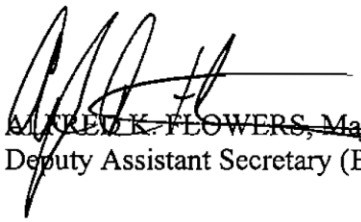
United States Air Force

FY 2011 Budget Overview

Foreword

The FY 2011 Budget Request provides a balance across all Air Force mission areas to meet the needs of today while preparing for tomorrow. The strategic environment is constantly changing, requiring more flexibility to provide the best mix of capabilities and resources to meet the Department of Defense (DoD) Quadrennial Defense Review (QDR) and Strategic Review priorities. Interaction across the changing strategic environment creates new and evolving threats that require innovative ways to apply forces, technologies and the resources that enable them. This budget submission addresses the Air Force's top priorities to sustain progress and continue strengthening the nuclear enterprise, partner with the Joint and Coalition Team, take care of Airmen and their families, develop and acquire key systems and ensure increased emphasis on acquisition processes. The pages that follow provide highlights of the budgetary initiatives that enable these leadership priorities through Air Force Core Functions and describe progress made towards meeting mission and QDR goals.

As the Air Force organizes, trains and equips air, space and cyber forces for the Nation, these priorities guide the necessary and difficult choices required to construct the annual budget request. To be the best stewards of the resources the Air Force executes, the choices made in this budget carefully balance winning today while preparing for tomorrow.



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Introduction

The Air Force FY 2011 Budget Request supports the DoD Budget Themes of Taking Care of People, Rebalancing the Force, Reforming how the Department Buys Equipment and Services and Supports the Joint Team. This budget request also supports the QDR Goals: Prevail in Today's Wars; Prevent and Deter Conflict; Prepare to Defeat Adversaries and Succeed in a Wide Range of Contingencies; and Preserves and Enhances the All-Volunteer Force. The priorities laid out and funded in this budget request provide a strong foundation to ensure generations of Airmen to come can *fly, fight* and *win* in air, space and cyberspace. Meeting the strategic charge of leadership is addressed by matching resources to capabilities in the FY 2011 Budget Request.

This FY 2011 Budget Overview explains how the Air Force is allocating resources across top priorities. Each dollar in the Air Force is considered a part of Air Force Total Obligation Authority (TOA)--the amount of money the Air Force has the authority to obligate throughout the life of the appropriation. Air Force TOA is viewed in two "buckets"--"Blue TOA" and "Non-Blue TOA"--allowing Air Force leadership to distinguish between those resources under direct Air Force management and those managed by other organizations. In accordance with guidance from Congress and administration policy, the Air Force budget includes a separate but simultaneously submitted request for Overseas Contingency Operations (OCO) funding. The OCO request and all supplemental funding is addressed in separate sections of the Budget Overview and called out, as appropriate, in funding tables.

The Budget Overview is organized in four sections:

1. Section 1 is a summary of the Air Force baseline budget by appropriation as it is presented to Congress. This section breaks the Air Force FY 2011 Budget Request out into Blue and Non-Blue TOA, and highlights Blue discretionary initiatives. This section does not include OCO.
2. Section 2 summarizes the OCO Budget Request for FY 2011 and is organized by major appropriation. Descriptions of the FY 2011 Budget Request reflect requirements to support the needs of Joint Force Commanders with a view of Core Functions impacted by appropriations. OCO includes Blue and Non-Blue TOA.
3. Section 3 is a summary of the Air Force Performance Based Budget organized into the Air Force's top five priorities listed in the current strategic plan with a discussion of Core Functions. The Performance Based Budget discusses Air Force performance goals in specific mission areas and progress achieved towards these goals. The totals in this section match with the budget materials provided to Congress for FY 2011. This section includes all TOA.
4. Section 4 highlights the Air Force Working Capital Fund and describes the initiatives within each business activity. The Working Capital Fund includes both planned revenue and expenses required to support Consolidated Sustainment Activity Group, Supply Management Activity Group and Transportation Working Capital Fund activities that meet the logistics demands of the warfighter on a daily basis.

Section 1: FY 2011 Budget Highlights (Overview)

The Air Force's FY 2011 Budget Request supports a balanced approach to prevail in today's operations while investing in new capabilities, force structure, skills and technologies to meet tomorrow's challenges. This budget positions the Air Force to execute the priorities laid out in the National Defense Strategy and the QDR to deliver capabilities at the time and place required by Joint Force Commanders. Additionally, the Air Force strengthens the capacity of its partners through outreach across the diverse set of geopolitical and resourcing decisions. This section will discuss the Air Force budget highlights by appropriation.

The Air Force **mission and priorities** come together to support the Joint mission by providing *Global Vigilance, Reach* and *Power* across the globe. Those are:

- **Air Force Mission**
  - *Fly, fight* and *win*…in air, space and cyberspace

- **Leadership Priorities**
  - Continue to Strengthen the Nuclear Enterprise
  - Partner with the Joint and Coalition Team to Win Today's Fight
  - Develop and Care for Airmen and Their Families
  - Modernize Our Air and Space Inventories, Organizations and Training
  - Recapture Acquisition Excellence

The FY 2011 Budget Request reflects commitment to support the Joint fight and represents a transition from a "combat forces" to a "Joint Force enabler" investment focus. As stewards of national resources, the Air Force will also continue to examine investments to emphasize diverse capabilities needed to meet an increasingly complex and uncertain environment in support of the Joint Team. In developing this budget request, Air Force leadership has prepared a balanced portfolio of capabilities across the twelve Air Force Core Functions defined below:

Nuclear Deterrence Operations	Air Superiority	Space Superiority	Cyberspace Superiority	Global Precision Attack	Rapid Global Mobility
Operate, maintain, and secure nuclear forces to achieve assured capability to deter an adversary from taking action against US vital interests	Deliver dominance in the air battle	Deliver dominance in space over adversaries	Deliver dominance in cyberspace of one force over another that permits conduct of operations by the former	Hold at risk or strike rapidly and persistently any target to achieve precise effects	Timely deployment, employment, sustainment, augmentation and redeployment of military forces and capabilities
Special Operations	**Global Integrated ISR**	**Command & Control**	**Personnel Recovery**	**Building Partnerships**	**Agile Combat Support**
Specialized airpower operations conducted in hostile, denied or politically sensitive environments	Conducting and synchronizing surveillance and reconnaissance across all domains	Ability of commanders to integrate operations in multiple theaters at multiple levels	Recovery and return of US military, DoD civilians and DoD contractor personnel	Set conditions for interaction with partner, competitor or adversary leaders, military forces or relevant populations	Field, protect and sustain air, space and cyber forces

Figure 1. Air Force Core Functions

Table 1. Air Force Budget Highlight Summary

Numbers may not add due to rounding

FY 11 Budget Facts	FY 10 APPN	FY 11 PB	Delta
Total Air Force ($M)	**$166,016**	**$170,766**	**$4,750**
Blue TOA	**$115,771**	**$119,625**	**$3,854**
Operations and Maintenance (O&M)	$42,152	$45,792	$3,640
Military Personnel (MILPERS)	$28,546	$29,289	$743
Military Construction (MILCON)	$1,867	$1,338	($529)
Military Family Housing (MFH)	$565	$588	$23
Procurement	$22,665	$24,178	$1,513
Research Development Test & Evaluation (RDT&E)	$19,430	$18,188	($1,242)
Base Realignment and Closure (BRAC)	$546	$252	($294)
Non-Blue TOA	**$28,941**	**$30,356**	**$1,415**
OCO TOA	**$21,304**	**$20,785**	**($519)**
OCO Blue and Non-Blue	$15,234	$20,785	$5,561
OCO Supplement - Increased Operations in Afghanistan*	$6,070		

General Facts	FY 10 APPN	FY 11 PB	Delta
Major Installations**	83	80	(3)
Total Aircraft Inventory	5,493	5,606	113
Flying Hours	1,373,593	1,211,808	(161,785)

Personnel Facts	FY 10 APPN	FY 11 PB	Delta
Authorized Manpower	686,962	702,667	15,705
Military	**507,900**	**510,100**	**2,200**
Active	331,700	332,200	500
AFR	69,500	71,200	1,700
ANG	106,700	106,700	0
Civilian	**179,062**	**192,567**	**13,505**
Active	140,487	153,540	13,053
AFR	14,467	14,787	320
ANG	24,108	24,240	132

FY 11 Major Procurement Quantities***			
Aircraft	**133**	**Space**	**5**
MQ-9A Reaper	36	EELV	3
F-35A Lightning II	22	SBIRS GEO	1
Light Mobility Aircraft	15	WGS	1
USAFA Flight Program	12		
Aerial Targets (QF-4)	9		
C-27J Spartan	8	**Weapons**	**7,540**
C-130J Super Hercules	8	JDAM	3,500
CV-22B Osprey	5	Small Diameter Bomb	2,985
MC-130J	5	AGM -114 Hellfire	460
RQ-4A Global Hawk	4	AIM-120D AMRAAM	246
HC-130J	4	AIM-9X Sidewinder	178
HH-60G Pave Hawk	3	AGM-158 JASSM	171
C-37A (Lease to Purchase)	2		

*OCO Supplemental has not yet been appropriated for FY 2010
**Impacted by Joint Basing actions in FY 2010/11
***Baseline budget quantities only – OCO not included

Total Air Force (Components)

The components of the Air Force--Active, Reserve and Guard--make up the Total Force to support the domains of air, space and cyberspace. The integration of the Active and Reserve components allow for a flexible and agile response in today's complex strategic environment. This Total Force must be fully leveraged with the correct mix of operational forces to be able to shift quickly and efficiently from one mission to another. Through the Total Force Integration (TFI) process, the Air Force has identified, analyzed and selected new ways of organizing its forces to meet the Nation's military challenges now and into the future. Together with Air Force Reserve and Air National Guard forces, the United States Air Force (USAF) is the best in the world.

Active Air Force

The Active component endstrength comprises approximately 70 percent of the Air Force's Total Force and provides seamless options for Joint Force commanders. In FY 2011, the Active Air Force will maintain an inventory of over 4,000 aircraft and be responsible for 80 major installations across the United States and overseas. All mission areas are supported by the Active Air Force to include global strike; homeland defense and civil support; global mobility; global persistent attack; nuclear response; space superiority; Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR); and agile combat support. The Active Air Force is the only full time component of the Air Force--the other components can be called to full time when "activated" to support operational requirements.

Air Force Reserve

The Air Force Reserve supports the Air Force mission through the control and exploitation of air and space by supporting engagements all over the world. The Air Force Reserve Command (AFRC) has flying wings outfitted with dedicated aircraft and nine associate units who share aircraft with Active Duty units. Four space operations squadrons share the satellite control mission with the Active force. There are also more than 620 mission support units in the AFRC, equipped and trained to provide a wide range of capabilities to include all Air Force Core Functions. Air Force reservists are part-time Airmen until "activated."

Air National Guard

The Air National Guard's federal mission is to maintain well-trained, well-equipped units available for responsive mobilization at times of war and provide assistance during national emergencies (such as natural disasters or civil disturbances). In peacetime, the combat-ready and support units are assigned to Air Force Major Commands to carry out missions compatible with training, mobilization readiness, humanitarian and contingency operations. Air National Guard units may be activated in a number of ways as prescribed by public law and provide almost half of the Air Force's tactical airlift support, combat communications functions, aeromedical evacuations and aerial refueling. In addition, the Air National Guard provides the majority of forces for the Air Defense of the United States. The Guard is the only military force that state governors can call upon to respond to disasters and other emergencies.

Military Personnel Total

Figure 2 is a depiction of the FY 2011 Blue TOA request shown in Table 2 below and displays the relative size of each subsection of this appropriation.

Figure 2. Military Personnel - Total Force FY 2011 Blue Budget Request

The FY 2011 Budget Request for Military Personnel (MILPERS) supports all Core Functions and allows the Air Force to maintain the right number of the world's highest quality force with the right skill sets, with pay and allowance increases to maintain a standard of living that will attract and retain quality Airmen. Details of what is included in this appropriation:

- Provides an across-the-board 1.4 percent military pay increase, a Basic Allowance for Housing increase of 4.2 percent and a Basic Allowance for Subsistence increase of 3.4 percent
- Includes Active component endstrength of 332,200
- Includes Reserve Component endstrength of 71,200 Airmen
- Includes Air National Guard endstrength of 106,700 Airmen
- Funds recruiting efforts focused at attracting a diverse and multi-skilled workforce
- Supports approximately $645M to fund recruiting and retention bonuses

Table 2. Military Personnel – Air Force Total Force TOA

Military Personnel, Air Force Total Force TOA ($M)	FY10	FY11
Category	*Appropriated*	*Request*
Air Force Active Duty	22,011	22,484
Air Force Reserve	1,573	1,670
Air National Guard	2,932	3,085
Medicare Eligible Retiree Health Care	2,030	2,050
Blue Total	**28,546**	**29,289**
Non-Blue	4,823	5,106
AF MILPERS TOA Total	**33,370**	**34,395**

Numbers may not add due to rounding.

Civil engineers at work in Kyrgyzstan

Returning from Iraq

Building munitions

Military Personnel – Active Air Force

Figure 3 is a depiction of the FY 2011 Blue TOA shown in Table 3 below and displays the relative size of each activity within this appropriation.

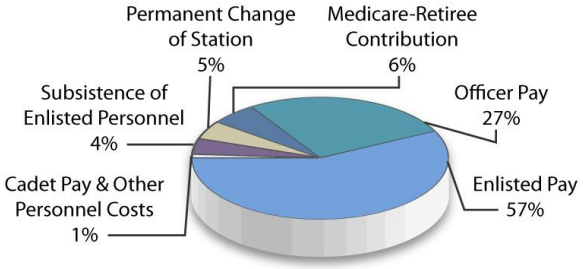


Figure 3. Military Personnel – Active Air Force FY 2011 Blue Budget Request

The Air Force Military Personnel appropriation provides funding for preserving and enhancing the all-volunteer force. It includes all direct military compensation for Active Duty personnel including regular pay, special pays, retired pay accruals and allowances for subsistence and housing. Recruiting and retention incentives and permanent change of station moves are also funded within this appropriation. Other personnel costs include death gratuity and unemployment compensation benefits and bonuses. The FY 2011 Budget Request includes funding for endstrength increases in Cyberspace and Command and Control (C2) capabilities; Network Attack/Network Access Engineering; Irregular warfare; endstrength adjustments for growth to 50 Remotely Piloted Aircraft (RPA) Combat Air Patrols (CAPs) by the end of FY 2011 and 65 CAPS by the end of FY 2013; and personnel to support Distributed Common Ground System (DCGS) and other intelligence, surveillance and reconnaissance (ISR) mission requirements.

Table 3. Military Personnel – Active Air Force TOA

Military Personnel, Air Force TOA ($M)	FY10	FY11
Category	*Appropriated*	*Request*
Officer Personnel Pay and Allowances	6,395	6,456
Enlisted Personnel Pay and Allowances	13,311	13,691
Cadet Pay and Allowances	74	75
Subsistence of Enlisted Personnel	875	896
Permanent Change of Station	1,224	1,230
Other Personnel Costs	133	135
Subtotal	**22,011**	**22,484**
Medicare-Retiree Contribution	1,435	1,428
Blue Total	**23,446**	**23,912**
Non-Blue	4,786	5,065
AF Active MILPERS TOA Total	**28,232**	**28,977**

Numbers may not add due to rounding.

Checking credentials

Airman engaged in "fit to fight"

Securing a guided bomb unit to an F-16

Military Personnel – Air Force Reserve

Figure 4 is a depiction of the FY 2011 Blue TOA shown in Table 4 below and displays the relative size of each subsection of this appropriation.

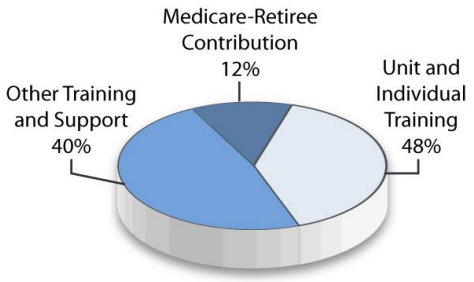


Figure 4. Military Personnel – Air Force Reserve FY 2011 Blue Budget Request

Air Force Reserve Personnel budget funding pays for direct military compensation including regular pay, allowances and benefits for Reserve Airmen to provide trained units and individuals to augment the Active force. School training and special tours of Active Duty training required to build and maintain skill level proficiency to accomplish mission assignments are funded through this appropriation. The FY 2011 Budget Request supports endstrength increases for ISR, nuclear mission requirements, and other stressed career fields.

Table 4. Military Personnel – Air Force Reserve TOA

Air Force Reserve Personnel, TOA ($M)	FY10	FY11
Category	*Appropriated*	*Request*
Unit and Individual Training	859	916
Other Training and Support	714	753
Subtotal	**1,573**	**1,670**
Medicare-Retiree Contribution	222	237
Blue Total	**1,795**	**1,907**
Non-Blue	20	20
AF Reserve MILPERS TOA Total	**1,815**	**1,927**

Numbers may not add due to rounding.

Airmen in line at a dining facility

Medivac training

Honor Guard at baseball game

Military Personnel – Air National Guard

Figure 5 is a depiction of the FY 2011 Blue TOA shown in Table 5 below and displays the relative size of each subsection of this appropriation.

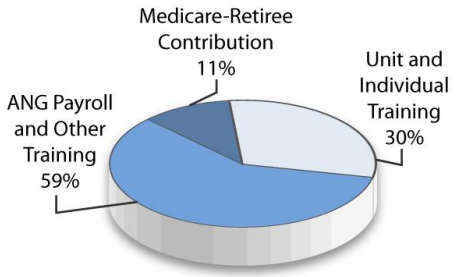


Figure 5. Military Personnel – Air National Guard FY 2011 Blue Budget Request

The Air National Guard Personnel budget funds direct military compensation including regular pay; special pays; retired pay accruals; basic allowances for subsistence and housing; recruiting and retention incentives; and clothing allowances to provide trained units for participation in the Expeditionary Air Force as well as to perform Air Sovereignty alert missions. This funding supports annual 15-day tours and 48 drill periods, as well as tours of Active Duty for training of selected Air National Guard (ANG) personnel in FY 2011. Total funding supports an ANG endstrength of 106,700.

Table 5. Military Personnel – Air National Guard TOA

Air National Guard Personnel, TOA ($M)	FY10	FY11
Category	*Appropriated*	*Request*
Unit and Individual Training	969	1,053
ANG Payroll and Other Training	1,963	2,032
Subtotal	**2,932**	**3,085**
Medicare-Retiree Contribution	372	385
Blue Total	**3,305**	**3,470**
Non-Blue	18	21
AF ANG MILPERS TOA Total	**3,323**	**3,491**

Numbers may not add due to rounding.

Combat controllers test data link

New ANG Second Lieutenants

Connecting AC hoses to a C-21

Operations and Maintenance

Figure 6 is a depiction of the FY 2011 Blue TOA shown in Table 6 below and displays the relative size of each subsection of this appropriation.

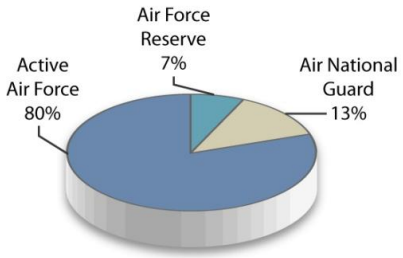


Figure 6. O&M Budget Request FY 2011 Blue Budget Request

The FY 2011 Operations and Maintenance (O&M) Budget Request funds the day-to-day expenses of the Air Force to meet mission sustainment activities. It supports 80 major installations, funds the costs associated with flying operations, space operations, cyber operations, intelligence, logistics, nuclear deterrence, search and rescue and special operations activities. All Core Functions are supported by this appropriation. Table 6 is a depiction of O&M across the Total Force broken into these components.

Table 6. O&M – Air Force Total Force TOA by Budget Category

Operations and Maintenance, Air Force Total Force TOA ($M)	FY10	FY11
Category	*Appropriated*	*Request*
Active Air Force	33,150	36,550
Air Force Reserve	3,127	3,301
Air National Guard	5,875	5,941
Blue Total	**42,152**	**45,792**
Non-Blue	858	864
AF O&M TOA Total	**43,010**	**46,656**

Numbers may not add due to rounding.

Key highlights:

- Civilian Pay Raise of 1.4% consistent with Military Pay Raise and Employment Cost Index
- Civilian insourcing for approximately 7,700 additional endstrength
- Support for 1.2M flying hours and sustain a fleet of 5,500 aircraft
- Reflects the Joint Force emphasis on ISR capacity and builds on progress made in FY 2010. The Air Force will reach 50 RPA CAPs in theater by FY 2011 and 65 CAPs by FY 2013
- The Air Force leads six new Joint Base initiatives, adding 1,944 positions:
  - In FY 2010, the two Joint Bases are McGuire-Dix and Andrews-NAF Washington
  - In FY 2011, the four Joint Bases are Charleston, Elmendorf-Richardson, Lackland-FSH-Randolph, and Langley-Eustis
  - Note that three Air Force bases (Hickam, Bolling and McChord) transfer to the Navy/Army in FY 2011
- Air Force funded as the lead service for space launch, supporting DoD, National and Commercial Agencies
  - Supports 24 launches in FY 2011 and operations at two spacelift ranges
- Day-to-day operations at 80 major installations with facilities sustainment funded at 90 percent

Table 7 displays O&M across major mission areas.

Table 7. O&M – Air Force Total Force Blue TOA

Operations and Maintenance, Air Force Total Force TOA ($B)	FY10	FY11
Category	*Appropriated*	*Request*
Civilian Pay	10.3	11.7
Flying Operations	14.9	16.0
Mobility Forces	1.2	1.1
Space/Other Combat Forces	5.7	6.1
Training & Recruiting	1.2	1.2
Logistics Ops & AF Wide Support	2.3	2.6
Installation Support & FSRM	6.5	7.1
AF O&M Blue TOA Total	**42.2**	**45.8**

Numbers may not add due to rounding.

Major Mission Area Highlights:

- Civilian Pay supports a total civilian endstrength of 192,567
- Flying operations and mobility forces support aircrew combat training, maintenance and repair, parts, transportation costs and aviation fuel to support Joint warfighter and humanitarian operations. The program fully funds 1.2M flying hours ($7.2B): Active is 879K hours ($4.8B), ANG is 216K hours ($1.5B), AFR is 117K hours ($0.9B). $1.1B is for aircrew training activities and systems. Mobilization preparedness sustains contingency operations and wartime requirements through prepositioning of war readiness materials (WRM), weapons storage, industrial preparedness, and medical capabilities
- Supports combat and specialized operations, management, readiness, and sustainment of weather and space capabilities
- Produces 1,289 new pilots through pilot training and recruiting and advertising costs to meet personnel requirements
- Supports five Combatant Commands through executive agent responsibilities
- Funds readiness for Air Force Materiel Command (AFMC) (Air Logistics Centers [ALCs], Headquarters [HQ], product centers, acquisition program offices and field operating agencies)
- Second Destination Transportation (SDT) funds the movement of all material already in the Air Force inventory or supply system, to include engines, helicopters, vehicles, subsistence and munitions
- Provides funding for installation support functions, engineering and environmental programs. The main objective is to sustain capability, quality of life, workforce productivity and infrastructure support

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

MQ-9 Reaper taxis in Afghanistan

Airmen keeping physically fit

Weapons course graduate

O&M – Active Air Force

Figure 7 is a depiction of the FY 2011 Blue TOA shown in Table 8 below and displays the relative size of each subsection of this appropriation.

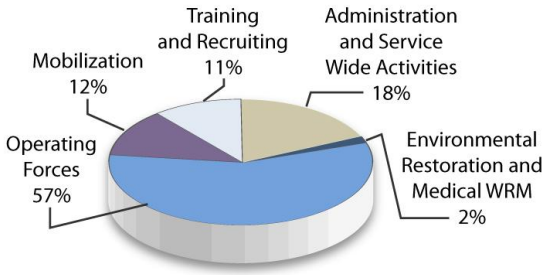


Figure 7. O&M – Active Air Force FY 2011 Blue Budget Request

The O&M Active Air Force appropriation funds day-to-day operational activities, organizational, intermediate and depot level maintenance, training, engineering support, and logistical support necessary to operate, maintain and deploy forces in support of the National Military Strategy and Joint Force Commander mission requirements. Operating costs such as flying hours and base operations (including civilian and contractor pay) are funded by this appropriation. Land-based nuclear and space forces, electronic warfare, irregular warfare and ISR missions are supported by O&M funding. The FY 2011 Active Air Force Budget Request supports 80 installations, two space ranges, produces 1,289 pilots and funds approximately 879,000 flying hours while sustaining an aircraft fleet of over 4,000 aircraft. The budget supports a decrease in support service contractors and over a 7,700 increase in full-time government employees as part of the insourcing effort for a total active civilian endstrength of 153,540. The categories in the table below include: funding for civilian pay; flying operations; mobility forces; space/other combat forces; training and recruiting; logistics operations and Air Force-wide support; and installation support and Facilities, Support, Restoration and Modernization (FSRM).

Table 8. O&M – Active Air Force TOA

Operations and Maintenance, Active Air Force TOA ($M)	FY10	FY11
Category	*Appropriated*	*Request*
Operating Forces	18,740	20,989
Mobilization	4,269	4,306
Training and Recruiting	3,399	4,029
Administration and Service Wide Activities	6,169	6,656
Environmental Restoration	494	503
Medical WRM	79	67
Blue Total	**33,150**	**36,550**
Non-Blue	858	864
AF Active O&M TOA Total	**34,008**	**37,414**

Numbers may not add due to rounding.

Loading a 10-ton pallet on a C-130 Hercules

An F-16C approaches a KC-135 Stratotanker for refueling

Air Force trainees complete an obstacle course

O&M – Air Force Reserve

Figure 8 is a depiction of the FY 2011 Blue TOA shown in Table 9 below and displays the relative size of each subsection of this appropriation.

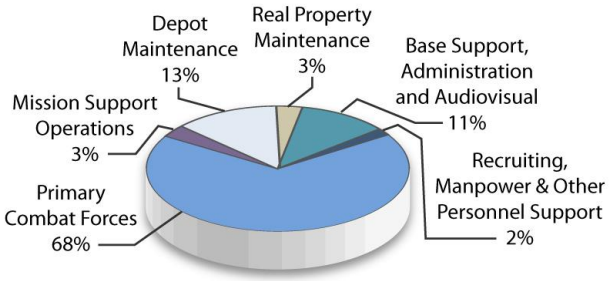


Figure 8. O&M – Air Force Reserve FY 2011 Blue Budget Request

The O&M Air Force Reserve appropriation provides funding to maintain and train units for immediate mobilization, and to provide administrative support for the Office of Air Force Reserve (Air Staff), Headquarters Air Force Reserve (Operational Headquarters), the Numbered Air Forces and the Air Reserve Personnel Center. The FY 2011 Budget Request provides for the operation and training of 34 wings, approximately 117,000 O&M funded flying hours, maintains approximately 350 aircraft, funds air reserve technicians (military) and civilian endstrength of 14,787 and provides mission training for over 71,000 Reserve personnel. Activities include aircraft operations, training, base and depot level aircraft maintenance, mission support, facilities sustainment, restoration and modernization and supply and maintenance for Air Force Reserve units. The categories in the table below include: funding for civilian pay; flying operations; mobility forces; space/other combat forces; training and recruiting; logistics operations and Air Force-wide support; and installation support and FSRM.

