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MEMORANDUM FOR ALL PME STUDENTS

FROM: AF/CC 1670 Air Force Pentagon Washington, DC 20330-1670

SUBJECT: CSAF White Paper and Transformational Initiatives

In this increasingly competitive and unpredictable global environment, America's Airmen must not only be prepared to fight and win the current war, but postured to meet and defeat the challenges facing us in the years ahead. It is essential to transform the Air Force as a member of our Joint warfighting team into a service that is even more capable of fulfilling its roles and missions and remains unrivaled in its ability to dominate air, space and cyberspace.

The attached strategy White Paper and list of Transformational Initiatives set a course for our future. They will drive our Air Force actions as we plan, budget, and execute. The White Paper outlines how we see our strategic operating environment and defines the Air Force's indispensable roles in providing our nation *Global Vigilance*, *Global Reach*, and *Global Power* in and through our three warfighting domains. The Initiatives are a series of way points on our flight path toward this future, but they are only a start. Transformation is an enduring part of our culture as Airmen; we are forever looking for the changes in technology, organization, and concepts of operation that will give us the edge in future fights and strengthen our ability to deliver combat power for the Nation.

As leaders of our Air Force and representatives to the Joint community, I need each one of you to own these concepts and continually develop them. I need every Airman to internalize their substance, discuss them, and include them in your thinking as you communicate the distinctiveness of what our Air Force delivers to the Joint team and America now and in the future.

Our nation is at a strategic crossroads, and the Air Force is vital to its defense and our way of life. We must get this right. Each and every one of you makes our Air Force a lethal and effective weapon in our nation's arsenal. We need you to step up now more than ever.

Talulus Morley

T. MICHAEL MOSELEY General, USAF Chief of Staff

Attachments:

- 1. CSAF Strategy White Paper
- 2. Transformational Initiatives

THE NATION'S GUARDIANS AMERICA'S 21ST CENTURY AIR FORCE



CSAF White Paper

General T. Michael Moseley 18th Chief of Staff United States Air Force

29 December 2007

We better be prepared to dominate the skies above the surface of the earth or be prepared to be buried beneath it.

General Carl A. "Tooey" Spaatz 1st Chief of Staff U.S. Air Force

1. PURPOSE

This White Paper charts U.S. Air Force strategy for the next two decades and defines the Air Force's indispensable role in promoting and defending the national interest. In framing the strategic imperatives that face the United States and its Air Force, the paper lays out the urgent actions required to cope with today's and tomorrow's challenges. Accordingly, this White Paper is a definitive statement of Air Force intent to maintain its role as the guardian of America's freedom, security and prosperity—the Nation's force of first and last resort.

2. AMERICA'S GUARDIANS

Since the Nation's birth, it has been the constitutional duty of our military to ensure national survival, defend lives and property, and promote vital interests at home and abroad. To provide for the common defense, all of America's military Services strive for excellence in how they organize, train, and equip their forces to fight and win the Nation's wars. All are vital, interdependent components of a mighty joint team, united by a tradition of honor, valor, and devotion.

The Air Force exists to fly, fight and win—to achieve strategic, operational and tactical objectives—unhindered by time, distance or geography. The Air Force's mission is to "deliver sovereign options for the defense of the United States of America and its global interests—to fly and fight in Air, Space, and Cyberspace." Thereby, jointly with our brothers and sisters in arms—Soldiers, Sailors, Marines, and Coast Guardsmen—we underwrite the national strategy of defending the Homeland and assuring allies, while dissuading, deterring and defeating enemies.

As the Nation's premier global, multi-dimensional maneuver force, the Air Force safeguards America by dominating the ultimate vantage of air, space and cyberspace. We provide *Global Vigilance, Global Reach and Global Power* in and through these domains.

- **Global Vigilance** is the persistent, world-wide capability to keep an unblinking eye on any entity—to provide warning on capabilities and intentions, as well as identify needs and opportunities.
- **Global Reach** is the ability to move, supply, or position assets—with unrivaled velocity and precision—anywhere on the planet.
- **Global Power** is the ability to hold at risk or strike any target, anywhere in the world, and project swift, decisive, precise effects.

With the oldest inventory in history, battered by 17 years of continuous combat, the Air Force's ability to fulfill its missions is already being tested. This is particularly true in cyberspace, seen by potential adversaries as a relatively inexpensive venue to offset our traditional advantages in air and space. Since the air, space and cyber domains are increasingly interdependent, loss of dominance in any one could lead to loss of control in all. Thus, superiority and freedom of action—the historically proven predicates of all joint operations, in all warfighting domains—cannot be taken for granted.

No modern war has been won without air superiority. No future war will be won without air, space and cyberspace superiority. Accordingly, the Air Force must be better postured to contend with both today's and tomorrow's challenges. To promote and defend America's interests through Global Vigilance, Global Reach and Global Power, the Air Force must attain cross-domain dominance. Cross-domain dominance is the freedom to attack and the freedom from attack in and through the atmosphere, space and the electromagnetic spectrum. It permits rapid and simultaneous, lethal and non-lethal effects in these three domains to attain strategic, operational and tactical objectives in all warfighting domains: land, sea, air, space, and cyberspace. Crossdomain dominance integrates systems, capabilities, operations, and effects in air, space and cyberspace to gain competitive advantage in any and all domains. It transforms our operational concepts to maximize synergy among air, space and cyberspace, thus generating a new array of simultaneous, synchronized effects.

