UNITED STATES AIR FORCE
STRATEGIC PLANNING DIRECTIVE
FOR
FISCAL YEARS 2006–2023

HEADQUARTERS, UNITED STATES AIR FORCE
DEPUTY CHIEF OF STAFF FOR PLANS & PROGRAMS

FOREWORD

This document, the first in a series of biennial *Air Force Planning Directives*, establishes a new approach for Air Force strategic planning. The *Directive*, combined with a new emphasis on *Strategic Thinking* and *USAF Real-Time Planning Tools*, replaces the multiple Strategic Planning Volumes published previously by the Deputy Chief of Staff (DCS) for Plans and Programs (AF/XP). The *Directive* provides the key planning priorities of the Secretary of the Air Force and Chief of Staff, outlines our shift to a capabilities-based planning process (in movement toward a performance-based management [PBM] system), and assigns planning initiatives that will provide the foundation for future capability decisions. The *Directive* also establishes guidance that will affect development of the FY06-11 Program Objective Memorandum (POM) by examining the impact of capability needs through the mid- and long-term planning period.

Over the last two years, we have experienced an accelerating degree of uncertainty and change. Our nation endured a devastating attack on our homeland in 2001, signaling the emergence of a serious long-term threat to national security. We face the threat of multiple conflicts overseas. Future years will no doubt bring us new security challenges. The imperatives of sustaining Homeland Defense, prosecuting the Global War on Terrorism (GWOT), and conducting current operations, while meeting transformation priorities, challenge the Air Force to develop a coherent plan that ensures resources are best applied to meet our nation's defense needs.

To meet the challenges of our new security environment, the President and Secretary of Defense are changing the basis by which we plan. They have placed heavy emphasis on transforming the Department for the future as a means to sustain today's real-world operations. For example, the Department of Defense (DoD) is in the process of reviewing our overseas posture and force structure requirements and is about to begin assessments in support of potential future base closings and consolidations. Similarly, we in the Air Force must change the way we approach these challenges, much as we did for the last Quadrennial Defense Review (QDR). Air Force planners must proactively develop solutions to our most pressing issues, working as necessary with our service counterparts, the Joint Staff, the Office of the Secretary of Defense, and Congress. *Such opportunities for real change come once in a generation*. If we are successful, we will have a far-reaching, positive effect on our future investment strategy, POMs, budgets, and QDRs—and the fundamental shape, capability, and relevance of our Air Force.

We are presently experiencing real growth within defense budgets. Congress has approved a second year of real increases in DoD spending to support the current Administration's defense requirements; however, we cannot assume that our budget will continue to increase indefinitely. The United States has undergone two major defense buildups since the end of the Korean War. Historically, following each of these 4-5 year real defense increases, we have experienced over a decade of steadily declining budgets. US demographics over the next 20 years indicate the average age of the US population will steadily increase, leading to increased Social Security and Medicare funding requirements. This will place additional pressures on future defense budgets roughly 5 years from today.

Using history as an example, we are faced with a nearly unique opportunity to define the size, shape, and capabilities of the Air Force that will be on the ramp for the next 20 years and beyond, as well as prepare us for Base Realignment and Closure (BRAC)-05, QDR-06, and POM-06. To properly define our Air Force in light of these substantive challenges, the Air Force must achieve several major strategic planning objectives. The objectives noted below represent the fundamental strategic planning direction for the USAF, and all participants must place emphasis on meeting these objectives. It is essential that these objectives, and not functional or organizational goals, drive our actions.

Air Force Strategic Planning Objectives

- Define and articulate, through concepts of operation (CONOPS), Air Force requirements in terms of Air and Space Expeditionary Forces (AEF);
- Increase interoperability within the Total Air Force, with other services, with allies, and with coalition partners;
- Define the Air Force's future force structure in terms of AEF capabilities needed to achieve desired effects, support the Defense Strategy, and link strategy to CONOPS to capabilities to plans and to programs through their associated performance-based metrics/ performance measurement systems;
- Define the Future Total Force (FTF) mix and innovative organizational concepts to better leverage all elements of our capabilities;
- Determine the fundamental manpower and organizational tenets that will shape the demographics of the Air Force—e.g., core and non-core competencies for blue-suiters, potential divestitures, AEF composition, outsourcing, etc.;
- Assess the infrastructure required to support our future force structure;
- Continue to improve relationships with OSD, Joint Staff, other Service planners, and Congress to better communicate our strategies, concepts and common planning priorities;
- Increase the speed and efficiency of our approach to the way we conceive, develop, prioritize, acquire, deploy and sustain our weapons and support systems so needed capabilities are available quickly and on budget.

John P. Jumper
General, USAF
Chief of Staff

James G. Roche
Secretary of the Air Force

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SECURITY ENVIRONMENT

Air Force planners must understand the following issues and trends that are fundamentally changing how we prepare for future military operations as well as the concepts of operations and capabilities airmen will require to defend our Nation in the decades to come.

Planning for Uncertainty

The threats we face today are both uncertain and wide-ranging. Today, the Air Force cannot reliably predict when and where we will fight. The Air Force must have the ability to offensively and defensively combat significant and emerging asymmetric threats worldwide. We must prepare for a wide range of future contingencies, from terrorists armed with unconventional weapons threatening attacks, to sustained combat with near-peers armed with advanced weapon systems and weapons of mass destruction (WMD). This includes actively seeking our adversaries as early as possible and neutralizing their actions before they can damage or destroy our assets. To allow us to see first, understand first, and act first, we must employ an integrated protection concept across the entire force and national power structure. The exploration and application of transformational technologies, along with new concepts and organizational structures, will enhance our capabilities in countering uncertain threats to preserve employment of air and space power in the 21st century.

To prepare for this uncertain future, the Air Force is changing from a threat-driven, scenario-based, deterministic planning and programming process to one that is fundamentally driven by operating concepts and related capability requirements. These are outlined in Section 4 of this *Directive*. Our new process will provide the President with a broader range of joint capabilities to meet the nation's global demand for air and space power. Air Force planners must develop a thorough understanding of capabilities-based planning (as part of a performance-based management construct) and how Joint integrated architecture-based USAF Concepts of Operations (CONOPS) provide the foundation for defining current and future capabilities.

Air Force Challenge

Air Force planners must think of new ways and means of introducing uncertainty, surprise, and asymmetry into the calculus of our potential future adversaries.

Air Force Challenges

Air Force planners must develop new concepts and identify the required capabilities that will enable us to anticipate a potential adversary's actions and ensure we are able to gain access in denied environments and obviate or mitigate the value of WMD use by adversaries.

The Air Force must expand its outreach to friends and allies, strengthening relationships and developing an environment of trust and mutual interest as we develop our future military capabilities. When feasible, USAF-sponsored wargames, concept development, and other planning activities should include our allies and coalition partners.

Responsive Adversaries

Non-state actors and supporting rogue states have prioritized the development and employment of novel human weapon system capabilities. Combatants have demonstrated more potent impact on the world stage, achieving disproportionately large political, cultural, and economic influence, relative to the resources expended to produce the effects. Developing and exploiting weakness in the seams between security organizations have produced homeland threats that now dwarf their pre-9/11 relevance and impact. Our adversaries' asymmetrical reliance on optimizing the human combatant has been unmatched by our national military strategy; this oversight yields a vast resource to our adversaries to build and support future conflict and escalating violence unchecked. A sophisticated, coordinated counter-capability must be mounted to deny our adversaries this strategic advantage.

Weapons of mass destruction—chemical, biological, radiological, nuclear, and enhanced high explosive (CBRNE)—are regarded as a "force multiplier" for less powerful nations that cannot afford to field a wider range of advanced conventional military capabilities. Such weapons increase the power and prestige of possessing nations; have the potential to destroy or disrupt forward-deployed forces; can inflict heavy casualties; and can be used to strike at the US homeland with devastating political and economic impact. Our future adversaries are likely to use WMD in an attempt to deter US intervention and prevent neighboring nations from providing access to US forces.

We must adapt our weapons systems and intelligence, surveillance and reconnaissance (ISR) assets to defeat the concealment, dispersal and deception techniques of our potential adversaries. Our adversaries have employed these techniques in every war the US has ever fought, including our own Civil War. To reduce vulnerability to surveillance and air attacks, adversaries rely on hardened facilities (bunkers and caves), deception and masking (mock-ups and camouflage), urban warfare, and frequent movements under the cover of night and adverse weather. In the future, adversaries can be expected to use even more sophisticated methods to mask their actions and disrupt our response. These techniques threaten the future viability of current ISR and weapon systems that are less responsive or cannot operate effectively in all environments, day and night.

The threat to the United States from ballistic, theater, and cruise missiles is also growing. Iraq's use of SCUD missiles in the 1991 Gulf War, combined with the coalition's difficulties in dealing with this threat, contributed to the proliferation of *theater and ballistic missiles* in all regions of the world. More recently, ballistic missiles have been joined by the proliferation of cruise missiles to form a deep strike threat to US forces. The addition of precision guidance to enemy arsenals, including global positioning system (GPS) guided ballistic missiles, is equally threatening to our ability to gain access and conduct air operations. Such weapons

combined with the spread of advanced sea- and land-based mines, diesel submarines, and advanced air defenses, form the basis for emerging anti-access threats to prevent and/or disrupt US power projection operations.

Coalition Capabilities

During the Cold War era, defense planners counted on the capabilities provided by our friends and partners in formal alliances with the United States. While our formal alliances, including NATO, are critical to our future planning, recent operations in the Gulf and Afghanistan have taught us that the number, composition and *ad hoc* nature of our future alliances could become more uncertain. The trend in our evolving international arrangements might be better characterized as a series of short-term liaisons, or "coalitions of the willing." In contrast to the Cold War, allied contributions may be, with significant exceptions, better measured in terms of political support and access to facilities than in combat capabilities. Additionally, these coalitions may be temporary or fragile, resulting in constraints that would limit our operational capabilities, including reduced regional access and target constraints. Finally, downward trends in our potential allies' defense budgets indicate that the military potential of many of our friends and partners will continue to lag those of the US military. That will further complicate our development of interoperable capabilities with an emphasis on physical and conceptual interoperability. The Air Force must continue to pursue a wide range of security assistance, armaments cooperation and international personnel programs to help strengthen our relationships with allied and partner air forces.

Threats to Our Homeland

September 11, 2001, and subsequent events signaled the dramatic escalation of an ongoing, upward trend in frequency, targeting selection, and increased violence in terrorist activity against the United States and its allies dating back to the Iranian Hostage Crisis and the bombing of the US Marine Corps barracks in Lebanon. The willingness and ability of non-governmental groups and state-sponsored terrorists to attack our vital interests directly has increased dramatically over the last decade. Non-governmental and terrorist groups continue to seek access to weapons of mass destruction. As Vice President Dick Cheney noted: "Deliverable weapons of mass destruction in the hands of a terror network…constitutes as grave a threat as can be imagined."[1] Our new security environment, characterized by the spread of weapons of mass destruction, advanced conventional capabilities, access denial strategies, and new threats to our homeland is reshaping our defense strategy and planning priorities. Force protection must be emphasized across the entire spectrum of conflict and incorporated into all operational concepts. This will focus planning and programming efforts to allocate limited resources to address our new homeland defense strategy.

