, and transportation services (i.e. engines, aircraft and other repairable items). The submission includes estimates derived from forecasted customer requirements and reflects our continuing efforts to streamline logistics and business processes. Rate/price changes reflect ongoing initiatives to reduce costs and accurately project inflation impacts. Table 29 captures the highlights of the FY 2020 AFWCF budget request.

**TABLE 29. Air Force Working Capital Fund Financial and Personnel Summary**

AFWCF Total (\$M)	FY18	FY19	FY20 PB
Total Revenue	23,670	24,401	26,537
Cost of Goods Sold	23,999	24,862	26,523
Adjustments for Net Operating Result <sup>1</sup>	-23	-1	-45
Net Operating Result	-352	-462	-31
Accumulated Operating Result <sup>2</sup>	1,058	0	0
Capital Budget	257	264	317
Direct Appropriation <sup>3</sup>	67	78	92
Rate/Price Changes	FY18	FY19	FY20 PB
Consolidated Sustainment Activity Group - Maintenance Division	2.61%	2.92%	3.73%
Consolidated Sustainment Activity Group - Supply Division	-8.32%	2.62%	8.05%
Supply Management Activity Group - Retail	4.78%	2.72%	3.18%
AFWCF, Total Personnel	FY18	FY19	FY20 PB
Civilian Work-Years/Full Time Equivalents	31,133	33,192	35,187
Military Work-Years/Full Time Equivalents	12,283	11,040	12,298

<sup>1</sup> Other Adjustments made for both USTRANSCOM and AF,

AF adjustment required for Medical-Dental Direct Appropriation

<sup>2</sup> Accumulated Operating Result - Reflects gains to be returned in FY 2018 & FY 2019

<sup>3</sup> Direct Appropriation support Medical-Dental War Reserve materials

## CASH MANAGEMENT

The Secretary of Defense (OSD) policy requires DWCF activities to maintain positive cash balances throughout the year and an adequate ending balance to support continuation of operations into the subsequent year. To determine necessary cash levels, a comprehensive analysis of cash disbursements, the operating environment, and associated risk, to include unforeseen events, is completed. The methodology for calculating cash requirements consists of four components: rate, range, risk mitigation, and reserves as reflected in Tables 13 and 14.

In FY 2020, AFWCF cash is projected to exceed \$1.5B (AFWCF and TWCF) while remaining within lower and upper operating limits, a sufficient balance necessary to support operational disbursements. Tables 30 and 31 below detail cash for both AFWCF and TWCF.

**TABLE 30. Air Force Working Capital Fund Cash Management**

AFWCF, Air Force Cash (\$M)	FY18 PB	FY19	FY20 PB
Beginning of Period (BOP) Cash Balance	1,863	1,400	879
Disbursements	16,534	17,528	18,569
Collections	16,110	17,412	18,500
Transfers	-59	0	0
Direct Appropriations (War Reserve Material)	67	78	92
<b>End of Period (EOP) Cash Balance</b>	<b>1,400</b>	<b>1,362</b>	
<b>Lower Limits</b>	<b>1,086</b>	<b>973</b>	<b>726</b>
<b>Upper Limits</b>	<b>1,725</b>	<b>1,595</b>	<b>1,365</b>

Numbers may not add due to rounding

**TABLE 31. Transportation Working Capital Fund Cash Management**

TWCF Cash (\$M)	FY18 PB	FY19	FY20 PB
Beginning of Period (BOP) Cash Balance	856	911	552
Disbursements	7,652	6,668	8,552
Collections	7,323	6,687	8,632
Transfers	0	0	0
Direct Appropriations (Fallen Heroes)	0	0	0
<b>End of Period (EOP) Cash Balance</b>	<b>911</b>	<b>930</b>	
<b>Lower Limits</b>	<b>727</b>	<b>761</b>	<b>582</b>
<b>Upper Limits</b>	<b>1,280</b>	<b>1,281</b>	<b>1,117</b>

Numbers may not add due to rounding

# SUMMARY



The Air Force is participating in engagements throughout the world in defense of our nation, and can only meet the demands with predictable budgets driven by the National Defense Strategy. This budget prioritizes long-term competition and delivers a more lethal and ready Air Force through smarter and faster acquisition practices and a laser focus on readiness improvements for Multi-Domain Operations. To counter the threats we face today, the Air Force must smartly modernize, continue to advance our readiness posture and implement smart reforms. The Air Force budget request of \$165.6 billion for Fiscal Year 2020 builds on the progress made in 2019 to restore the force readiness, increase lethality, and to continue cost-effective modernization. We are prioritizing our readiness to fight and remain on track to meet our readiness goals as we field tomorrow's Air Force.