Through cross-domain dominance, the Air Force grants joint freedom of maneuver in all warfighting domains: land, sea, air, space, and cyberspace. This, in turn, allows the Joint Force Commander to achieve desired outcomes across the full range of military operations: from humanitarian relief saving those in need, through preventing war via dissuasion and deterrence, to inflicting strategic paralysis on implacable opponents. Without the Air Force's ability to present this spectrum of capabilities to the joint team in peace, crisis and war, national security would be at risk.

3. THE STRATEGIC IMPERATIVE

History is replete with examples of militaries that failed due to their inability to transform organizations and culture, adopt new operational concepts, or leverage breakthrough technologies. But militaries do not fail by themselves. Failure occurs in the context of an overall, national debacle, caused by systemic problems that fall into three distinct but related categories: failure to anticipate, failure to learn and failure to adapt. In contrast, victory comes to those who foresee, recognize and act on changes in the strategic environment. To succeed—indeed, to avoid catastrophic failure—we must redefine the Air Force for the 21st Century.

In the wake of the Vietnam War, the Goldwater-Nichols DoD Reorganization Act of 1986 and the collapse of the Soviet Union, tectonic shifts in the global security setting prompted extensive changes in Air Force culture and structure. Organizational and technological transformation brought about a quantum leap in airpower's effectiveness—compellingly demonstrated in operations such as: DESERT STORM, maintaining no-fly zones in Iraq through NORTHERN WATCH and SOUTHERN WATCH, ALLIED FORCE in the Balkans, ENDURING FREEDOM, and IRAQI FREEDOM, as well as in operations providing life-saving relief to victims of tsunamis, famines, earthquakes, and hurricanes. Our transformation objectives were uniquely suited to the strategic context of the time. The U.S. Air Force harnessed space and cyber capabilities as the catalysts of precision, stealth, speed, reach, and persistence that became the hallmarks of late 20th Century warfare. In the process, the entire joint team—indeed, the entire free world—became increasingly dependent on space, electronics and the electromagnetic spectrum as the indispensable pillars of freedom of action. Consequently, 21st Century airpower is not merely the *sum but the product* of air, space and cyberspace superiority. Loss of control in any one of these domains risks across-the-board degradation—if not outright failure.

Today's confluence of global trends already foreshadows significant challenges to our organization, systems, concepts, and doctrine. We are at an historic turning point demanding an equally comprehensive revolution. The future strategic environment will be shaped by the interaction of globalization, economic disparities and competition for resources; diffusion of technology and information networks whose very nature allows unprecedented ability to harm and, potentially, paralyze advanced nations; and systemic upheavals impacting state and non-state actors and, thereby, international institutions and the world order. The following are salient features of this increasingly complex, dynamic, lethal, and uncertain environment:

- Violent extremism and ethnic strife—a global, generational, ideological struggle
- Proliferation of weapons of mass destruction and empowering technologies
- Rising peer competitors with voracious appetites for resources and influence
- Predatory and unpredictable regional actors
- Increasing lethality and risk of intrusion by terrorist and criminal organizations
- Systemic instability in key regions (political, economic, social, ideological)
- Unprecedented velocity of technological change and military adaptation
- Availability of advanced weapons in a burgeoning global marketplace
- Exponential growth in volume, exchange and access to information
- Surging globalization, interconnectivity and competition for scare resources
- Dislocating climate, environmental and demographic trends

4. 21st CENTURY WARFARE

These global dynamics are closely intertwined with the changing character of 21st Century warfare. Having experienced—or vicariously learned—the cost of challenging the U.S. head-on, would-be adversaries are developing asymmetric approaches to attack vital levers of U.S. power. Their strategies seek to circumvent our core advantages, while undermining international support and domestic resolve.

Airpower's unprecedented lethality and effectiveness deter opponents from massing on the battlefield, driving them to adopt distributed and dispersed operations. They find maneuver space and sanctuary in dense urban areas, ungoverned hinterlands and loosely regulated information and social networks. These enemies pose a significant challenge to our freedom of action and threaten our interests at home and abroad. Their operations are difficult to constrain with traditional force-on-force approaches, compelling all Services to think anew about the challenges of irregular warfare.

Meanwhile, ascendant powers—flush with new wealth and hungry for resources and status—are posturing to contest U.S. superiority. These adaptive competitors are translating lessons from recent conflicts into new warfighting concepts, capabilities and doctrines specifically designed to counter U.S. strengths and exploit vulnerabilities. They are advancing in all domains. For example:

- "Generation 4-plus" fighter aircraft that challenge America's existing "4th Generation" inventory—and, thus, air superiority—with: overwhelming numbers and advanced weaponry; sophisticated integration of electronic attack and advanced avionics; emerging low-observable technologies; and progressive, realistic, networked training
- Increasingly lethal, integrated air defense systems (IADS) that threaten both our Airmen and aircraft, and could negate weapons used to suppress or destroy these systems
- Proliferation of surface-to-surface missiles with growing range, precision, mobility, and maneuverability—capable of delivering both conventional and non-conventional warheads
- Proliferation of unmanned aerial systems (UAS) capable of conducting low observable, persistent, intrusive missions in both lethal and non-lethal modes
- Resurgence of offensive counterspace capabilities
- Increasing ability of even marginal actors to surveil the disposition of U.S. and allied assets through commercially available and widely accessible means
- Attacks through cyberspace are already creating tactical, operational and strategic effects at low cost and with relative impunity

Even if we continue to successfully dissuade and deter major competitors, their advanced equipment is proliferating worldwide. We are bound to confront these weapons systems wherever America engages to promote and defend its interests. We must also be vigilant to adversary breakthroughs in fields such as cybernetics, nanotechnology, biotechnology, electromagnetic spectrum physics, robotics, advanced propulsion, etc. We cannot assume that the next military revolution will originate in the West. Indeed, the hub of innovation in science and engineering education has shifted eastward. Therefore, we must anticipate innovative combinations of traditional and new concepts, doctrines, weapons systems, and disruptive technologies.