Required Action

The DCS for Air and Space Operations shall assist USNORTHCOM as they develop an Interagency CONOPS that will improve our capability to support sustained Homeland Security operations.

[1] *See remarks by the Vice President to the Veterans of Foreign Wars 103rd National Convention, August 26, 2002.*

STRATEGY: FOUNDATION FOR AIR FORCE PLANNING

Required Action

In support of the National Security Strategy, the senior Air Force Operational Concept Developer in AF/XO will work with other Air Force and joint organizations as appropriate, to propose new concepts for conducting future pre-emptive operations against adversaries.

National Security Strategy

The President published a new *National Security Strategy* (NSS) that explains how the US will work with its allies and international partners to promote democracy, economic expansion, and human rights to defeat regional threats and terrorism. The NSS is the foundation for Air Force and DoD strategic planning. To meet its objectives, the DoD will increasingly depend on air and space capabilities. For example, the strategy cites *intelligence capabilities* as "our first line of defense against terrorists," and stresses *long-range precision strike*. The NSS emphasizes the Department's critical operational goals for transformation, including improving our ability to defend the homeland, conduct *information operations, ensure access to distant theaters and protect space assets* and other critical infrastructure. Finally, the NSS explains that the emerging security environment, including WMD threats against our homeland, requires a new emphasis on potential preemptive military operations:

> "We must be prepared to stop rogue states and their terrorist clients before they are able to threaten or use weapons of mass destruction against the United States and our allies and friends…. To forestall or prevent such hostile acts by our adversaries, the United States will, if necessary, act pre-emptively."[2]

DoD Defense Strategy

During the 2001 Quadrennial Defense Review, Secretary Rumsfeld approved a new Defense Strategy to guide DoD planning and programming. The four pillars of the strategy address the spectrum of possible military operations:

- *Assuring allies and friends* of the United States' steadiness of purpose and its capability to fulfill its security commitments;
- *Dissuading adversaries* from undertaking programs or operations that could threaten US interests or those of our allies and friends;
- *Deterring aggression* and coercion forward in four critical regions (Northeast Asia, the East Asian littoral, the Middle East/SWA, and Europe) by maintaining forward forces capable of swiftly defeating attacks with minimal external reinforcement and imposing severe penalties for aggression on an adversary's military capability and supporting infrastructure;
- *Decisively defeating any adversary* if deterrence fails.

[2] *The National Security Strategy of the United States of America, September 2002, pgs 14-15*

New Defense Strategy Force Sizing Construct

In the 1993 Bottom-Up Review, the Services were directed to size and shape their forces to win two Major Theater Wars (MTWs) nearly simultaneously. Other missions, including overseas presence, smaller-scale contingencies, and sustaining deterrence, were assumed to be lesser-included requirements. Over the last decade, high operational and personnel tempos, shortfalls of critical forces, and reduced strategic agility to meet multiple real-world operations, clearly illustrated the limits of this "two MTW" assumption. As a result of QDR 2001, the new Defense Strategy defined a 1-4-2-1 construct that directs the Air Force to size and shape its forces to:

- Defend the United States;
- Deter aggression and coercion forward in four critical regions;
- Swiftly defeat aggression in overlapping major conflicts while preserving for the President the option to call for a decisive victory in one of those conflicts - including the possibility of regime change or occupation;
- Conduct a limited number of smaller-scale contingency operations;
- Concurrently, the DoD will maintain sufficient force generation capability and a strategic reserve to mitigate risks.

Figure 1. Force Sizing Construct

The 1-4-2-1 force sizing construct depicted in Figure 1 places great stress on our force structure requirements. For the first time since the end of the Cold War, homeland defense is explicitly expressed as the Department's primary mission and *forces to defend the homeland are additive* to our other force requirements. Compared to the "two MTW" strategy to *conduct two occupations/ regime changes* nearly simultaneously, the 1-4-2-1 construct directs the Services to provide capabilities to support *two overlapping "swiftly defeats"* with the option to *win decisively in one* of those conflicts. Additionally, the construct explicitly addresses post-Cold War rotational base issues by stressing the need to sustain rotational forward deterrence while continuing deployments limited to small-scale contingencies in critical regions concurrent with major combat operations. In total, Air Force requirements to support the new Defense Strategy, to include Homeland Defense, are more stressing in terms of personnel and operations tempo than the old "two MTW" construct.

The continuing challenge for Air Force planners is to develop the portfolio of capabilities to accomplish the Defense Strategy for a wide range of possible scenarios. Air Force strategic planners must ensure our nation is provided with the air and space forces needed to meet the demands of our strategy, now and in the future. Collaboration between warfighter and acquirer is vital to a robust strategic planning process, especially where materiel alternatives

are concerned. Furthermore, Air Force planning documents must address enabling technologies in developing innovative concepts of operation and organizational structures.

Required Action

In support of BRAC 05 and QDR 06, AF/XP, AF/XO, and SAF/AQ, in conjunction with other Deputy Chiefs of Staff and MAJCOMs as appropriate, will collaboratively lead an effort to define:

- Current AF force structure capability to meet Defense Strategy requirements, including capabilities for Air Defense Levels 1-5, missile defense, and rotational base requirements; OPR: AF/XO, XP
- Mid- to far-term AF force structure projections in terms of AEFs baselined on the current program; OPR: AF/XP
- Mid- to far-term AF alternative capabilities and force structures that incorporate promising future concepts and technologies to meet future challenges. These alternatives will address our most likely funding constraints, and seek to optimize potential investments in: OPR: AF/XP, XI
    - Force Structure Mix—manned aircraft/UCAVs, long-, short-range and persistent strike capabilities, new and legacy Service Life Extension Programs (SLEP), missile defense, counterair, and potential space-based systems;
    - ISR and C4 Enabling Capabilities—space-based/airborne and manned/unmanned platform mixes;
    - Advanced Munitions—smart, stealth, range/time dynamics, and directed energy options;
    - Mobility (including combat support and spacelift);
    - Special operations capabilities;
    - Infrastructure capabilities.

AIR FORCE CAPABILITY-BASED PLANNING, PROGRAMMING AND BUDGETING PROCESS

In the QDR 2001 Report, Secretary Rumsfeld directed the Department to transform to a "capabilities-based approach" for defining DoD current and future defense requirements:

> "A capabilities-based model—one that focuses more on how an adversary might fight than who the adversary might be and where the war might occur—broadens the strategic perspective. It requires identifying capabilities that US military forces will need to deter and defeat adversaries who will rely on surprise, deception, and asymmetric warfare to achieve their objectives."[3]

Each of the Services and the Joint Staff are conducting aggressive efforts to establish internal processes using joint integrated architectures as a tool for capability-based planning and programming. The Air Force recognized early the need to adopt a fundamentally different capabilities-based means for planning, programming and budgeting for the future, and has been working since the mid-1990s to embed its principles in our Planning, Programming, Budgeting and Execution (PPBE) process.

USAF Capabilities-Based Planning, Programming and Budgeting Process

The key to the new process is using architectures to develop a capabilities-based linkage between planning, programming, budgeting, and budget execution decisions and performance evaluations/assessments. This process will flow from our vision to military strategy and effects, to concepts, to capabilities, to requirements and then to programs, with CONOPS as the primary driver of capability requirements. As illustrated in Figure 2, *the vital engine that drives this process is concepts of operation*—how airmen intend to operate to best meet our enduring missions.

This new CONOPS-focused approach provides a link between strategy and programs by thinking through how we will fight in the joint battlespace and what capabilities are necessary for military operations. Effects-based operations achieved through a capabilities-based planning and programming process and performance-based budgeting allows continuous assessment of shortfalls, gaps and opportunities. CONOPS-driven capabilities will allow the Air Force to guide its planning, programming and budgeting priorities to address capability shortfalls. In other words, by emphasizing CONOPS, the Air Force is shifting its emphasis from programs and platforms to battlefield effects and

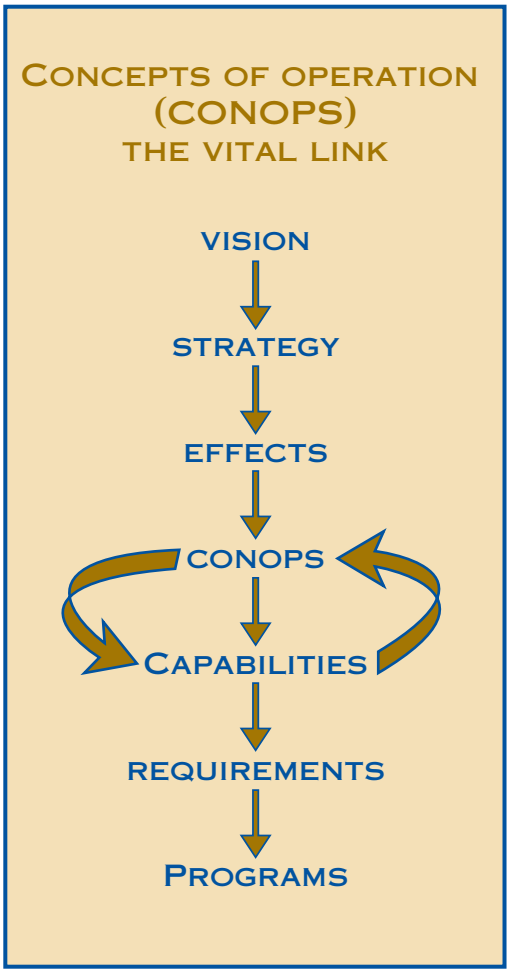

Figure 2. Capability-based Planning, Programming, and Budgeting Linkages

[3] *Quadrennial Defense Review, September 2001, page iv*

concepts of operations that emphasize how we will fight in joint and future combat operations within a joint integrated architecture. Current CONOPS requirements impact USAF planning, programming and budgeting decisions for the near-term, while potential new CONOPS will provide a guide for future planning. Figure 3 depicts the Air Force's biennial, integrated capabilities-based planning and programming process:

