Congressional Report

Review of Air Force End Strength

House Report 110-434, page 72

February 2008

Introduction

House Conference Request

This report is being provided to the Congressional Defense Committees as directed in House Report 110-434, page 72, dated November 2007

> Review of Air Force End strength.
>
> *—The conferees direct the Secretary of the Air Force to conduct a thorough review of its total force end strength requirements and provide a report to the congressional defense committees in conjunction with the President's fiscal year 2009 budget request. The report should explain the capabilities that the current force structure provides the nature of any shortfalls for new and emerging missions, and an explanation on how the Air Force could balance the budgetary demands necessary to implement any corrective policy action within its own budget.*

Executive Summary

The Air Force has prepared this document as directed within House Conference Report 110-434, page 72, to accompany the President's Budget for FY 2009. This report describes the current total force end strength level of funding at 95% to operate, maintain, and support 86 modernized Combat Wings (CWs) required to accomplish the Air Force's core competencies as identified in the FY 2006 Quadrennial Review (QDR). This report will discuss in some detail; end strength requirement determination methods, current end strength, 86 CWs end strength shortfall, shortfalls by weapon system/mission capability, and ability for the Air Force to offset the cost for the needed required additional end strength.

Report

End Strength Requirement Determination

The Air Force manpower requirements determination process systematically identifies minimum essential manpower required for the most effective and economical accomplishment of approved Air Force missions and functions. The Air Force's Management Engineering Program (MEP) provides the framework for manpower requirement's determination via Air Force Capability-based Manpower Standards (CMSs). The MEP tool kit includes numerous accepted engineered tools. Air Force CMSs include both conventional standards based on classic industrial engineering tools and techniques and modeling/simulation derived standards based Logistic Composite Modeling Studies (LCOM computer simulation). Additionally, the MEP use tools such as Post Manning Factors, Aircrew Ratios/Compliments and Staffing Patterns. Models are also developed as part of the MEP to determine at the aggregate level manpower requirements for both common base support and training. All of the tools in the MEP tool kit are used as required during the development of the Manpower Estimate Reports (MER) used in the acquisition process.

These engineered tools provide the ability to determine end strength requirements based on established concepts of operations, force structure, directed mission requirements, organizational structure, etc. The above MEP tools were used in determining the end strength requirement to support an 86 CWs capable Air Force. All weapon system requirements were determined using LCOM computer simulation studies, conventional standards, Aircrew Ratios/Compliments, Staffing Patterns, etc. Non-weapon system requirements were determined using conventional standards, Staffing Patterns, and Post Manning Factors. Once the mission requirement was determined then Base Support and Training Models were used to capture the full mission impact to the Air Force. For new systems acquisition, such as CSAR-X, KC-X, JSF, and F-22, the Defense Acquisition Board approved MERs were used to determine the required additional end strength. MERs are based on concept of operation, maintenance, and organizational structure at a minimum. In acquisition of replacement systems it is expected that the new systems be equal to or greater in reliability and maintainability while providing greater capabilities. It is not uncommon to use end strength requirements of the legacy system being replaced and extrapolate the new requirement based on a given operational/logistical criteria.

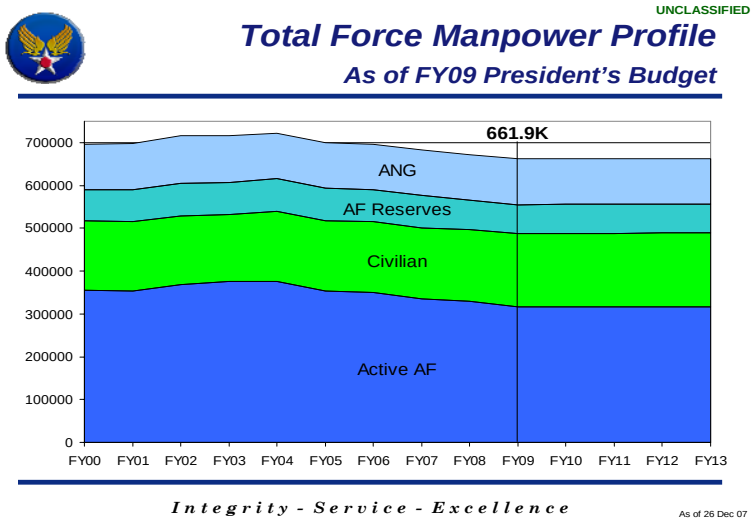
Air Force used long established MEP tools to determine and validate the end strength requirement to support an 86 CWs capable Air Force. Based on that requirement comparison to Air Force's FY 09 President's Budget programmed end strength submission, end strength is funded at ~95% of its Requirement Force for 86 CWs.