5. A STRATEGIC CROSSROADS

As a consequence of these global dynamics and shifts in the character of 21st Century warfare, we are at a strategic crossroads. The Air Force has aggressively pursued air dominance through focused, sizable investment in Airmen, aircraft, weapons, training and essential support structure—to include fundamental and applied

research. The investment has paid off; no U.S. ground forces have been attacked from the air since 1953. The Cold War was won through deterrence, backstopped by America's nuclear might. DESERT STORM is commonly called the "100-hour war"— that's how long the ground campaign lasted—because the preceding 1000-hour air war made it so. After the Iraqi army limped from the battlefield with sufficient capability to attack its own citizens, the Air Force imposed regional containment through Operations NORTHERN WATCH (to protect the Kurds) and SOUTHERN WATCH (to protect the Shia). Operation ALLIED FORCE, which compelled the Belgrade regime to bend to NATO's will and stop the slaughter of innocents, was won through airpower without the need for a costly ground campaign. Brutal dictatorships were toppled in Afghanistan and Iraq in record time, with many of the necessary effects accomplished from the air. However, the advantages that accrue from air dominance can no longer be taken for granted. Consequently, America's freedom of action in all warfighting domains—land, sea, air, space, and cyberspace—is no longer assured.

From this point forward, the Air Force should expect to be challenged not only in the air domain, but in and through space and cyberspace as well. In January 2007, China demonstrated the ability to hold satellites at risk and the willingness to contest the space domain. State and non-state actors are already exploiting cyberspace to gain asymmetric advantage. In April 2007, Estonia was the victim of a well-coordinated, far-reaching cyber attack which brought its technologically sophisticated government to a virtual standstill. Insurgents in Iraq, Afghanistan and elsewhere exploit electronics and the electromagnetic spectrum to kill and maim through improvised explosive devices (IEDs), while propagating their message of hate to the world. Thus, perhaps for the first time in the history of warfare, the ability to inflict damage and cause strategic dislocation is no longer directly proportional to capital investment, superior motivation and training, or technological prowess.

The Global War on Terrorism is a generational struggle we must win. The Air Force will continue to fly and fight in the various theaters of this war. At the same time, we owe the Nation a holistic approach that balances today's exigencies with the far-reaching, long-term implications of looming threats. America's Air Force will succeed in the 21st Century only by developing and resourcing a strategy that closes the gap between ends and means. The window of opportunity is shutting fast. Time is not on our side.

6. REDEFINING THE AIR FORCE FOR THE 21st CENTURY

The Air Force strategy is framed in terms of *ends, means, ways, and risk*. The *ends* are the objectives we must achieve. The *means* are capabilities and resources. The *ways* define how we employ the *means*. The essence of our strategy is to use required *means* in innovative *ways* to attain the desired *ends* with acceptable *risk*.

Ends: Protect Democracy and Guard Freedom

The Air Force's commitment to America's joint team is to provide forces proficient across the range of military operations to protect the United States, its interests,

values and allies; deter conflict and prevent surprise; and, should deterrence fail, prevail against any adversary. Airmen deliver global surveillance, global command and control, and the requisite speed, range, precision, persistence, and payload to strike any target, anywhere, anytime, in any domain—and assess the results. Global Vigilance, Global Reach and Global Power grant Joint and Combined Force Commanders the ability to safeguard the Homeland, assure allies, dissuade opponents, and inflict strategic dislocation and paralysis on adversaries—all while minimizing the loss of life associated with land warfare.

Ways: Global Vigilance, Reach and Power through Cross-Domain Dominance

Innovation, flexibility and integration are the hallmarks of all successful strategies. Airmen must develop creative solutions—*ways*—to gain and maintain superiority in air, space and cyberspace, exploiting the synergies of cross-domain dominance to attain a quantum leap in mission effectiveness. To this end, we must: refocus our organization and culture on the warfighting mission; implement advanced operational concepts to fly, fight and win in all domains; leverage game-changing technologies; and recapitalize our aging equipment.

Any organizational renaissance begins with people. We must prepare our Airmen for a future fraught with challenges, fostering their intellectual curiosity and ability to learn, anticipate and adapt. To this end, we are reinvigorating warrior ethos, revitalizing the world's most advanced training system and expanding 21st Century educational opportunities. Our expeditionary Airmen must be prepared to deploy and ready to fight. While we enrich our Airmen's culture, leadership, training, education, and heritage, we will care for their families and provide for their future.

We are committed to enhance Total Force Integration. We are developing concepts, strategies, force management policies and practices, and legal authorities to access sufficient Air Reserve Component forces without the need for involuntary mobilization. Though the Air Force is already the model for melding its Guard, Reserve and civilians with its active duty elements, we can and will push this synergy to new levels.

We must continue to inject Airman's global, inherently three-dimensional perspective into all levels of planning and execution. We will better prepare our officers for key joint leadership positions by bolstering cultural, language and academic skills—as well as practical experience—to ensure they are articulate airpower advocates, capable of fully integrating and leveraging our distinctive capabilities in joint and coalition arenas.