Table 9. O&M – Air Force Reserve TOA

Operations and Maintenance, Air Force Reserve TOA ($M)	FY10	FY11
Category	*Appropriated*	*Request*
Primary Combat Forces	2,062	2,275
Mission Support Operations	117	112
Depot Maintenance	486	416
Real Property Maintenance	79	89
Base Support	254	278
Administration	77	81
Recruiting and Advertising	24	24
Military Manpower & Personnel Management	21	20
Other Personnel Support (Disability Compensation)	6	6
Audiovisual	1	1
Blue Total	**3,127**	**3,301**
Non-Blue	-	-
AF Reserve O&M TOA Total	**3,127**	**3,301**

Numbers may not add due to rounding.

A C-17 Globemaster III pilot

Maintainers at work

Pararescue training

O&M – Air National Guard

Figure 9 is a depiction of the FY 2011 Blue TOA shown in Table 10 below and displays the relative size of each subsection of this appropriation.

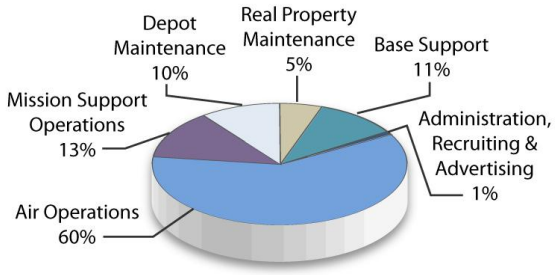


Figure 9. O&M – Air National Guard FY 2011 Blue Budget Request

The O&M Air National Guard appropriation funds the flying and maintenance of Air National Guard aircraft. It also provides for the facilities, equipment and manpower required to sustain the force structure at a combat readiness level enabling immediate assimilation into the Active Air Force as well as the capability to conduct independent operations in accordance with unit wartime taskings. The FY 2011 Budget Request provides for approximately 216,000 O&M funded flying hours, maintains over 1,000 aircraft, a civilian endstrength of 24,240 and the flying and mission training of 106,700 Air National Guard personnel. The categories in the table below include: funding for civilian pay; flying operations; mobility forces; space/other combat forces; training and recruiting; logistics operations and Air Force-wide support; and installation support and FSRM.

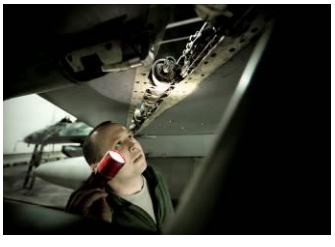
Table 10. O&M – Air National Guard TOA

Operations and Maintenance, Air National Guard TOA ($M)	FY10	FY11
Category	*Appropriated*	*Request*
Air Operations	3,335	3,519
Mission Support Operations	782	763
Depot Maintenance	776	599
Real Property Maintenance	310	315
Base Support	605	668
Administration, Recruiting and Advertising	68	77
Blue Total	**5,875**	**5,941**
Non-Blue	-	-
AF ANG O&M TOA Total	**5,875**	**5,941**

Numbers may not add due to rounding.

ANG members prepare to deploy

Wisconsin ANG F-16 Fighting Falcons



A deployed ANG Airman inspects the leading edge flap of an F-16

Research, Development, Test and Evaluation

Figure 10 is a depiction of the FY 2011 Blue TOA shown in Table 11 below and displays the relative size of each subsection of this appropriation.

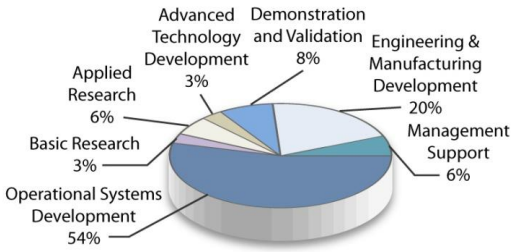


Figure 10. RDT&E FY 2011 Blue Budget Request

The Air Force Research, Development, Test and Evaluation (RDT&E) appropriation funds requirements for next generation weapons and platforms by maturing technologies essential to equipping the Nation to defeat near-term and forecasted threats. Air Force science and technology efforts included under RDT&E are advanced propulsion; space-based, airborne and ground sensors; directed energy; and command and control for both air and space. The FY 2011 RDT&E budget supports most Core Functions as well as legacy and new weapons systems. Nuclear deterrence operations are impacted by development of the long-range strike platform and development of B-2 Defensive Management System (DMS) to ensure survivability. A key to sustaining Air Superiority is keeping up with the emergence of modern air defenses by upgrading F-22s, developing Active Electronically Scanned Array (AESA) radar for F-15s and fatigue testing for F-16s. Avionics upgrade development for the Airborne Warning and Control System (AWACS) will help meet command and control requirements. To sustain Space Superiority, continued development of Global Positioning System (GPS) IIIA; Advanced Extremely High Frequency (AEHF) 2 integration and testing; National Polar-Orbiting Operational Environment Satellite System (NPOESS) restructure; and Space Based Infrared System (SBIRS)-GEO 1 and 2 development, integration and testing will be priorities in FY 2011. The Joint Strike Fighter will continue flight testing as the primary fighter replacement. Joint Air-to-Surface Standoff Missiles - Extended Range (JASSM-ER), Small Diameter Bomb II (SDB II) and a test drop of the Massive Ordnance Penetrator (MOP) will add greater capability and flexibility for Global Precision Attack.

Satellite environmental testing

Table 11. RDT&E TOA

Research, Development, Test, and Evaluation TOA ($M)	FY10	FY11
Category	*Appropriated*	*Request*
Basic Research	483	500
Applied Research	1,221	1,181
Advanced Technology Development	759	509
Demonstration and Validation	1,842	1,495
Engineering & Manufacturing Development	3,845	3,549
Management Support	1,062	1,084
Operational Systems Development	10,219	9,868
Totals	**19,430**	**18,188**
Non-Blue	8,512	9,059
AF RDT&E TOA Total	**27,942**	**27,247**

Numbers may not add due to rounding.

Procurement

Figure 11 is a depiction of the FY 2011 Blue TOA shown in Table 12 below and displays the relative size of each subsection of this appropriation.

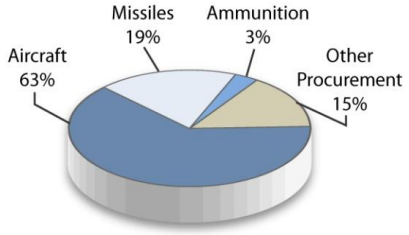


Figure 11. Procurement FY 2011 Blue Budget Request

The Procurement appropriation portfolio delivers both immediate and future capabilities through investments across four specific appropriations: Aircraft, Missiles, Ammunition, and Other procurements. The FY 2011 Budget Request supports all of the Air Force Core Functions. Some specific areas of interest include significant expansion to ISR, Irregular Warfare and in 5th Generation fighters for more capability in Global Integrated ISR, Special Operations and Global Precision Attack. Funding provides modifications to key Air Superiority assets (F-22 Common Configuration, F-15 AESA and Flight Data Recorder); upgrades Rapid Global Mobility assets (C-5 AMP and Reliability Enhancement and Re-engineering Program [RERP], C-130 AMP, C-17 block retrofit); ground control sensor modifications to upgrade primary data link, target location accuracy and high definition video for RPAs; and SBIRS GEO, Wideband Global Satellite Communications (WGS), and three Evolved Expendable Launch Vehicles (EELVs) as well as supporting advance procurement for AEHF, WGS-8 and GPS-IIIA for Space Superiority. Table 12 displays funding by appropriation area. The pages to follow will discuss procurement appropriations in more detail.

Table 12. Procurement TOA

Procurement TOA ($M)	FY10	FY11
Appropriation	*Appropriated*	*Request*
Aircraft	13,527	15,354
Missiles	5,148	4,570
Ammunition	799	667
Other Procurement	3,191	3,587
Blue Total	**22,665**	**24,178**
Non-Blue	14,740	15,165
AF Procurement TOA Total	**37,405**	**39,343**

Numbers may not add due to rounding.

HH-60G Pave Hawk

Space modernization

Ammunition supply

Procurement – Aircraft

Figure 12 is a depiction of the FY 2011 Blue TOA shown in Table 13 below and displays the relative size of each subsection of this appropriation.

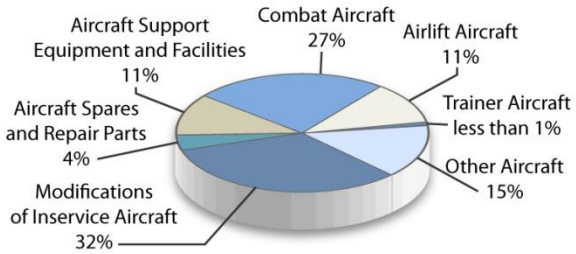


Figure 12. Aircraft Procurement FY 2011 Blue Budget Request

The Aircraft Procurement appropriation enables acquisition and modification of aircraft, specialized ground handling equipment, training devices, spare parts and accessories. The FY 2011 Budget Request supports procurement of key air systems. A key Air Superiority initiative includes F-22 modifications for common configuration. A Global Precision Attack initiative includes procurement of 22 F-35As. Rapid Global Mobility initiatives include procurement of eight C-27J aircraft; C-5 modifications for avionics and reliability enhancements; Large Aircraft Infrared Countermeasures (LAIRCM) modifications; and eight C-130J purchases. Increases to Global Integrated ISR include procurement of 36 additional MQ-9s; upgrades to MC-12 aircraft and modifications to MQ-1s and MQ-9s; modification to AWACS Command and Control aircraft; purchase of CV-22B aircraft for Special Operations; and procures four HC-130J aircraft of Personnel Recovery. Table 13 summarizes funding for aircraft procurement by some primary mission areas.

Table 13. Aircraft Procurement TOA

Aircraft Procurement TOA ($M)	FY10	FY11
Appropriation	*Appropriated*	*Request*
Combat Aircraft	2,434	4,144
Airlift Aircraft	3,797	1,764
Trainer Aircraft	20	70
Other Aircraft	2,195	2,274
Modifications of Inservice Aircraft	3,609	4,807
Aircraft Spares and Repair Parts	550	622
Aircraft Support Equipment and Facilities	922	1,672
Totals	**13,527**	**15,354**
Non-Blue	19	13
AF Aircraft Procurement TOA Total	**13,546**	**15,367**

Numbers may not add due to rounding.

C-130J

F-35A Lightning II

RQ-4 Global Hawk

Procurement – Missile

Figure 13 is a depiction of the FY 2011 Blue TOA shown in Table 14 below and displays the relative size of each subsection of this appropriation.

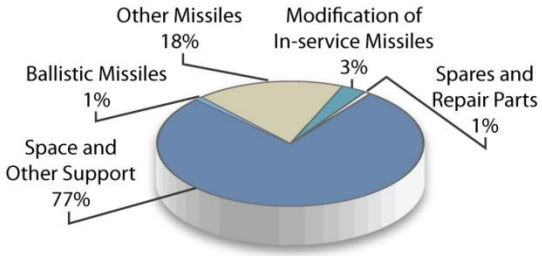


Figure 13. Missile Procurement FY 2011 Blue Budget Request

The Missile Procurement appropriation provides funding for acquisition and modification of missiles, spacecraft, launch vehicles and spare parts. The FY 2011 Budget Request funds continued provision of critical space-based capabilities for the Nation. In support of the Space Superiority Core Function, SBIRS ensures continuous missile warning, the AEHF satellite provides protected communications for Airmen, Soldiers, Sailors and Marines, and the EELV program continues to assure the Nation's access to space. Space program procurement efforts include one SBIRS GEO, three EELVs and one WGS satellite. The FY 2011 Budget Request also funds Air Superiority capabilities including 171 AGM-158 JASSMs, as well as 178 AIM-9 Sidewinders and 246 AIM-120D Advanced Medium-Range Air-to-Air missiles (AMRAAMs), both of which are supersonic, air-to-air missiles carried by fighter aircraft. Also budgeted in this request are 2,985 SDBs and 460 AGM-114 Hellfire missiles employed by multiple aircraft.

Table 14. Missile Procurement TOA

Missile TOA ($M)	FY10	FY11
Appropriation	*Appropriated*	*Request*
Ballistic Missiles	58	61
Other Missiles	596	816
Modification of In-service Missiles	229	139
Spares and Repair Parts	70	43
Space and Other Support	4,194	3,512
Blue Total	**5,148**	**4,570**
Non-Blue	828	893
AF Missile Procurement TOA Total	**5,976**	**5,463**

Numbers may not add due to rounding.

AIM-9 Sidewinder

Delta IV EELV

AGM-114 Hellfire Missiles

Procurement – Ammunition

Figure 14 is a depiction of the FY 2011 Blue TOA shown in Table 15 below and displays the relative size of each subsection of this appropriation.

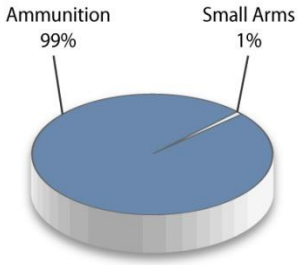


Figure 14. Ammunition Procurement FY 2011 Blue Budget Request

The Ammunition Procurement appropriation provides the means to acquire all munitions, primarily supporting Global Precision Attack. The munitions portfolio includes ammunition, bombs, flares, cartridges and related training devices. A few of the requirements addressed in the FY 2011 Budget Request include 3,500 Joint Direct Attack Munitions (JDAM) and funding for general purpose bombs.

Table 15. Ammunition Procurement TOA

Ammunition Procurement TOA ($M)	FY10	FY11
Appropriation	*Appropriated*	*Request*
Ammunition	793	660
Small Arms	6	7
Blue Total	**799**	**667**
Non-Blue	-	-
AF Ammunition Procurement TOA Total	**799**	**667**

Numbers may not add due to rounding.

Ammunition

JDAM

Loading ammunition

Procurement – Other

Figure 15 is a depiction of the FY 2011 Blue TOA shown in Table 16 below and displays the relative size of each subsection of this appropriation.

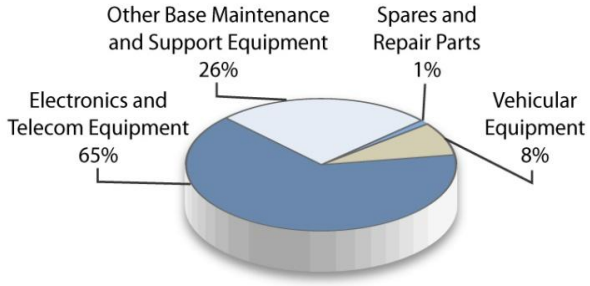


Figure 15. Other Procurement FY 2011 Blue Budget Request

The Air Force Other Procurement appropriation provides acquisition and modification funding for a range of requirements from vehicles to information systems and supports the Agile Combat Support Core Function. Vehicle acquisition includes security and tactical, firefighting, rescue and passenger carrying vehicles. Global Combat Support Systems, combat training ranges and base communications infrastructure are a few programs funded within the Other Procurement appropriation.

Table 16. Other Procurement TOA

Other Procurement TOA ($M)	FY10	FY11
Appropriation	*Appropriated*	*Request*
Vehicular Equipment	184	300
Electronics and Telecom Equipment	2,046	2,324
Other Base Maintenance and Support Equipment	942	943
Spares and Repair Parts	19	19
Blue Total	**3,191**	**3,587**
Non-Blue	13,893	14,259
AF Other Procurement TOA Total	**17,084**	**17,845**

Numbers may not add due to rounding.

Armored vehicle

Spares and repairs

Mission electronics and telecommunications

Military Construction

Figure 16 is a depiction of the FY 2011 Blue TOA shown in Table 17 below and displays the relative size of each subsection of this appropriation.

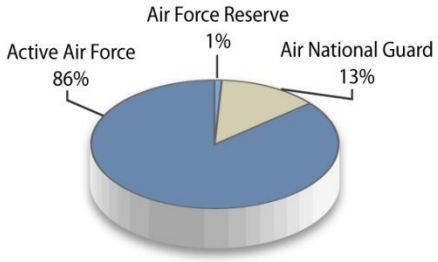


Figure 16. MILCON FY 2011 Blue Budget Request

The Air Force Military Construction (MILCON) appropriation funds construction projects which support operational needs; modernization of air and space infrastructure; support to Combatant Command (COCOM) priorities; and provides Quality of Service for Airmen and Joint personnel. Also included in the budget request are projects supporting multiple weapon system beddowns (F-22A, F-35A, HC-130J and RPAs), regional training facilities, nuclear weapons load training and nuclear/space security tactics. Also funded are projects supporting dorm replacement, security forces, power plant repair, control towers and taxiway extensions. Table 17 reflects a summary of Active, Reserve and Air National Guard MILCON with a breakout of major and minor construction funding in the subsequent tables.

Table 17. MILCON TOA

Military Construction TOA ($M)	FY10	FY11
Category	*Appropriated*	*Request*
Active Air Force	1,383	1,153
Air Force Reserve	112	8
Air National Guard	371	177
Totals	**1,867**	**1,338**
Non-Blue	3	158
AF MILCON TOA Total	**1,870**	**1,496**

Numbers may not add due to rounding.

New overseas housing

New community center

Demolition of old dorms

MILCON – Active Air Force

Table 18. MILCON, Active Air Force TOA

Military Construction, Air Force (Active) TOA ($M)	FY10	FY11
Category	*Appropriated*	*Request*
Major Construction	1,263	1,069
Minor Construction	20	18
Planning and Design	101	66
Totals	**1,383**	**1,153**
Non-Blue	3	158
AF Active MILCON TOA Total	**1,386**	**1,311**

Numbers may not add due to rounding.

MILCON – Air Force Reserve

Table 19. MILCON, Air Force Reserve TOA

Military Construction, Air Force Reserve TOA ($M)	FY10	FY11
Category	*Appropriated*	*Request*
Major Construction	108	3
Minor Construction	1	3
Planning and Design	4	2
Totals	**112**	**8**
Non-Blue	-	-
AF Reserve MILCON TOA Total	**112**	**8**

Numbers may not add due to rounding.

MILCON – Air National Guard

Table 20. MILCON, Air National Guard TOA

Military Construction, Air National Guard TOA ($M)	FY10	FY11
Category	*Appropriated*	*Request*
Major Construction	371	160
Minor Construction	-	8
Planning and Design	-	9
Totals	**371**	**177**
Non-Blue	-	-
AF ANG MILCON TOA Total	**371**	**177**

Numbers may not add due to rounding.

Military Family Housing

Figure 17 is a depiction of the FY 2011 Blue TOA shown in Table 21 below and displays the relative size of each subsection of this appropriation.

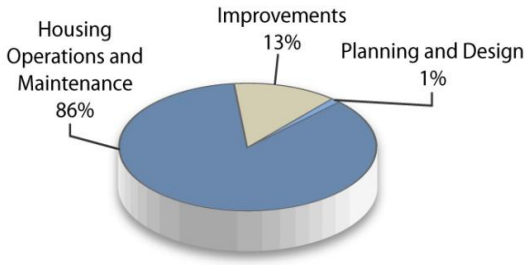


Figure 17. Military Family Housing FY 2011 Blue Budget Request

The FY 2011 Military Family Housing Budget Request reflects the Air Force's continued emphasis on revitalizing housing and providing service members with homes that meet contemporary standards similar to the size and floor plans of homes constructed in the local community. The Air Force created the Air Force Family Housing Master Plan as the "roadmap" to guide the planning and programming of investment, operations and maintenance and privatization in military family housing. The FY 2011 Budget Request continues privatization as well as supports maintenance of owned and leased units and oversight of privatized units.

Table 21. Military Family Housing TOA

Military Family Housing TOA ($M)	FY10	FY11
Category	*Appropriated*	*Request*
New Construction	-	-
Improvements	62	74
Planning and Design	4	4
Housing Operations and Maintenance	499	510
Totals	**565**	**588**
Non-Blue	4	4
AF Military Family Housing TOA Total	**569**	**592**

Numbers may not add due to rounding.

Family Housing at Moody AFB, Georgia

Overhead view of Schriever AFB housing

Dover AFB Family Housing

Base Realignment and Closure

Figure 18 is a depiction of the FY 2011 Blue TOA shown in Table 22 below and displays the relative size of each subsection of this appropriation.

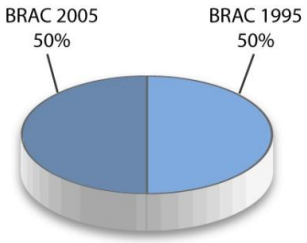


Figure 18. BRAC FY 2011 Blue Budget Request

The law authorizes the Base Realignment and Closure (BRAC) accounts to fund one-time, nonrecurring costs that are a direct result of BRAC-directed base closure or realignment actions. BRAC 1995 and 2005 provided funding in multiple years to implement realignment and closure recommendations. These BRAC funds included environmental cleanup at legacy bases, movement of civilian and military personnel and equipment, training and program management. Air Force BRAC programs supported seven closures, 59 realignments and included 63 major construction projects. The FY 2011 Air Force BRAC Budget Request includes environmental cleanup and property management for 28 installations closed under BRAC 1988-1995 totaling $125M. The FY 2011 Budget Request for BRAC 2005 supports costs associated with realignments and closures, primarily movement of personnel and purchasing of equipment.

Table 22. BRAC TOA

Base Realignment and Closure TOA ($M)	FY10	FY11
Category	*Appropriated*	*Request*
BRAC 1995	127	125
BRAC 2005	418	127
Blue Total	**546**	**252**
Non-Blue	-	-
AF BRAC TOA Total	**546**	**252**

Numbers may not add due to rounding.

New Joint Team Andrews logo

New San Antonio medical center

Facility transfer to local community

Summary

Resources identified in the FY 2011 Air Force Budget Request will enable the Air Force's 12 Core Functions to support the capabilities the Nation depends on to provide a dominant and decisive edge in air, space and cyberspace. This strategy will ensure the Air Force has the systems, equipment and personnel to meet the challenges of today's missions and succeed in a wide range of contingencies in the future.

Section 2: FY 2011 Overseas Contingency Operations Request

The Air Force is committed to Overseas Contingency Operations (OCO) and will continue to project its many unique capabilities to defeat enemies anywhere in the world. Maintaining combat readiness is a key factor in supporting OCO. The Air Force must sustain critical mission areas of *Global Reach*, *Global Vigilance* and *Global Power*, while continually maintaining an agile, adaptable, persistent, lethal and surge-ready air, space and cyberspace force. For the past two decades, the Air Force has taken the fight to hostile forces around the world. The Air Force continues combat contributions through forces deployed to the U.S. Central Command's (USCENTCOM's) Area of Responsibility (AOR). Funding supports the continued deployment of Active Duty and Reserve personnel to the AOR. This funding also supports post-hostility operations and actions facilitating the transition from war to peace. Details of the FY 2011 OCO Budget Request are shown in Table 23.

Table 23. FY 2011 OCO by Appropriation

OCO by Appropriation ($M)	FY 10 Appropriated	FY10 Supplemental	FY10 Total	FY 11 Total Request	Delta
MILPERS	1,475	97	1,572	1,455	(117)
O&M	9,582	3,965	13,547	13,907	360
RDT&E	37	3	40	69	29
Procurement	1,106	354	1,460	1,977	517
MILCON/Military Family Housing	475	287	762	281	(482)
Working Capital Fund	0	739	739	17	(722)
Total Blue OCO Request	**12,675**	**5,445**	**18,120**	**17,705**	**(415)**
Total Non-Blue OCO Request	**2,559**	**626**	**3,185**	**3,081**	**(104)**
Total OCO Request**	**15,234**	**6,070**	**21,304**	**20,785**	**(519)**

Numbers may not add due to rounding.

** OCO Supplemental for increased Operations in Afghanistan has not yet been appropriated for FY 2010.

Military Personnel

The FY 2011 O&M Budget Request includes $1.5B for Officer and Enlisted pay and special pay and allowances for 29,000 Airmen directly supporting contingency operations. This funding covers the additional Air Reserve Component endstrength requirement to support these operations along with hazardous duty pay and other special pays necessary to address expenses over and above the Air Force baseline program.

Operations and Maintenance

OCO funding also supports operational costs associated with flying hours for multiple aircraft, supplies and materials, transportation costs for equipment to be shipped into and out of the theater, equipment and communications and other miscellaneous costs to meet world-wide operational requirements. The FY 2011 Budget Request includes $13.9B for OCO Readiness, which includes 398,000 flying hours, inter/intra-theater airlift, sustainment and base support/airfield operations. It also delivers critical C2, persistent ISR, and firepower to U.S. and Coalition forces.

Investment (RDT&E and Procurement)

FY 2011 OCO funds are required to reconstitute equipment and ammunition and deliver increased operational capability to the warfighter to successfully meet a range of security challenges in the theater. This request includes 12 MQ-9 Reapers for attrition replacement of MQ-1 Predators and MQ-9s, one F-35A to replace an F-15E Strike Eagle lost during operations and three HH-60G Pave Hawk Special Operations helicopters to replace operational losses in Afghanistan. This request also funds the modernization of LAIRCM for the C-5, C-17 and C-130 to support aircraft survivability of man-portable missiles. Further, funding of advanced targeting pods provides aircrews the ability to employ precision guided munitions. Home-station deployment training and depot spares to maintain in-theater ATPs are also supported.

Military Construction

The Air Force submission includes $0.3B in Military Construction (MILCON) funding for eight projects in Afghanistan. These projects will increase ground operations to maximize operational effectiveness and response time to ground forces in the region. FY 2011 MILCON projects directly support operations in Afghanistan by providing direct runway access for close air support aircraft, a refueler apron, an airlift shelter, cargo handling areas and two runways to provide tactical airlift capability for increased force posture, in addition to a secure passenger and cargo terminal to support the increase in aircraft and cargo in the area.

Summary

The Air Force is providing support to OCO in multiple regions in support of the Joint Force Commander. Airmen are training, coaching and mentoring the Iraqi and Afghanistan police, and providing medical supplies to remote areas of Afghanistan. The Air Force is also providing day-to-day support to Army and Marine counterparts, assisting with transportation and security details while providing airdrop capabilities to remote areas all over the globe. The Air Force is committed to OCO and will continue to support operational commanders to meet their mission requirements. In order to do this, the Air Force must ensure forces are adequately trained, equipped and supported across the full spectrum of mission sets required by Combatant Commands (COCOMs). The FY 2011 OCO Request sustains this support and ensures troops are equipped to accomplish their mission.