Background

The 2006 QDR identified an Air Force Required Force of 86 modern CWs capabilities able to dominate any adversary in all aspects of the battle space and to meet 21st Century challenges. To fly, fight, and win in the air, space, and cyberspace domains and provide combatant commanders the full spectrum of expeditionary, joint warfighting capabilities they need, the Air Force needs more resources. Without additional resources, the Air Force is compelled to program a portfolio that balances risk. For several years, modernization and recapitalization has been the target of choice for mitigating reduced buying power, resulting in unacceptable aging of our weapon systems decreasing reliability and maintainability while dramatically reducing our domination of the battle space. Without a fundamental shift in strategy the ability of our infrastructure to meet future calls to action is problematic. In Fiscal Year (FY) 2005, prior to our latest round of reductions, we had ~700,000 people in the total force; that breaks out to approximately 359,700 Active Duty, 106,800 Guard, Reserve 76,100, and 163,000 civilians. In FY 2006, 2007, and 2008 Air Force reduced military/civilian end strength and used the dollars to stem the tide of rapidly aging hardware. If planned end strength reductions (plus all other program content) continue as they were presented in the FY 2006, 2007, 2008 and FY 2009 President's Budget submission, by FY 2009 the Air Force

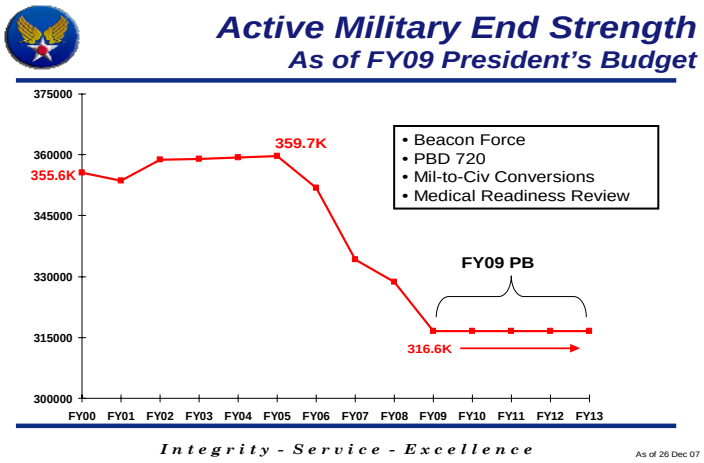
would fall to 316,600 Active Duty, Reserve to 67,400. Guard end strength remained at 106,700 and civilian grew to 171,300 due to converting non military essential positions to civilians. As a result of BRAC and Air Force's Total Force integration, the Guard has transitioned its end strength from 'Cold War' legacy missions to new and emerging missions required to meet the challenges of the 21st Century.

This decision to reduce end strength sought to halt the intolerable risk of continued deferment of fielding modern battle systems, shifting more risk to the increasingly costly yet precious personnel accounts, and in turn, to our Total Force.