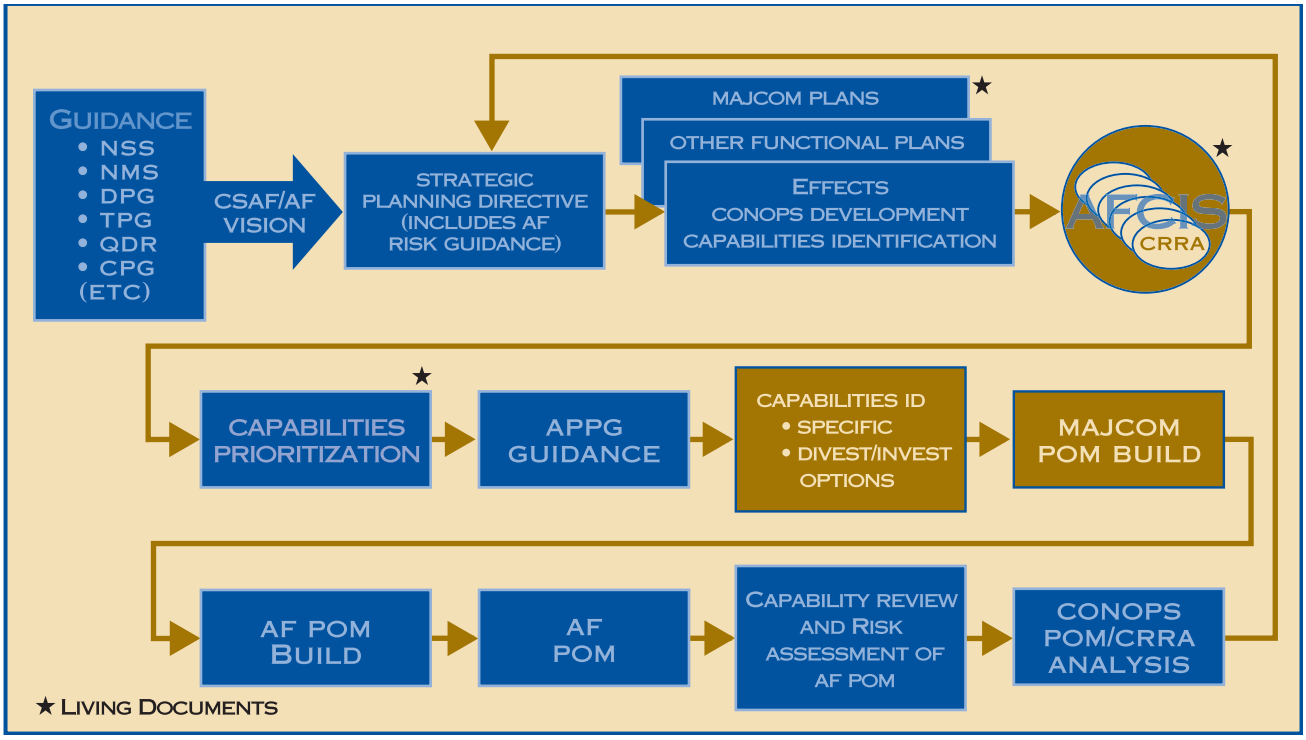

Figure 3. Integrated Capabilities-based Planning and Programming Process

Although the POM process is based on a two-year cycle, Capabilities Review and Risk Assessment (CRRA) is a continuous assessment with integrated CRRA updates to AF leadership twice per year. While Figure 3 depicts a linear flow of events, there are many supporting systems, including science and technology, acquisition, personnel, financial management, and infrastructure processes that influence each of the key steps. Contributing to the process illustrated in Figure 3 is the warfighting integration function performed by the DCS for Warfighting Integration (AF/XI) that, from a C4ISR perspective, identifies overlaps, redundancies, gaps and deficiencies in capabilities leading to informed resource allocation decisions and implementation of architecture development. The integration function will also review and analyze all POM inputs and provide an assessment of cross-functional initiatives to achieving desired capabilities. The challenge to Air Force planners and programmers over the next several years is to complete the transition to a capabilities-based process to ensure the Air Force will continue to meet the needs of our Defense Strategy through a defined set of Air Force operational

concepts. In summary, the Air Force defines capability-based planning and programming as:

> An approach where the focus is to identify a prioritized, integrated, and optimized set of air and space capabilities, including required support, that provide for specific effects. This set of effects-based capabilities is in turn tied to distinct, prioritized planning and programming actions that balance risk across the spectrum of military operations.

Supporting this approach is a series of guidance documents to include the *Air Force Transformation Flight Plan* and the *Air Force Capabilities Investment Strategy* (AFCIS). The *Transformation Flight Plan* responds to OSD's *Transformation Planning Guidance* (TPG) that provides transformation strategy and directs the Services to prepare transformation roadmaps. The roadmaps specify capabilities required by joint concepts and will also be used to guide POM development. The AFCIS, further described in Appendix A, will assist this effort by providing a fiscally constrained, executable, investment projection of force structure and associated manpower, operations and maintenance (O&M), and infrastructure support over three Future Year Defense Plans (FYDP).

There are many tools and processes being developed at various levels of the Air Force (see Appendix B for more information) that will underwrite the analysis necessary for informed resource allocation decisions. The Enhanced Tradespace Tool (ETT) represents one of a collective suite of tools developed to support capabilities-based planning and programming. The ETT uses corporately approved data from AFCIS development to reveal the impact of real-time resource changes to future forces. Future editions of this *Directive* will highlight complementary tools.

While this *Directive* complements, but does not replicate, other current Air Force and higher guidance documents, the collection of products and processes involved in the Air Force strategic planning process is captured in Air Force Policy Directive 90-11 series publications.

Required Action

The Air Force will use an effects- and capabilities-based planning and programming process to validate potential program change requests during the FY05 APOM cycle. The foundation for developing the Air Force POM for FY06-11 will be the capabilities required to support USAF CONOPS. OPR: AF/XO

AIR FORCE CONCEPTS OF OPERATIONS

The Air Force will develop CONOPS, described in the following pages, to identify those capabilities and functions necessary to linking our vision and strategy to programs. They are closely linked to the *critical operational objectives for transformation* directed by the Secretary of Defense in the Defense Planning Guidance and Transformation Planning Guidance.

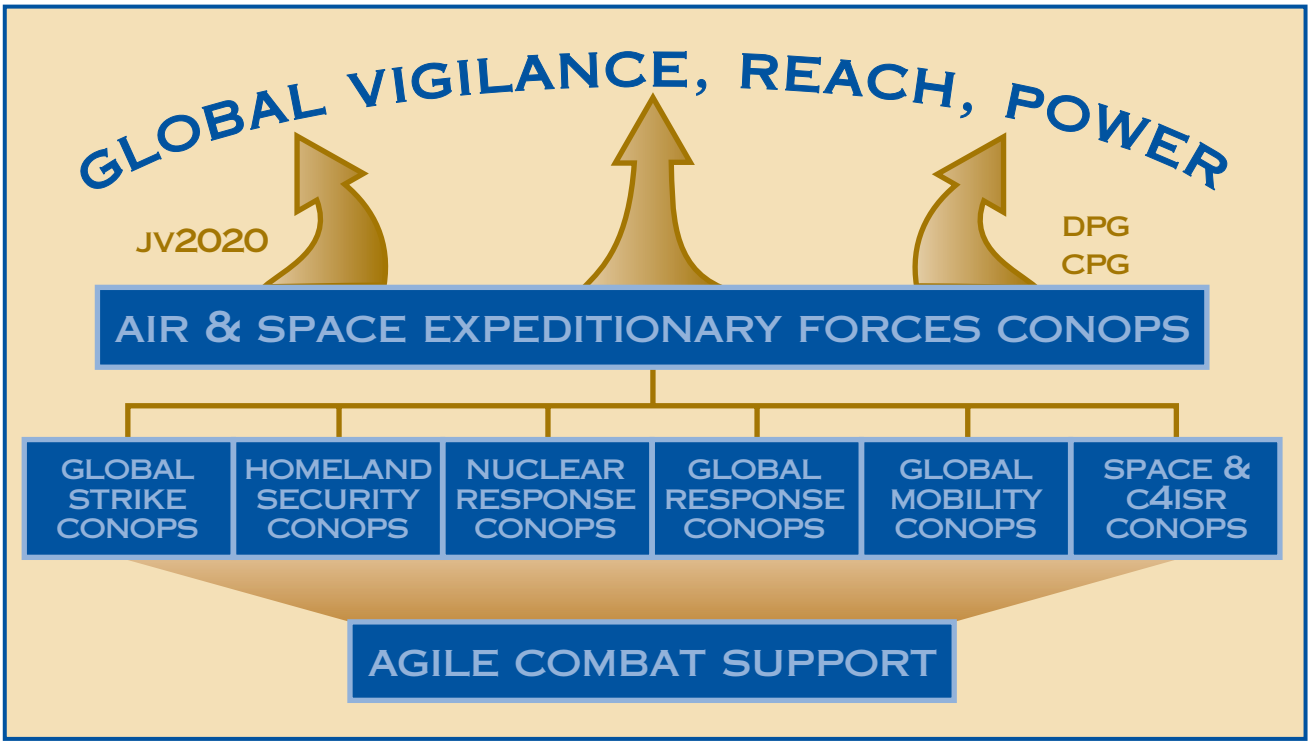

Figure 4. CONOPS Framework

Instead of starting with threats and developing systems to counter them individually, the Air Force is now concentrating on operating concepts necessary to achieve desired *effects* for joint warfighters and the capabilities necessary to produce those effects. These capabilities are derived through combinations of sub-capabilities provided by systems and systems-of-systems. As General Jumper has noted: "The CONOPS are designed to help us focus on the most probable missions our air and space forces will be tasked to perfom…the CONOPS…will reveal the capabilities we need to pursue in our plans and programs…and will help guide our tactical and operational level training as we develop the doctrine to deal with the scenarios we anticipate."[4]

DUAL PURPOSE

Developed and approved by Air Force MAJCOMs, the CONOPS explain current capability requirements and guide the development of future capabilities. However, the real innovation in this CONOPS-centered approach is their dual purpose. More than a

[4] *General John Jumper, Chief's Sight Picture, (Washington D.C.: HQ/USAF, October 22, 2002).*

guide to Air Force planning and programming, they also influence how we present air and space forces to the Combatant Commanders. The Air Force historically has "presented" platforms to commanders as part of joint task forces: forces deployed and tailored to meet Combatant Commanders' critical mission needs. Our CONOPS has shifted the Air Force's attention from programs and platforms onto effects and concepts of operations emphasizing *how we will fight in the future with other services and coalition partners.*[5]

Air Force CONOPS Champions

The CONOPS Champions, under the Director for Operational Capability Requirements (AF/XOR) are focal points and advocates for warfighting capabilities. The Champions' focus is on warfighting effects needed by Combatant Commanders vice specific platforms and systems. During the CRRA, the Champion will lead the assessment through a combined Air Staff/MAJCOM matrix organization. Champions will conduct an assessment of risk based on the current budget (POM or President's Budget [PB]), required capabilities from the CONOPS, inputs from the programmers, acquisition community, MAJCOMs, and other staff entities. A major input to the Champion is the Air Force's Strategic Vision, which guides the Champion and his organization's focus on where the USAF of the future needs to go in terms of capabilities. As issues arise, programs meet technical difficulties, or new challenges force a re-examination of priorities, the Champion will assist the programmers and acquisition community by describing the risks these new challenges present to warfighting capabilities. This close interaction, driven by the need to focus on capabilities instead of individual systems, will allow a fuller understanding of the problems as well as the potential solutions. Champions will assist the Air Force Corporate Structure to evaluate programs and their contribution to risk and seek out those programs that do not contribute to risk reduction. This *Directive* and the Annual Planning and Programming Guidance (APPG) will translate guidance from Air Force senior leadership during CRRA activities as direction to the MAJCOMs. Those programs will be sources for future investment in areas where we must reduce our capability risk by divesting from some and focusing our investment dollars in areas where we must reduce risk. This process will require a foundation of analysis that will take time to establish, but will feed many future activities.