In an era of intense competition for resources, all Services must avoid unnecessary duplication and overlap in acquisition, procurement, manning, and operations. To this end, we will continue a series of cross-Service initiatives already underway with the aim of generating new joint synergies across all warfighting domains: land, sea, air, space, and cyberspace. We will also work with the rest of DoD to enhance collaboration and interoperability with the Department of Homeland Security, Department of State, the

Intelligence Community, law enforcement agencies, and other interagency partners to facilitate a more effective orchestration of all elements of national power.

America's strategic partnerships are more important than ever. Our Air Force will strengthen and broaden coalitions, capitalizing on the global community of like-minded Airmen, while attending to interoperability between allies and partners. Building these relationships not only expands, extends and strengthens Global Vigilance, Global Reach and Global Power, but also leverages airpower's value as an engine of progress and, thus, as a potent instrument of America's diplomacy in an increasingly interconnected world.

The U.S. Air Force is formulating innovative operational concepts to anticipate, adapt to, and overcome challenges. We are transforming our thinking from considering the space and cyber domains as mere enablers of air operations to a holistic approach that factors in their interdependence and leverages their unique characteristics. We must continue to push this conceptual envelope—and expand the boundaries of existing tactics, techniques and procedures—to fully exploit the synergies of cross-domain dominance.

We will accelerate the deployment of evolutionary and disruptive technologies, as we address the urgent need to recapitalize and modernize. We must bolster our advantage through continued investment in our own science and technology, as well as outreach and integration with industry, academia and think tanks. We will reform our procurement and acquisition system to ensure full transparency, open competition and adherence to operational timelines.

Means: Revitalizing the Air Force

The U.S. Air Force has been in continuous combat since 1990—17 years and counting—taking a toll on our people and rapidly aging equipment. While we remain globally engaged, we recognize the imperative of investing in the future through recapitalization and modernization. We must field flexible systems, capable of providing full-spectrum effects across the entire range of military operations, from a catastrophic attack on the Homeland, through major theater contingencies, to irregular warfare and humanitarian relief.

We must position the Air Force to secure America's superiority in all domains, including: appropriate mixes of stand-off capabilities; penetrating manned aircraft; enhanced cyber capabilities; advanced unmanned combat systems; operationally responsive space; and breakthroughs in fields such as electromagnetic spectrum physics, directed energy, nanotechnology, bioengineering, super-stealth, and hypersonics—all wedded to innovative concepts and superior training.

To meet current and future challenges, we will maintain a credible deterrent that convinces potential adversaries of our unwavering commitment to defend our Nation, its allies and friends. The U.S. nuclear arsenal continues to serve as the ultimate backstop

of our security, dissuading opponents and reassuring allies through extended deterrence.

As the demand for global intelligence, surveillance, reconnaissance, and communications continues to grow, our reliance on assured access to space will increase exponentially. The challenge is to find an affordable pathway to secure space—striking the right balance among hardening, countermeasures and reconstitution. We need to deploy high-altitude, high-speed, air-breathing systems to mitigate risks to space-based capabilities. The Air Force will continue to provide the entire joint team with exacting intelligence, surveillance and reconnaissance in air, space and cyberspace. We will also develop new concepts that merge sensors and shooters into a seamless, ubiquitous force that can permeate adversary defenses.

Throughout history, war-fighters at all levels have operated with limited information and constrained situational awareness. With advances in sensors, information sharing and network-centric systems, our operators are suffering the embarrassment of riches—they are, quite literally, struggling with information delivered at a velocity and volume far exceeding human ability to process and absorb. We must develop and field systems that are not just network-centric, but knowledge-centric. These systems process, filter and integrate data, presenting information in a format that enables quick, logical decisions. To this end, we will develop self-forming, self-healing networks that harness the power of machine-to-machine interfaces, freeing up human resources for activities where intellect and warrior spirit are indispensable.

In September 2007, the Air Force stood up Cyber Command to provide combat-ready forces, trained and equipped to conduct sustained operations in and through the electromagnetic spectrum, fully integrated with air and space operations. We will continue to develop and implement plans for maturing cyber operations as an Air Force core competency. Our objective is to provide flexible options to the decision-makers to deter, deny, disrupt, deceive, dissuade, and defeat adversaries through destructive and non-destructive, lethal and non-lethal means.

Soldiers, Sailors, Marines, and Coast Guardsmen share a sacred bond with Airmen: we will not leave a comrade behind. We are modernizing combat search and rescue forces to fulfill the moral imperative to locate, support and recover our joint warriors. The Air Force is committed to fielding a new combat search and rescue aircraft; advancing our rescue concepts of operation; and enhancing survival, evasion, resistance, and escape (SERE) training—all to ensure that the Air Force remains the premier combat search and rescue force for the entire joint team.

The Global War on Terrorism has highlighted the importance of specialized airpower to meet the requirements of Special Operations Forces. We will continue to provide aircraft, unmanned aerial vehicles, agile combat support, and trained personnel to meet Combatant Commanders' special operations requirements. Air Force Special Operations Command is establishing a new main operating base in New Mexico, with world-class training ranges and facilities to accommodate its growth. In addition, the Air

Force continues to refine tactics, techniques and procedures to enhance the synergies between airpower and Joint Special Operations Forces.

An enduring element of our national security strategy is to engage forward in peace, crisis and war. Accordingly, we must maintain a sufficient rotational base to sustain our forward-deployed and forward-based posture, as well as enhance our ability to project and protect those forces—a moral imperative and a military necessity. The Air Force will work with Combatant Commanders and partner air forces to secure basing and counter potential anti-access strategies. We will continue to develop new ways of projecting power without projecting vulnerabilities and design systems that facilitate reach-back, thus maximizing effects while minimizing forward presence.