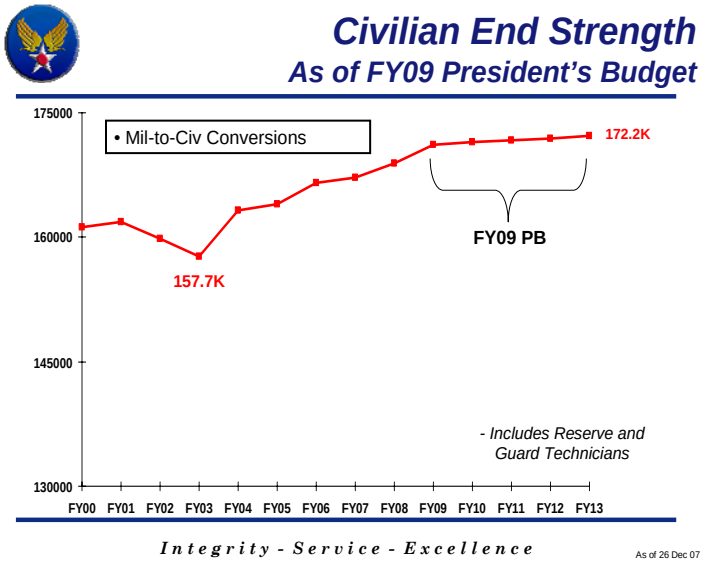
Current Active Military End Strength

Active duty end strength has been impacted primarily by the following initiatives; Beacon Force, FY 2007 PBD 720 (reduced 33K active, 2K civilians, and 2K reserve FTEs), Military to Civilian Conversions, and the Medical Readiness Review. Beacon Force and PBD 720 were major initiatives to reduce active military, civilian, and reserve end strength in order to reprogram the monies into modernization and recapitalization. To maintain a balanced budget, Air Force had to make a difficult choice between People, Readiness, and Modernization in order to transform from a 'cold war' legacy to a modern force capable of meeting the challenges of the 21st century. Military to Civilian conversions is an ongoing effort to convert non military essential positions to US civilians and to free up military to realign to selected military skills enhancing warfighting skills and reducing stress on high tasked skill sets. The Medical Readiness Review is an initiative to convert non military essential positions and replace them with a civilian workforce.



U.S. Civilian End Strength

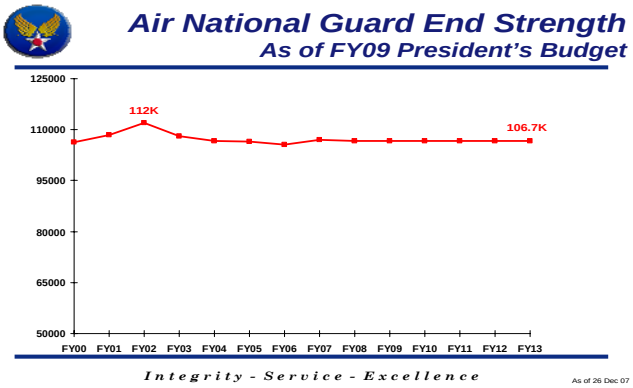
Through the PBD process U.S. Civilian end strength has increased due to the aggressive effort by the Defense Department to reduce/eliminate the use of military personnel in non military essential position and replace them with either U.S. Civilians or contractors. Military are then realigned to warfighting skills reducing the stress on high demand military skill sets. When converting to a contractor to ensure it is the most cost efficient the Air Force uses the OMB Circular A-76 process.



Air Guard End Strength

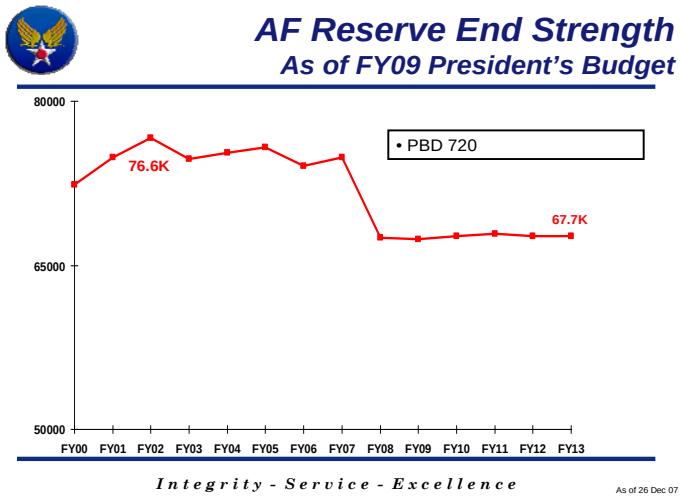
Given the choices Air Force had to make to recapitalize its aging fleets, in the 2007 President's Budgets, Air Force reduced Total Force end strength by 37K Full time Equivalents (FTE) and reprogrammed active military, civilian, and reserve end strength monies into the modernization and recapitalization accounts while the Guard maintained its end strength at 106,700. Initially the Guard was included in PBD 720 plan by reducing its end strength by 3K FTEs but because of its impact to the Guard post BRAC and at the same time Air Force was executing its Total Force Initiative, the Guard reductions were reversed. However, due to the impacts of 2007 BRAC and Total Force Integration (TFI), the Guard has transitioned a significant number of its end strength from operating, maintaining, and supporting 'Cold War' legacy system to new and emerging missions such as Predator, Global Hawk, Falconer Air Operations Centers, and Distributed Common Ground Systems. A major impact on the TFI transition from legacy to new missions is the training cost.