APPENDIX

Air Force Total Aircraft Inventory (TAI)

Active Air Force							
Aircraft	FY18	FY19	FY20	Aircraft	FY18	FY19	FY20
A-10	141	143	143	HH-60W (CRH)	0	9	9
AC-130	32	38	34	KC-10	59	53	48
B-1	62	61	61	KC-135	155	143	167
B-2	20	20	20	KC-46	0	34	40
B-52	57	58	58	MC-130H	16	15	16
C-130J	100	105	109	MC-130J	37	41	41
C-5	36	36	36	MC-130P	0	0	0
C-12	29	29	29	MQ-9	222	251	260
C-17	150	146	146	MQ-1	43	0	0
C-21	19	19	19	NC-135	1	1	1
C-32	4	4	4	OC-135	2	2	2
C-37	12	12	16	RC-135	22	22	22
C-40	4	4	4	RQ-4	34	32	31
C-130H	1	0	0	T-1	178	178	178
CV-22	50	50	51	T-6	444	444	444
E-3	31	31	31	T-38	501	504	504
E-4	4	4	4	T-41	4	4	4
E-9	2	2	2	T-51	3	3	3
E-11A	4	4	4	T-53	24	24	24
EC-130H	13	13	12	T-X	0	0	3
EQ-4B	0	3	3	TC-135	3	3	3
EC-37B	0	0	1	TG-15	5	5	5
F-15	316	316	316	TG-16	18	19	19
F-16	552	553	553	TH-1	28	28	28
F-22	166	166	166	TU-2	4	4	4
F-35	157	210	250	U-2	27	26	26
HC-130J	19	19	19	UH-1	63	68	68
HC-130N	0	0	0	UV-18B	3	3	3
HH-60	68	82	82	VC-25	2	2	2
VC-25B	0	2	2	WC-135	2	2	2

Air National Guard			
Aircraft	FY18	FY19	FY20
A-10	85	85	85
C-17	50	50	50
C-21	0	0	0
C-32	2	2	2
C-40	3	3	3
C-130H	127	123	123
C-130J	16	16	16
HC-130N	6	0	0
HC-130P	3	0	0
E-8	16	13	13
F-15	137	137	137
F-16	333	333	334
F-22	20	20	20
F-35A	0	2	20
HH-60	17	18	18
HC-130J	5	12	12
KC-135	171	164	164
KC-46	0	12	12
MQ-9	29	24	24
MQ-1	9	0	0
LC-130H	10	10	10
EC-130J	7	7	7
RC-26B	11	13	0
MC-130	1	0	0
WC-130	5	0	0

Air Force Reserve			
Aircraft	FY18	FY19	FY20
A-10	55	55	55
B-52	18	18	18
C-5	16	16	16
C-17	22	26	26
C-40	4	4	4
C-130H	48	46	42
C-130J	10	10	10
HC-130N/P	0	4	0
F-16	54	53	53
HH-60	15	16	16
KC-135	72	74	67
WC-130J	10	10	10
HC-130J	0	0	1

Notes:

1. Includes Programmed Total Aircraft Inventory only
2. Excludes ALCM, ICBM, LRE, Aerial Target, and Ground Control Stations
3. Includes industrial funded, RDT&E, and Special Operations Command aircraft