Section 3: Performance Based Budget (Overview)

The Government Performance and Results Act of 1993, as well as the Office of Management and Budget Circular A-11, *Preparation, Submission and Execution of the Budget*, are two pieces of Federal government directives requiring more accountability for "outcomes" or "performance" achieved via expenditures. Increased accountability is to be achieved by aligning performance measures against the strategic plans of each Federal agency. The Air Force publishes a strategic plan that identifies what is needed to shape actions over three to five year periods. The *2008 Air Force Strategic Plan* aligns priorities across the entire Air Force with the guidance of the Secretary of Defense and the Chairman of the Joint Chiefs of Staff, balanced with the needs of the Combatant Commanders. The Air Force Priorities are as follows:

- Continue to Strengthen the Nuclear Enterprise
- Partner with the Joint and Coalition Team to Win Today's Fight
- Develop and Care for Airmen and Their Families
- Modernize Air and Space Inventories, Organizations and Training
- Recapture Acquisition Excellence

These priorities form the construct of the following sections of the Budget Overview. Within each of the sections, there will be a reference to Core Functions. These Core Functions describe what the Air Force provides to Combatant Commanders with clarity beyond *Global Vigilance*, *Reach* and *Power*. Air Force Core Functions, with definitions, are listed in Figure 19:

Nuclear Deterrence Operations	Air Superiority	Space Superiority	Cyberspace Superiority	Global Precision Attack	Rapid Global Mobility
Operate, maintain, and secure nuclear forces to achieve assured capability to deter an adversary from taking action against US vital interests	Deliver dominance in the air battle	Deliver dominance in space over adversaries	Deliver dominance in cyberspace of one force over another that permits conduct of operations by the former	Hold at risk or strike rapidly and persistently any target to achieve precise effects	Timely deployment, employment, sustainment, augmentation and redeployment of military forces and capabilities
Special Operations	**Global Integrated ISR**	**Command & Control**	**Personnel Recovery**	**Building Partnerships**	**Agile Combat Support**
Specialized airpower operations conducted in hostile, denied or politically sensitive environments	Conducting and synchronizing surveillance and reconnaissance across all domains	Ability of commanders to integrate operations in multiple theaters at multiple levels	Recovery and return of US military, DoD civilians and DoD contractor personnel	Set conditions for interaction with partner, competitor or adversary leaders, military forces or relevant populations	Field, protect and sustain air, space and cyber forces

Figure 19. Air Force Core Functions

The following section includes details of funding initiatives and progress through FY 2009 towards priorities, goals and objectives.

Priority 1 – Continue to Strengthen the Nuclear Enterprise

Overview

According to the 2008 National Defense Strategy, "…the United States will maintain its nuclear arsenal as a primary deterrent to nuclear attack, and the New Triad remains a cornerstone of strategic deterrence." The New Triad refers to the potential to deliver a nuclear attack by land, by sea, or by air: with land-based intercontinental ballistic missiles, sea-based submarine-launched ballistic missiles, and airborne strategic bombers. Deterrence seeks to preclude future actions by an adversary and requires both credibility and strength. This deterrence must be strong enough to preclude an enemy's use of its nuclear arsenal or their weapons of mass destruction. The strength of the Air Force nuclear enterprise deterrence stems from the organizations, people, processes, procedures and systems used to conduct, implement and sustain nuclear operations. Since reinvigorating the Air Force culture organizational and technical focus, the Air Force is now institutionalizing these successes.

The Air Force provides two of the three critical components for the Nation's nuclear Triad: nuclear bombers and intercontinental ballistic missiles (ICBMs). It is imperative that the Air Force safeguard these vital capabilities in order to maintain credible means for nuclear deterrence. This section addresses Air Force leadership's priority to *Continue to Strengthen the Nuclear Enterprise*. This priority corresponds to the Nuclear Deterrence Operations Service and Agile Combat Support Core Functions, as listed in Table 24.

Table 24. Air Force Core Functions Included in Priority 1

Priority 1 Air Force Core Functions
• Nuclear Deterrence Operations • Agile Combat Support

Air Force nuclear bombers, including the B-2A (Spirit) and B-52H (Stratofortress), as well as ICBMs (Minuteman III), C2 platforms, dual capable fighter aircraft, and early warning systems are all critical components of the nuclear enterprise. The Air Force's ICBMs are on continuous alert, deployed in hardened, widely dispersed locations. The size and characteristics of the total Minuteman III force presents any potential adversary with an overwhelming challenge. In addition, the B-52Hs provide unique, timely and responsive stand-off capabilities, complemented by the B-2's ability to penetrate air defenses to strike mobile or high priority targets. The combination of ICBM and bomber assets provides immense flexibility and versatility, and serves as the backbone to strategic nuclear deterrence. Another vital element of the nuclear enterprise is ballistic missile early warning systems providing long-range detection and warning of a ballistic missile attack.

A B-2 Spirit from Whiteman AFB during an engine-running crew swap exercise

The Air Force recognized nuclear operations shortcomings at the end of FY 2008, and leadership has aggressively addressed these issues with action plans to implement the nuclear roadmap, *Reinvigorating the Air Force Nuclear Enterprise.* The nuclear roadmap identified six focus areas for rebuilding the nuclear enterprise and restoring the standards of safety, security and reliability using a back-to-basics approach. Leadership used these focus areas to define six nuclear strategic objectives to

reinvigorate the nuclear enterprise. These six objectives are listed in Table 25, and each is discussed in the following sections to provide specific details on the steps being taken toward reinvigoration and sustainment of the nuclear enterprise.

Table 25. Air Force Nuclear Roadmap Strategic Objectives

Six Nuclear Roadmap Strategic Objectives
1) **Authority** - Ensure that nuclear-related authority and responsibility is unfragmented and aligned with nuclear deterrence mission demands, requirements and expectations
2) **Advocacy** - Implement a comprehensive process for ensuring sustained advocacy, focus and commitment
3) **Investment** - Sufficiently invest in the nuclear deterrence mission arena
4) **Sustainment** - Implement an end-to-end inter-related, systems, life-cycle nuclear enterprise methodology/discipline
5) **Expertise** - Develop adequate nuclear-related expertise and ensure positions throughout the enterprise reflect a proper match-up of requirements and assignments
6) **Self Assessment** - Implement effective processes for uncovering, analyzing, addressing and reviewing systemic weaknesses

A total of 784 action plan items have been identified by the Air Force and are to be completed by October 2011. The action items include areas such as organizational changes, increased training and improvements in inspection processes to name a few. Highlights of these action plans are discussed in the following sections, and overall progress toward completing these action plans is shown in Figure 20. Specifically, the nuclear enterprise had a goal to complete 356 of 784 (45 percent) action plans by 30 September 2009, but actually completed 423 of 784 (54 percent) action plans. This accomplishment illustrates the Air Force's commitment to reinvigorating the nuclear enterprise.

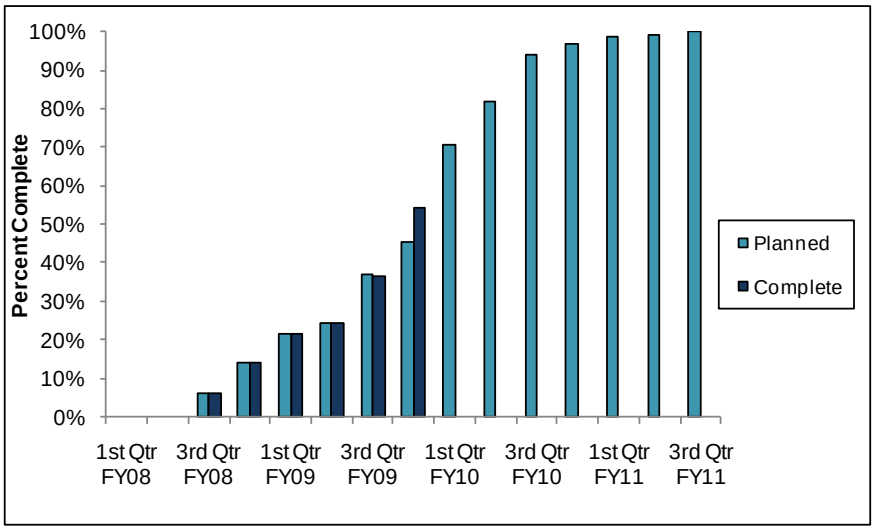


Figure 20. Nuclear Action Plan Items Complete

The following sections include highlights on each of the six Air Force Nuclear Strategic Objectives and actions planned, in progress, or completed, to restore the standards of precision and reliability.

Authority

The Air Force has undertaken numerous organizational changes in order to ensure nuclear-related authority and responsibility is cohesive and aligned with nuclear deterrence mission demands,

requirements and expectations. The most significant change was the stand up of Air Force Global Strike Command (AFGSC), a new major command (MAJCOM) responsible for all Air Force operational strategic nuclear forces. AFGSC stood up in August 2009 at Barksdale Air Force Base (AFB), Louisiana, and aligns strategic nuclear forces together under a single commander. The activation of AFGSC is part of a broad strategy to ensure the Air Force has the proper focus on critical missions that provide nuclear deterrence and global strike forces for the Combatant Commander, the Joint Team and allies. AFGSC will provide Combatant Commanders with the combat ready forces to conduct strategic nuclear deterrence and global strike operations through ICBMs, B-2A and B-52H operations. AFGSC will include Air Force Reserve and Air National Guard units performing critical roles and responsibilities, with the command ultimately growing to 23,000 people.

A Minuteman III intercontinental ballistic missile successfully launches

In December 2009, the operational responsibility for ICBM forces was aligned to AFGSC when the 20th Air Force (F.E. Warren AFB, Wyoming) transferred from Air Force Space Command to AFGSC. In February 2010, the 8th Air Force (Barksdale AFB), which manages the nuclear-capable bomber force, will be transferred to AFGSC. The command also assumed responsibility for the 576th Flight Test Squadron at Vandenberg AFB, California (ICBM testing), and the 625th Strategic Operations Squadron at Offutt AFB, Nebraska (which supports US Strategic Command) in December 2009.

While the new command is the largest reorganization in the Air Force's ongoing effort to sustain progress and continue strengthening the nuclear enterprise, the Air Force has also established the Strategic Deterrence and Nuclear Integration Air Staff Directorate (AF/A10) focused solely on strategic deterrence and the nuclear mission. The AF/A10 staff provides policy oversight, increased institutional focus and staff integration for nuclear issues and is involved in managing the overall nuclear enterprise and implementing the nuclear roadmap.

In addition to organizational changes, Air Force officials published a new version of the Nuclear Operations Doctrine, replacing the 11-year old existing doctrine. One of the most significant updates to the new doctrine was changing the nuclear operations focus from a Cold War standpoint to one more aligned with the current global environment. The document outlines the Air Force's responsibilities and policies for maintaining effective nuclear forces with the capability to support national security deterrence goals. The doctrine focuses on posturing, maintaining and exercising nuclear forces for deterrence, as well as employing these forces should deterrence fail.

Advocacy

Air Force leadership is working to instill discipline, accountability, excellence, pride and professionalism in every member of the nuclear enterprise--Active, Reserve, Guard and civilians. Recapturing the culture of excellence and accountability is evident in all facets of the nuclear enterprise, from organizational changes, to training, to sustainment.

The new AFGSC mission statement, “Develop and provide combat-ready forces for nuclear deterrence and global strike operations ... safe, secure, credible ... to support the president of the United States and

combatant commanders," emphasizes the importance of the nuclear mission and every individual supporting that mission.

The AFGSC commander emphasized all AFGSC Airmen need to be aware of this objective and stated, "The mission needs to be understood by everyone in the command, because we truly have been given a 'special trust and responsibility' for our Nation's strategic deterrence mission." He added, "Each person in the command is important -- all of our Airmen: Active-Duty, Guard and Reserve; our Department of Defense civilians and contractors."[1]

Investment

To rebuild nuclear proficiency and restore confidence in nuclear missions, the Air Force has invested in the organizational support, expertise, oversight and sustainment of the nuclear enterprise. These investments support the establishment of AFGSC; realignment of the B-52Hs, B-2As and ICBMs under one major command to enhance the nuclear focus; fund flying operations and aircraft modifications for the B-2A and B-52Hs, ICBM sustainment actions, enhance the nuclear weapons center and increase the nuclear workforce.

Munitions on display demonstrate the full capabilities of the B-52 Stratofortress bomber

The FY 2011 Budget Request includes significant investment towards development of a Long Range Strike platform and support for the requisite industrial base. The bomber force will receive funding increases that address sustainment and modernization. Starting in FY 2011 the B-2A will receive funding across the Future Years Defense Program (FYDP) to improve the DMS on the aircraft. This initiative will allow the B-2A to continue operations around the world in more advanced threat environments while decreasing the maintenance required to operate the system. The B-2A will also have funding increased for the Weapon System Support Center (WSSC) which enables testing of current as well as developmental aircraft systems. The B-52H is undergoing several modernization programs in order to maintain its viability through 2040. Current initiatives include installing the 1760 bus on the B-52H for increased smart weapon capability while progressing with the Strategic Radar Replacement program, aimed at replacing its current radar (which is experiencing sustainment and obsolescence issues). The B-52H Extremely High Frequency program integrates communications and data and supports United States Strategic Command (USSTRATCOM) requirements for secure, survivable communications via Emergency Action Messages.

As part of the effort to sustain ICBMs, funding was realigned in FY 2011 to complete the installation of new environmental control systems at the launch facilities. The Air Force also procured more Minuteman III test equipment over the FYDP to provide the necessary flight test components for follow-on test and evaluation launches to ensure reliability, accuracy and viability of the fielded ICBM force. Additionally, funding provided for the development of software to validate message generator processes critical for nuclear certification. The FY 2011 Budget Request includes $295M to modernize out-dated fuzing mechanisms and to sustain test equipment and environmental control systems for the aging but capable

[1] *Air Force Global Strike Command leaders release command's mission, vision*, Air Force Link, November 3, 2009, http://www.warren.af.mil/news/story.asp?id=123175884

Minuteman III ICBMs. The UH-1N that supports missile launch complexes will begin replacement activities with an Initial Operational Capability (IOC) date of FY 2015. The Air Force continues to analyze and address requirements to maintain the Minuteman III ICBM to 2030 as directed by Congress.

Nuclear Command and Control funding was also increased to preserve the capability to communicate with the National Authority (NA). The Nuclear Command, Control and Communications Long Term Solution was funded over the FYDP to complete the Joint system with the Navy ensuring communications between NA, Air Force and Navy Command Centers. The Air Force also invested in the Ground Element Minimum Essential Emergency Communication Network (MEECN) System which also improves communication capability with the NA.

Sustainment

Implementing an end-to-end, inter-related, systems, life-cycle nuclear enterprise discipline is another critical component to rebuilding the nuclear enterprise. One major step toward making this happen was the consolidation of all Air Force nuclear sustainment matters under an expanded Nuclear Weapons Center aligned to AFMC, increasing the size and scope of operations. This consolidation required the transfer of the sustainment and maintenance operations within weapons storage areas and nuclear war reserve material to the Air Force Nuclear Weapons Center. This change streamlines sustainment and positive control of nuclear weapons systems continually emphasizing rigor and standardization in this critical function.

An Airman performs daily munitions maintenance

One specific undertaking to increase accountability and control is a massive effort to demilitarize more than 100,000 nuclear weapons-related legacy assets from the ICBM, aircraft and space test programs. As of July 31, 2009, officials have successfully disposed of 45,000 assets. The goal is to eliminate another 52,000 assets by September 30, 2010. The initiative extends to identifying other excess assets in the nuclear enterprise that can also be disposed of under this program.

Nuclear personnel have been working diligently to maximize accountability and control for all nuclear assets. Figure 21 shows the number of nuclear weapons related material (NWRM) assets with serial or unique item identification control out of the total number of NWRM assets since the second quarter of FY 2009, the first date for which this data was available. (The drop in the total number of NWRM assets each quarter reflects the demilitarization efforts.) At the end of FY 2009, the Air Force had serial or unique identifier control for 96 percent of NWRM assets.

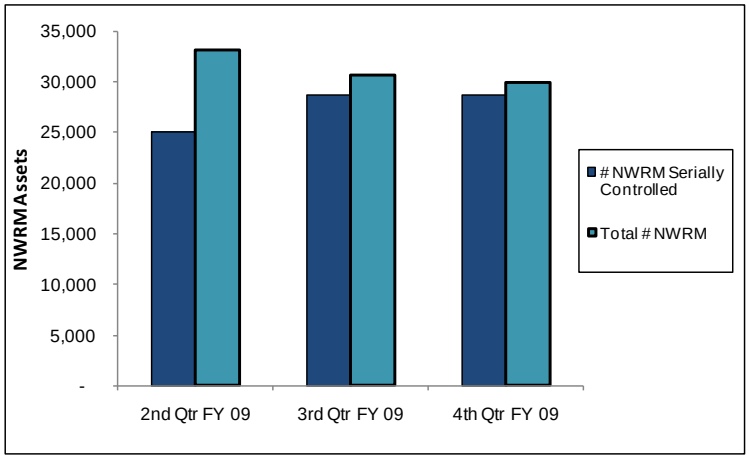


Figure 21. NWRM with Serial or Unique Identifier Control

Consolidating nuclear sustainment activities in the Air Force under a single commander provides an effective means for improved nuclear sustainment force management and development, focused advocacy for nuclear sustainment programs and clear lines of authority and accountability to ensure compliance with nuclear surety standards.

Expertise

The Air Force is utilizing training, professional military education and career development to enhance nuclear-related expertise and ensure positions throughout the enterprise reflect a proper match-up of requirements and assignments. As the venue to making this happen, Air Education and Training Command (AETC) created a new directorate to strengthen the focus on training for the Air Force's nuclear enterprise. The new office, AETC Nuclear Operations, Plans and Programs, is on a mission to re-establish a culture of accountability and rigorous self-assessment to ensure the highest standards of nuclear excellence.

A review of education, training and experience was initiated for all key nuclear billets to ensure clarity of requirements and personnel to meet the needs of the job. The review of all 1,216 of these positions was completed by the second quarter of FY 2009, setting the stage to ensure that leadership has the proper expertise to successfully guide the nuclear enterprise.

AETC has the opportunity to shape every Airman as the first major command that all commissioned and non-commissioned officers (NCOs) are exposed to in their careers. From the initial accession process through the entire range of education and training, AETC personnel are responsible for launching the campaign to reinforce the importance of the nuclear deterrence mission and ensuring nuclear weapons are controlled in a safe, secure and reliable nuclear surety program. Training facilities and equipment are being updated for Airmen in all eleven Air Force nuclear-related career fields to make training as realistic or representative of the operational environment as possible. Airmen in the AETC nuclear training pipeline will experience an increased and focused emphasis on adherence to technical data ensuring precision, compliance and accountability.

AETC provides Air Force Specialty Code-awarding courses for nuclear munitions officers and enlisted nuclear weapons specialists as the foundation of nuclear training. A new Nuclear Fundamentals Course was launched in May 2009 to provide basic nuclear weapons training for all new munitions officers. Another new course, the Nuclear Accountability Course, provides realistic, hands-on training to Airmen assuming accountability and responsibility for nuclear weapons. This four-week course is for squadron-level munitions officers and NCOs undertaking responsibility for the daily tracking, monitoring and reporting of nuclear munitions. The course provides a solid foundation for Airmen and ensures the training is consistent across the Air Force--something which could not be verified with the on-the-job training that the course replaced.

Security Forces perform recapture and recover operations during a Nuclear Surety Inspection

The main goal of the Nuclear Accountability Course and all nuclear education programs is to provide the specific training for munitions officers and NCOs to do their jobs, and do them perfectly. A secondary goal is to foster the development of future nuclear leaders, with knowledge of the business from the ground up and an understanding of the demands of managing the nuclear enterprise, which will restore the culture and institutional knowledge for future nuclear enterprise leaders in the long-term.

Self Assessment

Air Force leaders are committed to implementing effective processes for uncovering, analyzing, addressing and reviewing systemic weaknesses in the nuclear enterprise. To accomplish this, Air Force Inspection Agency (AFIA) officials created a new centralized team, the Air Force Nuclear Surety Inspection (NSI) Core Team, to increase the standardization and consistency of NSIs across the Air Force. The core team will augment MAJCOM Inspector General (IG)-led NSIs providing a tailored, dedicated group of highly skilled, very proficient nuclear inspectors whose primary mission is to augment 10 to 14 NSIs per year across all nuclear MAJCOMs. The ultimate goal is to help ensure precise nuclear standards are applied consistently and effectively across the Air Force.

Personnel assigned to the core team consist of subject matter experts taken from the field who have been trained and certified as nuclear inspectors. The core team will merge with the MAJCOM/IG team to form a single inspection unit. This inspection unit will work under the direction of the MAJCOM/IG team chief, while AFIA will provide the deputy team chief. The initial core team started with four Airmen, then ramped up to 13 Airmen, and will eventually grow to the target of 20 Airmen as depicted in Figure 22. Additionally, AFIA has requested two more billets to perform Personnel Reliability Program/Competent Medical Authority inspection duties.

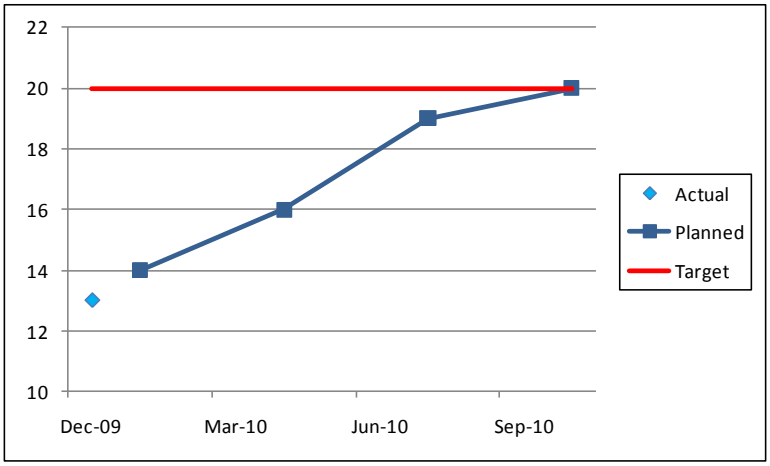


Figure 22. Air Force NSI Core Team Build-up Plan

A Nuclear Surety Inspector's Course was also established to standardize the training and certification of Air Force NSI inspectors. The course will elevate the inspector experience and contribute to NSI lessons learned and trend analysis processes as well as ensuring standardized training and certification. New core team inspectors will complete SAF/IG inspector training and the AFIA Nuclear Surety Inspector's Course before augmenting an NSI. Establishing the NSI Core Team was another significant milestone to ensuring unwavering standards of perfection and precision across the nuclear enterprise.

Implementing the Transformation

The Air Force has been working tirelessly to regain and preserve the trust and confidence in its contribution to the Nation’s nuclear deterrence mission. As a Core Function, the Air Force must, in conjunction with the other services and agencies, bear the accountability and responsibility as stewards of the nuclear enterprise to provide credible strategic deterrence capabilities. With the Nation’s armed services engaged in missions across the world, it is vital to maintain the Air Force’s legacy of excellence in the nuclear mission as it underpins United States national security.

Priority 2 – Partner with the Joint and Coalition Team to Win Today's Fight

Overview

This priority directly reflects the Department's emphasis on balancing commitments to today's conflicts against preparing for mid- and long-term risks. Investments in ISR as well as airlift, command and control and building partner capacity reinforce the prominence of this priority in the budget request. The Air Force remains committed, first and foremost, to providing the Joint warfighter *Global Vigilance, Reach* and *Power* to win today's fight and is prepared to act in both "supporting" and "supported" roles as dictated by the objectives of the Joint or combined commanders. Airmen contribute to the fight every day by delivering the effects the Joint Team needs with unmatched speed and precision. Airmen provide persistent watch over today's battlefield, move people and cargo to, from and within theater and deliver precise and reliable fire power every day for the Joint and Coalition Team. Airmen assess Joint effects across the globe, and provide command and control for U.S. and coalition air, space and cyberspace assets to achieve Combatant Commander objectives. Airmen are working to build indigenous self-sustainable capabilities in Afghanistan and Iraq, playing a critical role in fighting terrorism and supporting the CENTCOM mission. Additionally, 130,000 Airmen are directly supporting Combatant Commanders from home stations, contributing to the efforts in theater through unmanned aerial surveillance, air sovereignty alert, space and intelligence operations and strategic deterrence.

Table 26. Air Force Core Functions Included in Priority 2

Priority 2 Air Force Core Functions	
• Air Superiority	• Global Integrated ISR
• Space Superiority	• Command and Control
• Cyberspace Superiority	• Personnel Recovery
• Global Precision Attack	• Building Partnerships
• Rapid Global Mobility	• Agile Combat Support
• Special Operations	

Being crucial partners with Army, Navy and Marine Corps teammates is something Airmen take very seriously; if the distinctive Air Force capability they provide requires them to be in the thick of the fight, Airmen are there:

- As explosive ordnance disposal and security forces specialists, rendering improvised explosive devices "safe" and protecting convoys and Provincial Reconstruction Teams
- As medical technicians, providing life-saving medical procedures on the battlefield, and overseeing the safe transport of wounded warriors to a main, world-class medical facility far from the battlefield
- As Joint Terminal Air Controllers, calling in timely and precise close air support for friendly forces anywhere they are pinned-down by enemy fire, and much more in the broad portfolio of Joint Expeditionary taskings

An Air Force pararescueman cares for a patient while waiting for a wounded Afghan national army soldier to be loaded into the HH-60 Pave Hawk helicopter

Airmen know, in victory, the truly meaningful wins are those garnered with their Joint partners, as a unified team. The Air Force's ability to innovatively integrate these capabilities and execute the Air Force Core Functions contributes to security and impacts future planning. Whether conventional fight, irregular

warfare, humanitarian relief operations, or deterrence and dissuasion of potential adversaries, the Air Force is a key contributor to the strategic defense of America.

Bringing air, space and cyberspace capabilities to bear in concert with the Joint and Coalition Team to win today's fights in Afghanistan and Iraq is the Air Force's highest priority mission. As noted by the Secretary of the Air Force, "9/11 changed the international security environment and our response has in many ways brought new Air Force capabilities to the forefront. Our commitment to supporting the Joint fight is borne out by the numbers. Historically, the Air Force has spent just over 30 percent of the budget on foundational areas like base operations, headquarters functions, test and training, the defense health program and maintenance. The remaining 70 percent can be grouped roughly into two categories: combat forces and Joint enablers. While this 70 percent has remained fairly constant, the Air Force has moved away from investment in just the combat forces, and toward Joint Force enablers. Over the last 10 years, spending on combat forces—like ICBMs, bombers, fighters, and munitions, for example—has decreased from roughly 29 percent to 22 percent of the Air Force budget. That seven percent has been absorbed into Joint Force enablers: airlift, air refueling, C2ISR, space and intelligence to name a few. Investment into these Joint Force enablers has been and continues to be justified by their immense contributions."[2]

An A-10 Thunderbolt II flies a combat mission over Afghanistan

The Air Force stands ready to do whatever the Nation requires. Nearly 40,000 Airmen (Active, Guard, Reserve and Civilian) are deployed to 263 locations across the globe, including 63 locations in the Middle East. In addition to deployed Airmen, nearly 130,000 Airmen support Combatant Commander requirements from their home-station daily. These Airmen operate the Nation's space and missile forces process and exploit remotely collected ISR, provide national intelligence support, execute air sovereignty alert missions and contribute in many other ways.