The end strength training cost is addressed in the 'Total Force End Strength 5 % Shortfall by Mission Capability' section of this report.



AF Reserve End Strength

In the 2006 and 2007 President's Budgets, Air Force reduced Total Force end strength by 37,000 FTEs and reprogrammed active military, civilian, and reserve end strength monies into the modernization and recapitalization accounts while the Reserves reduced its end strength 76,800 to 67,700. This reduction was the result of Air Force making tough decisions on reducing people to pay for modernization. In addition, due to the impacts of BRAC and TFI the Reserve has transitioned a significant number of its end strength from operating, maintaining, and supporting legacy system to new and emerging missions such as CYBER, Predator, Global Hawk, Falconer Air Operations Centers, and Distributed Common Ground Systems. A major impact on the TFI transition from legacy to new missions is the training cost. The end strength training cost is addressed in the 'Force End Strength 5 % Shortfall by Mission Capability' section of this report.



86 Combat Wings Total Force End Strength Requirement

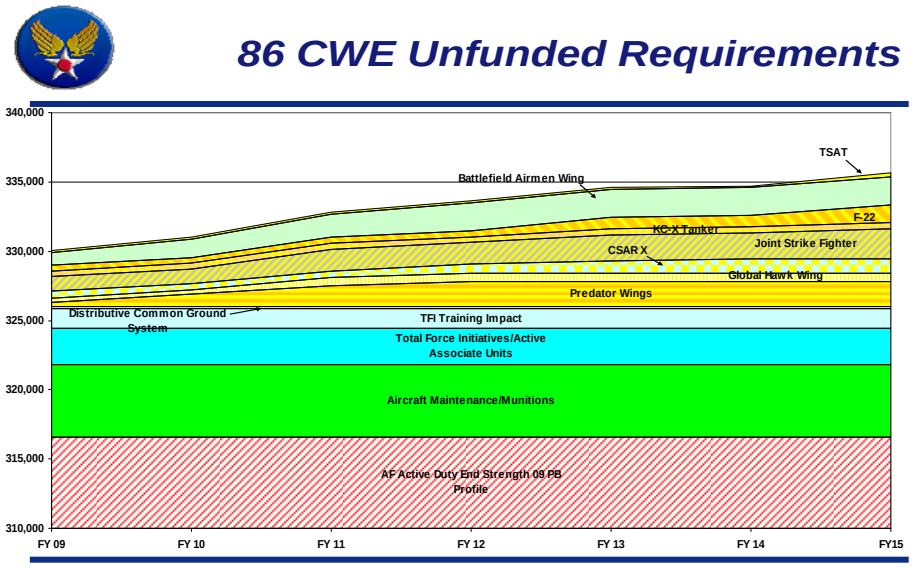
In the 2006 QDR the Department of Defense stated the need for Air Force to operate, maintain, and support 86 modern CWs capabilities. This need is based on the current and future requirement to provide the United States with overwhelming dominance in Global Vigilance, Global Reach, Global

Power, Space and CYBER, and Agile Combat Support with the ability to operate 24/7 in the full spectrum of the battle space. The 86 CWs total force end strength requirement consists of 330,154 Active ramping to 335,661 in FY 15, 173,130 Civilian ramping to 174.200 in FY 15, 106,700 Guard, and 71,100 Reserve ramping to 71,956 in FY 15 versus the current FY 09 funded end strength of 316,600 Active, 171,300 Civilian, 106,700 Guard, and 67,700 Reserves. The Programmed Force end strength is 95% of the Air Force's Requirement Force which will have a significant impact on the Air Force's ability to provide Global Vigilance, Global Reach, Global Power, Space and CYBER, and Agile Combat Support capabilities that will dominate in all spectrums of the battle space. To overcome this critical capability gap will require funding for an increase of end strength top line of 13,554 ramping to 19,061 active, 1,830 civilian, and 3,400 ramping to 4,256 reserve forces.