Risk: Failure to Anticipate, Learn, Adapt

All strategic planning is based on a set of assumptions. Surprise occurs when core assumptions are proven wrong. To succeed, we must continually validate our strategy across the *ends, means, ways, risk* framework. We should not assume that future conflicts will resemble the current fight in Iraq or Afghanistan—lest we lose the ability to project global power, inflict strategic paralysis, deter nation-states, destroy their fielded forces, and defend our Homeland, its allies and friends.

For a nation whose security is predicated on an enduring strategy of dissuasion and deterrence, the most fundamental risk is failure of deterrence. Deterrence is a function of capability, will and credibility and, thus, exists in the eye of the beholder. Its success—or failure—is measured only in the breech. To mitigate the risk, we must retain a modern, secure and well-trained force and evolve new deterrence concepts. In particular, it behooves us to rethink concepts such as extended deterrence and conceive new ways to deal with actors who might be deemed "undeterrable" in the Cold War construct.

Strategic risk can also mount through the accumulation of shortfalls in recapitalization and modernization, stale operational concepts and failure to revitalize warrior ethos. Recapitalization is about more than replacing aging aircraft; it is about ensuring the combat effectiveness of all air, space and cyberspace forces. The success of the Air Force and the joint team depends upon the ability of our people and organizations to adopt new, relevant operational concepts, suitable to the dynamics of the strategic environment. Cross-domain dominance is essential to victory.

7. FROM HERITAGE TO HORIZON

Billy Mitchell's appeal for strategic foresight still resonates today: "Nations nearly always go into an armed contest with the equipment and methods of a former war. Victory always comes to that country which has made a proper estimate of the equipment and methods that can be used in modern ways."

Complacency breeds failure. In the 1920s and 1930s, when our political and military leaders assumed the Nation was appropriately postured for the future, we failed to anticipate the coming crucible. Despite the vocal objections of a few, we entered World War II unprepared for the demands of total war. Likewise, we engaged in both Korea and Vietnam unprepared for the challenges of limited war. America paid a heavy price in blood and treasure for this strategic myopia. To cite but one example: on August 1, 1943, American Airmen flew a daring, low-level mission to strike Hitler's largest oil refinery—Ploesti. The target was demolished, but attrition was brutal: 44 of 177 B-24 Liberators were shot down and 540 of 1720 Airmen were lost. Through determination, ingenuity and innovation—as well as our industrial might—we persevered. The Nation and its entire military adapted in the midst of these fights to win decisively in World War II, restore the *status quo* in Korea, terminate the conflict in Southeast Asia, and, having exorcized the ghosts of Vietnam, deliver a swift victory in DESERT STORM.

We must learn from history. Our shared touchstone of warrior virtues and single, unifying purpose remain unchanged: fly, fight, win. We must remain true to the legacy of valor and devotion, so boldly written with contrails and smoke across the skies from Ploesti and Schweinfurt, through MiG Alley and downtown Hanoi, to Kandahar and Baghdad. This legacy defines our role in the American way of war—to risk the lives of Airmen to kick down the opponent's door so thousands need not die.

We will have neither the buffer of time nor the barrier of oceans in future conflicts. The Air Force is smaller in December 2007 than it was in December 1941. The character, tempo and velocity of modern warfare already severely test our ability to adapt. Therefore, redefining the Air Force for the 21st Century is an urgent national security requirement—not a luxury we can defer. If we are to defend America and promote its interests, the Air Force must continue to provide the joint team with prompt, persistent, decisive air, space and cyberspace effects.

The Air Force is often first to the fight and last to leave. We give unique options to all Joint Force Commanders. The Air Force must safeguard our ability to: see anything on the face of the earth; range it; observe or hold it at risk; supply, rescue, support or destroy it; assess the effects; and exercise global command and control of all these activities. Rising to the 21st Century challenge is not a choice. It is our responsibility to bequeath a dominant Air Force to America's joint team that will follow us in service to the Nation.

U.S. AIR FORCE TRANSFORMATIONAL INITIATIVES

<u>CSAF'S PRIORITIES</u> Win Today's Fight Take Care of Our People Prepare for Tomorrow's Challenges

The USAF approach to transformational change is centered on three principal elements and their interactions:

- Advanced technologies that yield new capabilities
- *New concepts of operations* that produce orders of magnitude increases in desired effects
- *Organizational change* that enhances our ability to execute national guidance -- the National Security, Defense and Military Strategies (NSS, NDS and NMS)

ORGANIZE:

Streamline for Warfighting

Normalized presentation of warfighting forces for Combatant Commanders

- Focused Major Commands (MAJCOMs) on oversight
- Focused Numbered Air Forces (NAFs) on warfighting
- Standardized organizational template for MAJCOMs and NAFs
- Standardized Joint/Combined Air Operations Centers (CAOCs)
- Institutionalized Air Component Coordinating Elements (ACCE) in warfighting HQs
- Evaluated Director of Space Forces (DIRSPACEFOR) manning in all AORs
- Evaluating interdependent benefits of USAF as Executive Agent (EA) for mediumand high-altitude Unmanned Aerial Vehicles (UAVs)
- Stood up USAF Cyber Command