While the Air Force is heavily engaged in winning today's fight, great care is being taken to preserve aircraft weapon systems and retain highly skilled people. FY 2009 was the safest flying year in the 62-year history of the Air Force with only 17 'Class A' mishaps. A 'Class A' mishap is one with loss of life, an injury resulting in permanent total disability, the destruction of an Air Force aircraft, or property damage or loss exceeding $1M. Figure 23 shows Air Force Class A aviation flight mishaps by year, from FY 2000 to FY 2009.

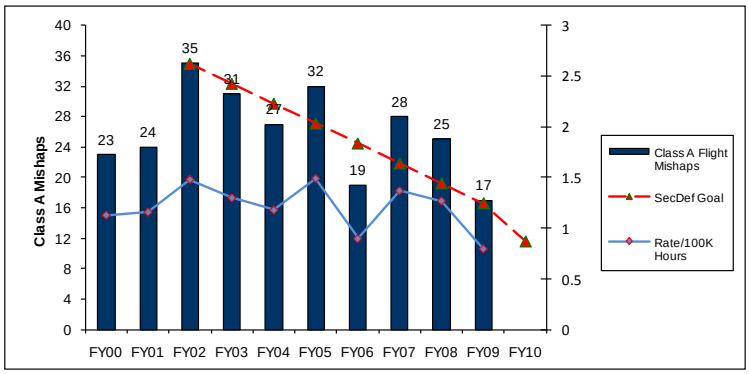


Figure 23. FY 2000 – FY 2009 'Class A' Aviation Flight Mishaps

[2] Secretary of the Air Force, AFA Keynote address, "The State of the Air Force," 14 September 2009.

Given the spectrum of threats the United States faces, the Air Force must be capable of assuring allies, dissuading and deterring potential adversaries and, if necessary, defeating those who choose to become enemies. The Air Force has implemented a strategy based on providing policy makers with options for defense, covering the spectrum of air, space and cyberspace. In war, Air Force capabilities provide decision makers with a range of options from supporting Joint and Coalition actions in conjunction with allied air, land and sea forces to direct strikes against enemy centers of gravity. These options are enabled by the asymmetric advantages the United States possesses in air and space technology and the preparation of forces. The Air Force has used seven Concepts of Operation (CONOPS) designed to achieve Joint Commander's desired effects through the application of capabilities needed by Joint Concepts.

This section focuses on Air Force Operations providing *Global Vigilance, Reach* and *Power* through the execution of Air Force Core Functions. It specifically describes how the Air Force is teaming with the Joint and Coalition warfighters to win today's fight and further U.S. global interests.

Global Vigilance

Air Force global integrated ISR is critical to winning today's fight. *Global Vigilance* is the ability to gain and maintain awareness, to keep an unblinking eye on any entity anywhere in the world; to provide warning and to determine intent, opportunity, capability or vulnerability; then to fuse this information with data received from other Services or agencies. Relevant information is subsequently shared with the Joint Force Commander.

Air Force Core Function: Global Integrated ISR

The Air Force continues to rapidly increase its ISR capability and capacity to support combat operations. Air Force ISR provides timely, fused and actionable intelligence to the Joint Force from forward deployed locations and globally distributed centers around the globe. The exceptional operational value of Air Force ISR assets has led Joint Force Commanders in Iraq, Afghanistan and the Horn of Africa to continually increase their requests for these forces. To help meet this demand, the Air Force currently has more than 90 percent of all available ISR assets deployed, with 70 percent of the available RPA fleet dedicated to the USCENTCOM AOR.

An MQ-9 Reaper awaits another wartime mission in Iraq

The Air Force accomplishes *Global Vigilance* by conducting Global Integrated ISR, an Air Force Core Function. Air Force ISR resource contributions to the Joint Team and winning today's fight include over 100 operational satellites providing ISR capabilities. In addition, as of 1 December 2009, the MQ-1B Predator and MQ-9A Reaper flew over 158,000 combat flight hours in calendar year (CY) 2009 and serviced almost 20,000 ISR targets of interest. Further, the Air Force provided 40 RPA CAPs to USCENTCOM to meet the commander's operational requirements. In addition, RPA pilot requirements are growing to well over 1,100, which will make the MQ-1B/9A the second largest pilot manpower requirement behind the F-16C/D. Finally, the Predator and Reaper RPA have captured over 22,400 hours of full motion video per month in the USCENTCOM AOR.

The Air Force achieved significant milestones in 2009 while making vital contributions to the defense of the Nation and winning today's fight. Today, capabilities continue to be surged into the fights in Afghanistan and Iraq, including adding six additional MQ-1B Predator and MQ-9A Reaper CAPs toward the goal of 50 CAPs by the end of FY 2011 and 65 CAPS by the end of FY 2013. Additionally, six new

MC-12W ISR platforms were deployed to Iraq through an acquisition program hardly existing one year ago. Overhead ISR has emerged as the linchpin of today's fight. Today, and in the future, Joint Force commanders will expect to have persistent full motion video fully linked with other sensors over a wide area and over specific areas of the battlespace - a quantum leap in real time situational awareness provided by the Air Force. Figure 24 depicts the exponential growth in MQ-1A/MQ-9B CAPS and flight hours since CY 1999. The Air Force equaled its CY 2008 flight hours in the first ten months of CY 2009 and continues to add CAPS – five more in CY 2010 and five more in CY 2011 (50 total). With 40 total CAPs currently providing both intelligence and fire support to ground forces, the Air Force has come a long way since flying only one CAP in 2001. By the end of 2011, that total is likely to be at least 50, adding another 300,000 or so flying hours to the 600,000 hours already amassed.

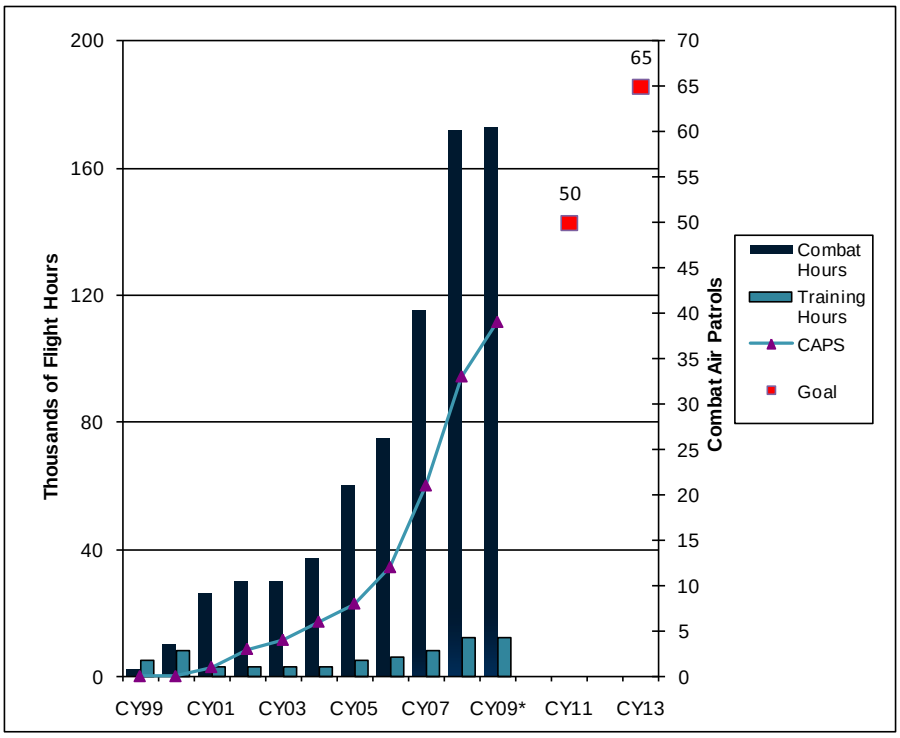


Figure 24. Historic MQ-1B/MQ-9A Operational Growth (by Calendar Year – *Through Oct 09)

To meet the projected Combatant Commander demand for 50 CAPs by FY 2011, the Air Force initiated a number of measures to increase the personnel available to conduct missions:

- Created a short-term program to assign approximately 100 undergraduate pilot training (UPT) graduates per year direct to the RPA as their first assignment
- Began testing small groups of non-UPT trained pilots to develop a training program for future RPA pilots
- Created new RPA pilot and sensor operator career fields
- Increased RPA pilot production capacity from 240 per year by expanding crew training at Creech AFB, Nevada and standing up formal training units (FTU) at Holloman AFB, New Mexico and March AFB, California
- Activated the first AFRC RPA Special Operations Squadron (MQ-1B and MQ-9A) at Nellis AFB, Nevada, June 2009

Maximizing the use of RPAs to increase Joint warfighting capability while promoting service interdependency and the wisest use of tax dollars is an Air Force goal. As the capabilities of RPAs advance beyond providing only a single video signal per aircraft, the Joint force will be able to focus on the output of ISR rather than the number of platforms airborne at any given time. As the Air Force

enhances ISR collection capabilities, and begins transitioning from Gorgon Stare to Wide Area Airborne Surveillance, 10 feeds and 50 video streams per aircraft will be achieved.

The FY 2011 Air Force Budget Request reflects the Joint Force emphasis on ISR capacity, and builds on progress made in FY 2010. The Air Force will reach 50 RPA CAPs in theater by the end of FY 2011. This proposal restructures the MQ-1B and MQ-9A platform mix, adds more surveillance capability, and increases the total number of RPA platforms to enable fielding up to 65 CAPs by the end of FY 2013. As the Air Force requests additional RQ-4B Global Hawks for high altitude ISR, it also intends to continue operating the U-2 at least throughout FY 2013 as a risk mitigation capability. The Air Force will sustain ISR processing, exploitation and dissemination in the DCGS, providing critical distributed analysis without having to forward deploy more forces.

Global Reach

Security Forces Airmen provide security for a C-130 Hercules during a cargo mission in Afghanistan

Air Force Rapid Global Mobility delivers the right Joint resources, at the right time and place to win today's fight. *Global Reach* is the ability to project military capability responsively, with unrivaled velocity and precision, to any point on or above the earth; and to provide mobility to rapidly supply, position, or reposition Joint Forces. The forward presence of U.S. forces in these conflict zones, especially the remote regions of Afghanistan, would not be possible without air mobility. Additionally, Air Force C-5s, C-17s, and C-130s moved 8.9 million personnel and 3.7 million tons of critical supplies into theater, airdropped food and ammunition to forward-based ground forces and provided tactical airlift for personnel and equipment. Air Force air refueling aircraft continue to play a vital role in extending the range and persistence of Joint and Coalition Air Forces. Additionally, Air Mobility Command aircraft have provided 10.6 billion pounds (1.6 billion gallons) of aviation fuel during air refueling operations. Rotary-wing Combat Search and Rescue (CSAR) assets were surged to support Joint medical evacuation and casualty evacuation missions in theater. Air Force medics are providing unprecedented care to Joint warfighters from the combat zone to the continental United States (CONUS) via unique aeromedical evacuation and enroute care capabilities--enabling the lowest death rates in history from combat wounds and disease as well as non-battle injuries.

Air Force Core Function: Rapid Global Mobility

Airmen load a C-17 for Haitian earthquake relief efforts

The Air Force is committed to providing unmatched airlift and air refueling capability to the Nation. Air Force mobility forces provide an essential deployment and sustainment capability for the Joint Force, delivering personnel, equipment and supplies necessary for missions ranging from conflict to humanitarian relief.

The Air Force provides *Global Reach* by conducting on-time/on-target mobility missions across the globe, accomplishing the Rapid Global Mobility Air Force Core Function. In Afghanistan and Iraq, Air Force air mobility assets are central to sustaining the Joint and Coalition Team. On any given day, Air Force C-5s and C-17s deliver life-saving Mine Resistant Ambush Protected (MRAP) vehicles into theater--over 4,000 MRAP vehicles were delivered to Iraq as quickly as they were ready to be sent--to save countless American lives; C-17As airdrop critical supplies to forward-based ground forces via the revolutionary GPS-aided Joint Precision Airdrop System; and C-130E/H/Js provide tactical airlift to move theater-based personnel

and equipment. Highly skilled aeromedical transport teams swiftly evacuate combat casualties ensuring wounded warriors receive the best possible medical care. Further, Air Force air refueling aircraft continue to play a vital, daily role in extending the range and persistence of almost all other aircraft of the Joint Force. The "air bridge" will continue to be the backbone of the Nation's global power projection, as the 32,000 air refueling receivers over the last 8 years can attest.

The FY 2011 Budget Request reflects a balanced approach across the tanker and airlift portfolios, which prioritizes recapitalization of the oldest aircraft while ensuring the continued viability of the legacy fleet. Investment in the tanker portfolio is heavily weighted towards the KC-X program, the top acquisition priority, and represents $11.7B in the FYDP. However, even as the Air Force moves aggressively to recapitalize the tanker fleet, it must ensure the continued health of legacy aircraft. This budget request includes $680M for airspace access and sustainment of the KC-10A and KC-135R/T fleets. The airlift budget relies primarily upon modernization programs, recapitalizing only the oldest airlift aircraft. To ensure continued access to all airspace, this budget continues to modernize and modify C-5B/Cs and C-130Hs through Avionics Modernization Programs, and upgrades C-5Bs with the RERP. In order to complete the recapitalization of the C-130Es, the Air Force requests $1.8B across the FYDP to procure 24 C-130Js while retiring some of the oldest, least capable C-5As and C-130Hs.

The Air Force installs LAIRCM kits on mobility aircraft for protection against highly proliferated and lethal Infrared Man-portable Air Defense Systems (IR MANPADS). To keep pace with the advancing threat, planned upgrades to LAIRCM include migration to the newer and more reliable Guardian mini-turret, Next Generation missile warning system, and initiatives to further increase capability and reliability. The Air Force is planning to exceed 360 total installs of the LAIRCM system on mobility aircraft by FY 2015. Figure 25 shows how many LAIRCM systems have been purchased through FY 2009 and the planned purchases for FY 2010 and FY 2011. The LAIRCM Target/Goal is based on a 2009 Joint United States Transportation Command (USTRANSCOM) and USAF study that analyzed the LAIRCM requirement for mobility aircraft. It is based on the maximum LAIRCM production capability and aircraft availability for installs as laid out in the 2009 Joint USTRANSCOM and USAF Study.

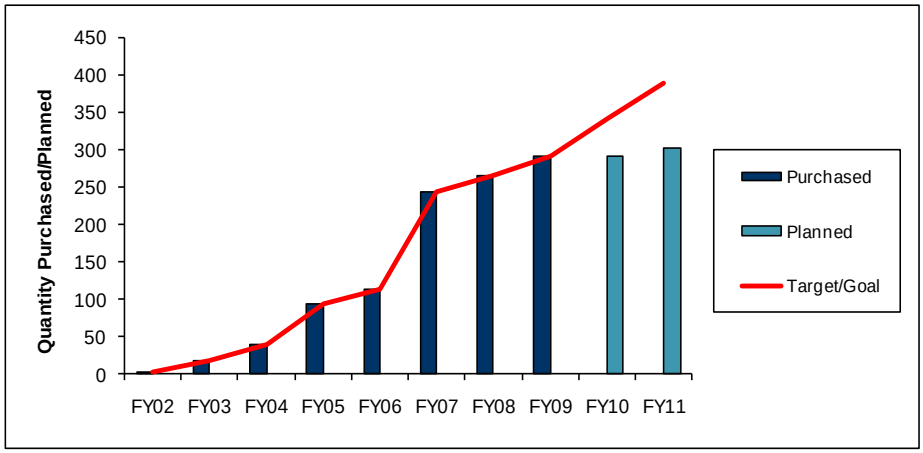


Figure 25. Purchased LAIRCM for Mobility Aircraft

Whether delivering warfighter logistical/weapons needs or relief supplies to victims of natural disasters, Airmen are delivering the resources anywhere the need arises. The Air Force is committed to ensuring the Joint Team can deploy, maneuver and sustain large forces on a global scale. One Global Mobility aircraft departs every 90 seconds, 24 hours a day/7 days a week, 365 days a year. Mobile surgery rooms move wounded warriors directly to American hospitals leading to a 97 percent survival rate. The Total Force tanker fleet, including Active, Reserve and Air National Guard crews, fly an average of 130 sorties a day. In addition, the Air Force supported humanitarian operations such as tsunami relief and the earthquakes in

Pakistan and Haiti. Recent history is full of examples where the Air Force and its sister services have extended the hand of compassion on behalf of the United States.

Global Power

Air Force global power teams with the Joint warfighter to win today's fight through Air Superiority and Global Precision Attack, enabled by Command and Control, Global Integrated ISR, Global Rapid Mobility, Cyberspace Superiority, Space Superiority, Special Operations, Personnel Recovery, and Building Partnerships Air Force Core Functions. *Global Power* is the ability to hold at risk or strike any target anywhere in the world, assert national sovereignty, safeguard Joint freedom of action, and achieve swift, decisive, precise effects related to Air Force alignment with Joint and National priorities. Technological improvements together with Joint cooperation enable the Air Force to deliver the required effects to any spot on the planet with unmatched speed and precision. Modifications continue to improve the capability of legacy aircraft.

Air Force Core Functions: Air Superiority and Global Precision Attack

An F-22 Raptor executes a supersonic flyby during Northern Edge 2009, a Joint exercise in Alaska

The Air Superiority and Global Precision Attack Air Force Core Functions remain the foundation of the Air Force's ability to deliver *Global Power*. In FY 2011, the Air Force is investing $22.9B ($8.5B in Air Superiority and $14.4B in Global Precision Attack) into these Core Functions. Air superiority is a necessary precondition for most U.S. military operations. American ground forces have not been killed by enemy air power since 1953. However, the emergence of modern air defenses challenges the ability of the Air Force to achieve Air Superiority. Potential adversaries are leveraging readily accessible technologies by modifying existing airframes with improved radars, sensors, jammers, and weapons. In addition, several nations are pursuing fifth-generation aircraft capable of all-aspect, low-observable operations with fully integrated avionics and sensors. Some have turned to advanced surface-to-air missiles to augment or even substitute for aircraft modernization efforts. The proliferation of these sophisticated and increasingly affordable weapons offers an area denial capability that challenges the legacy fleet. As the range of potential threats evolves, the F-22A will be the workhorse of the Air Superiority fighter force. Complementing the 187 modernized F-22As, the Air Force will continue to rely on legacy aircraft to provide an important component of the service's Air Superiority capability. The FY 2010 budget included plans to accelerate the retirement of some legacy fighter aircraft to pave the way for a smaller but more capable fighter force. As the Air Force works with Congress to execute this plan, the Air Superiority fleet will continue to be aggressively modernized. The FY 2011 Budget Request includes upgrades of older F-22As to ensure fleet commonality with current deliveries. The request adds ground target attack capabilities such as SDB delivery, improving reliability and maintainability and adding training enhancements for the fleet. Additionally, the Air Force began modernizing all F-15Cs with the new APG-63 AESA Radar. Along with these modifications, the development and procurement of the AIM-9X and AIM-120D air-to-air missiles continues. Recognizing that electronic warfare remains an integral part of full spectrum Air Superiority, the Air Force requests upgrades to the fleet of stressed, high-demand EC-130H Compass Call aircraft. This request includes the conversion of a WC-130 to provide an additional EC-130H, as well as a combined flight deck and mission crew simulator to increase crew readiness and proficiency.

Global Precision Attack is the ability to hold any target at risk, across the air, land and sea domains. As area denial and anti-access capabilities proliferate, fourth-generation fighters and legacy bombers' ability to penetrate contested airspace is increasingly challenged. Simultaneously, ongoing contingency

An F-15E Strike Eagle deploys countermeasure flares over Afghanistan

operations in a permissive, irregular warfare environment require new capabilities, such as longer aircraft dwell times and the increased use of fighter and bomber platforms in non-traditional ISR roles.

The $14.4B Budget Request in FY 2010 recognized these developments and continued improvements to aircraft and weapons capabilities. This year, the Air Force will take delivery of 10 F-35As for developmental testing and to train the test pilot cadre. Efforts also continue in modernizing legacy fighter aircraft to maintain sufficient capability and capacity until the F-35 fleet is fully online. The Air Force is moving ahead with development programs for preferred air-to-ground weapons, and recently completed Lot 7 JASSM test firings, achieving success with 15 of 16 shots, and a successful fourth test drop of the MOP. Finally, development of the second increment of the SDB will give the Air Force even greater capability and flexibility.

In FY 2011, the Air Force will invest in a balanced and flexible force, with the F-35A as the foundation of a longer-term global precision attack capability. In addition to complementing the F-22A's unparalleled air superiority capabilities, the F-35A can penetrate air defenses and deliver a wide range of precision munitions. This budget reflects the current state of the program as the Air Force completes the development of three variants and the initial phases of the flight test program. Additionally, the budget addresses the early phases of Low Rate Initial Production. This request provides funding for 22 F-35As, advance procurement of 24 F-35As, and maintenance trainers for field training detachments.

F-35 Lightning II over Fort Worth, Texas

While part of Nuclear Deterrence Operations, investments in both the B-2A and B-52H also increase conventional capabilities. Although these platforms perform well in current operating environments, emerging area denial and anti-access capabilities will soon challenge their ability to penetrate air space and deliver effects for the Joint Force. Developing a new family of systems for long range strike will require innovative approaches. For FY 2011, $160.0M is dedicated to maintain the defense industrial base and continue research and development for this capability.

The Air Force uses numerous measures to track performance of the operational missions described in *Global Vigilance*, *Reach* and *Power*. (Note that some systems like the B-52H and B-2A support both nuclear and conventional roles so their performance measures are included in the overall measures described in this section.)

Figure 26 shows the makeup of the Air Force's total active inventory (TAI) by mission performance area (trainers, strike, mobility and ISR). The trend over the last decade had been an overall reduction in aircraft in every mission area with the exception of ISR, which has more than doubled due to the increased demands and requirements for RPAs.

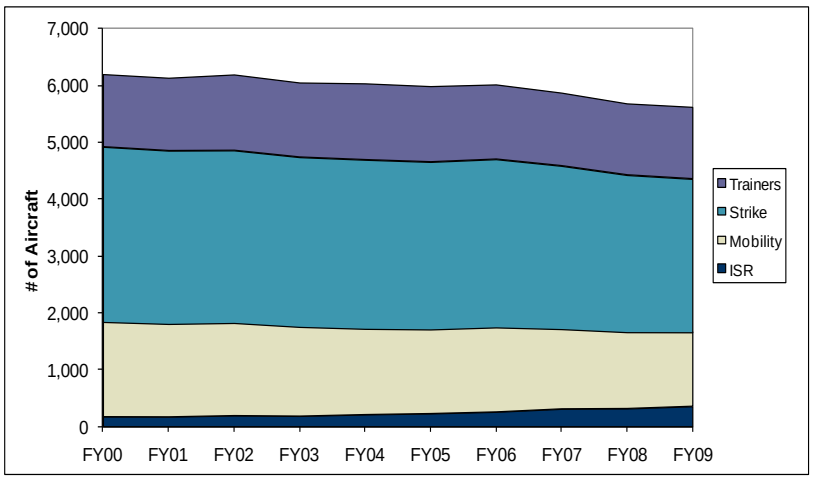


Figure 26. Total Active Inventory by Mission Performance Area (FY 2009 Actuals)

Accelerating the retirement of some legacy aircraft enabled the Air Force to modernize Combat Air Forces into a smaller yet more capable force. As the overall TAI steadily decreased over the past decade, aircraft utilization (flying hours/TAI) has steadily increased since FY 2006. Figure 27 depicts this utilization by year since FY 1999.

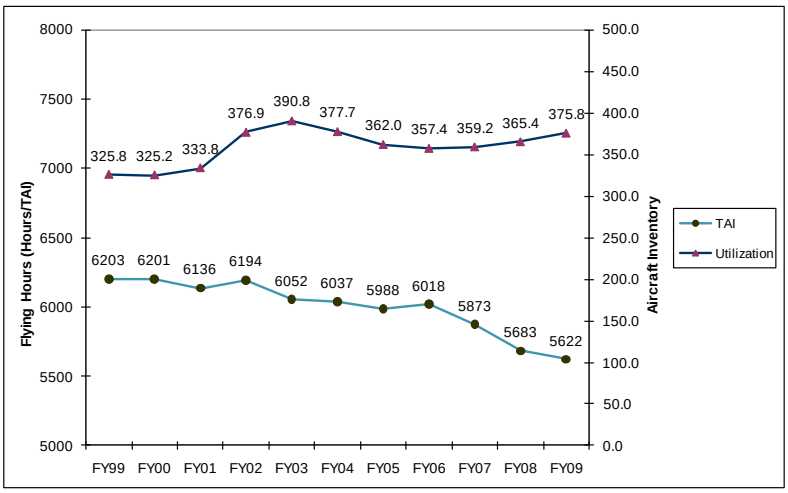


Figure 27. Historical Flying Hours and Inventory

Air Force operations are largely impacted by the ability to support planned flying missions with the right aircraft at the right time. Figure 28 depicts aircraft availability metrics by mission performance area. Each aircraft type has a different aircraft availability target based on the number of available crews and scheduled missions on a monthly basis. The decrease in Global Power availability in FY 2008 was primarily due to the grounding of the F-15A/C/D/E when structural defects were identified. All F-15 models were inspected before being placed back in service, which negatively impacted the airframe availability in FY 2008. Availability for Global Power further decreased in FY 2009 when the Air Force issued a time-compliance technical order on approximately 130 A-10A/Cs, requiring immediate inspection and repair of wing cracks. Additionally, an issue with TukLoc fasteners with the F-16C/D during the Falcon Star Modification affected aircraft availability. The overall availability drop in FY 2008 and FY 2009 was attributed to the aforementioned problems and the T-6A (training aircraft) Propeller Sleeve Touchdown (PSTD) problem. The PTSD problem required the repair of the aircraft engine. This large group of over 400 aircraft significantly dropped availability for the entire Air Force fleet. Despite

aircraft structural and maintenance challenges that impacted availability, the Air Force met both operational and training requirements in FY 2009.