Total Force End Strength 5% Shortfall by Mission Capability

The following provides program detail by each Air Force Component

Active Duty Military End Strength Requirement



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Active Military End Strength Requirement Shortfall by Year (FY 09-15)

	Active Duty Requirements for FY10 POM						
	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY15
Predator Wing (MQ1 and MQ9)	329	879	1,506	1,833	1,833	1,833	1,833
Global Hawk Wing (RQ4)	283	283	566	566	566	566	566
Distributive Common Ground System (DCGS)	162	162	162	162	162	162	162
CSAR X Force Structure Growth	493	493	493	644	913	1,039	1,039
Battlefield Airmen Wing	905	1,345	1,645	2,015	2,015	2,015	2,015
Total Force Integration	2,640	2,640	2,640	2,640	2,640	2,640	2,640
TFI Training - AETC	1,384	1,384	1,384	1,384	1,384	1,384	1,384
Joint Strike Fighter (Force Structure Growth)	1,050	1,050	1,585	1,585	1,868	1,868	2,193
F-22 (Force Structure Growth - Lots 10/11)	419	419	419	419	419	419	419
KC-X	428	428	428	428	828	828	1,261
Aircraft Maintenance/Munitions	5,223	5,223	5,223	5,223	5,223	5,223	5,223
TSAT	238	238	238	238	238	238	326
09 PB Profile	**316,600**	**316,600**	**316,600**	**316,600**	**316,600**	**316,600**	**316,600**
86 CW Required Force	**330,154**	**331,144**	**332,889**	**333,737**	**334,689**	**334,815**	**335,661**

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Predator Wings
86 CWs require the addition of 4 Predator Wings (MQ-1/9). End strength requirement is based on the operational need for additional 24 hour 7 days a week combat air patrol capability for persistent intelligence, surveillance, and reconnaissance with strike capability.

Global Hawk Wing
86 CWs require the addition of a Global Hawk Wing. End strength requirement is based on the operational need for additional 24 hour 7 days a week combat air patrols capability for persistent intelligence, surveillance, and reconnaissance.

Distributed Common Ground System
With the addition of 4 Predator Wings and one Global Hawk Wing require additional intelligence exploitation capability. End strength requirement is based on the operational need for exploitation of 24/7 combat air patrols capability providing persistent, intelligence surveillance, and reconnaissance capability.

CSAR-X
End strength requirement is based on the CSAR-X MER. CSAR-X is a replacement system for current HH-60 legacy system. Reason for the additional end strength is due to the acquisition of an additional 40 aircraft beyond the current 101 HH-60s. This end strength will be required to operate, maintain, and support the additional 40 aircraft.

Battle Field Airman Wing
The transformation of the Army into Brigade Combat Teams and their associated programmed end strength growth of 65,000 drive a requirement for the Air Force to provide additional combat weather and Tactical Air Control Party battle field airman.

Total Force Integration
Over the last 3 years the Air Force has implemented over 139 TFI initiatives. These initiatives will better integrate Active, Guard, and Reserve Forces while the Air Force transforms from a 'Cold War' legacy force to a modern integrated 86 CWs capable Air Force. One of the many initiatives is to create several Active Associate Units at Guard and Reserve bases. End strength requirements were determined by aircrew ratio/crew compliments and LCOMs. In the chart below the Secretary and Chief of Staff of the Air Force approved the first six initiatives while Air Combat Command is in the process of finalizing the proposed establishment of the remaining active associates units.

TFI Active Associates

Command	MDS	PAA	Total (OFF)	Total (ENL)	BOS	AD Total	Total
AFRC	F-16 B30	24	10	139	15	**164**	164
AFRC	F-16 B30	24	10	139	15	**164**	328
ANG	F-16 B30	18	6	76	9	**91**	419
ANG	F-16 B30	18	6	76	9	**91**	510
AFRC	A-10	24	10	139	15	**164**	674
AFRC	A-10	24	10	139	15	**164**	838
ANG	F-16 B40	24	10	139	15	**164**	1002
ANG	F-15/F-22	24	10	139	15	**164**	1166
ANG	F-16 B30	18	6	76	9	**91**	1257
ANG	F-15	24	10	139	15	**164**	1421
ANG	F-16 B30	18	6	76	9	**91**	1512
ANG	F-16/F-22	24	10	139	15	**164**	1676
ANG	F-16 B42	24	10	139	15	**164**	1840
ANG	F-16 B30	18	6	76	9	**91**	1931
ANG	F-16 B30	18	6	76	9	**91**	2022
ANG	F-16 B30	18	6	76	9	**91**	2113
ANG	F-22	24	10	139	15	**164**	2277
ANG	F-22	24	10	139	15	**164**	2441
			152	**2061**	**228**	**2441**	

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TFI Training Impact
The Air Force implemented 139 TFI initiatives over the last two years that re-roll a significant number of Guard and Reserve personnel from 'Cold War' legacy missions to new and emerging missions resulting is an increased training requirement for AETC. Requirement was determined by conventional student training manpower standard.