Air Force Investment New Starts | #1-66 of 89

	Appn	Weapons System	Requirement Title	FY20 PB (\$M)
1	3010	A-10	ARC-210 Radio System Upgrade	8.8
2	3010	A-10	Second Gigabit Ethernet Switch(2GES)	5.0
3	3010	A-10	High Resolution Display System (HRDS)	6.3
4	3010	A-10	3-Dimensional Audio (3DA)	1.0
5	3010	A-10	SDB-1	8.0
6	3010	Aircraft Support Equipment	Bomber Armament Tester (BAT)	6.6
7	3010	Aircraft Support Equipment	Aircraft Maintenance Testers	22.2
8	3010	Aircraft Support Equipment	Nondestructive Inspection (NDI) Joint Oil Analysis Program (JOAP)	26.0
9	3010	B-1	IFF Mode 5/S ADS-B	9.2
10	3010	B-52	GPS-IU Replacement	11.1
11	3010	B-52	B-52 Bomber Tactical Data Link	15.9
12	3010	B-52	B-52 Crypto Modernization	17.7
13	3010	C-17	Filter Fire Migration	0.4
14	3010	E-3	Communication Networking Upgrade (CNU)	10.4
15	3010	E-3	AWACS Mode 5 Acceleration	2.3
16	3010	E-4B	E-4B MUOS	5.7
17	3010	E-8C	Distributed Mission Operations Center (DMOC)	5.0
18	3010	F-15C	F-15 C/D Mobile User Objective System (MUOS)	0.6
19	3010	F-15E	F-15E Mobile User Objective System (MUOS)	0.6
20	3010	F-15E	F-15E B61 ATS Upgrade	5.4
21	3010	F-15EX	F-15 EX	1,050.0
22	3010	F-16	Modification Digital Radar Warning Receiver (RWR).	4.3
23	3010	F-16	Modular Mission Computer (MMC) and Display Generator Upgrade	14.5
24	3010	F-22	Sensor Enhancement	151.7
25	3010	F-35	F-35 Block 4 Modifications	14.0
26	3010	F-35	F-35 Correction of Deficiencies	187.7
27	3010	HH-60U	Low Cost Modification Line	1.9
28	3010	Initial Spares	A-10, EQ-4B, F-15 EPAWSS	12.8
29	3010	MQ-9	System Lifecycle Agile Modernization (SLAM)	0.1
30	3010	Other Production Charges	C-5 Depot Activation	0.6
31	3010	Other Production Charges	F 15C Mode 5 Depot Activation	2.5
32	3010	Other Production Charges	Family of Advanced BLoS Terminals (FAB-T)	1.7
33	3010	RQ-4	Ground Segment Modernization Program (GSMP)	1.6
34	3010	T-1	Crew Relief Station Replacement	1.5
35	3010	T-38	T-38 Canopy	0.2
36	3010	T-6	Reliability & Maintainability (R&M) Safety Mods	0.1
37	3010	T-6	Crew System Modernization Program (CSMP)	0.1
38	3010	U-2	ASARS-2B Procurement for U-2	32.5
39	3020	AGM-86	Service Life Extension Program: Inertial Navigational Element	13.4
40	3020	JAGM	Joint Air-to-Ground Munition (JAGM)	15.0
41	3020	MM III, Control Monitor Procedures Trainer (CMPT)	Control Monitor Procedures Trainer	0.9
42	3021	GPS IIIF	GPS IIIF Space Vehicle (SV)-13 Production	414.6
43	3080	Battlefield Airborne Control Node (BACN)	Battlefield Airborne Control Node (BACN)	39.6
44	3080	Battlefield Airborne Control Node (BACN)	E-11A BACN System	8.9
45	3080	Combat Training Ranges	Advanced Radar Threat System Variant 2 (ARTS-V2) Threat System Simulator	23.8
46	3080	Intelligence Communications Equipment	ISR Modernization & Automation Development (IMAD)	3.5
47	3080	General Information Technology	Electronic Warfare Integrated Reprogramming (EWIR)	1.4
48	3080	General Information Technology	Intel Data Applications	5.3
49	3080	AFNET Unified Platform	Cyber Mission Forces (CMF) Operational Capability	5.0
50	3080	Mobility Command and Control	Roll-On Conference Capsule (ROCC)	10.8
51	3080	Integrated Personnel and Pay System (AFIPPS)	Payroll COTS Software Licenses to support the Total Force	20.9
52	3080	Communication Electronic Modifications	Tactical Data Networks Enterprise Link 16	6.9
53	3080	Strategic Command and Control	Multi Domain Command and Control (MDC2)	2.0
54	3080	Base Procured Equipment	Tactical Deception Program	3.0
55	3080	Base Procured Equipment	F-35 Beddown (Sun Shades)	12.0
56	3080	Base Maintenance and Support Equipment	Small Munitions Trailers	12.0
57	3080	Spares and Repair Parts	Wide Area Surveillance	3.0
58	3600	Airborne Warning & Control System (AWACS)	E-3 AWACS Communications Integration Program (ACIP) Development	1.0
59	3600	Airborne Warning & Control System (AWACS)	E-3 AWACS GPS Upgrade (M-Code)	1.0
60	3600	Analysis Enterprise	Kill Chain Automation - software development	3.0
61	3600	B-2 Modernization	B-2 Expanded Strike	1.0
62	3600	C-130	Mobile User Objective System (MUOS)	15.8
63	3600	C2 Optimization	Artificial Intelligence and Machine Learning	0.8
64	3600	C-5	Replace Multi-Function Controls and Display (RMCD) program	10.2
65	3600	Core Technology	Develop ISR Algorithmic Warfare	16.0
66	3600	CSEL Next Generation Survival Radio Recapitalization (NGSR)	Upgrades 60,000 handheld CSEL rescue radios.	1.0