Transition:

While CONOPS development is a work-in-progress, all Champions have the task of determining shortfalls in capabilities, assessing the risk of those shortfalls, and determining what measures may mitigate those risks. The Integration Champion will determine the methodology and process for *integrating* all CONOPS capabilities and *determining the priority for shortfalls* that should be mitigated in future budgets. The following sections provide a short description of

Required Actions

Air Force MAJCOMs will explicitly address CONOPS capabilities in their strategic plans, and identify prioritized programs to meet CONOPS shortfalls in their POM submissions. The Air Force Corporate Structure will assess POM submissions against CONOPS capability requirements.

AF/XO, working with the Deputy Chiefs of Staff and MAJCOMs as appropriate, will define the capabilities of current AEFs in terms of their ability to support scalable task forces (CONOPS) to meet Combatant Commanders' operational requirements.

[5] *General John P. Jumper, "Focusing on the Concept, Adapting to the Changing Force," Remarks at the Air Force Association National Convention Luncheon, Washington D.C., September 17, 2002.*

CONOPS objectives, desired effects, and key capabilities required to support Air Force operations. Capabilities development is a dynamic process and those capabilities identified in the following sections will likely change before the next publication.

Refer to **https://www.xo.hq.af.mil/xor/taskforce/icrraslides.htm** for current information on CONOPS capabilities. Additionally, functional communities may develop functional CONOPS enabling the Air Force CONOPS and assisting in functional capability prioritization.

Air and Space Expeditionary Forces (AEF) CONOPS (Air Force Lead: DCS/Air & Space Operations)

Objectives and Desired Effects

The AEF CONOPS provides the overarching framework for USAF CONOPS, explaining how the Air Force provides commanders with war-ready, capabilities-focused forces. The CONOPS describes how those capabilities and force packages should be tailored and sequenced so that commanders not only get forces, but also receive the *right forces in the right order at the right time* to accomplish their mission. Through the use of consistent and effective risk management decision making, the AEF CONOPS seeks to achieve the following effects:

- Freedom to attack and freedom from attack;
- Persistent, precise, lethal and non-lethal engagement in hours or minutes;
- Information dominance;
- Indefinite presence over an adversary;
- Timely movement, positioning, and sustainment of forces;
- Highly responsive force support;
- Integrated manned and unmanned air & space operations;
- Trained, motivated, and ready warriors;
- Adaptive, integrated technology-to-warfighter acquisition/ modernization processes;
- New and innovative operating concepts and capabilities development;
- Provide essential support services to warriors and their dependents so they can perform their mission;

- Cost effective support to maintain legacy weapon system platforms;
- Fit and healthy warriors.

Capabilities

The AEF CONOPS addresses all distinctive capabilities that air and space power provides the joint warfighter. These include air and space superiority; information superiority; global attack; precision engagement; rapid global mobility; and agile combat support.

Challenges

The Defense Strategy stresses the need to ensure an appropriate mix of transformational capabilities is pursued to deter forward in the four critical regions and to support potential "swiftly defeat" operations. USAF AEFs represent the core of our deployable combat power. Currently, our 10 AEFs are not capable of fielding the same capabilities. For example, only three of the AEFs have precision stand-off strike capability, and nine have an organic Suppression of Enemy Air Defenses (SEAD) capability. This can lead to an increase in out-of-cycle taskings for Air Force people to meet Combatant Commanders' operational requirements, increasing the strain on our force. Additionally, we are concerned about the rising cost associated with aging aircraft: the average age in today's Air Force fleet is 23 years and will continue to rise at an unprecedented rate. The ability to test and train is fundamental to the establishment and sustainment of capabilities, but encroachment issues are adversely impacting this ability. All capabilities and effects delivered under this and all other CONOPS depend on having the right systems, equipment, personnel, testing, and training at the right place at the right time. A broadly integrated resource and risk management approach is needed to ensure the critical integration objectives are adequately addressed.

Required Action

AF/XO, working with AF/XP, SAF/AQ, and other Deputy Chiefs of Staff and MAJCOMs as appropriate, will define force structure objectives that will ensure Air Force AEFs are each fully- and equally-capable by 2020. These capability objectives will be documented in the Air Force Capability Investment Strategy, in addition to potential capability tradeoffs and opportunities.

Global Mobility (GM) CONOPS (Air Force Lead: Air Mobility Command [AMC])

Objectives and Desired Effects

The GM CONOPS provides the necessary planning, command and control, and operations capabilities to enable rapid, timely, and effective projection, employment, and sustainment of US military power in support of our nation's global interests. The GM CONOPS seeks to achieve the desired effects of: a) the rapid projection and application of joint US military power; b) assured ability to establish air operations anywhere, in minimum time; and c) integrated and responsive air and space mobility operations.

Required Action

AMC, working with the AF/XO, AF/XP, SAF/AQ and other Air Force organizations as appropriate, will develop an air refueling modernization roadmap through 2020 for CSAF and SecAF review. The roadmap will address fleet aging, fuel transfer capability and projected requirements, and other potential capability alternatives, including data links and C4ISR capabilities.

Capabilities

The GM CONOPS provides joint capabilities that span the spectrum of military operations:

- Global command and control for integrated planning and execution;
- Mobility operations—airlift, air refueling, global access, survivability, aeromedical evacuation;
- Space lift—launch and on-orbit support; and
- Base opening—air base assessment, expeditionary command and control, force protection, expeditionary airfield operations, and expeditionary force reception and beddown to enable sustained operations.

Challenges

Recapitalization and modernization of GM CONOPS capabilities while supporting current aging systems is one of the highest priorities of the Air Force. One of our most pressing needs is to support the joint objective of 54.5 million ton miles per day (minimum moderate risk capability) in airlift. Additionally, our aerial refueling force is an increasingly critical joint asset for joint mobility and force projection, particularly given the shift in our Defense Strategy towards deterring forward and "swiftly defeat" operations. We are increasingly concerned about the growing Air Force tanker fleet average age, since all KC-135s were procured within a few years of each other—roughly four decades ago. The high operational tempo at which the Department has employed these systems, combined with the effects of aging, has reduced mission capable rates.

One of the challenges facing our spacelift capability is ensuring access to space as the Air Force transitions from our legacy launch platforms to the Evolved Expendable Launch Vehicle (EELV). A particular focus is maintaining the viability of the EELV launch providers during a current depressed commercial launch environment. Additionally, developing an operationally responsive spacelift capability is a priority into the next decade. The assured ability to rapidly open and initiate operations has historically been accomplished on an ad hoc basis. The GM CONOPS establishes specific tailored capabilities to perform this vital function consistently, in a timely manner, and across a wider range of conditions.

Mobility Air Forces (MAF) require seamless collaborative planning, dynamic command and control for synchronized operations, and real-time retasking capabilities. Additionally, MAF requires global connectivity with MAF forces, as well as interoperability with Combat Air Forces, Coalition forces, and Air Traffic Management. Current systems and communications capabilities fall short in providing the necessary interfaces and connectivity (secure and non-secure voice, video, and data) to meet future demands.

Space & Command, Control, Communications, Computers, Intelligence, Surveillance, & Reconnaissance (Space & C4ISR) CONOPS

(Air Force Lead: Air Force Space Command)

Objectives and Desired Effects

The purpose of the Space & C4ISR CONOPS is to identify required capabilities so that the Air Force, working with joint Space & C4ISR systems, can achieve the right mix of assets to synchronize/orchestrate the execution of campaign plans at all levels of conflict and operational environments. This CONOPS will enable the development of advanced Space, Command and Control (C2) Battle Management, ISR, and Command, Control, Communications, Computers, & Intelligence (C4I) systems to conduct Predictive Battlespace Awareness (PBA), facilitate precision attack, and compress the kill chain and air and space integration. Desired effects include:

- Deter and dissuade through persistent and deployable forces that can detect, track and positively identify all potential surface, ground, air and space targets;
- Respond rapidly to emergent global targets/events anywhere;
- Enable seamless Command, Control, & Communications (C3) connectivity at all distances and levels of command in the face of any opposition;
- Deliver timely, actionable information to effectively direct forces; and
- Execute operations by conducting distributed, dynamic battle management, control and deconfliction.

Capabilities

The following list of capabilities is crosscutting. They are required by the majority of the other Air Force CONOPS as explained in detail in the Space & C4ISR CONOPS White Paper:

- Provide the right information to the right decision-maker, at the right time, in actionable format;
- Locate, identify, track and observe friendly, enemy, non-friendly and non-aligned forces/actors anywhere/anytime in near real-time;
- Assess global conditions and events;

Required Action

AF/XO, working with SAF/AQ, AF/XI, and the MAJCOMs will develop a master plan for CSAF and SECAF review to achieve the horizontal integration of manned, unmanned, space, and information systems to provide decision-quality knowledge to joint commander in near-real-time.

- Establish and maintain battlespace situation awareness;
- Attack and defend in the infosphere;
- Perform counterspace;
- Apply non-nuclear deterrence/strike from, through and to space;
- Generate and provide supporting information services;
- Provide dynamic battle management;
- Operate information systems and protect information, share data and information with all appropriate people and machines at any desired place and time;
- Provide mission support and sustainment for Space and C4ISR forces;
- Deceive or defeat ISR capabilities in the physical environment;
- Share data and information with all appropriate people and machines at any desired place and time;
- Destroy strategic and tactical missiles, reentry vehicles and targets;
- Use appropriate C4ISR assets to take lethal action;
- Deploy and employ Space and C4ISR elements to forward locations;
- Exercise Space and C4ISR capabilities.

Challenges

Modern space and C4ISR capabilities must enable seamless air and space integration while transitioning joint forces from peacetime to operations along the full spectrum of conflict. Fully integrated systems will provide future warfighters, at all levels of command and execution, with information they require on the constantly changing battlespace to conduct effective operations.