Restructured the Air Staff

- Implemented Air Force-wide J-Staff template (A1 through A9)
 - Separated Intel function from A3 and stood up A2 with Lt Gen in leadership role
 - Stood up separate Studies & Analysis/Lessons Learned function (A9) with SES in leadership role
 - Stood up Global Combat Support (AF/A4/7Z) Directorate
- Reorganized "CHECKMATE" (HAF/CK) to support CSAF directly by focusing on strategic planning and initiatives, while exploring opportunities within joint, coalition and Interagency warfighting template (invited USN, USMC, USA, USCG & RAF, RAAF, FAF, CAF participation)
- Established: Heritage to Horizon Group, CSAF Civic Leader Group, CSAF's Flight

Major Command Restructuring

- Reduced existing MAJCOM Headquarters overhead
- Transferred Combat Search and Rescue (CSAR) mission area back to the Combat Air Force
- Evaluating transfer of A-10s to AFSOC

- Restructuring and updating RED FLAG and Aggressors
- Established Lead Command or Forward Operating Agency (FOA) for Air Force range utilization

Wing Restructuring

- Stood up separate Air-to-Ground (A/G) Operations Wing to consolidate all A/G activities in a single wing and NAF
- Aligned Fighter and Combat Search and Rescue Wing maintenance functions according to mission

Enhance Total Force Integration (TFI) – Regular, Guard, and Reserve Components

- Executing all phases of Air Force TFI plan
- Aligned Total Force personnel policy, structure, execution
- Formalized TFI policies and practices to access sufficient Air Reserve Component forces without the need for involuntary mobilization
- Increasing "associate" arrangements for Regular, Guard, and Reserve units
- Executing UAV squadron stand up in Guard units (CA, NV, AZ, TX, ND, NY) as well as Reserve units

Optimize Manning and Operations by Consolidating:

- UAV operations in a single wing
- Combat Search and Rescue (CSAR) operations in a single wing
- Aggressor activities into a single wing at Nellis AFB
- Multiple War Fighting Centers into one USAF Warfare Center at Nellis AFB
- Multiple Weapons Schools into one USAF Weapons School at Nellis AFB
- Air Expeditionary Force (AEF) Center under Air Force Personnel Center

Optimize Deployments for Airmen

- Linked deployments with reassignment process to ensure predictable rotations
- 100% of Airmen aligned to AEF deployment cycles
- Continue to evaluate deployment tour length for aviation and non-aviation units (Regular, Guard, and Reserve)
- Reduced and grouped Air Force Specialty Codes to deployable clusters
- Minimize non-unit deployments
- Converting long-standing individual augmentee (IA) requirements to 365-day deployments

Increase, Broaden and Re-focus Air Force Partnerships across Air, Space, and Cyberspace Domains

Joint Partnerships

- Including Joint and Coalition partners in Joint Terminal Attack Controller (JTAC) training
- Reinvigorating exchanges with USN/USMC Weapons School
- Formalizing joint tactics, techniques and procedures publications in a single squadron at Nellis AFB (Navy & USMC already present...re-invited Army to join)

Interagency

• Enhanced USAF – NRO relationships

Strategic/International Partnerships

- Reinvigorating existing Coalition Air Force-to-Air Force relationships (UK, France, Australia and Canada) to foster strategic partnerships
- Increased PME opportunities for coalition partners
 - Inviting key Coalition partners to participate in Air University's School of Advanced Air and Space Studies
 - UK, Australia already present
 - Canada and France invited
- Increasing number of Military Personnel Exchange Program (MPEP) exchange billets:
 - RAF pilots in F-22A, B-2, F-117
 - Inviting RAAF
 - RAF, RAAF in Aggressors
 - Invited CAF
- o Evaluating inclusion of French Air Force in Aggressor activities
- o Strengthening strategic international partnerships for equipment programs
 - F-35A
 - C-27 Joint Cargo Aircraft (JCA)
- Exploring additional global Air Force-to-Air Force relationships to provide insights into regional operations, created potential capacity/partnering opportunities, and enhance strategic capacity
- o Hosted Global Air Chiefs Conference (some 95 nations took part)

Strengthen Air Force Strategic Communications Internal

- - Published Airman's Creed
 - Streamlined internal communication tools
 - Launched CSAF Scope
 - Launched CSAF Vectors
 - Launched "All Airmen" e-mails

External

- Established 24/7 Strategic Communications/Public Affairs (CM/PA) Operations Center
- o 2007 Strategic Communication Road Show
- Increased Media Engagement at all levels
- Established "Portraits in Courage" series to highlight the heroic contributions of Airmen in the Long War
 - Published two volumes in the series
- Executing 2008 Recruiting, Marketing & Branding Campaign

Published CSAF's White Paper as definitive statement of intent

TRAIN:

Eliminate Inefficiencies in Existing Training

- Evaluate training to ensure we're training like we fight (Ready Aircrew Program/training currency)
- Evaluate current ancillary training and additional duties to identify what we can stop doing
- Assess end-to-end training to eliminate duplication between training courses

Full Spectrum, Cross-Domain Combat Training

- Consolidating all RED FLAG / COPE THUNDER composite force training into a single RED FLAG activity and merge all Alaska and Nevada operations into one template
- Streamlining and consolidating all training range activities with clear focus on advanced composite force training, "real world" rehearsals, development/validation of theater-specific tactics, techniques and procedures, as well as 5th generation test/evaluation
- Finalizing aircraft training range updates to integrate kinetic and non-kinetic operations with Command and Control (C2)
- Consolidating all Aggressor activities into one command
 - Flying operations, IADS, Space, Information Operations, Cyber, Intelligence, threat exploitation, etc.
- Evaluating and refocusing relevance of all USAF Weapons School syllabi

Strengthen All Parts of Airmen's "Continuum of Learning"