Joint Strike Fighter
End strength requirement based on the JSF MER, the JSF force structure ramp up, and the F-16 drawdown. Current JSF force structure profile exceeds offsetting F-16 end strength. Therefore, additional end strength is required to transition from the F-16 to JSF program.

F-22
End strength requirement based on the F-22 MER, current F-22 operations, the F-22 force structure ramp up, and the F-15 drawdown. Current F-22 force structure profile exceeds offsetting F-15 end strength. Therefore, additional end strength is required to transition from the F-15 to F-22 program.

KC-X Tanker
End strength requirement based on the KC-X MER, the KC-X force structure ramp up, and the KC-135 drawdown. Major reason for increased end strength requirement is the acquisition of additional aircraft above and beyond the KC-135 force structure.

Aircraft Maintenance/Munitions
Historically Air Force weapon systems are funded to 100% requirement to ensure our Air Force is capable to fly, fight, and win in all spectrums of the battle space. Based on the latest Weapon System LCOM reports (F-15,F15E, A-10, F-16, B-1, B-2, B-52, C-130, C-40, E-3, EC-130, Tactics & Training) aircraft maintenance/munitions are short ~5,300 billets (include BOS/Training Tails) to meet its required peacetime, wartime surge, and wartime sustained missions. Primary reasons for the increase in requirement from previous funded LCOM reports are increased operations, lower mean time between failures for parts (lower reliability and maintainability because of aging aircraft flying more), availability of part because of vendor availability (increases cannibalization of aircraft for parts). This additional maintenance manpower requirement provides further evidence that aging aircraft weapon systems is more expensive to maintain and support the need to modernize the fleet.

TSAT
End strength requirement is based on the TSAT MER

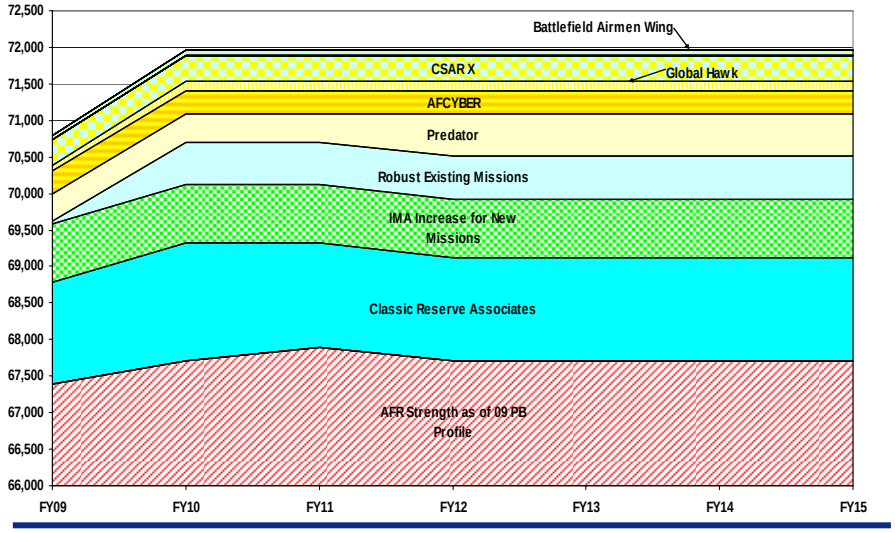
Civilian End Strength
Civilian end strength based on the requirement identified in each weapon system MER.

MER	ES Requirement
CSAR-X	178
JSF	583
KC-X	16
TSAT	73
ARTs	980
Total	1,830

Air Reserve's 86 Combat Wing End Strength Requirement Short Fall
As a result of the 2006 QDR, 2007 BRAC and Air Force's TFI the Air Reserve had major adjustments to it end strength. BRAC and TFI directed a significant mission re-roll from 'Cold War' legacy systems to 21st Century Air Force transformation to its 86 modern CWs. At the same time the Air Reserve end strength was reduced by over 9,000 positions as part of FY 2007 PBD 720 transferring end strength monies into the modernization and recapitalization accounts.