Homeland Security (HLS) CONOPS (Air Force Lead: Air Combat Command [ACC])

Objectives and Desired Effects

The HLS CONOPS addresses three primary areas: a) defending the homeland through air and space power in an interagency environment within legal and resource constraints; b) responding to requests for assistance from local, state, and Lead Federal Agencies (LFA) without compromising combat mission capabilities; and c) preserving the Air Force's ability to project forces overseas in a

terrorist threat environment. The National Strategy for Homeland Security defines HLS as: "a concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur."[6] Therefore, the Air Force defines the mission area for this CONOPS as the territories of the United States and its littoral waters out to 500 nautical miles (NM). Accordingly, the Air Force will develop the capabilities required to achieve the following desired effects:

- Prevent—deter, detect, predict, preempt;
- Protect—defend against attacks, secure infrastructure;
- Respond—provide forces to reduce effects of natural or man made disasters in support of LFAs.

Capabilities

The Concept of Operations for Air Force Homeland Security White Paper, released September 2002, described in detail the capabilities summarized below:

- Conduct counterair operations;
- Conduct mobility operations;
- Perform information warfare activities;
- Support LFAs in crisis and consequence management;
- Conduct counter nuclear, biological, and chemical (NBC) operations;
- Perform force protection activities;
- Exercise authority and direction over assigned/attached forces;
- Perform information-in-warfare activities.

Challenges

Based on its large perimeter, porous borders, and societal emphasis on freedom of travel, the US remains vulnerable to asymmetric attack. As a result, the Air Force must be prepared to contribute to HLS across the spectrum—whether facing specific weapons (chemical, biological, radiological, nuclear, high explosives) or non-kinetic cyber and psychological attacks. More significantly, the domestic character of the HLS mission connotes that force employment, especially ISR, must occur within the guidelines set forth by law.

Required Action

ACC, working with AF/XO, AF/XP, and other AF, joint, and interagency organizations as appropriate, will identify required Air Force capabilities to support the National Strategy for HLS objectives of: preventing terrorist attacks within the US; reducing vulnerability to terrorism; and minimizing the damage and recovering from attacks on the US that do occur.

[6] *The National Strategy for Homeland Security, July 2002, pg 2.*

Global Strike (GS) CONOPS (Air Force Lead: Air Combat Command)

Required Action

ACC, working with AF/XO, AF/XI, AFSPC, Air Force organizations, other Service organizations, and JFCOM as appropriate will develop new joint operational concepts for defeating adversary anti-access strategies. These concepts should address capabilities to defeat the full range of anti-access threats, joint force sequencing, and potential reductions to first-deployer footprints.

Objectives and Desired Effects

The GS CONOPS provides the "high end" of Air Force combat capability that will allow joint commanders to employ all power-projection forces to counter adversary anti-access systems while simultaneously holding critical targets at risk. The CONOPS provides key capabilities in support of our Defense Strategy by assuring our allies, deterring and dissuading potential adversaries from challenging US forces and, if required, decisively defeating our nation's enemies. Desired effects include the ability to:

- Gain access to battlespace globally;
- Neutralize anti-access systems enabling follow-on forces to deploy in the battlespace;
- Exploit, neutralize, disrupt, and/or destroy an adversary's key, high-value capabilities and centers of gravity in the opening stages of a crisis.

Capabilities

The CONOPS addresses concerns primarily in the following areas: C2 elements; ISR; global posturing and response; and attack operations.

- *C4ISR:* Gain an understanding of potential enemy actions through PBA, provide layered ISR coverage (Special Operations Forces [SOF], space, air), and a robust, distributed capability for deployed and over-the-horizon C2 provided by Space and C4ISR CONOPS;
- *Deployment, Basing, Sustainment:* Support employment from both CONUS and forward/austere basing while reducing the requirement for a large US footprint; provide force protection against asymmetric and CBRNE threats;
- *Attack Operations:* Capability to independently locate, track, and engage through kinetic/non-kinetic means a wide variety of fixed and mobile targets; accomplish time sensitive targeting; survive against advanced threats and provide first look/shot/kill against advanced defenses.

Challenges

The Army, Navy, Marine Corps, and joint community are developing new operational concepts for defeating anti-access threats, one of the Secretary of Defense's (SECDEF) critical operational goals for transformation. The key to achieving the Secretary's goal is to ensure that joint anti-access operational concepts provide the Combatant Commanders with capabilities

that are integrated, complementary, and properly sequenced to achieve desired effects.

Global Response (GR)[7] CONOPS (Air Force Lead: Air Combat Command)

Objectives and Desired Effects

The overarching objective of the GR CONOPS is to provide the nation with capabilities to rapidly attack fleeting or emergent high-value and high-risk targets by applying air and space power precisely during a narrow window of opportunity. At the President's direction, tailored Global Response forces will strike single or multiple targets, without warning, anywhere on the globe within hours. GR forces can operate independently or with other joint forces, and can be equipped to strike with kinetic or non-kinetic assets. Desired effects include the potential to exploit, neutralize, disrupt, and degrade state and non-state leadership elements; CBRNE capabilities; theater ballistic and cruise missile capabilities; and counter-narcotics targets.

Capabilities

The following capabilities are key to ensuring Global Response forces are able to respond rapidly and with precision against emerging targets anywhere on the globe, achieving decisive effects through the swift employment of air and space power:

- *Agile command and control;*
- *Decision Dominance*—the ability to find fleeting or emergent targets and create actionable intelligence;
- *Global Posturing and Response*—the capability to employ a combination of forward-based rotational forces, crisis deployed forces and CONUS based capabilities;
- *Attack Operations*—provide tailored, highly responsive capabilities, to rapidly engage emerging targets.

Challenges

GR forces' ability to respond globally on very short notice requires the capability to employ a combination of forward-based rotational forces, crisis deployed, and CONUS-based capabilities. The posturing of these capabilities will be key to their responsiveness; GR forces must be poised to respond, especially when emergent targets provide the opportunity to preemptively destroy critical infrastructure, capabilities or leadership. US force posture must be commensurate with, and geographically tailored to, potential GR CONOPS operations.

Required Action

AF/XO, working with USAFE, PACAF, AFSPC, ACC, AF/XP, AF/IL, SAF/AQ, and other Air Force and Joint organizations as appropriate, will develop a long-term (through 2020) USAF overseas posture plan. The plan will address:

- Regional trends affecting US military access;
- New concepts for regional presence;
- Capabilities required to support forward deterrence/swiftly defeat operations in each of the four critical regions; and
- Potential options for future changes to the Air Force's overseas posture.

[7] *Global Persistent Attack will replace Global Response in name and focus. Check CONOPS Champion website (https://www.xo.hq.af.mil/xor/taskforce/icrraslides.htm) for updated information.*

Nuclear Response (NR) CONOPS (Air Force Lead: Air Combat Command)

Objectives and Desired Effects

The NR CONOPS will provide a credible deterrent umbrella under which conventional forces operate and, if deterrence fails, strike a wide variety of high-value targets with a highly reliable, responsive and lethal nuclear force. Air Force Space Command, as the Component Command to US Strategic Command, is a key participant in implementing NR CONOPS responsibilities. Desired effects include:

- Freedom for US and Allied forces to operate, employ, and engage at will;
- Elimination of an adversary's incentives and options to initiate hostile actions;
- Immediate response to inflict damage unacceptable to the adversary.

Capabilities

- Nuclear Attack: rapid, flexible and precise;
- C4ISR: prompt, secure, survivable, flexible;
- Responsive nuclear attack support (to include security, planning, and infrastructure).

Challenges

Classification issues preclude complete development of this section and more expansive details on required capabilities. The reader can find further details on the NR CONOPS on the SIPRNET at: **https://www.afxo.pentagon.smil.mil/xox/xoxs/conops/csafconops.htm.**

AGILE COMBAT SUPPORT (ACS) AND INFRASTRUCTURE INITIATIVES

DCS/Installations and Logistics is the Air Staff advocate for Agile Combat Support and Infrastructure and must ensure our support forces, infrastructure, technology and processes fully support the full range of Air Force missions. HQ ACC/DR is the Air Force lead command organization for combat support modernization planning—responsible for identifying the full range of modernization initiatives across MAJCOMs and functional areas to achieve desired warfighting effects across CONOPS and mission areas. Agile Combat Support integrates key personnel, infrastructure, communications, information and logistics concepts under a common policy, process and organizational framework. Right-sized forces and infrastructure are critical—not only to effectively focus our people and resources on providing responsive support to global operations, but to ensure quality of life for our personnel.

ACS Objectives and Desired Effects

ACS focuses our development efforts and serves as a compass for the alignment and convergence of policy, process, organizational, and programmatic investments needed to achieve desired end states. The underlying ACS theme is the systemic processes of *readying the force, preparing the battlespace, positioning the force, employing the force, sustaining the force, and recovering the force.* ACS is cross-functional and drives planning, executing, monitoring, and assessing processes at all Air Force echelons while producing the following effects:

- *Ready Forces:* smart assessment and selection, physically and mentally fit, organized, trained, and equipped in accordance with a systemic development and investment plan for human combatant enhancement to produce combat capability across the range of military operations;
- *Prepared Battlespace:* globally assessed environment, planned basing, and postured forces and materiel for employment in specific mission scenarios;
- *Positioned Forces:* located for required response timing, assembled in modular-scalable capabilities, sequenced in prioritized increments, and based to provide effective mission support;
- *Employed Forces:* engaged in launch and/or strike operations, Humanitarian Relief Operations/Non-combatant Evacuation Operations (HUMRO/NEO), and right-sized for generation and regeneration capacity;

- *Sustained Forces:* maintained by effective capacities of mission support for the duration of operations worldwide including force protection, beginning day one of force employment;
- *Recovered Forces:* relocated and renewed by precise redeployment/reconstitution actions.

ACS Capabilities

Air Force planners and programmers will focus on the following required capabilities as they transform ACS processes and develop ACS initiatives:

- Properly sized/organized units structured with functional competencies geared to accomplish assigned and anticipated tasks; manned and trained for skillful accomplishment of each task; and equipped with the latest technology and appropriate types and numbers of systems and materiel.
- Capability to rapidly open, maintain and enhance the physical infrastructure of an airbase, as necessary, to support the operational mission. Strategic basing should reduce unnecessary costs and improve operational efficiency.
- Capability to provide Security; Environmental; Safety; Occupational Health; Fire/Rescue; Explosive Ordnance Disposal (EOD); CBRNE defense (e.g., detection, identification, warning, area decontamination, recovery, etc.); and integrated full-spectrum threat response to natural and man-made disasters.
- Capability to provide efficiently sized, secure, reliable and robust global C4ISR and navigation in support of AEF requirements.
- Direct mission support elements that generate mission elements/equipment/vehicles; launch air missions; recover mission equipment; and regenerate mission elements and equipment repetitively.
- Capability to receive and beddown forces; assure full operating capability of supported mission elements; assure immediate lean forces support through the maximum use of reachback.
- Highly mobile, technologically superior, robust, responsive, flexible support elements fully integrated with operations.
- Integrated planning and execution; includes assessing, planning and initiating actions to control/manage ACS capabilities for supporting in-place and mobile forces.
- Capability to support expeditionary combat support through sufficient depot maintenance. Ensure Air Force weapon systems and equipment are safe and ready to operate across the whole spectrum of operations through innovative,

modern, technically superior and ready depot maintenance, repair, and overhaul operations.