Accessions

- Re-evaluating recruiting and retention programs; sustain Career Recruiter Force
- Refocusing Basic Military Training (BMT) on joint expeditionary combat skills and extending the course to accommodate new approaches to combat preparation and life saving skills
- Refocusing efforts on providing more enlisted opportunities for U.S. Air Force Academy (USAFA) attendance (from Regular, Guard, and Reserve units)
- Exploring opportunities for Guard and Reserve personnel to attend USAFA and serve active commitment full time in Reserve units
- Standardizing Total Force accessions (USAFA, Reserve Officer Training Corps/ROTC, Officer Training School/OTS) and evaluating a common training location for OTS

Technical Schools

- Refocusing all USAF technical schools on joint expeditionary combat skills
- Consolidating ground combat specialties into a single course under Common Battlefield Airman Training (CBAT)
 - Exploring enhanced partnerships with Army training
 - Securing best location

Professional Military Education (PME)

- Standardized Total Force PME (all levels, all ranks)
- Evaluating faculty selection criteria for USAFA, ROTC, OTS, Air University (AU) focusing on "credentialed" combat-experienced "role models"

- Reinvigorated Air University's focus on joint war fighting lessons learned
- Ensuring continued developmental education at all levels
- Included language training in upper-level PME (Air Command and Staff College/ACSC, Senior Non-Commissioned Officers Academy/SNCOA, and Air War College/AWC) syllabi
 - Chinese, Arabic, Spanish, and French language options for each student
- o Included Air Force heritage in all Developmental Education
- Increased Legislative Fellows to 40-plus level

Senior Officer Preparation

- Strengthen prep for officers for JFACC/CFACC, ACCE, CAOC staff
- o Strengthen prep for joint assignments, CAPSTONE, joint schools and command

Improve Force Development

- Implementing Air Education and Training Command (AETC)/AU flight plans for further developing:
 - Intel professionals
 - Space professionals
 - Cyber professionals
 - Public Affairs professionals
- Strengthened Space Operations education and training opportunities
- Developing Cyberspace Training Strategy for cyber forces
- Refocused entire enterprise on effective Rated Management System and practices, and fielded a more effective analytical tool for better understanding rated force dynamics

Improve Airmen's Education and Strategic Thinking

- Re-established a strategic-level journal for AU to encourage a more robust exchange of ideas (*Strategic Studies Quarterly*)
- Ensured continued voluntary educational opportunities at all levels
- Finalizing and implementing the revised "Continuum of Learning" force-wide
- Refocused AU syllabi on bolstering cultural, language and academic skills
- Evaluated current force language skills and regional experience
- Refocusing AU on developing "Continuum of Learning" opportunities for enlisted and officer (and spouses) degrees and advanced degrees
- Ensuring advanced educational opportunities for all Airmen
- Finalizing and implementing plans for Distance Learning at all levels
- Reinvigorated AU on joint strategic thinking and refocus each enlisted / officer course syllabi on war fighting skills and war fighting ethos

Take Care of Airmen and Families

- Executing programmed Airman and Family Readiness Center transformation
- Strengthened all pre-deployment, deployment and post-deployment member and family wellness programs
- Executing programmed Family Housing upgrades & privatization
- Execute programmed Family Support Center enhancements

EQUIP:

Optimize Air Force Acquisition System and Procurement Policies

- Injected Air Force Smart Operations (AFSO) analysis in every Air Force process

 Based on Lean business practices
- Executing AFSO initiatives to reduce costs, eliminate waste and inefficiency
 - In warfighting operations
 - In the acquisition process at every level
- Implemented "Air Force Transparency"
- Ensured full visibility and fidelity of contracts at every level
- Normalized all Acquisition Programs (including space acquisition)
 - Standardized the use of best practices and efficiencies
- Streamlined space acquisition process with "Back to Basics" and "Block Approach"
- Streamlining space launch and space ops opportunities with NRO and other DOD entities
- Exploring streamlining and accelerating UAV procurement and deliveries through a single Executive Agent for the DOD-wide effort

Accelerate Delivery of Advanced Capabilities to Combatant Commanders

- Aggressively expediting acquisition and operational fielding of Air Force acquisition priorities: new tanker (KC-X), new Combat Search and Rescue Helicopter (CSAR-X), space systems, F-35A, Next Generation Bomber
- Preserving the industrial base of our nation to produce Air, Space, and Cyber effects
 - Ensuring the F-35A program delivers to specification, schedule and within budget
 - o Contract the F-22A Lot 6 purchase as quickly and efficiently as possible
 - Negotiate and put on contract an F-22A multi-year procurement
 - Expedited Analysis of Alternatives for the Next Generation Bomber program
 - Aggressively pursued the C-27 Joint Cargo Aircraft contract
 - Ensured executability of Combat Search and Rescue aircraft (CSAR-X)
 - Investigated multi-year procurement options
 - Aggressively pursued contract for the new tanker aircraft (KC-X)
- Ensuring automated aerial refueling (AAR) capability
- Focused on QDR-mandated time lines for Next Generation Bomber and options to meet the 2018 IOC timeline
- Evaluating additional modifications to existing HH-60G (CSAR) inventory
- Delivering Unmanned Aerial System (UAS) solutions
 - Expediting deliveries of all UAV systems and "flesh out" units at earliest opportunity
 - Tested and delivered revolutionary new capability which provides a data-link from a UAV to another airborne asset or a ground based asset (ROVER)
 - Executing existing MQ-1 and MQ-9 programs to deliver global, deployable capacity for Combatant Commanders
 - o Expediting RQ-4 Multi-Platform Radar Technology Insertion Program integration
 - Executing RQ-4 (Block 20) Program
 - As RQ-4 Global Hawk demonstrates capability retire excess U-2 inventory