Air Force Investment New Starts | #67-89 of 89

Appn	Weapons System	Requirement Title	FY20 PB (\$M)
67	3600 Cyber Systems Modernization	Cyber Command and Control Mission System (C3MS) Modernization	7.6
68	3600 E-11 Development	BACN Simulators/Trainers.	15.6
69	3600 F-15	Data Transfer Module II	2.5
70	3600 F-15	F-15E Digital Color Display	1.3
71	3600 F-15 E/X	F-15 EX	67.4
72	3600 Global Access	Interoperable Multi-Modal Patient Movement	0.5
73	3600 Global Access	Autonomous Technologies applied to the 60K Tunner	0.5
74	3600 Global Access	Replenishment from Ships to Point of Need Delivery	0.5
75	3600 Global Access	Use of Dual Row Airdrop System with Joint Light Tactical Vehicle	1.3
76	3600 Logistics IT System Modernization	Enhanced Technical Information Management System Enhancements (ETIMS)	0.6
77	3600 Logistics IT System Modernization	Transformation Capability Initiative - Supply Capability Initiative (SCI)	0.5
78	3600 Noncooperative Identification Subsystems	Multi-Mode Ladar Aided Target Recognition (M2LATR)	2.4
79	3600 Nuclear Detonation Detection Systems	Begins United States Nuclear Detection System 7	26.5
80	3600 Cyberspace Operations Forces and Force Support	Cyber Mission Force (CMF) Foundational Tools	35.0
81	3600 MQ-9 System Lifecycle Agile Modernization (SLAM)	MQ-9 System Lifecycle Agile Modernization (SLAM)	6.3
82	3600 Nuclear Planning and Execution System (NPES)	Decision Support Service (DSS) Development	9.2
83	3600 Geobase Common Installation Picture (CIP)	GeoBase Development	2.7
84	3600 Space Weather Analysis and Forecast	Energetic Charged Particle Hazard Assessment	0.4
85	3600 Space Weather Analysis and Forecast	Radiation Exposure Model	0.4
86	3600 C-130J Mobile User Objective System (MUOS)	Mobile User Objective System (MUOS)	0.3
87	3600 T-6 Operational System Development	Controlled Flight Into Terrain - Prevention (CFIT-Prevention)	0.1
88	3600 T-6 Operational System Development	Next Generation On-Board Oxygen Generation System	0.7
89	3600 Warfighter Readiness	Command & Control Simulation Environment for Training (C2SET)	0.5
<b>Total FY20 New Starts</b>			<b>2,480.4</b>