- Efficient and effective base operating support (BOS) environment that enhances readiness and combat capability.
- Creating and maintaining a consistent, high quality, and safe environment in locations where AF people work, reside and recreate.
- Capability to provide preventive, primary and critical care for the population at risk; perform medical surveillance; advise on effects of weapons, environment, and operations on enemy and friendly forces; extend human capability; assist in rapid identification and hazard analysis of CBRN agents; and CBRNE casualty response.

Challenges

Meeting AEF challenges will require a fundamentally redesigned USAF support system that is lean, highly mobile, technologically superior, responsive and fully integrated with operations. Resourcing these ACS capabilities will also require structured change in investment and programming constructs to assure effects/ capabilities based support is consistent with operational need.

Innovative Concepts

To the maximum extent possible, USAF planners and programmers will use the following concepts defined below, employing the principles and practices of operational risk management, as they develop new ACS and infrastructure initiatives and organizational constructs:

- *Scalable, Modular Expeditionary Support:* Develop scalable and modular Unit Type Codes (UTCs) for all expeditionary support.
- *Quality Workplaces:* Ensure our Airmen have adequate work environments to effectively carry out their assigned duties. Developing base infrastructure initiatives and organizational constructs on customer-focused, value-driven (quality for the price) programs and services.
- *Quality of Life:* Provide adequate facilities and programs where we live and work to engender readiness and strong sense of community.
- *Consolidation and Divestiture of Facilities and Infrastructure:* Through consolidation of functions into existing facilities and divesting excess facilities, the Air Force will improve infrastructure operational efficiency. Right-size our installation inventory by realigning and closing bases to eliminate excess facility inventory.

Required Action

AF/IL, working through the ACS Executive Steering Group, and ACC/DR will develop a transformation roadmap that provides effective and efficient Combat Support for the Air Force Capability CONOPS.

- *Enterprise Information Management (EIM):* Establish an integrated environment that facilitates standardized, interoperable capabilities to deliver the right information, in the right form, at the right place, at the right time. Ensure communications and information assets are seamlessly integrated into operational missions.

- *Land Use Compatibility and Encroachment Management:* Partnering with local, state and Federal authorities to ensure the Air Force retains or secures land, water, airspace, and frequency spectrum interests necessary to support and protect our readiness capabilities while preserving the environment and precluding conflicts with the civil community over the use of these resources.

- *Infrastructure and Facilities Privatization, and Sourcing of Commercial Activities:* Promote resourcing (including communications/information) leverage through the strategic use of privatization and sourcing.

- *Implement Integrated Base Defense (IBD) as Part of Force Protection:* IBD improves defenders' integration with other security agencies, enables all Airmen to be defense "sensors" through training and technology, and enables defenders to respond, deter and defeat the enemy, through robust intelligence, training, and new technologies.

- *Streamline Facility Acquisition Process:* Through policy and legislative changes, adopt a more flexible facility acquisition process responsive to the commanders' needs.

- *Full Spectrum Threat Response (FSTR) and CBRNE Defense:* Institutionalize the principles of FSTR and CBRNE defense into all aspects of ACS at home and deployed. Goal is to make these essential war skills an integral part of all Air Force Specialty Codes' (AFSC) development and to provide the resources necessary to accomplish these foundational missions.

- *Re-capitalize Infrastructure Every 67 Years:* To keep pace with a flexible Air Force, provide facility funding necessary to achieve a facility re-capitalization rate of 67 years.

AIR FORCE BUSINESS TRANSFORMATION

Implementing operational capabilities through development and delivery of transformational combat forces and systems demands equal flexibility and agility in the conduct of our daily business operations: personnel (human resource), finance, logistics, and information technology. If we are to keep pace with and support innovation in the methods and modes of air and space warfare, we must break out of Industrial Age business processes and embrace Information Age thinking. This culture change will assist transforming business operations into a more financially savvy and modern model.

We envision a world in which our combat forces move quickly to decisively defeat new and emerging threats to our national interests. A responsive, agile, flexible, horizontally integrated business environment must keep pace with operational, organizational, and technology changes. It must encourage innovation, empower employees, and maximize resources (people, time, money, material). Support staffs must be aware of and respond to the needs of their customer, the warfighter. We must aim to eliminate defects and redundancies, time and money-consuming layers of oversight. The vision for the business operations infrastructure is a single enterprise, which embraces Information Age thinking and has a common goal of serving the warfighter's needs.

Our Air Force vision for the business operations of tomorrow is an enterprise architecture that closes the seams dividing our functional areas and capabilities today. Senior leaders must drive improvements of this magnitude through the critical phases of implementation.

To achieve this vision the Air Force is heavily involved with, and contributing considerable resources to, the DoD's Business Management Modernization Program (BMMP). The BMMP established in July 2001, by SECDEF, under the sponsorship of Under Secretary of Defense (Comptroller) Zakheim, is charged with the transformation of all DoD business activities. The BMMP vision statement is, "The Department of Defense will be managed in an efficient, business-like manner in which accurate, reliable, and timely financial information, affirmed by clean auditing opinions, is available on a routine basis to support informed decision-making at all levels throughout the Department."[8] However, the warfighter is still the key element—"…the business side of the Department exists for only one purpose: to support the warfighter, thus enabling the United States to have the best trained, best equipped fighting force in the world."[9] Secretary Rumsfeld has designated the BMMP to be one of his top ten priorities.

Required Action

AF-CIO, working with SAF/FM, HAF and MAJCOM staffs as appropriate, will identify inefficiencies in business and financial practices and develop a master plan to resolve these issues by Business Management Modernization Program implementation in 2008.

[8] *Financial Management Enterprise Architecture, Overview and Summary ver 4.9, 19 Mar 03, page 3.*

[9] *Financial Management Enterprise Architecture, Overview and Summary ver 4.9, 19 Mar 03, page 21.*

PERSONNEL PLANNING INITIATIVES

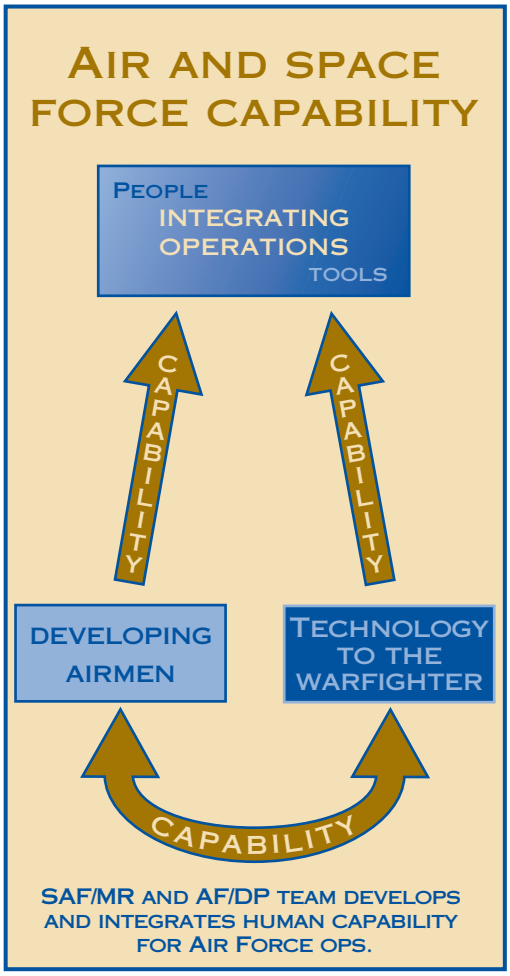

Figure 5. Human Capital.

REQUIRED ACTION

AF/DP WILL INITIATE A CAPABILITIES-BASED DETERMINATION OF MANPOWER REQUIREMENTS PROCESS BASED UPON THE AEF CONSTRUCT.

OBJECTIVES

People are *the* essential element required of every aspect of Air Force operations. The capability provided by Air Force people is so critical, our primary core competency—Developing Airmen—is defined by senior leadership as the heart of combat capability. Our force must be properly sized, trained, experienced, and motivated to meet every Air Force mission—now and in the future. The capability of Airmen—Active Duty, Reserve, Air National Guard—as well as our Civil Servants and commercial partners underpin each of the Air Force's capabilities. Only through the effective development of our Airmen and the seamless integration of their capabilities into Air Force operations can we optimize our projection of air and space power. This relationship is illustrated in Figure 5.

The capability of Air Force people, our human capital, is critical to achieving the Air Force's Strategic Planning Objectives and meeting the challenges of our new security environment. Our strategy for developing and integrating people and their capabilities focuses on a capabilities-based planning and programming process as part of a performance-based management system. The target is developing and integrating our people/force capabilities to meet operational requirements now and into the future. However, the Air Force must overcome the following challenges to fully achieve our objectives.

REQUIREMENTS DETERMINATION

Accurate identification of force-wide manpower requirements must be the solid foundation for the development of human capability that, when integrated with technology and operational plans, produces air and space power. Specific requirements must form the basis of personnel policy decisions throughout the entire spectrum of the Human Resource Life Cycle as they are combined in force development. These decisions ultimately affect the integration of human capabilities into the performance of AF operations. Several initiatives are currently underway to ensure future manpower determination processes accurately capture/document manpower requirements with defined capability, i.e., Capability Based Manpower Determinants, Stressed Career field formula and Personnel Load (PERSLOAD) accounting. These initiatives will help define the optimum baseline/mix for Active Duty, Reserve, Air Guard, AF civilian and commercial partners for achieving effective Total Force capability.

Constrained Resources

As end strength ceilings and fluid programming decisions contribute to constrain available resources, the process of developing human capability to meet requirements will require a risk-based analysis to determine where shortfalls should be taken. Planners and programmers must effectively assess risk factors to identify areas of greatest and least risk. Once risk factors are applied, planners and programmers can allocate available resources to those areas where risk of diminished capability is greatest. Implementing these initiatives will contribute to the Air Force's ability to acquire the right competencies it needs now and aid in developing those it will need in the future despite changing priorities/programs and workforce dynamics.

Force Development

Though the Air Force has always recognized the importance of training and development, efforts at linking training, education, and experience to produce required capabilities have been disconnected. Given that people, dollars and time available for training and development are all constrained, optimizing the Air Force's investment in its human capabilities, consistent with its mission and priorities, is critical. In light of current workforce demographics, particular attention must be focused on assuring

Required Action

All Air Force CONOPS must identify areas of assumed risk where resources are constrained. Planning and execution efforts should then be focused on applying resources to provide those capabilities where risk of diminished capability is greatest.