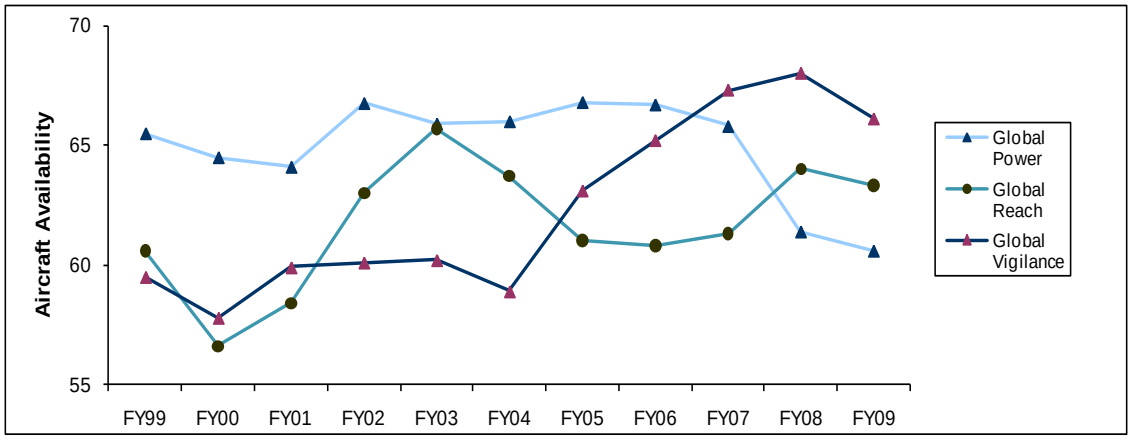


Figure 28. Aggregate Aircraft Availability by Mission Performance Area (Total Force)

Air Force Core Function: Space Superiority

As the steward of military space for the DoD, the Air Force has been maintaining systems that provide critical precision navigation and timing, worldwide secure communications, spacelift and early missile warning for the Nation in support of the Space Superiority Core Function. Last year, 13 space launch missions were conducted from three ranges--supporting National Security Space (NSS) requirements--including the 29th consecutive successful operational EELV launch. America's ability to operate effectively across the spectrum of conflict rests heavily on space capabilities. The Joint Force depends upon space capabilities provided by the Air Force, which fall into five key areas: Early Warning; Space Situational Awareness; Military Satellite Communications; Positioning, Navigation and Timing; and Weather. With the introduction of SBIRS, the Nation's missile warning, missile defense, battlespace awareness and technical intelligence capabilities will be enhanced. The Transformational Satellite program was cancelled in FY 2009 and funding was realigned in the FY 2010 President's Budget to support procurement of additional AEHF and WGS satellites. AEHF supports survivable and protected communications and lays the groundwork for future capability. With the insertion of three WGS satellites into operational orbit, the wideband capacity has been significantly increased (each WGS satellite provides double the capacity of the entire legacy Defense Satellite Communications System [DSCS] constellation). The Family of Advanced Beyond Line-of-Sight Terminals (FAB-T) provides satellite connectivity for strategic and tactical communications. The EELV program delivers assured access to space by replacing heritage launch vehicles with Delta IV and Atlas V launch vehicles. Operationally Responsive Space (ORS) furthers the effort to provide assured space power and deliver space capabilities to Joint Force Commanders in operationally relevant timelines.

The FY 2011 Budget Request for $11B includes considerable investment in space and space-related support systems. This request includes adds to the EELV program to maintain launch rate and mission assurance and to increase launch and on-orbit support of GPS satellites. This request also supports the Joint Space Operations Center Mission System (JMS) to continue the focus on Space Situational Awareness and Command & Control capabilities and adds resources for ORS to pursue innovative solutions to rapidly develop and field capabilities in months rather than years. To meet the demand for bandwidth the Air Force requests includes additional WGS satellites, while continuing to maintain ground-based systems. Exploration of space-based alternatives to develop increased space awareness will

ensure continued freedom to operate in this domain. These planned purchases provide increased space superiority capabilities for warfighters to meet growing operational requirements in the future.

Air Force Core Function: Command and Control

Theater-wide command and control enables efficient and effective exploitation of air, space, and cyberspace domains. The Air Force traditionally maintains significant command and control capabilities at the theater-level. However, the highly decentralized nature of irregular warfare places increased demands on lower echelons of command. Matching the range and flexibility of air-, space-, and cyber-power to effectively meet tactical requirements requires a linked command and control structure at all echelons.

This year the Air Force is expanding its efforts to provide Command and Control at the tactical, theater and global scale. At the strategic level, the Air Force is providing a technology upgrade of USSTRATCOM's Distributed Command and Control Node, equipment modernization of United States Northern Command (USNORTHCOM)'s National Capital Region-Integrated Air Defense, and initial sustainment of United States Africa Command (USAFRICOM)'s Air Operations Center. Tactically, the Air Force is increasing training pipelines for Joint Terminal Attack Controllers (JTACs), establishing an Air Liaison Officer career field, fielding advanced video down-link capabilities, and adding airborne radio and datalink gateways to improve the connectivity of the Air Support Operations Centers and JTACS.

An E-3 Sentry AWACS flies a mission

In FY 2011, the Air Force request includes modernization and sustainment of both airborne and ground-based command and control systems. For the core of the airborne Command and Control capability, the Air Force requests $435M in FY 2011 to modify the E-3B/Cs to Block 40/45 Airborne Warning and Control System aircraft. This modernizes a 1970s-era computer network, eliminates many components that are no longer manufactured, and adds avionics to comply with Global Air Traffic Management standards. To improve ground-based tactical air control operations, the Air Force is increasing manpower in the Control and Reporting Centers and investing $51.5M—with the U.S. Marine Corps—for a follow-on ground based radar capability supporting air and missile defense. This Three-Dimensional Expeditionary Long-Range Radar will be the principal long-range, ground-based sensor for detecting, identifying, tracking, and reporting aircraft and missiles.

Air Force Core Function: Cyberspace Superiority

Operations in and through cyberspace are a core element of the Air Force mission. As part of the Cyberspace Superiority Core Function, robust, full-spectrum cyberspace capabilities are provided to Combatant Commanders for the Nation's defense. The Air Force has created a cyber Numbered Air Force (NAF), 24th Air Force, under Air Force Space Command (AFSPC) to posture cyber forces to support Joint operations and all Combatant Commands. 24 AF is part of the larger DoD mission to establish security in cyberspace—the Air Force is committed to a Joint capability that fully integrates with sister services and agency partners. A NAF dedicated to cyberspace provides combat-ready forces trained and equipped to conduct sustained cyberspace operations, fully integrated with air and space operations.

Placing 24th AF under AFSPC enables cross-domain synergy, aligns operational expertise, and facilitates career development, sustainment and acquisition programs.

The Air Force provides cyberspace capabilities to defend its portion of the Global Information Grid (GIG), to meet USSTRATCOM requirements when tasked and supply cyber-trained forces to Combatant Commanders enabling Joint operations. The GIG is a globally interconnected, end-to-end set of information capabilities for collecting, processing, storing, disseminating, and managing information on demand to warfighters, policy makers, and support personnel. As the U.S. government builds capabilities and defines policy to defend national interests in the cyberspace domain, the Air Force will be working with various government agencies and industry partners at every step. Cooperation with allies and international partners will be critical to securing network infrastructure and protecting mutual interests. Partnerships with academia and industry will ensure Air Force cyberspace capabilities remain on the leading edge of technology and expertise. The Air Force will leverage expertise across the Total Force by incorporating elements of the Active Duty force, Air Force Reserve and Air National Guard. Recruiting and retaining individuals with the right skills to accomplish a wide array of missions in cyberspace is the commitment for the future.

Air Force Core Function: Special Operations

A CV-22 Osprey and an MH-53 Pave Low fly over the Florida coastline

For the foreseeable future, the U.S. faces hybrid warfare - persistent/protracted conflict where major combat operations and Irregular Warfare (IW), counterinsurgency and unrestricted warfare are blurred and occur simultaneously. Meeting these challenges falls under the Special Operations core function. Special Operations is defined as operations conducted in hostile, denied or politically sensitive environments to achieve military, diplomatic, informational and/or economic objectives. Special Operations employ military capabilities for which there is no broad conventional force requirement. IW is a violent struggle among state and non-state actors for legitimacy and influence over the relevant populations. IW favors indirect and asymmetric approaches, though it may employ the full range of military and other capabilities in order to erode an adversary's power, influence, and will. As USAF enhances its capabilities in IW, it must also maintain its capabilities and forces to deter and defeat a near-peer adversary and fight large scale conflicts, including the need to address nuclear threats to the U.S. and its allies. Recognizing the increasingly important role that special operations forces play in today‘s fight, investments have been prioritized to continue growing these special operations capabilities. Operations in Afghanistan and Iraq have increased the requirement for these low-density/ high-demand personnel and platforms. This high demand is expected to continue as counterterrorism and irregular warfare missions are prosecuted.

In FY 2010 the Air Force focused on growing and recapitalizing the special operations aircraft inventory. By the end of the fiscal year, the Air Force will modify three MC-130W Combat Spear aircraft with the Precision Strike Package to provide additional armed overwatch for SOF forces. Additionally, the Air Force will deliver the sixteenth CV-22. As the Air Force continues the procurement of CV-22s and MC-130J tanker aircraft, this request also includes $1.6B to start the recapitalization of AC-130Hs. The Air Force will recapitalize these aging aircraft rapidly through the procurement of 16 additional MC-130Js, modified with the proven Precision Strike Package. The Air Force will increase Air Force Special Operations Command’s manpower by 258 personnel to support the addition of 16 fixed-wing mobility and two rotary wing aircraft.

Air Force Core Function: Personnel Recovery

The Personnel Recovery (PR) core function remains an imperative, fulfilling the promise to never leave U.S. and Coalition military and civilian personnel behind. The increased utilization of military and civilian personnel in support of OCO has dramatically increased the number of individuals who may find themselves isolated. Air Force PR forces are fully engaged in Afghanistan, Iraq and the Horn of Africa, accomplishing crucial missions that include command and control, intelligence, CSAR, convoy support, hostage recovery and reintegration. To bring the HH-60G fleet back to its original size of 112, the first four operational loss replacement aircraft will be put on contract. Additionally, the Air Force will deliver the first two HC-130J tanker aircraft, starting the replacement of the HC-130.

Pararescuemen receive an injured patient from Coalition forces in Afghanistan

Replacement of operational losses and modernization of aging equipment will continue in FY 2011. This request funds three HH-60G operational loss replacement aircraft in FY 2011with baseline dollars and requests three more in FY 2011 OCO. Additionally, the Air Force will begin the process of recapitalizing the remaining fleet with the inclusion of $1.5B to recapitalize 36 HH-60G aircraft in the FYDP. The Air Force will also continue the recapitalization the HC-130P/N fleet with HC-130J aircraft. Finally, $491M is included in the FY 2011 Budget Request across the FYDP to standardize and modernize mission essential equipment for pararescuemen under the Guardian Angel program.

Air Force Core Function: Building Partnerships

The Air Force continues to seek opportunities to develop partnerships around the world and to enhance long-term capabilities through security cooperation as part of the Building Partnerships core function. For example, in the Central Command AOR, deployed Airmen are working with Afghan and Iraqi partners to build a new Afghan National Army Air Corps and the Iraqi Air Force. The Air Force is also working to perform the vital role to further partnerships with more established allies, via programs such as the F-35A.

The third and final C-17A procured under the 12-nation Strategic Airlift Capability program was delivered in October 2009, alleviating a chronic shortage of strategic airlift among European Allies. Additionally, funding to expand the capability of the Contingency Response Groups to conduct building partnership capacity operations with the Nation's newest allies will be provided.

An Air Force Instructor Pilot and an Iraqi Flight School Student walk to the flightline before a mission in Iraq

This request includes $51M to continue investment in the Strategic Airlift Capability program. Finally, the Air Force programmed $6.4M annually across the FYDP for Pacific Angel humanitarian assistance missions in support of U.S. Pacific Command theater objectives.

In the recently released Global Partnership Strategy, the Air Force outlined a path to cultivate these key partnerships, nurturing the global relations, fortifying geographic access, safety and security around the world. The strategy seeks to develop partners who are able to defend their respective territories while ensuring interoperability and integration necessary for Coalition operations. The Air Force implements this strategy by utilizing a capabilities-based approach. Beginning with a thorough initial assessment of

capabilities and needs for partner nations, the USAF selects the appropriate ways and means for building, sustaining, expanding, and guiding global partnerships. Concepts of operations, interoperability, required training, security, logistics, maintenance and communications infrastructure, and proficiency are necessary to support a viable Air Force for the future. The capabilities-based approach addresses the partner's economic and political capabilities, in addition to ensuring that opportunities for cultural expansion and stability are considered in this analysis.

Priority 3 – Develop and Care for Airmen and Their Families

Overview

The true strength of America's Air Force is not the platforms operated or the technologies employed – it is America's Airmen. Across the career field spectrum, Airmen are deployed worldwide and committed to the Joint team goal of winning today's fight. Peak combat capability begins and ends with talented, healthy, motivated, trained and well-equipped Airmen. Taking care of Airmen and their families underpins the work of all Air Force Core Functions and is crucial to success. The priority is supported by the Agile Combat Support Core Function as listed in Table 27.

Table 27. Air Force Core Functions Included in Priority 3

Priority 3 Air Force Core Functions
• Agile Combat Support

The FY 2011 Air Force Budget Request enables recruiting, training, educating, sustaining and retaining the right number and mix of personnel, and to provide a quality of service worthy of their commitment to the Armed Forces. Recruiting and retaining the world's highest quality Airmen is a top priority.

Sharpening Skills

Expeditionary skills training

Recognizing the ever-changing nature of today's global challenges, the Air Force has evolved and matured training to meet the requirements of the Combatant Commanders. Under the leadership of the Force Management and Development Council, the Air Force has taken steps to deliberately develop Airmen to operate in today's environment while preparing them for the mission-critical leadership and supporting roles they will fill in the future. Great strides were made in FY 2009 to standardize, integrate and implement an Air Force-wide tiered Expeditionary Skills Training construct. This construct resulted in providing the right Airman with the right training at the right time to perform any Joint or standard force mission in permissive, uncertain or hostile environments. More importantly, the standardized curriculum and execution resulted in the elimination of redundant training while providing a standard presentation of forces to the Combatant Commanders. In addition, the Air Force implemented Basic Expeditionary Airman Skills and Training (BEAST) in FY 2009. BEAST is the centerpiece of a new two-week expansion to Basic Military Training (BMT) that gives Air Force trainees a more realistic forward-operating base environment to practice wartime skills. Because of the stress placed on BMT facilities incurred from 24/7 365-day-per-year use, the Air Force FY 2011 budget includes funding to upgrade facilities and equipment.

The Air Force executes a wider and more diverse range of missions today than ever before, and a large number of these missions require increased language and cultural education and training. To ensure readiness to meet these challenges, the Air Force has stepped out with the following initiatives:

- Fund seven specialized skill training centers to include subordinate detachments and operating locations
- Increase opportunities for foreign language education at Air Force commissioning sources. All U.S. Air Force Academy cadets are now required to take at least two semesters of foreign language education--30 percent of the U.S. Air Force Academy Class of 2009 graduated with a

foreign language minor. All four-year ROTC non-technical degree scholarship cadets are required to take at least four semesters of foreign language education. In addition, the ROTC foreign language proficiency bonus has produced very positive results as reflected by the fact 310 percent more cadets in the class of 2013 have already completed two or more semesters of foreign language studies than the recently graduated class of 2009

- Institute foreign language education in Air Force professional military education courses
- Increase professional development for civilian and military off duty and voluntary education programs. This includes funding for military tuition assistance and veterans education assistance programs
- Intensify regional affairs training by requiring students to complete six months in-country for certification after language education. These new strategists increase the Air Force inventory with a goal of 500 by 2016

The Air Force values cross-cultural competence as a strategic imperative in the global environment. The Language Enabled Airmen Program (LEAP) will further build surge capability as well as ensure the Air Force's ability to meet current taskings. LEAP selects, trains and sustains Airmen with language proficiency over a career and will dramatically improve the inventory and capability of the Air Force. A key measure of success will be the Air Force's ability to meet the DoD objective of increasing strategic language capability each year and filling all Air Force language requirements with language proficient Airmen. LEAP and other language and culture initiatives will build the inventory of Airmen with the right cross-cultural competence to meet and rebalance the force today and in the future.

As the Air Force rebalances its workforce to support new and expanded missions, new training requirements have developed. For example, the growth of the cyberspace mission demands greater training capacity for these professionals. The FY 2011 budget includes funding to expand the Air Force Cyberspace Technical Center of Excellence at the Air Force Institute of Technology. Also included is funding to develop and implement a Defense Language Institute English Language Center strategic plan to leverage use of the English language training to build partner capacity and support security forces activities.

In attempting to strike a balance of developing leaders to meet tomorrow's challenges with the high operations tempo of today, 2 years ago the Air Force's Air University implemented an on-line master's degree program. Since then, 348 majors have graduated with Master's of Military Operational Art and Science degrees and more than 1,000 are currently enrolled. The Air Force is expanding this program by opening it up to eligible mid-level captains.

An Airman reunites with his wife and daughter

In addition to developing military leaders, the Air Force has taken aggressive steps to cultivate civilian leaders. The Air Force launched a civilian development roadmap that takes into account the various grades, skill levels, and range of experiences of the civilian workforce. The roadmap incorporates education, training and experience, and will ensure civilians have the opportunity to develop institutional competencies valued by the Air Force at the right time in their career. This includes a new-employee orientation program, opportunities for continuous self-initiated personal and leadership development, a highly encouraged expectation to complete non-residence professional military education at the appropriate level and opportunities to attend in-residence acculturation and leadership training. The Air Force civilian leadership requirements have grown and will continue to grow as the result of civilian insourcing, and the roadmap will ensure these civilian leaders are at the desired

proficiency level for the Air Force institutional competencies. The FY 2011 Budget Request includes an increase of approximately 7,700 endstrength related to civilian insourcing.

Quality of Service

While the Air Force recruits Airmen, it retains families. When Airmen raised their hand and took an oath, they did so in the name of service. In doing so, they incurred a commitment. Likewise, the Air Force has a reciprocal commitment to them and their families. Air Force families backstop, underwrite, and share the sacrifice in all that Airmen do. Supporting families is not only the right thing to do for Airmen, it is the smart thing to do for the Air Force. Airmen make a decision to remain on duty based on many factors, one of which is the quality of support they and their families receive. This underscores the fact that caring for families has a direct impact on mission readiness. While the Air Force has historically performed well in this regard, findings from the April 2009 "Caring for People" forum provided excellent feedback on areas for improvement. As a result, Air Force leadership declared July 2009 to July 2010 as the Year of the Air Force Family (YoAFF). The Air Force will devote this year to identifying what it is doing right, and what it needs to do better, to support the entire Air Force family, and to rekindle the sense of community that has been the Air Force tradition for so many generations. The YoAFF program will focus on four pillars of emphasis: health and wellness; Airman and family support; education, development and employment; and Airman and family housing.

Health and Wellness: Health and wellness are critical to an effective and combat-ready fighting force. To ensure Airmen are prepared for the physical demands of the combat theaters, the Air Force redefined the physical fitness test in 2010 to put greater emphasis on the most important aspect -- cardiovascular endurance -- and require Airmen to test twice a year instead of just once. This is not only good for the mission, but for Airmen as well. However, the Air Force focus does not end with its Airmen. Most Air Force fitness centers have family-oriented fitness programs such as Mommy and Me, Yoga for Kids, and Strollerrobics that allow parents to exercise with their kids. In addition, the Air Force focuses on fitness through Air Force FitFactor, a program designed to promote healthy lifestyles through physical activity and healthy eating selections for youth ages 6 to 18 years. Furthermore, the Air Force FitFamily initiative rolled out in 2010 and will allow families to register as a team to enhance family fitness and wellness.

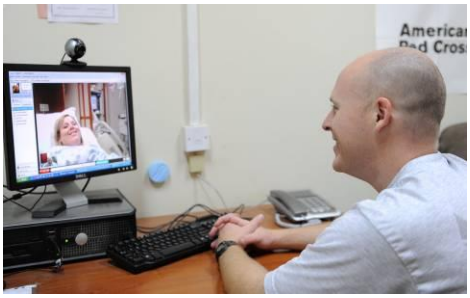
Unit physical fitness training

Airman and Family Support: Airman and family support encompasses a wide range of activities from child care and youth programs to pre-, post- and deployment support programs to off-duty recreational activities. The Air Force led a sustained effort to expand the capacity of child care while improving the standards of care and quality of day care facilities. The Air Force childcare shortfall of 6,400 will be eliminated by the end of FY 2011 as a result of 32 construction projects funded as part of the Air Force facility modernization plan combined with additional funding from the American Recovery and Reinvestment Act. In addition, programs such as Home Community Care, Expanded Child Care, Returning Home Care, and Respite Child Care provide additional child care for Airmen working shifts or on deployments, Airmen returning from or on leave from deployments, and Reservists during drill weekends.

Flag Day at elementary school

Air Force school-age children, which number over 145,000, face challenges their civilian counterparts will never know or experience. To address these issues, great progress was made in institutionalizing support for Air Force-connected students attending public, private, DoD Dependent Schools and home and cyber schools. Overseas Air Force bases and 12 stateside bases locally funded school liaison positions in FY 2009, and the FY 2011 budget includes funding for 54 of these positions. These

individuals work with local schools to address such issues as promotion and graduation requirements, services for children with special needs, eligibility for sports and extracurricular activities, and transfer and acceptance of credits and courses. In addition, a senior military officer or DoD civilian is designated to attend local school board meetings to advocate for the interests of Air Force families. The Air Force also sponsors training in conjunction with the Military Child Education Coalition for staff working education issues, and partner with the Army and Navy to offer training to schools located near installations.



A deployed Airman watches daughter's birth

To mitigate the strains of high operations tempo, the Air Force continued to expand and tailor programs to meet the needs of single and married members and their families who are impacted by deployments. Over 200,000 Airmen and family members received briefings, workshops, and one-on-one assistance last year on legal matters, financial management, family reintegration, personal and work-life issues and spouse employment assistance.

Education, Development, and Employment: Today, more and more spouses seek the personal fulfillment of a full professional career and many families need two incomes. As a result, spouse employment and career development opportunities are crucial for recruitment and retention. Studies show over 50 percent of Air Force spouses currently work outside the home. Typically, military spouses earn less than their civilian counterparts, even though 7 of 10 have some college education. Air Force programs provide spouses with knowledge and skills to develop and maintain a successful career within the framework of the mobile military lifestyle. Airman and Family Readiness Centers work with local community employers to raise awareness on the value of hiring military spouses. Classes and individual consultation on career planning and all phases of the job search as well as assistance with on-line resources and access to computers are provided by the Readiness Centers. The Air Force also works with the DoD to support spouse employment programs such as Spouses to Teachers and My Career Advancement Account (CAA). My CAA provides up to $6,000 per person for Air Force spouses to put toward education, licensure, certification and continuing education for a portable career. Executive Order 13473, which went into effect September 11, 2009, will open the door to civil service positions for spouses of Airmen with Permanent Change of Station orders, Airmen who retired or separated with a 100 percent disability rating and Airmen who were killed in action. Combined with the hiring of more than 9,000 new positions in FY 2010 as a result of insourcing, the Air Force will open many new employment opportunities for Airmen spouses.

Airman and Family Housing: The Air Force made great strides in efforts to provide affordable and attractive housing for Airmen and their families. The Military Housing Privatization Initiative (MHPI) has eliminated over 38,000 inadequate units and is now providing over 500 new and renovated homes a month. The Air Force is on track to select project owners to privatize 100 percent of Military Family Housing in the CONUS, Hawaii and Alaska by the end of FY 2010. In addition, the Air Force will also reduce the inventory of inadequate housing overseas to less than 100 units by the end of FY 2010, and will complete this process by 2015. In similar fashion, the Air Force will continue a long-standing commitment to improving dormitory conditions. The Air Force funded 104 dormitory construction projects from FY 2000 to FY 2010, totaling almost $1.6B. As a result, all permanent party central latrine dormitories have been eliminated and pipeline dormitory shortfalls will be eliminated in FY 2010. The Air Force will continue to replace dormitories at the end of their useful life with a standard Air Force-

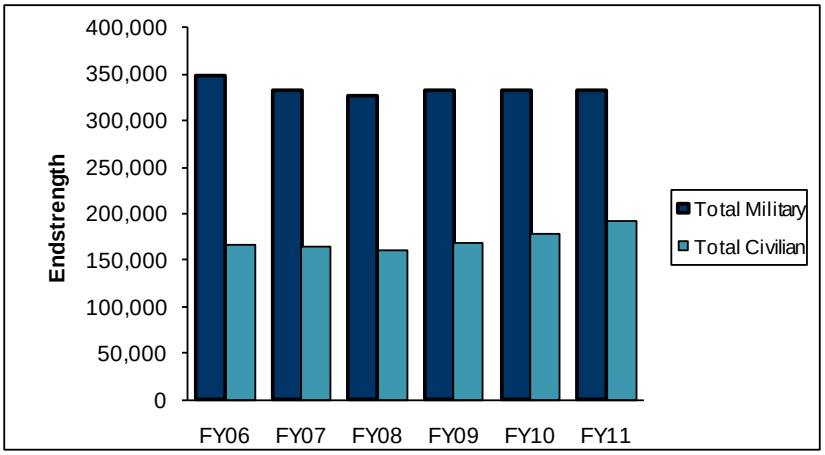
Common area of Dorms-4-Airmen configuration

designed private room configuration. Known as "Dorms-4-Airmen," the concept will keep Airmen socially and emotionally fit by providing each their own bedroom and bathroom, yet will encourage them to interact with their fellow Airmen with a shared kitchen, laundry and entertainment space. Additionally, the Air Force has established a $600M O&M "Dormitory Focus Fund" from FY 2010 – FY 2015 to help address the most pressing dormitory repair requirements.

The Air Force will also place special emphasis on enhancing a sense of community as part of the YoAFF program initiatives. The YoAFF was jump-started with a "roadshow" that visited 23 bases to brief activities and collect feedback from Air Force members and their families. Two new web sites were launched to showcase the YoAFF and provide community support and social networking, promoting and enhancing a sense of community. Through these web sites Airmen and their families can learn about Air Force-wide initiatives, monthly themes and programs and contact local installation Airman Family and Readiness Centers to find out about local events and activities. In addition, the Air Force Crossroads web site, the official community web site of the Air Force, has been modified to offer official community information, secure spouse forums and social networking applications. The Air Force also established two Twitter accounts, one for YoAFF programs and events and another for information on new personnel programs, civilian job announcements, wounded warrior information and retiree activities. These sites will help keep Airmen, civilians, retirees and family members informed and connected.

Shaping the Force

Shaping the Air Force through recruiting and retention efforts is on-going. In light of an increased focus on Joint team requirements and the stand up of new missions, the Air Force has undertaken a series of actions to ensure the force is mission-ready as part of a military-wide effort to reset, reconstitute and revitalize the armed forces. FY 2011 includes increases in manpower for cyberspace, C2, irregular warfare and nuclear capabilities. As noted in Figure 29, Air Force Active Duty endstrength grows some from FY 2010 but includes rebalancing in specific skill areas to address warfighter requirements.