As the Air Force and its components move from its 'Cold War' legacy capabilities, the Air Force will seamlessly integrate its components via the TFI process. The Air Reserve end strength shortfalls were determined using all afore mentioned MEP tools. Breakout of mission and numbers are as follows:

AFR 86 CW Requirements



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Air Reserve Military End Strength Requirement Shortfall by Year (FY 09-15)

AFR 86 CW Unfunded Requirements

	FY09	FY10	FY11	FY12	FY13	FY14	FY15
AFCYBER	316	316	316	316	316	316	316
Global Hawk	69	144	144	144	144	144	144
Predator	376	376	376	576	576	576	576
CSAR X Force Structure Growth	347	347	347	347	347	347	347
Battlefield Airmen Wing	69	69	69	69	69	69	69
Classic Reserve Associates	1,393	1,625	1,425	1,425	1,425	1,425	1,425
Robust Existing Missions	30	579	579	579	579	579	579
IMA Increase for New Missions	800	800	800	800	800	800	800
Total Unfunded AFR Requirements	**3,400**	**4,256**	**4,056**	**4,256**	**4,256**	**4,256**	**4,256**
FY09 PB Profile	**67,400**	**67,700**	**67,900**	**67,700**	**67,700**	**67,700**	**67,700**
86 Combat Wing Required Force	**70,800**	**71,956**	**71,956**	**71,956**	**71,956**	**71,956**	**71,956**

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Special Operations, Defense Health Program, and the National Intelligence Program (NIP)
In addition to the effort of the Air Force requirement to increase end strength to close the funding gap to operate, maintain, and support an 86 CWs capable Air Force, Air Force Special Operation command through its MFP-11 program has a requirement to increase Air Force MFP-11 end strength by 3,200 in support of USSOCOM growing end strength and mission requirements (provides enhanced capability in Predator, AC-130s, CV-22, MC-130s, U-28A, Special Tactics, Combat

Control Teams, Distributed Common Ground Stations). According to the MOA between USSOCOM and Air Force, USSOCOM provide the MFP-11 mission monies through Congress, OSD, or USSOCOM to fund the Air Force provided end strength while Air Force is responsible to fund and provide Base Operating Support end strength. Cost for this increase of MFP-11 end strength and its associated BOS is $317.6M

Also, any growth in end strength will drive a corresponding growth in the Defense Health Program to provide care for the 86 CWs requirements and this report also does not account for the growing demand for Air Force NIP end strength.

Resourcing within Air Force Baseline Budget

The FY 2009 budget cost of increasing Air Force's Total Force end strength (not including MFP-11) to 330K active ramping to 335K, 173K civilian, 106.7K Guard, and 71+K Reserves is:

FY 09 $.69B
FY10 $1.5B
FY11 $1.65B
FY12 $1.84B
FY13 $2B
FY14 $2.1B
FY15 $2.2B

Note, not included in the above end strength and dollars are the 3,200 MFP-11 end strength to enhance mission capability which is normally funded by Congress, OSD, or USSOCOM for Air Force Special Operations Command. This would require OSD/USSCOM to provide an additional $317.6M a year.

Air Force's ability to offset the $.69B in FY 09 ($11.9B FY 09-13) to increase its Total Force end strength from 661.9K to 681.9K ramping to 688.5K within its current baseline budget would be extremely difficult at best and reprogramming dollars from our Readiness and Modernization accounts will significantly impact readiness and accelerate the aging and obsolescence of our weapon systems. Over the past three budgets Air Force has had to make tough choices in respect to its People, Readiness, Infrastructure, and Modernization and Procurement accounts. Of particular concern are our aging weapon systems that will rapidly become operationally obsolete with the advancement of technologies. Reprogramming dollars from our Readiness and Modernization accounts will significantly impact readiness and accelerate the aging and obsolescence of our weapon systems. Failure to accelerate recapitalization will drive tremendous cost extending the life of current systems that will quickly become obsolete. To maintain a dominate edge in the battle space AF must modernize it capabilities and keep them in a high readiness state. For the Air Force to realign existing end strength or buy new end strength to operate, maintain, and support 86 modern CWs within existing Air Force top line would require a major BRAC (closing 15 major bases) and or terminating major programs. As to BRAC and/or terminating any program has met with resistance at many levels of our government to include Congress. The Air Force needs the additional budget top line and end strength increases to 335K Active Duty, 174K Civilian, 106.7K Guard, and 71.9K Reserves in order to perform existing mission requirements.