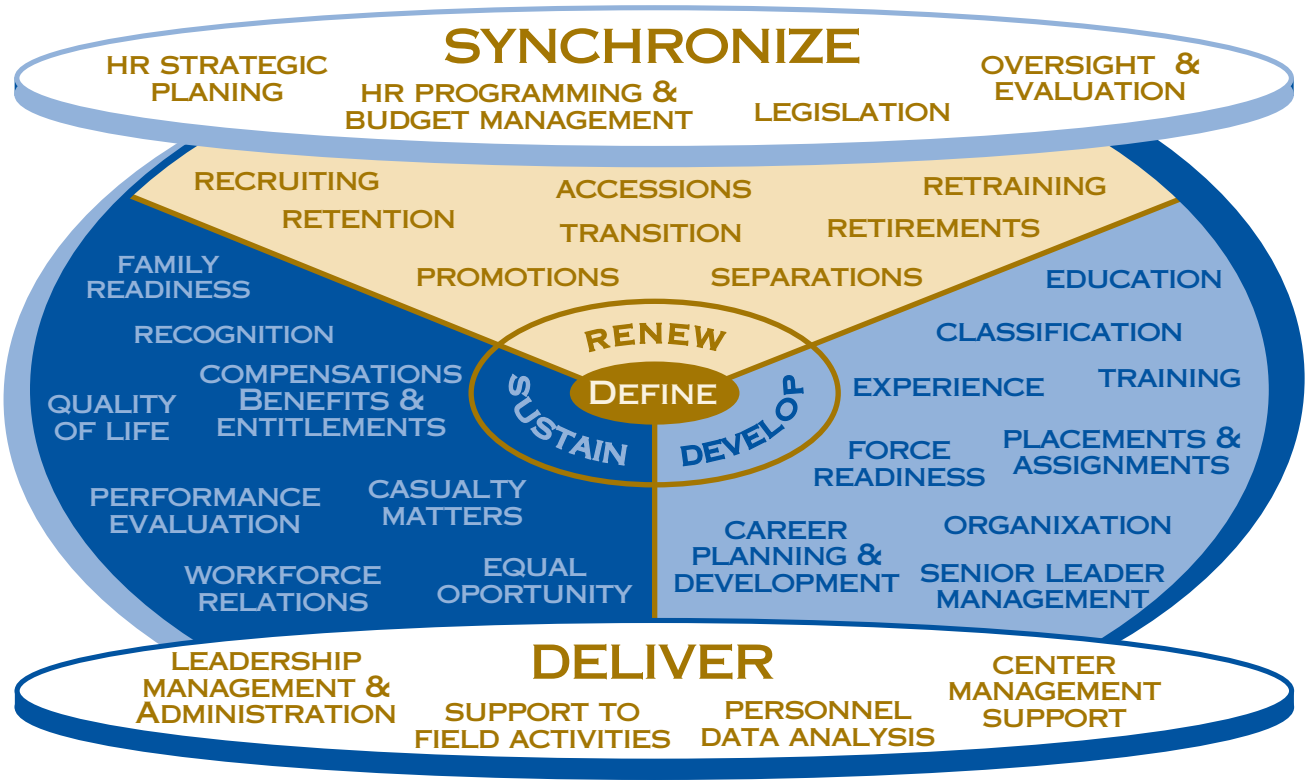

Figure 6. Force Development

Required Action

AF/DP, with support from AETC, will lead Force Development initiatives to ensure training and development programs build needed competencies, and include a process to ensure a more effective and targeted integration of training, education and experience. These initiatives will also produce an integrated, strategic training and development program that builds needed Air Force leadership competencies.

the Air Force captures and makes available the wealth of expertise and experience the current workforce possesses— as well as that which resides outside the Air Force in similar organizations— to aid in developing the next generation of Air Force leaders. Deliberate force development, depicted in Figure 6, of military and civilian leaders will be critical to continued success.

FUTURE TOTAL FORCE (FTF) INITIATIVES

The most effective mix of Air Force people—Active, Guard, Reserve, civilian, and contractor—is just as critical to our future as is the right distribution of fighters, bombers, and other platforms. Accordingly, the Air Force must explore innovative organizational concepts with the same enthusiasm as we do new operational concepts and technologies. For example, the "blended" Joint Surveillance Target Attack Radar System (JSTARS) unit at Robins AFB, ACC's fighter associate program, and AMC's Reserve Associate program are successes that the Air Force must continue to build on.

FTF Objectives

Air Force planners and programmers will focus on the following overarching objectives as they develop new FTF initiatives:

- Optimizing Active and Reserve Component integration at the operational level;
- Leveraging the unique strengths of each Air Force component;
- Increasing combat effectiveness while improving efficiencies and productivity;
- Retaining/conserving critical human resources.

Innovative Concepts

Air Force planners and programmers will consider the alternatives defined below as they develop new FTF initiatives and organizational constructs:

- *Reserve/Guard Associate Units:* Reserve Component personnel operationally support active component units. Potential application: Expand existing program into Low Density/High Demand (LD/HD) missions and "stressed" career fields to reduce personnel strains.
- *Active Associate Unit:* Active component personnel operationally support Reserve Component unit-equipped organizations. Potential application: Expand assignment opportunities to improve retention and improve unit experience.
- *Sponsored Reserve:* A contractual agreement between the military and private or public civilian organizations requiring membership in the reserve component as a condition of employment in that civilian business. Potential application: Expand Reserve Component capabilities that match civilian jobs with military positions to better capitalize on work-related experience.

Required Actions

Air Force planners and programmers working with ANG/XP, AFRC/XP, and AF/REX will develop and evaluate the following FTF initiatives and innovative organizational concepts with the potential to better leverage all USAF capabilities:

- Document lessons-learned and the benefits of recent FTF initiatives:
  - AF/XP will develop a summary briefing for CSAF review that assesses the JSTARS conversion and identifies lessons-learned to support potential future FTF "blended wing" initiatives; and
  - AF/XP will develop a report and briefing for AF/CV review that assesses the Nebraska ANG Associate Unit program at Offutt AFB, documenting the assistance provided in support of FTF initiatives in LD/HD mission areas.
- Develop the Sponsored Reserve concept: AF/XP will identify and develop,

in conjunction with the Human Capital Task Force Study, a briefing for AF/CV review that identifies potential Sponsored Reserve trial initiatives.

- Develop options to expand Associate Unit programs:
  - AFSPC will develop a briefing for AF/XP review that identifies proposals for the Reserve Component to assume additional space missions;
  - AMC will develop a briefing for AF/CV review to identify an Active Associate Unit initiative in either the tanker or strategic airlift mission areas; and
  - ACC will develop a briefing for AF/CV review proposing options to expand the Fighter Associate Program.
- Develop options to expand "Blended Wing" initiatives:
  - AMC will develop a briefing for AF Council review that estimates potential savings and efficiencies of converting Reserve Component Associate units to Blended Units; and
  - ACC will develop a briefing for AF/CV review that identifies options for blending and sizing Active and Reserve Component fighter squadrons to enhance absorption capability.

- *Blended Units:* Active Component/Reserve Component (AC/RC) resources combined into a single wing, group or squadron with the attendant employment categories—Active, Guard, Reserve and civilian. Potential application: Build on the strengths of each component to expand unit capability.

EXPANDING THE SCOPE OF AIR FORCE STRATEGIC PLANNING

Air Force planning and programming priorities should reflect the *National Security Strategy*, *Defense Strategy*, Combatant Commanders' needs, and USAF CONOPS requirements. A strategic plan that better communicates how current and future Air Force capabilities will support these priorities is more likely to receive broad support from our joint "stakeholders" and budget authorities.

An Open Process

During the 2001 QDR and development of the FY-04 Defense Planning Guidance, the Air Force worked closely with our service counterparts, Joint Staff, and Office of the Secretary of Defense to illustrate how the Air Force prioritized its planned capabilities, and how these capabilities support our joint "stakeholders" with air and space power. The end result of our cooperative and transparent process was reflected in FYDP resource allocation decisions, where the Air Force was provided with resources to support key joint and service transformation objectives. Our developing capabilities-based planning, programming and budgeting process is a major step towards institutionalizing this kind of transparency for our future PPBS activities.

Next Steps

Department of Defense transformation initiatives require continued support from the legislative branch in order to become reality. While Congressional support for Air Force planning priorities has consistently declined over the last two decades, in recent years it has begun to level out. Maintaining the trust and understanding of our Congressional partners will require continued, focused support from senior Air Force leaders, enabled by wholly sufficient information to enable fully-informed decisions.

A key to developing common planning priorities and successfully supporting the OSD staff, Joint Staff, service counterparts, Combatant Commanders, and Congressional staff members is to ensure the Air Force assigns the right people with the right skills to Air Force positions in these organizations.

Required Action

AF/DP and AF/XP, along with the ARC, will jointly develop a strategic plan for the deliberate development and placement of personnel from the FTF to fill critical Air Force, Joint, OSD, and Congressional staff positions that conduct and support defense related strategic planning.

APPENDIX A: AIR FORCE CAPABILITIES INVESTMENT STRATEGY

Overview

The Air Force Capabilities Investment Strategy (AFCIS) is a long-range, three FYDP, capabilities-based investment strategy. This strategy is based upon how our future adversaries might fight and what capabilities would be required to defend against, deter, and defeat those who rely upon surprise, deception and asymmetric warfare. The AFCIS is not a 17-year POM, but a basic projection outlining potential investment paths. AFCIS provides Systems Program Office (SPO)/Program Element Monitor (PEM) level of detail connecting the current programs to the future. It also provides planners and programmers with insights on potential investment "forks in the road," transformational technologies, and critical decisions that may occur within and beyond the POM period. The AFCIS reflects the priorities outlined in the Quadrennial Defense Review Report, Defense Planning Guidance, *National Security Strategy*, and the *Air Force Transformation Flight Plan.*

Capabilities

AFCIS has the ability to identify key funding streams that should remain stable, and to highlight upcoming fork-in-the-road decisions to recapitalize, modernize, or transform Air Force capabilities. It also provides insights into force structure options that optimize war-fighting ability under different future funding projections. Most importantly, it helps the Air Force to understand investment "trade-offs" for a variety of future scenarios, as well as to better understand the risks and opportunity costs of various alternatives. AFCIS is able to inform the development of Air Force planning and programming guidance to support operational concepts assessments by defining the priorities and timing for potential AF investment decisions and their capability "returns." AFCIS is able to take a view of the near-term based upon alternative views of the future and to eliminate the seam between the POM and the planning period. It also provides a foundation for developing POM baseline extension years.

Support for the CRRA Process

AFCIS will provide a starting point for the CRRA process. Following decisions from the Integrated CRRA, AF/XP will update AFCIS with newly vetted capability-to-program linkages. CONOPS Champions will ensure that all items required for the CONOPS are included in MAJCOM POM submissions as well as to the CRRA and the AFCIS.