	FY06	FY07	FY08	FY09	FY10	FY11
Officer	70,539	65,722	64,805	65,496	63,866	64,762
Enlisted	273,990	263,372	258,092	263,351	263,834	263,438
Cadets	4,424	4,401	4,482	4,561	4,000	4,000
Total Military	348,953	333,495	327,379	333,408	331,700	332,200
Total Civilians	166,538	163,807	161,108	168,760	179,062	192,567
Total Active	515,491	497,302	488,487	502,168	510,762	524,767

Figure 29. Air Force Active Duty and Total Civilian Endstrength

The rebalance in skill sets demands an increase in Air Force recruiting efforts beyond finding the right numbers to ensure the right quality and skills are present in potential candidates so they can effectively perform and support the Air Force's diverse mission. Use of the Initial Enlistment Bonus program allowed the Air Force to fill key requirements for physically demanding and highly skilled hard-to-fill jobs such as Combat Controller, Para-rescue, Tactical Air Control Party, Explosive Ordnance Disposal, Security Forces, Linguist and Survival, Evasion, Resistance, and Escape instructor. However, despite resounding FY 2009 recruiting successes, the Air Force continued to face challenges with officer health professions programs, so a long-term "grow our own" strategy was implemented to offer more medical school scholarships in student-based markets.

Basic Military Training graduates swear in

In reshaping the force, members from overage career fields will be retrained into undermanned career fields to assist in balancing and shaping the Air Force with the right level of expertise in the right place. Innovative ways of re-vectoring already trained personnel and training new accessions to properly shape the force for new and emerging missions are being implemented. For example, the Air Force has an immediate need for more trained personnel in the RPA mission to support the planned increase in unmanned CAPs to 50 by the end of FY 2011 and 65 by the end of FY 2013. The following steps have been taken to meet this growing RPA mission requirement:

- Stood up a new training schoolhouse to produce more RPA crews
- Implemented an initiative to redirect 100 new pilots per year from Specialized Undergraduate Pilot Training directly into the RPA career field for one tour
- Implemented a Beta test program to train officers with no previous manned flying experience to control Predators and Reapers

These initiatives will allow the Air Force to lift the current "stop movement" policy for RPA pilots, the short-term fix implemented to ensure we have enough operators to meet current mission requirements.

In addition to RPA pilots, the Air Force will revector personnel into the cyberspace, network attack/network access engineering, and irregular warfare/building partnerships career fields in FY 2011.

While aggregate Air Force retention numbers are excellent, they alone are not the determinant of success. Meeting skill-specific goals is far more consequential. Retention rates vary among skill codes and there remain career fields with significant retention issues. The Selective Reenlistment Bonus (SRB) continues to be the most effective monetary force-shaping retention tool. Table 28 displays historical retention data for the 10 most closely monitored enlisted career fields for retention issues. The table clearly shows the success achieved from the increased bonus amounts. The FY 2011 includes approximately $645M in recruiting and retention bonuses.

Table 28. Air Force Enlisted Retention for Top 10 Monitored Career Fields

Career Field	FY07 Retention	FY08 Retention	FY09 Retention	Trend	FY09 Retention Goal*	Goal Met
Aerial Gunner	10.7	9.6	15.4	↑	14.7	●
Combat Control	12.8	13	15.1	↑	17.8	●
Tactical Air Control Party	9.8	11.2	10.2	↓	15.6	●
Operations Intelligence	9.5	9.7	12	↑	9.6	●
Imagery Analysis	8.1	9.7	9.6	↔	11.8	●
Survival, Evasion, Rescue & Escape	14.4	13.3	16.3	↑	12.2	●
Pararescue	11	12.3	13.2	↑	17.1	●
Pavement & Construction Equipment	8.7	10.7	11.1	↑	11.8	●
Explosive Ordnance Disposal	11.8	9.9	11.2	↑	15.6	●
Contracting	6.9	6.2	7.5	↑	9.8	●

*Average Career Length measured in terms of completed years of service

While retention is very strong among officers, a few pockets of concern remain among the health professions, control and recovery officers supporting special forces, and contracting officers. Several initiatives were targeted at these career fields. An additional $65M in medical bonuses was funded for General Surgeons and Biomedical Specialists in FY 2009 and a Critical Skills Retention Bonus (CSRB) was approved for control and recovery officers, also in FY 2009. For contracting officers, a CSRB package has been staffed and currently awaiting approval. The FY 2011 budget includes funding to continue these initiatives. The Air Force will continue to place particular emphasis on stressed career fields. Almost 14 percent of Air Force officers and 19 percent of enlisted personnel serve in stressed career fields, those meeting at least two of the following three conditions: very high deployment rates, manning shortages, or meeting the unhealthy skill code criteria based on personnel inventory and retention. This affects over 54,000 Airmen, or almost 17 percent of the force as reflected in Table 29.

Table 29. Air Force Career Stress Summary

Officer	Enlisted	Total
AFSCs = 10 Personnel = 8,786/65,181 (13.5%)	AFSCs = 17 Personnel = 49,649/263,028 (18.9%)	AFSCs = 27 Personnel = 54,435/328,209 (17.8%)

Although recruiting and retention both improved in FY 2009, the number of Airmen and skill codes on the Air Force stress list increased because of greater operational demands. All but two skill codes on the list experience very high deployment rates. Table 30 and Table 31 provide detail on stressed career fields for enlisted and officer, respectively.

Table 30. Enlisted – Career Field Stress

Air Force Specialty	Title	Operational Demand	Required vs. Funded Manpower	Personnel Inventory/Retention
Enlisted AFSCs				
1C2	Combat Control	✔		✔
1C4	Tactical Air Control Party	✔	✔	✔
1T2	Pararescue	✔		✔
1W0	Special Ops Weather	✔		✔
2T0	Traffic Management	✔	✔	
2T1	Vehicle Operations	✔	✔	
2T3	Vehicle Maintenance	✔	✔	
3E0	Electrical	✔	✔	
3E1	Heating, Ventilation and Air Conditioning	✔	✔	
3E2	Pavement/Construction Equip	✔	✔	✔
3E3	Structural	✔	✔	
3E4	Utilities Systems	✔	✔	
3E5	Engineering	✔	✔	
3E8	Explosive Ordnance Disposal	✔	✔	✔
3N0	Public Affairs		✔	✔
3P0	Security Forces	✔	✔	
6C0	Contracting	✔	✔	✔

Table 31. Officer – Career Field Stress

Air Force Specialty	Title	Operational Demand	Required vs. Funded Manpower	Personnel Inventory/Retention
Officer AFSCs				
12M	Mobility Navigator	✔	✔	
12S	Special Ops Navigator	✔	✔	
13D	Control and Recovery	✔		✔
13M	Airfield Ops	✔	✔	
14N	Intelligence	✔	✔	
31P	Security Forces	✔	✔	
32E	Civil Engineer	✔	✔	
35P	Public Affairs	✔	✔	
46F	Flight Nurse		✔	✔
64P	Contracting	✔	✔	

Warrior Care

A commander visits a wounded Airman at Walter Reed Army Medical Center

The Air Force has an unwavering obligation to provide care and assistance for seriously wounded, injured or ill airmen and, in collaboration with the rest of DoD, the focus on wounded care is being strengthened. The road to recovery would be nearly impossible without the support system of many, to include family liaison officers (FLOs) and recovery care coordinators (RCCs). The Air Force budget in FY 2010 and FY 2011includes funds to bolster the size of this cadre. An FLO is assigned to each wounded warrior and extends support to families of fallen and combat-wounded Airmen, as well as to families of seriously-injured Airmen who are receiving medical treatment away from their home unit. They provide a wide variety of assistance, including local transportation, lodging arrangements, assistance with benefits, and referral to various agencies available to assist wounded warriors, their families and families of fallen heroes. While FLOs remain a critical part of the team in aiding the family, the RCC is trained to streamline the processes and guide the member and their family through the non-clinical recovery process. The RCC is designed to be an "ultimate resource" for seriously wounded, ill or injured Airmen. They work closely with FLOs, patient liaison officers, medical case managers and a host of support agencies to ensure the right level of support and entitlements are delivered to recovering Airmen and eligible family members. Once a member is identified as a wounded warrior, the warrior care team begins providing services and continues to do so until five years after separation or retirement.

Expanding wounded warrior athletics

The Air Force has revised several personnel policies in support of a DoD initiative to return wounded warriors to productive military service or civilian life. These changes allow wounded Airmen to continue their careers and compete for promotion while undergoing treatment and rehabilitation. Those Airmen no longer able to continue in their career field due to disqualifying conditions will be afforded priority retraining opportunities so they can continue contributing to the Air Force. Wounded Airman with a disability rating of 30 percent or greater who elect medical retirement or can no longer stay because of their wounds, the Air Force will facilitate offers of civil service positions.

Priority 4 – Modernize Our Air and Space Inventories, Organizations and Training

Overview

The ability to exploit air, space and cyberspace is a fundamental precept of the Air Force. As the defense of the United States and its allies continually adapts to and shapes itself within an evolving threat environment across the spectrum of operations, the Air Force must maintain a comprehensive set of capabilities--organizations, personnel and equipment--available to national leaders and Joint Force Commanders. This must include not only modernizing military capabilities through the replacement of older systems, but extending the life of aging systems via refurbishment.

The National Defense Strategy depends on the Air Force to provide a dominant and decisive edge for Joint and Coalition military operations. The FY 2011 Budget Request provides the resources in capability areas to help deliver decisive effects in, through and from the domains of air, space and cyberspace. The Air Force is developing and fielding capabilities to provide: protection to American and Coalition ground forces from enemy air attacks; battlespace awareness; cyber capabilities; and the ability to deliver precise, tailored effects whenever and wherever needed. The technology-fueled environment of the 21st Century demands continued dominance in air, space and cyberspace which can only be achieved by balancing modernization and enabling organizational change.

Table 32 shows the Air Force Core Functions included in this priority. Most systems described in this section support several Core Functions.

Table 32. Air Force Core Functions Included in Priority 4

Priority 4 Air Force Core Functions	
• Air Superiority	• Global Integrated ISR
• Space Superiority	• Command and Control
• Cyberspace Superiority	• Personnel Recovery
• Global Precision Attack	• Building Partnerships
• Rapid Global Mobility	• Agile Combat Support
• Special Operations	

Strategies and Priorities

The most comprehensive plan to build a modern, 21st Century Air Force has two critical ongoing components. The first is assessing the state of aging systems and it includes activities which extend the life of platforms when it makes good fiscal and operational sense. An outcome of those assessments may be retirement of the systems that are too costly to operate or are obsolete.

Some system assets have been extended past their originally planned service life with an outcome of less operational availability versus 10 years ago. This spiraling effect continues to negatively impact aging system readiness and places more focus on bringing modernization efforts to center stage. Figure 30 shows the growth in average age of aircraft from FY 1999 to 2009 and reflects how aircraft availability rates compare during the same time period. These metrics help the Air Force assess the health of each weapon system and assist in decisions on maintenance issues.

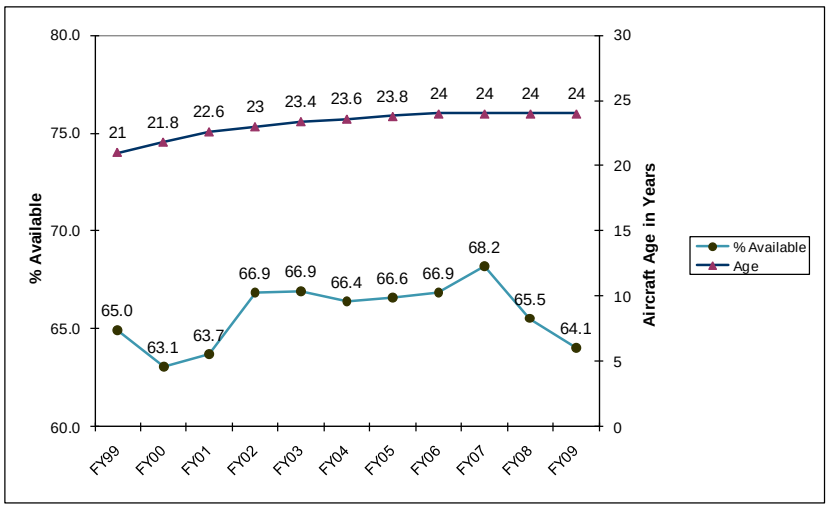


Figure 30. Average Age of Air Force Aircraft Compared to Aircraft Availability

The second part of the modernization strategy is procurement of more capable systems that have multiple roles, like the F-35A, the newest fighter addition. This will equip the Nation with fewer numbers of systems and increase warfighter capability to ensure Total Force readiness and system availability for future conflict. Figure 31 shows aircraft recapitalization rates for FY 2009 and FY 2010 compared to the FY 1982–FY 1986 average as a baseline. The FY 1982-FY 1986 baseline is used as a bench mark since it represents the Air Force's last major recapitalization period. The recap rate is the speed (in years) at which the Air Force is recapitalizing or replacing its inventory of aircraft. In FY 2010, the Air Force is divesting itself of 250 fighters and bringing fewer aircraft into the inventory.

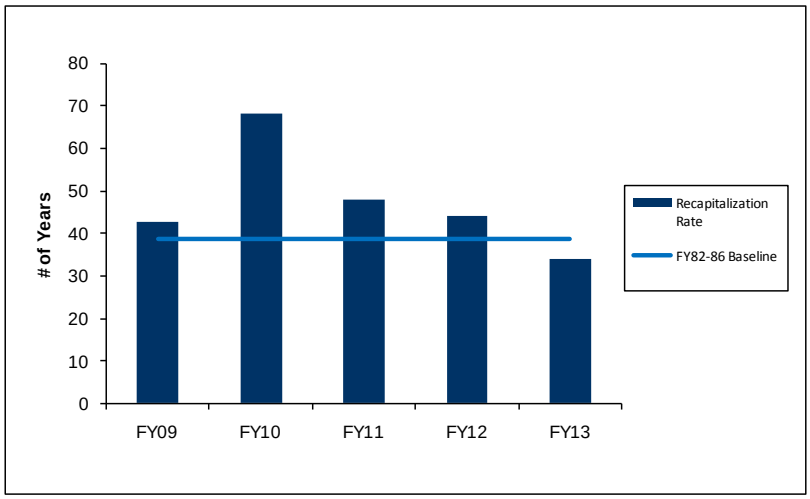


Figure 31. Aircraft Recapitalization Rate

Top Procurement Priorities

The sections that follow highlight some of the Air Force's top procurement priorities, primary systems development and procurement efforts over the next decade. Each will be discussed by capability area: *Global Vigilance, Reach* and *Power*.

Table 33 reflects planned procurement for key space systems while Table 34 reflects key aircraft procurement.

Table 33. Summary of Programmed Key Space Systems Procurement Quantities

Procurement	FY10	FY11
Global Vigilance		
Space Based Infrared System - Geosynchronous Earth Orbit (SBIRS GEO)	0	1
Space Based Infrared System - Highly Elliptical Orbit (SBIRS HEO)	1	0
Evolved Expendable Launch Vehicle (EELV)	3	3
Wideband Global Satellite Communications (WGS)	0	1
Advanced Extremely High Frequency (EHF)	1	0
Total	**5**	**5**

Table 34. Summary of Programmed Aircraft Key Systems Procurement Quantities*

Procurement	FY10	FY11
Global Vigilance		
RQ-4A Global Hawk	4	4
Global Reach		
C-130J Super Hercules	4	8
C-27J Spartan	8	8
C-37A (Lease to Purchase)	1	2
Light Mobility Aircraft	0	15
C-40B	3	0
C-17 Globemaster III	10	0
Global Power		
MQ-9A Reaper	24	36
CV-22B Osprey	5	5
F-35A Lightning II	10	22
HC-130J	1	4
MC-130J	1	5
HH-60G Pave Hawk	4	3
Aerial Targets (QF-4)	0	9
Other		
USAFA Flight Program	13	12
Total	**88**	**133**

*Baseline budget quantities only – OCO not included

Global Vigilance

The Air Force is a primary provider of ISR capabilities for the Joint Team and the Nation through a combination of airborne and spaceborne sensors. The goal of the modernization and recapitalization plan in this area is to dramatically increase the quantity and quality of C4ISR products and services to the Joint Team and the Nation. The increased demand for timely, fused and actionable intelligence from commanders in Afghanistan and Iraq increases every year and the Air Force must continue its ISR ability

to drive Joint Operations. To meet this demand there has been a steady expansion in ISR capability by growing the fleet of unmanned aircraft and upgraded space assets. The FY 2011 Budget Request includes considerable investment in space and space-related support systems. These assets will allow continued space support to today's Joint Fight while addressing tomorrow's challenges, modernization of the space inventory, and the creation of opportunities to partner with the Joint Coalition Team.

Overhead Persistence Infrared (OPIR). SBIRS, which replaces the Defense Support Program, provides initial warning of a ballistic missile attack on the United States, its deployed forces, and its allies. SBIRS supports Missile Defense, Battlespace Awareness, and Technical Intelligence missions by providing reliable, accurate and timely data to Unified Combatant Commanders, Joint Task Force Commanders, the intelligence community and other users. The FY 2011 Budget Request funds further development, integration, and test of the GEO-1 & -2 satellites; primary and backup Mission Control Stations and Relay Ground Stations; and GEO-1 launch campaign. Additionally, the FY 2011 Budget Request provides full funding for GEO-4 and advance procurement for GEO-5. The FY 2011 Budget Request totals $1.5B investment for the SBIRS program.

The budget provides funding in FY 2011 to support the Commercially Hosted Infrared Payload (CHIRP) demonstration for technology maturation of space and ground technologies. CHIRP will reduce risk and evaluate Wide-Field-of-View IR staring and data processing technology to potentially evolve future SBIRS staring sensors and processing algorithms. This is one of the first times sensors used by the U.S. government will be hosted by commercial satellites.

A WGS launching on an Atlas V launch vehicle

Evolved Expendable Launch Vehicle (EELV). The EELV is a space launch system developed in partnership with industry to provide two families of launch vehicles—the Atlas V and the Delta IV—along with their associated infrastructure and support systems. Each is based on a two-stage medium-lift vehicle, augmented by solid rockets as needed to increase payload capability, and a three-core heavy-lift variant. EELV satisfies the Nation's requirement for assured access to space. The FY 2011 Budget Request includes $1.2B for EELV.

Military Satellite Communications (MILSATCOM). The MILSATCOM enterprise provides robust protected and wideband communication services to Joint Warfighters at strategic and tactical levels. Enhanced MILSATCOM capabilities will be delivered through a combination of the WGS satellite system, the AEHF satellite system, the Enhanced Polar System (EPS), and the FAB-T.

WGS provides unprotected high-capacity and high data rate communication services primarily to deployed forces. Each satellite provides ten times the capacity of the DSCS it will replace. The FY 2011 Budget Request ($595.3M) funds WGS-7 and long-lead parts for WGS-8.

AEHF provides secure (low probability of detection/interception), anti-jam and anti-scintillation communication services for both strategic and tactical forces. Each satellite provides ten times the capacity of the Military Strategic, Tactical and Relay (MILSTAR) satellites they will replace. The FY 2011 Budget Request ($598.4M) funds the launch of SV 2, incremental development of the Mission Control Element and Advanced Procurement for SV 5 to maintain the production line.

EPS provides secure satellite communication services to deployed forces operating in the North Polar Region. It will offer a significant increase in both data rate and capacity over the current Interim Polar System. The FY 2011 Budget Request ($164.2M) supports continued concept development efforts ahead of a Milestone B which serves as the formal program initiation point.

FAB-T Increment 1 provides satellite communication terminals connecting users to the services offered through MILSTAR, AEHF and EPS. Increment 1 provides connectivity to protected satellite services for both airborne and ground command post terminals. The High Data Rate Airborne Terminal (formerly Increment 2) will provide Airborne ISR platforms access to the high-capacity and high data rate services offered by WGS.

RQ-4A Global Hawk. The RQ-4 Global Hawk is the only high altitude, long endurance unmanned aircraft system (UAS) currently used by the Air Force. The Global Hawk provides a wide spectrum of ISR collection capability to support Joint Forces in worldwide peacetime, contingency and wartime missions. The Global Hawk provides military field commanders with high resolution, near real-time reporting of large geographic areas using imagery intelligence sensors. The Air Force currently plans steady procurement of four Global Hawk aircraft in FY 2011.

A flightline ground crew tows an RQ-4 Global Hawk

Global Reach

Air Force mobility systems and personnel ensure the Joint Team's success with time-sensitive deployment, positioning, decisive operational movement, and sustainment of U.S. and allied forces on a global scale. The Air Force provides an unmatched airlift and refueling capacity that is integral to the rapid deployment, employment, and sustainment of U.S. military power. In Afghanistan and Iraq, Air Force Air mobility assets are central to sustaining the Joint and Coalition team. On any given day, Air Force C-5s, C-17s and C-130s provide strategic and tactical airlift to move personnel and equipment. Additionally, Air Force air refueling aircraft continue to play a vital, daily role in extending the range and persistence of almost all other aircraft of the Joint force. The modernization of these systems and the design and acquisition of new systems is critical to maintain the United States' strategic edge in Rapid Global Mobility.

KC-X. The KC-X is the next generation of the strategic tanker to replace the aging KC-135 fleet (currently exceeding its life expectancy of 56 years) with the KC-X, the next generation strategic tanker. The KC-X will use a centerline drogue/boom capability with the potential for multi-point refueling from wing pods. This modular medium transport uses major structural and system components that will reduce life cycle cost. The new tanker source selection decision is slated for a summer 2010 timeframe and is the number one Air Force acquisition priority in FY 2010.

C-130J Super Hercules Cargo Aircraft. The C-130J is a comprehensive update of the older C-130 Hercules with new engines, flight deck and other systems. While externally similar to the legacy C-130, the J model is very different. These differences include new Rolls-Royce turboprop engines with Dowty R391 composite scimitar propellers, digital avionics (including Heads-Up Displays for each pilot) and reduced crew requirements (two pilots and one load master—no navigator or flight engineer). This aircraft is also configured with the "enhanced cargo handling system." The system consists of a computerized loadmaster's station where the user can remotely control the under floor winch and also configure the flip floor system to palletized roller or flat floor cargo handling. This system enables rapid role changes to be carried out, extending the C-130J's turnaround time. These combined changes have improved performance of the C-130J over the C-130E/H models, such as 40 percent greater range, 21 percent higher maximum speed, and 41 percent shorter take-off distance. The FY 2011 Air Force Budget Request includes the procurement of eight C-130Js.

A C-130J on final approach

C-27J Spartan. The C-27J is a new lightweight intratheater airlift that will support combat forces operating in remote, austere environments. For over 40 years, the C-130 performed intratheater airlift. The smaller C-27J will be more effective for rapidly moving small amounts of cargo and personnel. In March, the Army's Future Cargo Aircraft program and the Air Force's Light Cargo Aircraft program were merged into a single Joint Cargo Aircraft program. In the FY 2011 Budget Request the Air Force is dedicating $378M to transition the C-27J into the Air Force fleet.

Global Power

The Air Force provides the ability to deliver precise, tailored effects whenever and wherever needed, both kinetic and non-kinetic, lethal and non-lethal, at the speed of sound and at the speed of light. It is an integrated cross-dimensional capability that rests on the Air Force's ability to control air, space and cyberspace. As a vital element of U.S. national power, the Air Force continues to transform this capability and focus on expanding Joint and Coalition effectiveness. The following is a sampling of these systems.

MQ-9A Reaper. The MQ-9A Reaper is a medium-to-high altitude, long endurance RPA system. The MQ-9A's primary mission is as a persistent hunter-killer against targets in support of Joint Force Commander objectives. The MQ-9A's secondary mission is to act as an ISR asset, employing sensors to provide real-time data to commanders and intelligence specialists at all levels. The MQ-9A flew its first mission for the Air Force in Afghanistan in 2007 and Iraq in 2008, and proved to be highly valuable offering longer loiter times and delivering precision strikes at enemy targets. MQ-9As are remotely piloted from the United States, and can be readily transported by disassembling and loading parts into a container for air deployment worldwide. The Air Force procurement plans include 36 MQ-9A Reaper aircraft in the FY 2011 Budget Request.

MQ-9 Reaper in flight

CV-22B Osprey. The CV-22B Osprey is a multi-mission, military, tilt-rotor aircraft with both vertical takeoff and landing and short takeoff and landing capabilities. It is designed to perform missions like a conventional helicopter with the long-range, high-speed cruise performance of a turboprop aircraft. In June 2009, CV-22s of the 8th Special Operations Squadron delivered 43,000 pounds of humanitarian supplies to remote villages in Honduras that were not accessible by conventional vehicles. The Air Force plans to procure five CV-22Bs in FY 2011.

F-35A Lightning II. The F-35A is a stealthy, supersonic, fifth-generation, single-seat, single engine, multi role fighter that can perform close air support, tactical bombing and air defense missions. The F-35A Lightning II is being built in three variants: a conventional take-off and landing aircraft for the U.S. Air Force; a carrier variant for the U.S. Navy; and a short take-off and vertical landing aircraft for the U.S. Marine Corps and the Royal Navy. For the Air Force the F-35A will replace the F-16 and A-10 aircraft, and complement the F-22A Raptor missions. It will be more effective than legacy fighters as it exceeds many capabilities and has a smaller basing footprint and requires significantly less infrastructure to sustain. DoD is in the process of revisiting and restructuring the F-35A program as a result of recent program cost and schedule assessments. The FY 2011 Air Force Budget Request includes the procurement of 22 F-35As and includes $1.4B of RDT&E to further the development of the F-35A. The total Air Force projected buy for F-35s is 1,763 aircraft.

F-35 modernizes the Air Force

Organizational and Transformational Changes

The nation expects the Air Force will be able to support two near-simultaneous major combat operations along with defending the homeland and meeting hybrid threats; therefore, within the context of *Global Vigilance*, *Global Reach*, and *Global Power*, the Air Force has established a comprehensive set of Core Functions to support Combatant Commanders. Combatant Commanders are the "customers" and aligning Air Force functions with Joint Operating Concepts will allow the Air Force to mix what it provides with other services, partner with foreign nations, to conduct operations. Figure 32 shows the Joint Operating Concepts and Air Force Core Functions--what the Air Force will supply in response to the demand from Combatant Commanders.

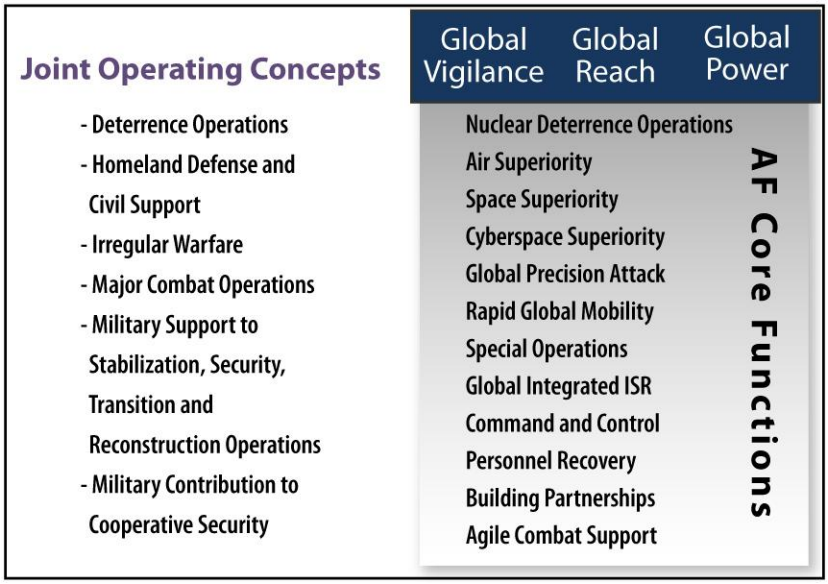


Figure 32. Joint Operating Concepts and Air Force Core Functions

The Air Force will also streamline the Corporate Structure to allow faster resource allocation deliberations with clear visibility into impact of decisions on core functions.