- Expediting:
 - A-10 modifications
 - Wings, gun mounts, landing gear, precision strike/PRECISION ENGAGEMENT (A-10C), IRCM, ARC-210 radio
 - A-10 Urban Close Air Support (Hellfire II) integration
 - Procurement and delivery of advanced targeting pods (ATP)
 - Replacement of USAF side arms with new joint developed side arm
 - o Joint Precision Airdrop System (JPADS) procurement
 - Equipage of our low density/high demand systems
 - Installation of F-15C active electronically scanned array (AESA)
 - Installation of F-15E joint helmet mounted cueing systems (JHMCS)
- Validating:
 - C-5A re-engine program
 - C-130E Avionics Modernization Program (AMP)
 - C-130H modifications, AMP for theater and SOF mission areas
 - o C-130J requirements to meet theater and SOF demands
 - Timing for new SOF C-130 Tankers
 - Options on joint undergraduate helicopter training aircraft
- Evaluating:
 - Opportunity for AC-27 capability to support global SOF demands
 - Options on engine upgrades (Propulsion Upgrade Program/PUP)
 - o Options on Counter-Insurgency (COIN) aircraft
 - o Operationally Responsive Space (ORS) programs
- Evaluated SECDEF's National Space Policy Guidance against AF 08 POM

Recapitalize and Modernize our Air, Space, and Cyber forces

- Published AF-level recapitalization / modernization plan
- Shared Total Force Roadmaps with the States Adjutant Generals
- Published the Planning / Required Force to determine "Future Force"
 - Revalidate B-52H force structure
 - Retire a portion of the B-52H inventory
 - Retire F-117A inventory
 - o Retire excess KC-135E inventory
 - Retire excess C-130E inventory
 - Revalidate strategic airlift programs to ensure highest return on C-17/C-5 mix given emerging land component and Army Future Combat System requirements
 - o Retire excess C-5A inventory relative to overall strategic airlift capability options
- Upgrading VC-25A Airborne Information Management System
- Evaluating and expediting DV/VIP/Special Airlift Mission (SAM) Gulfstream III C-20B replacement

Improve Air Force Uniforms and Individual Equipment

- Reinvigorating USAF Uniform Board
- Developed and fielded new Airman Battle Uniforms (ABUs)
 - Provided more useful field utility uniform and incorporated legacy styling while increasing usability
 - Expedited delivery, availability and wear of ABUs

- Conducted first review of women's uniform items
 - Re-designed uniform fit and size options to better accommodate females
- Developed new Service Dress Uniform
- Developed Combat Medal
- Developed Air Staff Badge
- Evaluating and fielding individual equipment sets for "outside the wire" operations

Energy Efforts

- Increasing Energy Conservation Efforts
- Strengthening Alternative Energy Efforts

CSAF Sponsored Conferences

2005

Airmen Talks South	1-2 Nov 05
CORONA Fall	3 Nov 05
AU Planning Conference	Nov 05

2006

Leadership Forum Senior Statesman Symposium	17 Jan 06 19 Jan 06
Civic Leaders (Nellis AFB)	9 Feb 06
4-Star CSAF Conference	31 Mar 06
Airmen Talks South	15 Jun 06
Senior Leadership Forum	20 Jun 06
Civic Leaders (Randolph AFB)	22 Jun 06
CORONA Top	12-13 Jul 06
Heritage to Horizons	24 Jul 06
Intel Summit	2 Aug 06
Blue Summit	22-23 Aug 06
Space Summit	7 Sep 06
60 th Anniversary Kick-Off	13-15 Sep 06
Civic Leaders (AFA)	24 Sep 06
AFA Conference	25-27 Sep 06
CORONA Fall	11-13 Oct 06
Cyber Summit	16 Nov 06
Strategic Communication Summit	19 Dec 06
CORONA South	30-31 Jan 06

2007

Leadership Forum	9 Jan 07
Senior Statesmen Symposium	11 Jan 07
Programming Summit	12 Jan 07
Williamsburg Talks	18-21 Jan 07
Civic Leaders (Air University)	15 Feb 07
CSAF NCO Forum	13 Mar 07
MAJCOM CC Conference	23 Mar 07

CSAR Summit Marine-Air Force Warfighter Talks Civic Leaders (Colorado Springs) AQ Summit CORONA Top Airman Talks North Senior Enlisted Leadership Summit AF Senior Leaders Symposium Navy-Air Force Warfighter Talks SERE Summit AFSO21 Summit Warfare Center Summit Global Air Chiefs Conference Civic Leaders (AFA) Army-Air Force Warfighter Talks AF Roadmap Summit Civic Leaders (AOR) AEF Forum CORONA Fall	4 Apr 07 9-10 Apr 07 11-13 Apr 07 23 Apr 07 6-8 Jun 07 13-14 Jun 07 20-27 Jul 26 Jul 07 1-2 Aug 07 10 Aug 07 22 Aug 07 23 Aug 07 23-27 Sep 07 5 Oct 07 23 Oct 07 Nov 07 14 Nov 07 30 Oct-3 Nov 07 5 Dec 07
	30 Oct-3 Nov 07

2008

Leadership Forum	8 Jan 08
Senior Statesmen Symposium	10 Jan 08
Army-Air Force Warfighter Talks	23 Jan 08
Squadron CCs/1 st Sergeants Summit	24 Jan 08