Support to OSD

AFCIS data is used to support submissions to OSD for the annual development of the DoD Defense Program Projection as well as respond to data requirements of DoD Instruction 8260.2, *Implementation of Data Collection, Development, and Management for Strategic Analysis*.

Logistics

Developed and maintained by AF/XP, AFCIS will ultimately "reside" in the Information and Resource Support System (IRSS) database. IRSS will enable the link from programs to capabilities, providing Air Force planners and programmers with ready access to AFCIS data, financial data updates, force structure, new programs, and other information—all of which will be web-based on the SIPRNET.

APPENDIX B: USAF REAL-TIME PLANNING TOOLS

Required Action

AF/XP, with support from AF/XO, AF/XI, AFSAA, and MAJCOMs as appropriate, will continue to develop additional functionality for real-time tools to include system divestitures, fleet demographics, force sizing, basing infrastructure, and manpower modules.

Capabilities-based planning has become the central theme of defense planning. Another view of capabilities-based planning is that it is planning, under uncertainty, that provides capabilities and effects suitable for a wide range of current and future challenges while working within a fiscally constrained environment. To support completing the transition to capabilities-based planning, the Air Force will need a family or suite of real-time planning tools to underwrite the analysis necessary for informed resource allocation decisions. Dynamic planning tools will address the practical issue of how to approach capabilities-based planning analytically in a way that will best serve the needs of the Air Force and the nation.

Real-time planning tools will help address the issue of which should come first when thinking about capabilities, strategy or budget. While both are important, the answer is complex and requires the support of rigorous analysis. In a healthy planning process, planning tools will address the full range of concerns to identify and estimate how to deal with different types and degrees of risk. The tools will help unravel "How much is enough?" and impose discipline and responsibility for decisions.

One such planning tool is the Enhanced Tradespace Tool (ETT). It is interactive and designed to support Headquarters and MAJCOM planning processes. The ETT provides the analytical underpinning for capabilities-based funding decisions in a way that meaningfully balances our transformation mandate to be ready to meet today's operational demands with sustaining an Air Force that is capable, and relevant in the future. The ETT can help the Air Force maximize and focus the capability achieved through its investments by providing senior leaders with real-time decision-quality information on the outyear effects of current funding decisions. The illustration at Figure 7 depicts the flow from investment options to capability impact provided by the ETT.

While use of any specific real-time tool is not envisioned to be mandated, the real power of these applications is tradespace analysis to allow the CSAF/SECAF to establish priorities across capability areas. The tools should also provide insight into how to balance the demands of the current force with the need to evolve to a modernized and transformed force.

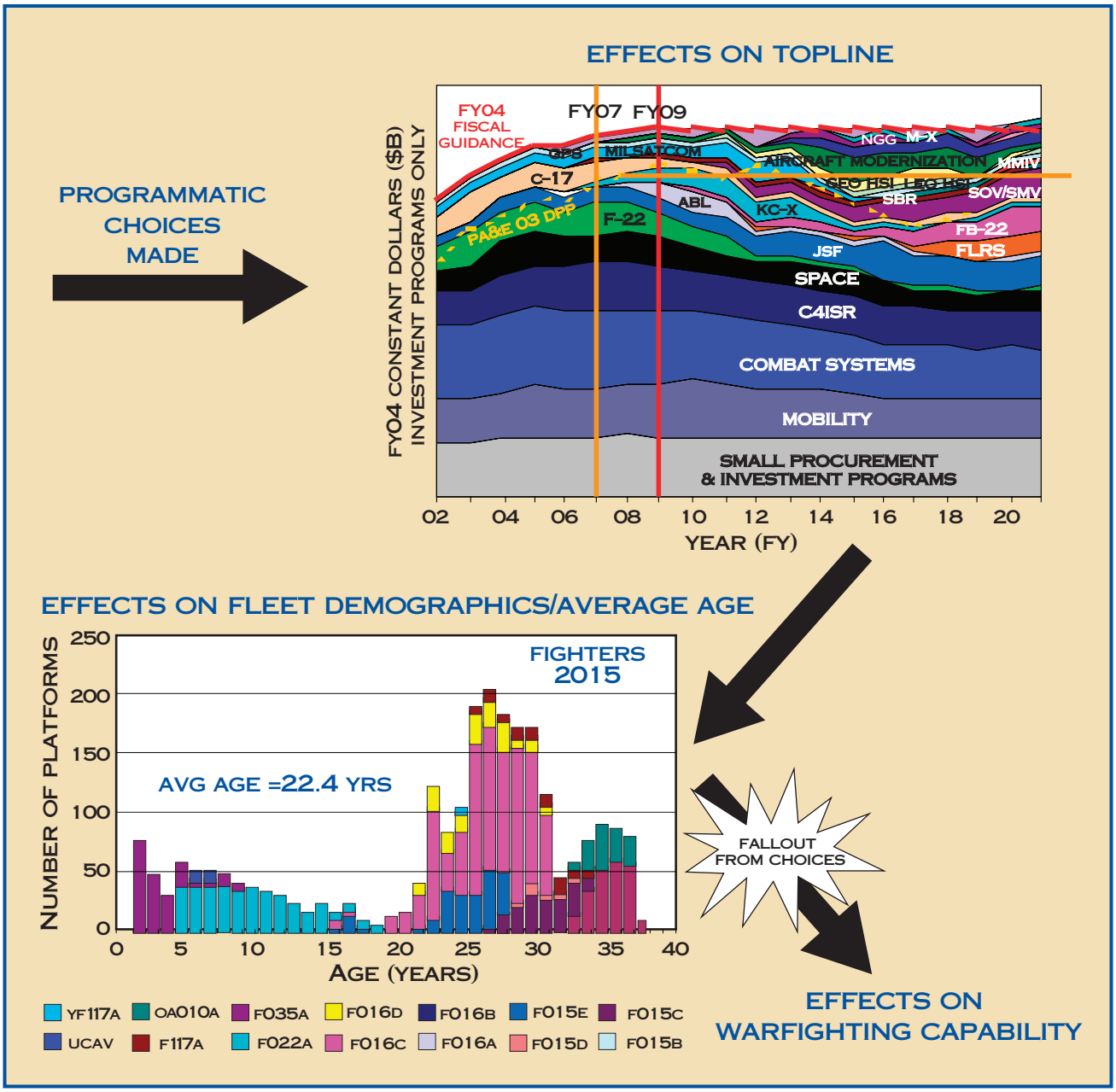

Figure 7. ETT Support to Air Force Investment

APPENDIX C: GLOSSARY & ACRONYMS

A

AC/RC	Active Component/Reserve Components
ACC	Air Combat Command
ACS	Agile Combat Support
AEF	Air and Space Expeditionary Forces
AF	Air Force
AF/CV	Vice Chief of Staff of the Air Force
AF/DP	Deputy Chief of Staff for Personnel
AF/IL	Deputy Chief of Staff for Installations and Logistics
AF/XO	Deputy Chief of Staff for Air and Space Operations
AF/XOR	Director for Operational Capability Requirements
AF/XOX	Director for Operational Plans and Joint Matters
AF/XP	Deputy Chief of Staff for Plans and Programs
AFB	Air Force Base
AFCIS	Air Force Capabilities Investment Strategy
AFRC	Air Force Reserve Command
AFSC	Air Force Specialty Code
AFSPC	Air Force Space Command
AMC	Air Mobility Command
ANG	Air National Guard
APOM	Amended Program Objective Memorandum
APPG	Annual Planning and Programming Guidance
ARC	Air Reserve Component

B

BEAR	Formerly Harvest BEAR
BMMP	Business Management Modernization Program
BOS	Base Operating Support
BRAC	Base Realignment and Closure

C

C3	Command, Control, and Communications
C4I	Command, Control, Communications, Computers and Intelligence
C4ISR	Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance
CBRN	Chemical, Biological, Radiological, and Nuclear
CBRNE	Chemical, Biological, Radiological, Nuclear and Enhanced High Explosive
CONOPS	Concept of Operations
CONUS	Continental United States
CPG	Contingency Planning Guidance
CRRA	Capability Review and Risk Assessment
CSAF	Chief of Staff of the Air Force

D

DoD	Department of Defense
DPG	Defense Planning Guidance

E

EELV	Evolved Expendable Launch Vehicle
EIM	Enterprise Information Management
EOD	Explosive Ordnance Disposal
ETT	Enhanced Tradespace Tool

F

FSTR	Full Spectrum Threat Response
FTF	Future Total Force
FY	Fiscal Year
FYDP	Future Years Defense Plan

G

GM	Global Mobility
GPS	Global Positioning System
GR	Global Response
GS	Global Strike
GWOT	Global War on Terrorism

H

HLS	Homeland Security
HR	Human Resources
HUMRO	Humanitarian Relief Operations

I

IBD	Integrated Base Defense
IRSS	Information and Resource Support System
ISR	Intelligence, Surveillance, and Reconnaissance

J

JFCOM	Joint Forces Command
JSTARS	Joint Surveillance Target Attack Radar System
JV 2020	Joint Vision 2020

L

LD/HD	Low Density/High Demand
LFA	Lead Federal Agencies
LMA	Leadership, Management, and Administration

M

MAJCOM	Major Command
MTW	Major Theater War

N

NATO	North Atlantic Treaty Organization
NBC	Nuclear, Biological, and Chemical
NEO	Non-combatant Evacuation Operations
NM	Nautical Mile
NMS	National Military Strategy
NR	Nuclear Response
NSS	National Security Strategy

O

O&M	Operations and Maintenance
OSD	Office of the Secretary of Defense

P

PBA	Predictive Battlespace Awareness
PBM	Performance-based Management[10]
PERSLOAD	Personnel Load
POM	Program Objective Memorandum
PPBE	Planning, Programming, Budgeting and Execution

Q

QDR	Quadrennial Defense Review

S

SAF/AQ	Assistant Secretary of the Air Force for Acquisition
SAF/MR	Assistant Secretary of the Air Force for Manpower, Reserve Affairs
SEAD	Suppression of Enemy Air Defenses
SECAF	Secretary of the Air Force
SECDEF	Secretary of Defense
SIPRNET	Secure Internet Protocol Network
SLEP	Service Life Extension Program
SOF	Special Operations Forces
SWA	Southwest Asia

T

TPG	Transformation Planning Guidance

U

UCAV	Unmanned Combat Air Vehicle
US	United States
USAF	United States Air Force
UTC	Unit Type Code

[10] *PBM is becoming increasingly important to DoD's transformation efforts as a systematic approach to improving the organization's activities through an on going process of establishing strategic objectives, measuring performance, collecting, analyzing, reviewing, and reporting performance data; then using that data to drive further performance improvement.*

W

WMD	Weapons of Mass Destruction
WRM	War Reserve Materiel