Energy Stewardship

The Air Force energy strategy to reduce demand, increase supply and change the culture presents a formidable, yet crucial challenge to meet. Policies, plans and governance structures have been established to support the overall Air Force mission and priorities while also meeting Federal government energy goals. As the largest consumer of energy among all federal agencies and Services and in light of increasing energy costs, it is critical that all parts of the Air Force redouble efforts to reduce consumption and lower costs. Figure 33 drives home this point. While Air Force energy consumption has decreased approximately 16 percent since FY 2003, energy costs have nearly tripled during that interval, primarily driven by increased fuel costs. The FY 2011 Budget Request includes $250M for energy and water conservation projects to meet the President's FY 2015 efficiency goals.

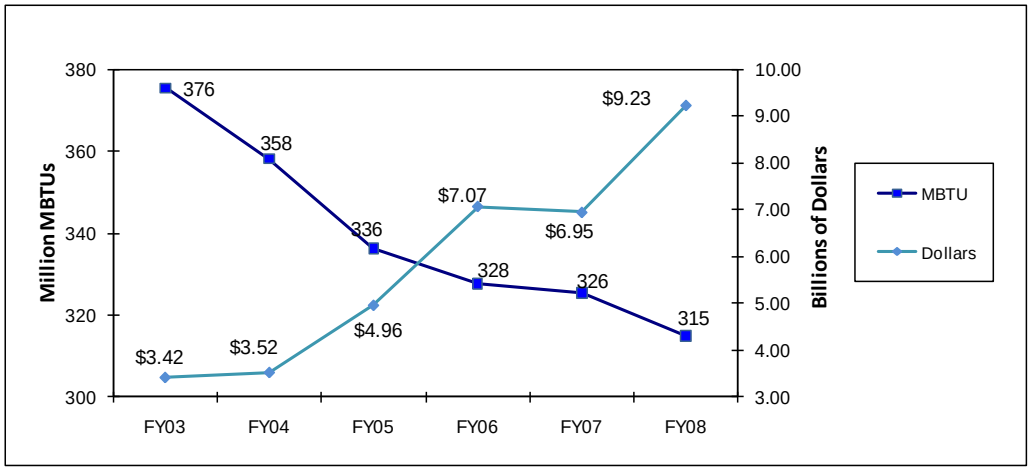


Figure 33. Energy Cost and Consumption Trends

As reflected in Figure 34, aviation operations use approximately 84 percent of the energy consumed by the Air Force, with jet fuel as the single largest energy commodity purchased by both the DoD and the Air Force.

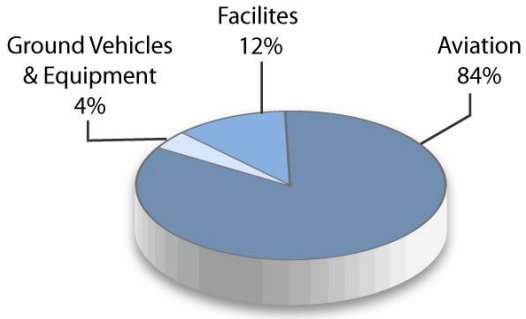


Figure 34. Energy Cost Breakdown

The Air Force has established a goal to reduce aviation fuel use by 10 percent from 2006 to 2015. Those fuel savings will yield future capabilities and mission execution improvements, reduce the Air Force environmental footprint, respond to budgetary constraints and provide prudence in the use of resources. The Air Force is on track to complete the certification of aircraft, infrastructure, support equipment and vehicles for unrestricted operational use of Fischer-Tropsch-derived synthetic fuel blend by early 2011. The B-52, C-17, B-1B, F-15, T-38 and the F-22A have been certified for unrestricted operations using the 50/50 synthetic fuel blend, and the KC-135 and C-5 are expected to be certified in the near term. A biomass-derived fuel blend certification initiative was also recently initiated.

While dedicated to developing alternative aviation fuels, the Air Force also leads the way in advanced research to develop more efficient engines, lightweight materials and structures and aerodynamically advanced platforms. For example, the Adaptive Versatile Engine Technology initiative will reduce fuel consumption by approximately 30 percent. This technology could be applied across multiple new systems and retrofitted into some existing systems.

Energy use in the battlespace drives monetary costs and operational risks; therefore, it is essential to ensure it is appropriately considered from a systems and concept of operations viewpoint. The recent Title Ten Futures wargame included fuel flow demands and logistics and tanker requirements. It revealed that fuel demands decrease force effectiveness while increasing operational risks and costs. Additional work is

needed to more fully understand how innovations that lead to reduced battlespace energy demands can improve overall force effectiveness and capability. For acquisition of future weapon systems, the Air Force is capturing energy Key Performance Parameters (KPPs) and studying the Fully Burdened Cost of Energy to incorporate this information in acquisition cost and trade analyses. The Air Force will also be challenged to apply required improvements in energy efficiency and deployment of renewable energy sources at installations to improve assurance for critical missions. During FY 2011, the Air Force will strengthen efforts to be on a path of continuous improvement in sustainable energy security.

The Air Force is the top purchaser of green power in the federal government, an Environmental Protection Agency Green Power Partner, and among the top 20 On-Site Green Power Purchasers in the Nation. Executive orders and legislative mandates have been exceeded by reducing facility energy intensity by more than 30 percent during the 20-year period ending in 2005. The Air Force goal is to reduce it another 30 percent by 2015 as reflected in Figure 35. Almost $40M in Energy Conservation Investment Program projects were funded in FY 2009, a 47 percent increase from FY 2008. These projects are expected to save $4M a year when complete. Looking forward, $250M in O&M has been budgeted for each of the next six years to meet Congressionally mandated energy goals.

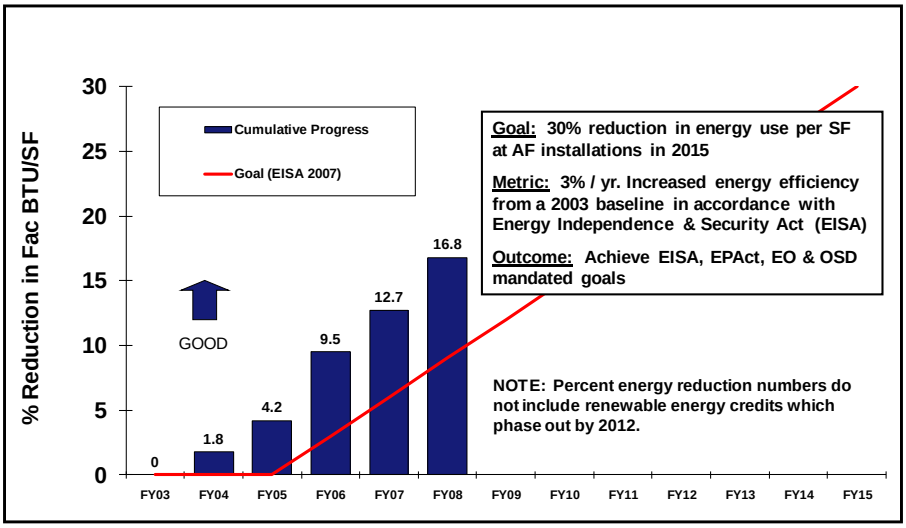


Figure 35. Facility Energy Reduction Status

All of these achievements and initiatives reflect the overarching vision of the Air Force energy strategy to "Make Energy a Consideration in All We Do." Capitalizing on this momentum, future resourcing will fund continued collaborative work with the Army and Navy, the DoD, interagency partners, private sector and Allied Air Forces to continue the work for efficient facilities, alternative aviation fuels and related technological advancements.

Training

The Air Force is committed to developing Airmen through quality training programs to ensure they are prepared to successfully execute the warfighting mission. Training is a focus area which affects performance within each priority in the strategic plan. The Air Force is undertaking major training initiatives in the nuclear and acquisition arenas as discussed in 'Continue to Strengthen the Nuclear Enterprise' and 'Recapture Acquisition Excellence' priorities, respectively. The 'Develop and Care for Airmen and Their Families' priority includes efforts to refine expeditionary skills training, enhance and expand language and culture training, and further develop civilian leaders.

In the Central Command AOR, deployed Airmen are working with Afghan and Iraqi partners to build a new Afghan National Army Air Corps and the Iraqi Air Force. To ensure readiness and the ability to meet

Combat communications training

these challenges, the Air Force has stepped out on a number of initiatives, to include how personnel are educated, starting with foreign language and cultural training at commissioning sources. In addition, the Air Force is expanding its cadre of Regional Affairs Strategists and is carefully managing this program to ensure these officers get comprehensive development and training, that personnel value these assignments, and that the Air Force values their service in this specialty. Airmen in these billets have been promoted to lieutenant colonel and colonel at rates exceeding promotion board averages. The Air Force will intensify this training in FY 2010 by requiring these strategists to complete six months of in-country certification. There are currently 145 Regional Affairs Strategists, with an additional 128 in the training pipeline--moving towards a goal of 500 by 2016.

The Air Force is also undergoing significant internal changes in the coming years to better align its Airman and their careers to emerging missions. The largest transformation in the history of Air Force communications career field will happen when 15 communications Air Force Specialty Codes transition into 11 new cyberspace support specialties.

Priority 5 – Recapture Acquisition Excellence

Overview

The Air Force has delivered superior weapons systems to meet a dynamic international environment marked by security challenges of unprecedented diversity. The extended operational lifetimes of air and space systems testify to the superior capabilities of the nation's industries and the government acquisition community's ability to manage development, delivery and sustainment of these systems. The nation benefits from these extended lifetimes but there are also associated challenges. Addressing these challenges requires the concerted effort of the broader government stakeholder community in justifying the need, providing the resources and delivering the capabilities. This section addresses how the Air Force is meeting challenges--primarily focusing on the Air Force acquisition community, whose responsibility it is to deliver the needed Air and Space capabilities. The Air Force Core Function included in this priority is listed in Table 35.

Table 35. Air Force Core Functions Included in Priority 5

Priority 5 Air Force Core Functions
• Agile Combat Support

Acquisition systems must deliver products and services that perform as promised – on time, within budget, and in compliance with all laws, policies, and regulations. Accordingly, the Air Force is improving its ability to manage complex procurements, increasing the rigor and transparency of its processes, and rebuilding the acquisition workforce while reinforcing stability in requirements and funding.

Recent challenges identified by the Government Accountability Office resulted in an independent assessment of Air Force acquisition which was conducted by the Center for Naval Analysis. The assessment concluded the following areas should be the focus for future growth: training, experience and quality of the acquisition workforce requirements evaluation during source selection.

Approach to Recapturing Acquisition Excellence

The Air Force has taken a two-fold approach to recapture acquisition excellence. The first was to elevate the focus by including it as one of the 5 top priorities in its current Strategic Plan. The second was the creation of the 2009 Acquisition Improvement Plan (AIP) to guide and shape efforts. Table 36 depicts the direct correlation between the Strategic Plan and the AIP.

The Air Force Chief of Staff at an acquisition conference

New acquisition specialists are sworn in

Table 36. Relationship between the Strategic Plan and the AIP

AF Strategic Plan Priority 5.0 Goals	AIP Initiatives
Goal 5.1: Rebuild and shape the acquisition workforce	Revitalize the acquisition workforce (10 action items)
Goal 5.2: Continue to improve acquisition process and skills	Improve major systems source selection (7 action items)
Goal 5.2: Continue to improve acquisition process and skills	Instill budget and financial discipline (6 action items)
Goal 5.2: Continue to improve acquisition process and skills	Improve requirements definition process (6 action items)
Goal 5.3: Enforce Stability in requirements, CONOPS and funding	Improve requirements definition process (6 action items) (overlaps with goal 5.2)
Goal 5.3: Enforce Stability in requirements, CONOPS and funding	Establish clear lines of authority and accountability (4 action items)

This section addresses the full scope of ongoing AIP Initiatives in the context of the Strategic Plan--with the focus primarily on the Air Force acquisition community, whose responsibility it is to deliver the needed air, space and cyberspace capabilities.

Rebuild and Shape the Acquisition Workforce/Revitalize the Acquisition Workforce

At the core of acquisition improvement is revitalizing the workforce in numbers and training. By filling civilian vacancies, recruiting interns and journeymen, offering advanced training as needed, and actively managing how human capital is applied, the Air Force is laying the cornerstone for strengthened acquisition. Equipping the workforce with the right training provides Air Force personnel with the right toolkit to improve acquisition programs, including transitioning new technologies into, the warfighting systems of tomorrow.

Newly commissioned 2nd Lt to enter the acquisition career field

Secretary of the Air Force for Acquisition (SAF/AQ) is currently implementing multiple initiatives to revitalize the acquisition workforce and increase the number of sufficiently educated, trained and experienced acquisition professionals. The Air Force is filling vacant positions and utilizing expedited hiring authority to enable AFMC to hire faster. The number of authorizations is increasing: FY 2011 funds 2,062 new positions and DoD has directed 4,865 new hires and insourcing. To date, the Air Force has already added over 980 new civilian positions.

The strategic changes called for by Priority 5 are outlined in depth in the AIP, signed by the Secretary of the Air Force and Chief of Staff. Recapturing acquisition excellence requires an experienced, skilled, empowered and accountable workforce equipped with defined requirements and adequate, stable funding. The following five initiatives and their associated actions set forth a comprehensive improvement plan for addressing the acquisition issues, and for achieving the *2008 Air Force Strategic Plan* goals supporting Priority 5.

One measure of workforce quality is the percentage of people who meet the requirements for the position they hold. As reflected in Figure 36, 92 percent of the total acquisition workforce either meet position requirements or are within the 24-month grace period (60 percent meet requirements and 32 percent are

within the grace period). The number of personnel meeting position requirements is projected to increase as training opportunities and capacity increase. In FY 2008 National Defense Authorization Act (NDAA) Sec 852 Amendment to the Defense Acquisition Workforce Improvement Act created the Defense Acquisition Workforce Development Fund (DAWDF). The DAWDF will increase training throughput for acquisition courses to provide part of the way ahead to increase the acquisition workforce qualification rate.

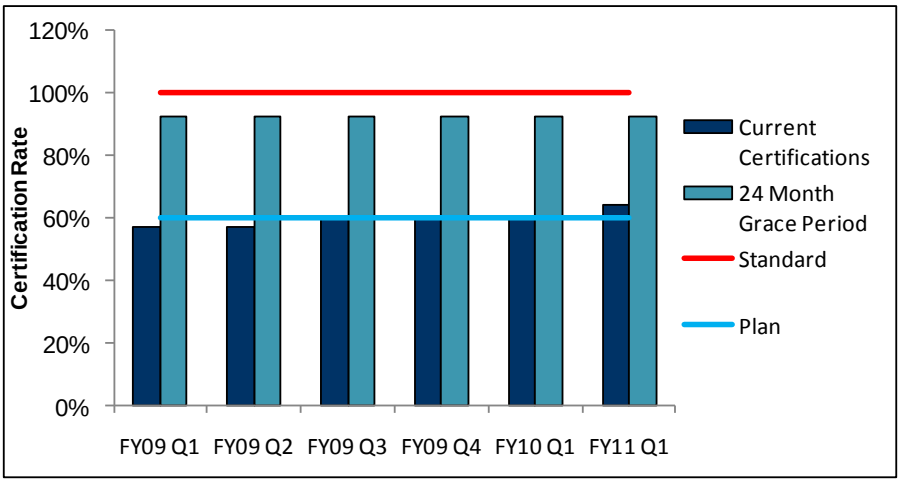


Figure 36. Acquisition Personnel who Meet All Position Requirements[3]

The Air Force is taking advantage of the Defense Acquisition Workforce Development Fund (NDAA 08 Sec 852) to address long standing shortfalls in certification training capacity. The Air Force also increased tuition assistance to encourage more of the workforce to obtain degrees, and is sending more interns to the Air Force Institute of Technology's initial acquisition skills course. Finally, the Air Force is increasing its focus on contracting, cost estimation/analysis, systems engineering, program management, and counsel to ensure that the right skill sets are being incorporated.

Currently, the Air Force is meeting half of the personnel sustainment targets. Contracting and Program Manager field grade officer inventories are below sustainment targets. To help address the issue, a Critical Skills Retention Bonus has been approved and funded for contracting officers in targeted year groups. To address the field grade officer sustainment of the program manager career field a rigorous cross-flow analysis compelled a re-balancing effort. As a result, approximately 50 Engineering FGOs are being re-trained into the career field annually to help offset the manning shortage and balance both career fields relative to sustainment requirements.

Continue to Improve Acquisition Processes and Skills/Improve Requirements Definition Process/Instill Budget and Financial Discipline/Improve Major Systems Source Selection

The Air Force will pursue improvements in the delivery of air, space and cyberspace capabilities by improving enterprise-wide understanding and execution of acquisition processes. Cost, schedule, and performance, are used as the top-level trend indicators to assess the impact of process and skill improvements across the enterprise.

This first metric, Figure 37, tracks acquisition RDT&E growth for Acquisition Category (ACAT) I programs based upon current Acquisition Program Baseline (APB). Currently there are nine ACAT I Air

[3] Meet requirement based on certification, Acquisition Corps, statutory PEO/PM experience and training requirements.

Force programs with negligible cost growth, eight programs with 5 percent or less growth and three programs with between 5 percent and 10 percent cost growth.

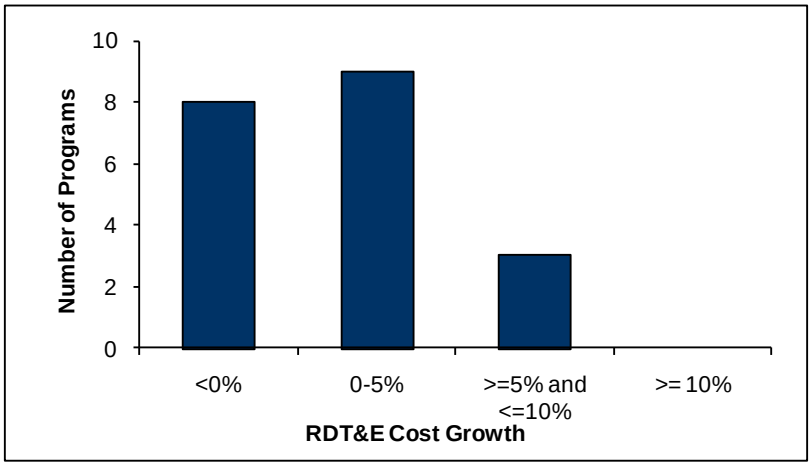


Figure 37. RDT&E Cost Growth (Current APB versus Current Program Estimate)[4]

The second metric, Figure 38, tracks cost growth in the Procurement account for ACAT I Air Force Programs. There are nine programs with negligible cost growth, eight with cost growth less than 5 percent, one with cost growth between 5 percent and 10 percent, and two programs with greater than 10 percent procurement cost growth.

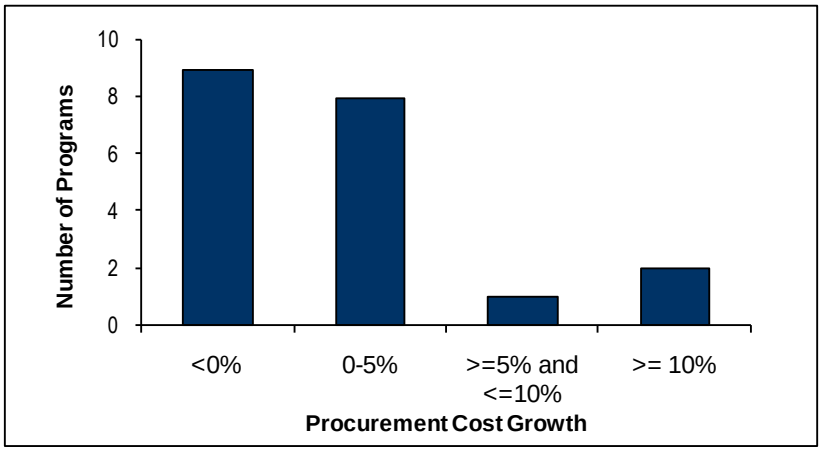


Figure 38. Procurement Cost Growth (Current APB versus Current Program Estimate)[5]

The third metric, Figure 39, tracks APB major milestone schedule deviation and measures the acquisition's community ability to meet schedule commitments. As can be seen in the following graph, 10 AF ACAT 1 programs are on track to meet their next Milestone while two programs are projecting a 3-month or greater slip to their upcoming Milestone. There are seven programs that are not currently reporting Milestone schedule deviation for various reasons, e.g. next Milestone not scheduled, program schedule being rebaselined, pre-Major Defense Acquisition Program (MDAP) not required to report, etc.

[4] Note: Includes only those programs in which the APB is not in the process of being rebaselined.

[5] Note: Includes only those programs in which the APB is not in the process of being rebaselined.

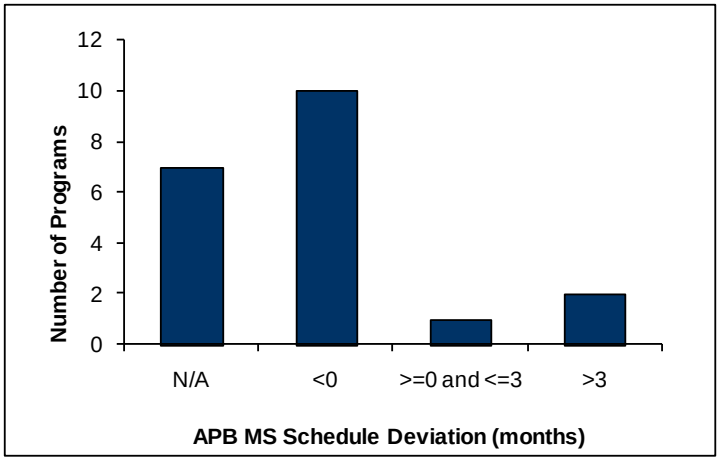


Figure 39. APB Major MS Schedule Deviation[6]

This fourth metric, Table 37, assesses the number of programs meeting their key performance parameters at either their IOC point or their Required Assets Available (RAA) point. This metric has been put in place to measure the ability to meet performance commitments to the deployed commander. Currently of those MDAP/Major Automated Information System (MAIS) programs with either IOC or RAA in 2009 all KPPs were met. There are no programs planned to IOC in FY 2010 and there is one program planned in FY 2011 that has met one of the six KPPs required. FY 2013 will see four programs IOC or achieve RAA and of the total 26 KPPs, 10 have currently been met.

Table 37. Programs Meeting All KPP at RAA/IOC

Year of IOC/RAA	Number of Programs (MDAP and MAIS)	Total Number of KPPs	KPPs Meeting Objectives	KPPs Meeting Threshold and Above	KPPs Not Meeting Thresholds
2009	2	9	9	9	0
2010	0	n/a	n/a	n/a	n/a
2011	1	6	1	6	0
2012	0	0	0	0	0
2013	4	26	10	26	0

The AIP directs the implementation of six actions to improve the requirements generation process. Early in the development of program requirements for major weapons systems, leadership will validate operational requirements are technically achievable and executable within the estimated schedule and budgeted life-cycle cost. This feasibility validation will occur concurrently with document presentation to the Air Force Requirements Oversight Council.

The Air Force is going back to the basics to get needed capability into the hands of warfighters earlier by pursuing incremental acquisition strategies. KPPs are being minimized, and each must be definable,

[6] Note: Includes only those programs in which the APB is not in the process of being rebaselined.

testable and shown as necessary to mission success. Another change being implemented for all new programs is consideration of incremental acquisition development strategies. This incremental approach should reduce acquisition risks as smaller acquisition efforts are less likely to experience requirements growth with requirements are intentionally broken into feasible increments of capability. This approach helps ensure the systems are operationally relevant and technically up-to-date.

F-35 production inches closer after wind tunnel test

Requirements changes vetted through a Configuration Steering Board and life-cycle cost and schedule impacts are taken into consideration. The results of these actions are to ensure that requirements are translated in a clear and unambiguous way into system requirements and subsequently used in source selection evaluations, prioritized when appropriate, and organized into feasible increments of capability. The acquisition workforce is revising processes and policies to ensure requirements are appropriately and accurately captured in Requests for Proposals (RFPs).

The Air Force also modified source selection procedures by strengthening governance of the process, including Service Acquisition Executive approval of source selection leadership for major acquisitions and use of realistic source selection schedules. The Air Force has improved source selection training to include the most current lessons learned, ensure this training is available, and made it mandatory for all MDAP source selection teams prior to initiation of new source selections. Further, the Air Force established requirements for all source selections over $50M to be reviewed by Multi-functional Independent Review Teams at multiple points in the process, from RFP preparation through contract award and debriefing of competitors. Over 113 reviews have been conducted since December 2008.

DoD officials announce requirement for new aerial tanker competition

The Air Force is developing a team of the most qualified Air Force source selection experts to provide on-call augmentation/consultation to source selection teams across Air Force. Improvement in personnel management created designation for both civilian and military personnel records to identify individuals with recent source selection experience which can be utilized to develop new source teams. Overall, the acquisition planning process as it relates to RFP and source selection planning was reviewed for simplification wherever possible. The end result of these actions is a simplified source selection process that will enable better results.

Enforce Stability in Requirements, CONOPS and Funding/Establish Clear Lines of Authority and Accountability

Properly developed requirements are a critical component in any acquisition program. Correspondingly, turbulence in requirements, CONOPS, and funding once baselined against an agreed to capability create program instability. Reducing unplanned requirements growth while increasing the program stability is a cornerstone objective to recapturing acquisition excellence. The acquisition workforce is diligently engaging with the stakeholders to improve the requirements management process.