## ACRONYMS

## A

<b>AB</b>	Air Base
<b>ACA</b>	Aerospace Control Alert
<b>ADAIR</b>	Adversary Air
<b>ADAL</b>	Add / Alter
<b>ADCP</b>	Advanced Display Core Processor
<b>ADS-B</b>	Automatic Dependent Surveillance-Broadcast
<b>AEHF</b>	Advanced Extremely High Frequency
<b>AESA</b>	Active Electronically Scanned Array
<b>AF</b>	Air Force
<b>AFB</b>	Air Force Base
<b>AFGSC</b>	Air Force Global Strike Command
<b>AFR</b>	Air Force Reserve
<b>AFRC</b>	Air Force Reserve Command
<b>AFWCF</b>	Air Force Working Capital Fund
<b>AGM</b>	Advanced Guided Missile
<b>AIM</b>	Air Intercept Missile
<b>ALCM</b>	Air Launched Cruise Missile
<b>AMP</b>	Avionics Compliance and Modernization
<b>AMRAAM</b>	Advanced Medium Range Air-to-Air Missile
<b>ANG</b>	Air National Guard
<b>AOC</b>	Air Operations Center
<b>AOR</b>	Area of Responsibility
<b>APKWS</b>	Advanced Precision Kill Weapon System
<b>ASNT</b>	Aircrew Strategic Network Terminal
<b>AWACS</b>	Airborne Warning and Control System

## B

<b>B</b>	Billion
<b>BRAC</b>	Base Realignment and Closure

## C

<b>C2</b>	Command and Control
<b>CCDR</b>	Combatant Commander
<b>CCMD</b>	Combatant Command
<b>CJTF</b>	Combined Joint Task Force
<b>CNMI</b>	Commonwealth of Northern Marianas Islands

**CRH** Combat Rescue Helicopter  
**CVR** Common Very Low Frequency/Low Frequency Receiver

## D

**DoD** Department of Defense  
**DWCF** Defense Working Capital Fund

## E

**EDI** European Deterrence Initiative  
**EELV** Evolved Expendable Launch Vehicle  
**EPAWSS** Eagle Passive/Active Warning Survivability System

## F

**FSRM** Facility Sustainment, Restoration and Modernization  
**FY** Fiscal Year  
**FYDP** Future Years Defense Program

## G

**GBSD** Ground Based Strategic Deterrent  
**GCS** Ground Control Station  
**GOCO** Government Owned, Contractor Operated  
**GPS** Global Positioning System

## H

**HOA** Horn of Africa

## I

**ICBM** Intercontinental Ballistic Missile  
**ISR** Intelligence, Surveillance and Reconnaissance  
**ISIS** Islamic State of Iraq and Syria

## J

**JASSM-ER** Joint Air-to-Surface Standoff Missile - Extended Range  
**JDAM** Joint Direct Attack Munition

## K

**K** Thousand

## L

**LRSO** Long Range Standoff

## M

**M** Million  
**MFH** Military Family Housing  
**MILCON** Military Construction  
**MILPERS** Military Personnel  
**MIT-LL** Massachusetts Institute of Technology - Lincoln Laboratory  
**MOB** Main Operating Base

## N

**NC3** Nuclear Command and Control Communications

## O

**O&M** Operations and Maintenance  
**OCO** Overseas Contingency Operation  
**OCX** Operational Control System  
**OFS** Operation FREEDOM SENTINEL  
**OIR** Operation INHERENT RESOLVE  
**ORS** Operation RESOLUTE SUPPORT  
**OSD** Office of the Secretary of Defense

## P

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<b>PAR</b>	Presidential Aircraft Recapitalization
<b>PB</b>	President's Budget
<b>PRV</b>	Plant Replacement Value

## R

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<b>RAF</b>	Royal Air Force
<b>RDT&amp;E</b>	Research, Development, Test and Evaluation
<b>ROTC</b>	Reserve Officers Trainings Corps
<b>RPA</b>	Remotely Piloted Aircraft

## S

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<b>SBIRS</b>	Space Based Infrared System
<b>SDB</b>	Small Diameter Bomb
<b>STEM</b>	Science, Technology, Engineering, Math

## T

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<b>TAI</b>	Total Aircraft Inventory
<b>TOA</b>	Total Obligation Authority
<b>TWCF</b>	Transportation Working Capital Fund

## U

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<b>USTRANSCOM</b>	United States Transportation Command
<b>USSTRATCOM</b>	United States Strategic Command

## V

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<b>VEO</b>	Violent Extremist Organizations
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## W

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<b>WSS</b>	Weapon System Sustainment
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**FISCAL YEAR 2020 BUDGET OVERVIEW**  
**[www.saffm.hq.af.mil/FM-Resources/budget/](http://www.saffm.hq.af.mil/FM-Resources/budget/)**