> *"The key to successful acquisition programs is getting things right from the start with sound systems engineering, cost estimating, and developmental testing early in the program cycle… If these changes are successfully implemented, they should help our acquisition programs avoid future cost overruns, schedule delays, and performance problems."*
>
> *–Senator Carl Levin, Chairman, Senate Armed Services Committee*

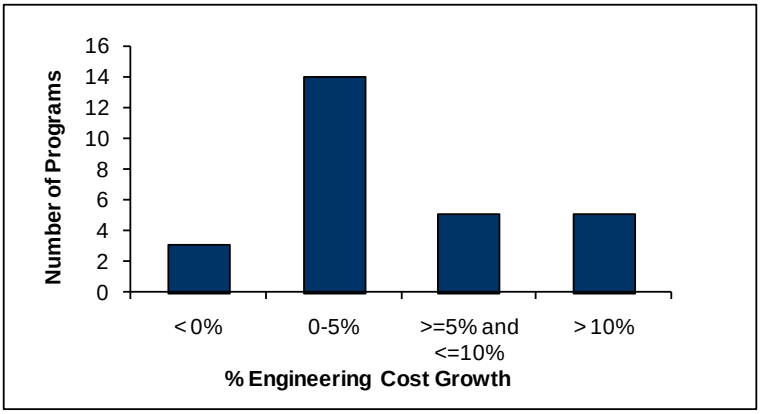


Figure 40. Acquisition Baseline Cost Growth Due to Engineering Changes

The Air Force must exercise budget and financial discipline, in addition to having a quality acquisition workforce stable processes, and clearly defined and validated requirements, in order to deliver on time acquisitions within budget. Establishing adequate and stable budgets is critical for program success. Program baselines must be based on realistic schedule and technical assumptions and accurate cost estimates. In addition, as budgeting, performance or schedule deviations occur, the acquisition process must have the flexibility to adjust requirements or cancel programs that become unexecutable. With this flexibility, programs can move ahead under realistic expectations on the part of Congress and the public.

The Air Force strives to control the costs of programs during contract performance. In this regard, the Air Force joined with the Defense Contract Management Agency and the Defense Contract Audit Agency to scrutinize contractor costs with the objective of driving improvements in contractor and subcontractor cost discipline. In particular, it is time to begin a systematic review of contractor overhead costs to assure that these costs are reasonable. The use of contract award fees has been examined and found to be commensurate with risk and performance. Controlling the cost of programs is vital to ensuring the Air Force acquisition system delivers as promised and within budget.

As part of this AIP, the Air Force will emphasize realistic budgeting based on realistic program cost estimates. Once budget baselines are established, achieving program stability and cost control will be given the same priority as technical performance and schedule.

By reinvigorating functional expertise and leading/managing a low-density, high-demand workforce, the Air Force can provide the best-equipped acquisition program office possible. To lead these programs, the Air Force has added additional Program Executive Officers (PEOs) to ensure that business decisions benefit from enhanced oversight, stay within budget and are fully compliant with laws and regulations. As part of this effort, SAF/AQ is undertaking several manpower-neutral initiatives, including migrating the organizational structure from wing/group/squadron to directorate/division/branch. This complies with Air Force unit size guidelines, and provides organizational flexibility while maintaining program visibility. Additionally, a functional management structure that meets Office of the Secretary of Defense (OSD) policy on contract rating and reporting chain is being implemented to optimize functional expertise alignment and career progression. These actions will be fully implemented by the end of FY 2010.

The Air Force understands that improving acquisition will not come quickly--it will take a collaborative and combined effort on the part of many and each action will build upon others. The combination of a stronger workforce, clearly defined requirements, incremental development strategies, predictable schedules and budgetary needs all improve the ability to provide industry with clear and concise requests for proposal which in turn enable industry to provide clearly defined, best value, solutions for the warfighting capabilities.

Section 4: Working Capital Fund

A Defense Management Review Decision established the Defense Working Capital Funds (WCF) for the purpose of carrying out specific mission activities in a more business-like manner. This creates a market-like financial framework to provide customers common goods and services in the most efficient way possible. Thus the Air Force Working Capital Fund (AFWCF) is designed to operate on a break-even basis and provides maintenance services, weapon system spare parts, base supplies, and transportation services. These goods and services support the following Air Force Core Functions: Rapid Global Mobility**,** Global Precision Attack, Special Operations, Agile Combat Support and Global Integrated ISR. These AFWCF services and products are integral to readiness and sustainability of air and space assets and the ability to deploy forces around the globe.

The AFWCF conducts business in two primary areas: depot maintenance and supply management. The maintenance depots provide the equipment, skills and repair services necessary to keep forces operating worldwide. The supply management activities procure and manage inventories of consumable and reparable spare parts required to keep all elements of the force structure mission ready. Directly or indirectly, AFWCF activities provide warfighters the key services needed to meet mission capability requirements.

Figure 41 shows how customers place an order with a working capital fund provider and are later billed for the goods and services provided.

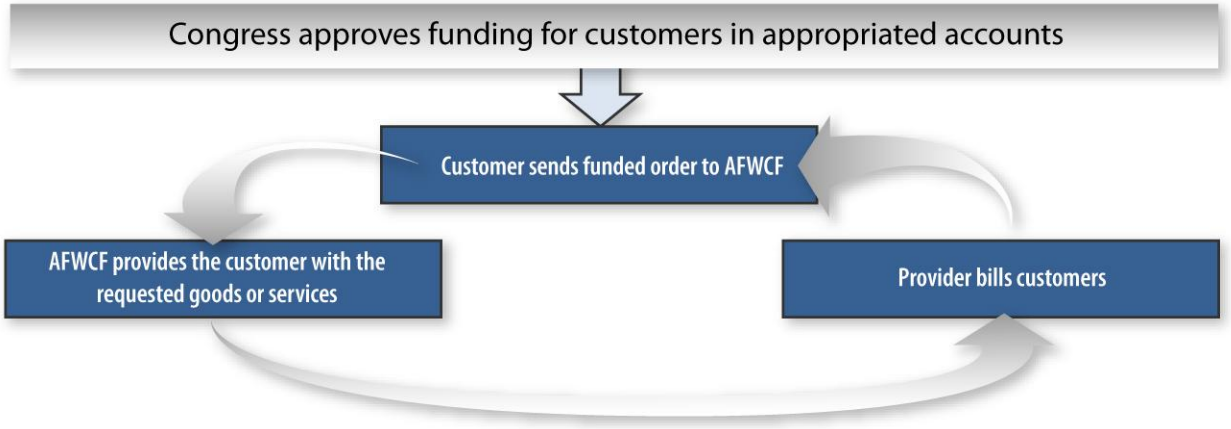


Figure 41. Working Capital Fund Business Process

The FY 2011 AFWCF Budget Request reflects current execution plans. Air Force logistics and business processes are continuously improved to meet customer needs within the time and location requirements specified. The FY 2011 WCF Budget Request is reflected in Table 38 while funded manpower requirements are reflected in Table 39.

Table 38. Air Force Working Capital Fund

Air Force Working Capital Fund ($M)	FY09	FY10	FY11
Total Revenue	23,730.5	24,596.8	25,031.4
Cost of Goods Sold	23,394.0	25,266.5	24,877.3
Net Operating Result (NOR)	(61.5)	(64.1)	(66.9)
Accumulated Operating Result (AOR)[7]	274.9	(733.8)	87.3
Capital Budget	358.1	(383.0)	0.0
Direct Appropriation – War Reserve Maintenance	389.0	338.4	308.8

Table 39. Air Force Working Capital Fund Manpower

Air Force Working Capital Fund Manpower	FY09	FY10	FY11
Civilian Endstrength	26,717	27,726	25,725
Military Endstrength	12,351	13,720	13,712
Civilian Workyears	26,376	27,206	26,793
Military Workyears	12,168	12,273	12,254

Working Capital Fund Organization

The AFWCF conducts business under two primary groups: The Consolidated Sustainment Activity Group (CSAG) and the Supply Management Activity Group – Retail (SMAG-R). The Transportation Working Capital Fund (TWCF) is a part of this submission; however, the Air Force is only charged with cash oversight and does not have operational responsibility. Figure 42 shows how the activity groups align in the Working Capital Fund, and will be discussed further below.

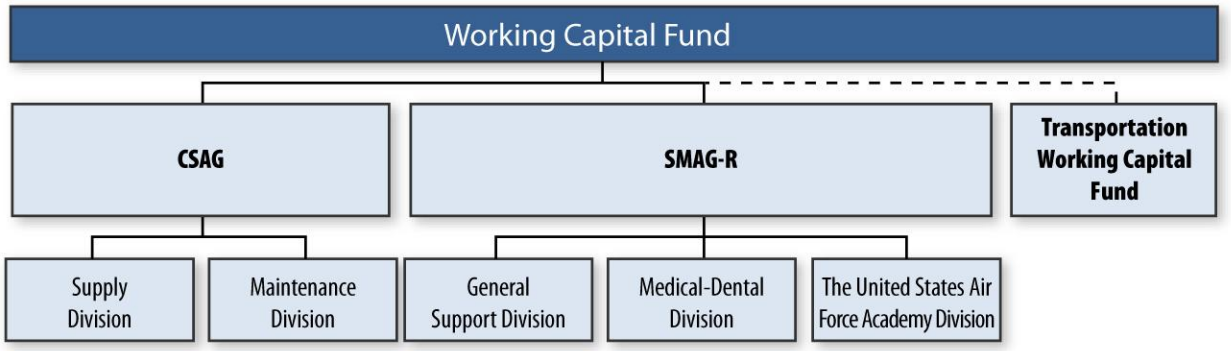


Figure 42. Air Force Working Capital Fund Activity Groups

Consolidated Sustainment Activity Group

The CSAG provides maintenance services and supply management of reparable and consumable items. Under CSAG, business operations formerly known as Material Support Division (MSD) are now designated the Supply Division, and business operations formerly known as Depot Maintenance Activity

[7] Includes Non-Recoverable AOR Adjustments.

Group (DMAG) are now characterized as the Maintenance Division. Maintenance and Supply customers include Air Force Major Commands (including Air National Guard & Air Force Reserves), the Army, the Navy, other WCF activities such as the TWCF, other government agencies and foreign countries.

- The **Supply Division** is primarily responsible for Air Force-managed, depot-level reparable spares and consumable spares unique to the Air Force. In addition to management of these inventories, the Supply Division provides a wide range of logistics support services including requirements forecasting, item introduction, cataloging, provisioning, procurement, repair, technical support, data management, item disposal, distribution management and transportation.

- The **Maintenance Division** repairs systems and spare parts to ensure readiness in peacetime and to provide sustainment for combat forces in wartime. In peacetime, the Air Force enhances readiness by efficiently and economically repairing, overhauling and modifying aircraft, engines, missiles, components and software to meet customer demands. As of FY 2009, the Maintenance Division no longer accepts new orders for contract depot maintenance, but is focusing on organic maintenance to support areas that commercial sources cannot or will not perform. Organic maintenance ensures support of mission essential workloads and support of workloads that commercial sources cannot or will not perform. Organic maintenance sites include:

    - Ogden Air Logistics Center (OO-ALC), Ogden, Utah
    - Oklahoma City Air Logistics Center (OC-ALC), Oklahoma City, Oklahoma
    - Warner Robins Air Logistics Center (WR-ALC), Warner Robins, Georgia
    - Aerospace Maintenance and Regeneration Group (AMARG), Tucson, Arizona

Table 40. Air Force Working Capital Fund CSAG Financial and Performance Summary

Financial Performance ($M)	FY 09	FY 10	FY 11
Total Revenue[8]	7,974.3	8,047.9	8,766.9
Total Expenses	8,025.2	8,427.1	8,342.9
Net Operating Results	(50.9)	(379.2)	424.0
Accumulated Operating Results	**(44.8)**	**(424.0)**	**0.0**

Numbers may not add due to rounding.

The FY 2010 prices for fuel in this submission are calculated using the current fuel composite rate of $118.02 per barrel versus the FY 2010 President's Budget rate of $89.46. This will result in a projected revenue shortfall of $5.2M of which $4.0M is being requested as a direct WCF appropriation in the FY 2010 Supplemental. The remainder will be handled from either WCF cash balances or through an additional customer surcharge.

Table 41. Air Force Working Capital Fund CSAG Cash Management

Cash Management ($M)	FY 09	FY 10	FY 11
Beginning of Period (BOP) Cash Balance	925.0	569.1	(62.4)
Disbursements	8,023.5	8,417.5	8,323.5
Collections	7,919.2	8,032.0	8,722.2
Transfers (+/-)	(251.6)	(246.0)	0.0
Changes in Cash	(355.9)	(631.5)	398.7
Cash Balance	**569.1**	**(62.4)**	**336.3**

Numbers may not add due to rounding.

[8] Includes revenue adjustment to account for depreciation recognized on buildings capitalized into the Maintenance Division.

Table 42. Air Force Working Capital Fund CSAG Item Quantity Requirements

Supply Item Quantity Requirements	FY 09	FY 10	FY 11
Number of Issues	2,365,903	2,264,169	2,166,810
Number of Receipts	1,757,752	1,682,196	1,609,835
Number of Requisitions[9]	636,707	609,329	583,127
Contracts Executed[10]	3,163	3,163	3,163
Purchase Inflation	3.05%	4.05%	4.00%
Items Managed	102,788	99,788	99,788

Supply Management Activity Group – Retail

The Air Force SMAG-R is the Air Force's primary purchaser of inventory. It is comprised of three divisions: General Support, Medical-Dental, and the United States Air Force Academy. Together they provide goods, logistics support services, and medical supplies and equipment to support forces.

Table 43. Air Force Working Capital Fund SMAG-R Revenue, Expenses and Net Operating Results

Revenue, Expenses and Net Operating Result ($M)	FY 09	FY 10	FY 11
Total Revenue	3,651.1	3,878.6	3,947.1
Total Expenses	3,512.8	3,864.6	3,892.9
Operating Results	138.3	14.0	54.2
Other Adjustments (War Reserve Maintenance)	(61.5)	(64.0)	(66.9)
Net Operating Results	76.8	(50.0)	(12.7)
Non-Recoverable AOR Adjustment	0.0	0.0	0.0
Accumulated Operating Results	**62.7**	**12.7**	**0.0**

Numbers may not add due to rounding.

Table 44. Air Force Working Capital Fund SMAG-R Cash Management

Cash Management ($M)	FY 09	FY10	FY 11
BOP Cash Balance	34.2	127.3	90.9
Less: Disbursements	3,550.1	3,882.5	3,959.5
Collections	3,581.7	3,782.0	3,876.8
War Reserve Maintenance	61.5	64.1	66.9
End of Period (EOP) Cash Balance	**127.3**	**90.9**	**75.1**

Numbers may not add due to rounding.

- The **General Support Division (GSD)** provides goods to support field and depot maintenance of aircraft, electronics systems and communications equipment. The GSD manages stock levels and procurement for critical OCO requirements. They also manage many items related to installation, maintenance and administrative functions.
- The **Medical Dental Division** provides all supplies and equipment for the AF medical treatment

[9] Requisitions are lower than issues due to Supply requisitions containing quantities greater than one, while issues are counted per unit. For example, one requisition for a National Stock Number (NSN) may order a quantity greater than one. When the requisitioned NSNs are issued, each unit is counted as an individual issue.

[10] Contracts containing multiple fund citations have been omitted because the current contracting system cannot distinguish supply funding under those conditions.

facilities. They are also responsible for the maintenance of the War Reserve Maintenance stockpile. War Reserve Maintenance provides initial medical and dental supplies and equipment to the warfighter until permanent supply chains can be established.

- The **Air Force Academy Division** procures uniforms and accessories for approximately 4,500 cadets.

Table 45. Air Force Working Capital Fund SMAG-R Stockage Effectiveness[11]

Division	FY 09	FY 10	FY 11
General Support	84%	84%	84%
Medical-Dental	85%	85%	85%
Academy	99%	95%	95%

Table 46. Air Force Working Capital Fund SMAG-R Quantity Requirements

Item Quantity Requirements	FY 09	FY 10	FY 11
Number of Issues	8,106,352	8,326,000	8,565,005
Number of Receipts	6,707,778	6,898,290	7,060,344
Number of Requisitions	6,564,410	6,743,694	6,923,279
Contracts Executed	26,102	27,002	27,449
Purchase Inflation	2.60%	2.00%	2.20%
Items Managed	1,456,029	1,456,293	1,456,565

Transportation Working Capital Fund

The Transportation Working Capital Fund (TWCF) is a part of this submission; however, the Air Force is responsible for cash oversight but does not have day to day operational oversight. USTRANSCOM manages all common aspects of the global mobility system. They synchronize the deployment, distribution, and sustainment of forces to achieve maximum efficiency and interoperability by eliminating duplication and nonstandard practices. USTRANSCOM's ability to move and sustain sufficient numbers of U.S. forces, equipment and supplies enables us to defend vital national interests anywhere in the world at a moment's notice.

C-130 flew OEF mission on December 25, 2009

Cash Management

In FY 2009, AFWCF cash balance remained relatively stable. Cash increased $25.1M primarily due to the TWCF operational tempo associated with Overseas Contingency Operations. The FY 2009 cash balance includes a $61.5M direct appropriation requested for Medical Dental War Reserve Maintenance requirements.

In FY 2010, AFWCF cash decreased by $915.6M primarily due to $250.0M transferring to Air Force Operations and Maintenance appropriation as Congressionally directed, fuel price increase, and increased

[11] Stockage Effectiveness measures how often the supply system has available for immediate sale those items it intends to maintain at base and depot level supply locations.

costs for manpower and material. The FY 2010 cash balance includes a $64.0M direct appropriation requested for Medical Dental War Reserve Maintenance requirements.

In FY 2011, AFWCF cash increased by $130.0M primarily due to recoupment of prior year losses. The FY 2011 cash balance includes a $66.9M direct appropriation requested for Medical Dental War Reserve Maintenance requirements.

Table 47. Air Force Working Capital Fund Cash

Air Force Working Capital Fund Cash Including TWCF ($M)	FY09	FY10	FY11
BOP Cash Balance	1,384.1	1,409.1	493.5
Disbursements	23,212.7	25,382.4	24,918.4
Collections	23,412.5	23,899.0	24,964.5
Transfers	(251.3)	(250)	0.0
Direct Appropriations			
Fallen Heroes	15.0	15.3	15.0
Fuel	0.0	738.5	0.0
War Reserve Maintenance	61.5	64.0	66.9
Container Consolidation	0.0	0.0	2.0
EOP Cash Balance	**1,409.10**	**493.5**	**623.5**
7-Days of Cash	885.3	903.5	854.5
10-Days of Cash	1,159.8	1,195.6	1,126.8

Numbers may not add due to rounding.

FY 2011 Budget Estimates

The United States confronts a dynamic international environment marked by challenges of unprecedented diversity. The FY 2011 AFWCF budget's primary purpose is to contribute to meeting these challenges by supporting the Air Force's Core Functions through maintenance, weapon systems spare parts, base supplies and transportation services. Estimates included in this submission are based on the current execution plans of customers. Successful WCF operations are essential to ensure warfighters receive the right item at the right place, right time and lowest cost.

Conclusion

The Air Force will meet the needs of Joint Force Commanders in FY 2011 in a deliberate, flexible manner which optimizes dollars, manpower and capabilities. Matching resources to strategy is the goal of the FY 2011 Budget Request by allocating resources to Core Functions with an objective of supporting the Air Force strategic priorities. This budget request sustains the Air Force nuclear enterprise; supports Joint and Coalition partners; develops and cares of airmen and their families; modernizes air and space inventories, organizations and training; and supports acquisition improvement initiatives.

Figure 43 shows Air Force Blue TOA to emphasize the resources focused on daily operations to meet the needs of the warfighter. The vision of the United States Air Force is to be a trusted and reliable Joint partner for the Army, Navy, Marines and coalition partners. This budget request balances strategic ends within resources to provide the Nation with the strongest *Global Vigilance*, *Reach* and *Power* in history.

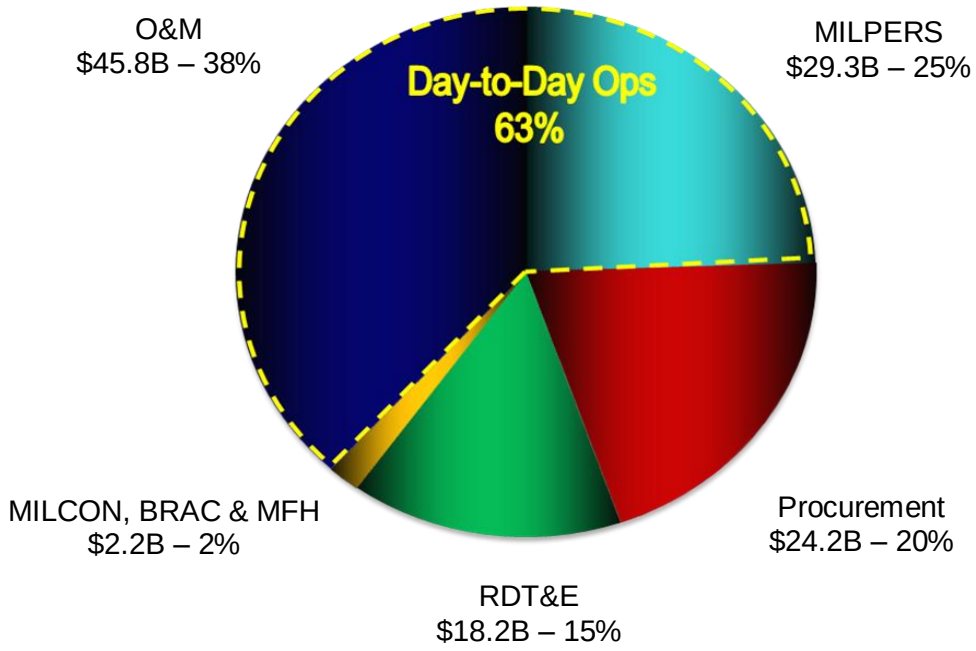


Figure 43. FY 2011 Air Force Blue TOA Appropriation

Acronyms

ACAT	Acquisition Category
AEHF	Advanced Extremely High Frequency
AESA	Active Electronically Scanned Array
AETC	Air Education and Training Command
AF	Air Force
AF/A10	Assistant Chief of Staff of the Air Force, Strategic Deterrence and Nuclear Integration
AFB	Air Force Base
AFCYBER (P)	Air Force Cyberspace Command (Provisional)
AFGLSC	Air Force Global Logistics Support Center
AFGSC	Air Force Global Strike Command
AFIA	Air Force Inspection Agency
AFMC	Air Force Materiel Command
AFMS	Air Force Medical Service
AFR	Air Force Reserve
AFRC	Air Force Reserve Command
AFROCC	Air Force Requirements for Operational Capabilities Council
AFSC	Air Force Specialty Code
AFSPC	Air Force Space Command
AFWCF	Air Force Working Capital Fund
AIP	Acquisition Improvement Plan
ALC	Air Logistics Center
AMRAAM	Advanced Medium-Range Air-to-Air Missiles
ANG	Air National Guard
AOR	Area of Responsibility
APB	Acquisition Program Baseline
APPN	Appropriation
AWACS	Airborne Warning and Control System
B	Billion
BEAST	Basic Expeditionary Airman Skills and Training
BMT	Basic Military Training
BOP	Beginning of Period
BP	Building Partnerships
BRAC	Base Realignment and Closure
C2	Command and Control
C4ISR	Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance
CAA	Career Advancement Account
CAPs	Combat Air Patrols
CHIRP	Commercially Hosted Infrared Payload
COCOM	Combatant Command
CONOPS	Concept of Operations
CONUS	Continental United States
CSAG	Consolidated Sustainment Activity Group
CSAR	Combat Search and Rescue
CSRB	Critical Skills Retention Bonus
CY	Calendar Year

DAWDF	Defense Acquisition Workforce Development Fund
DCGS	Distributed Common Ground System
DMAG	Depot Maintenance Activity Group
DMS	Defensive Management System
DoD	Department of Defense
DPO	Distribution Process Owner
DSCS	Defense Satellite Communications System
EELV	Evolved Expendable Launch Vehicle
EHF	Extremely High Frequency
eLog21	Expeditionary Logistics for the 21st Century
EOP	End of Period
EPS	Enhanced Polar System
FAB-T	Family of Beyond Line-of-Site Terminals
FLO	Family Liaison Officer
FSRM	Facilities, Support, Restoration and Modernization
FTU	Formal Training Unit
FY	Fiscal Year
FYDP	Future Years Defense Program
GEO	Geosynchronous Earth Orbit
GIG	Global Information Grid
GPS	Global Positioning System
GSD	General Support Division
HEO	Highly Elliptical Orbit
HQ	Headquarters
ICBM	Intercontinental Ballistic Missile
IG	Inspector General
IOC	Initial Operational Capability
IR	Infrared
ISR	Intelligence, Surveillance and Reconnaissance
IW	Irregular Warfare
JASSM	Joint Air-to-Surface Standoff Missile
JASSM-ER	Joint Air-to-Surface Standoff Missile – Extended Range
JDAM	Joint Direct Attack Munitions
JET	Joint Expeditionary Tasking
JMS	Joint Space Operations Center Mission System
JTACS	Joint Terminal Attack Controllers
KPP	Key Performance Parameter
LAIRCM	Large Aircraft Infrared Countermeasures
LEAP	Language Enabled Airmen Program
M	Million
MAJCOM	Major Command
MAIS	Major Automated Information System
MANPADS	Man-portable Air Defense Systems

MDAP	Major Defense Acquisition Program
MEECN	Minimum Essential Emergency Communication Network
MFH	Military Family Housing
MILCON	Military Construction
MILPERS	Military Personnel
MILSATCOM	Military Satellite Communications
MILSTAR	Military Strategic, Tactical and Relay
MOP	Massive Ordnance Penetrator
MRAP	Mine Resistant Ambush Protected
MSD	Material Support Division
NAF	Numbered Air Force
NCO	Non-Commissioned Officer
NDAA	National Defense Authorization Act
NSI	Nuclear Surety Inspection
NSN	National Stock Number
NSS	National Security Space
NWRM	Nuclear Weapons Related Material
O&M	Operations and Maintenance
OCO	Overseas Contingency Operations
OPIR	Overhead Persistence Infrared
ORS	Operationally Responsive Space
OSD	Office of the Secretary of Defense
PEO	Program Executive Officers
PME	Professional Military Education
PR	Personnel Recovery
PSTD	Propeller Sleeve Touchdown
QDR	Quadrennial Defense Review
RAA	Required Assets Available
RCC	Recovery Care Coordinator
RDT&E	Research, Development, Test and Evaluation
RERP	Reliability Enhancement and Re-engineering Program
RFP	Request for Proposals
RNI	Repair Network Integration
ROTC	Reserve Officer Training Corps
RPA	Remotely Piloted Aircraft
SAF/AQ	Assistant Secretary of the Air Force for Acquisition
SATCOM	Satellite Communications
SBIRS	Space Based Infrared System
SDB	Small Diameter Bomb
SDDC	Surface Deployment and Distribution Command
SDT	Second Destination Transportation
SMAG-R	Supply Management Activity Group-Retail
SPRDE	Systems Planning, Research, Development and Engineering
SRB	Selective Reenlistment Bonus
TAI	Total Active Inventory
TFI	Total Force Integration

TOA	Total Obligation Authority
TWCF	Transportation Working Capital Fund
UPT	Undergraduate Pilot Training
U.S.	United States
USAF	United States Air Force
USAFA	United States Air Force Academy
USAFRICOM	United States Africa Command
USCENTCOM	United States Central Command
USNORTHCOM	United States Northern Command
USSOCOM	United States Special Operations Command
USSTRATCOM	United States Strategic Command
USTRANSCOM	United States Transportation Command
WCF	Working Capital Fund
WGS	Wideband Global Satellite Communications
WRM	War Readiness Materiel
WSSC	Weapon System Support Center
YoAFF	Year of the Air Force Family