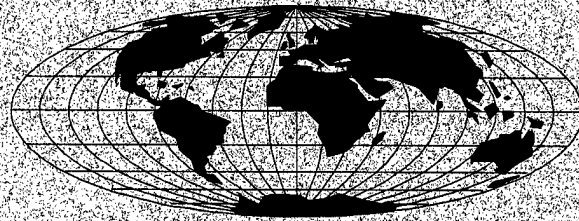


# FOUNDATION FOR URM

**Global Reach – Global Power**



**The Evolving Air Force Contribution  
to National Security**

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## FOREWORD

Global Reach -  
Global Power

In June 1990, when the Air Force first published *Global Reach—Global Power*, I wrote that extraordinary international developments would require fresh thinking about the role of military forces. Developments in the intervening thirty months have been truly extraordinary—from unprecedented arms control agreements, the collapse of Communism and the dissolution of the Soviet Union to a major war in Southwest Asia, ethnic conflict in many corners of the globe and a series of natural and man-made disasters.

The Department of Defense has responded to these opportunities and challenges with a fresh look at military strategy, forces and budgets. Within the Air Force we have undertaken the most fundamental restructuring of the institution since it was established as a separate Service nearly half a century ago. The blueprint for that restructuring has been the fundamental principles outlined in *Global Reach—Global Power*. It has been our

belief that if we planned within that framework—and infused the principles of modern management throughout our day to day operations—we could build a force well suited to the geopolitical and fiscal demands of a new era. This is the leaner, meaner Air Force to which I have often referred.

This current white paper reviews the principles of *Global Reach—Global Power* and shows how we have applied them to every aspect of how we do business. It also outlines the evolution in our thinking spurred by these principles and the experience of the Gulf War and other events. The principles of *Global Reach—Global Power* have been battle tested. They have enabled us to identify and nurture the unique contributions of aerospace power to joint warfare and the Nation's defense. They will continue to serve as the intellectual compass of an institution whose contribution to national security becomes more important daily—the United States Air Force.



A handwritten signature in cursive script that reads "Donald B. Rice".

DONALD B. RICE  
Secretary of the Air Force  
December 1992

## CONTENTS

The Evolving Air Force Contribution to National Security . . . . .	1
New Environment, New National Strategy . . . . .	2
Global Reach—Global Power: Five Principles . . . . .	3
Sustain Deterrence . . . . .	4
Provide Versatile Combat Force . . . . .	4
Supply Rapid Global Mobility . . . . .	6
Control the High Ground . . . . .	7
Build U.S. Influence . . . . .	7
Global Reach—Global Power in Action . . . . .	10
Desert Storm . . . . .	10
Shaping the Future . . . . .	12
Conclusion . . . . .	14

# The Evolving Air Force Contribution to National Security

In the public eye, the Air Force is most often identified with specific systems—fighters, bombers, missiles, satellites—and events such as the successful air campaign in Desert Storm. Yet the heart of what the Air Force contributes to national security is not captured by a narrow focus on specific programs and operations. *Aerospace power*—a maturing, precise and flexible instrument of national power—is what the Air Force contributes. Within the Air Force it is called simply *Global Reach—Global Power*.

The June 1990 White Paper titled *Global Reach—Global Power* was the first official statement of the Air Force role in national security since 1947. It laid out a vision of aerospace power and a strategic planning framework for the Air Force, building on the unique characteristics of aerospace forces—speed, range, flexibility, precision and lethality.

More than any other single event, the decisive role of airpower in the Gulf War validated these concepts and pointed di-

rections toward an even more capable force, uniquely well-placed to draw on advances in technology and doctrine. Today, air forces combined with space forces are the pivotal contributors to our national military strategy—in deterrence, forward presence, and crisis response. Beyond this, aerospace power gives America unique strengths for building influence and extending a helping hand around the globe.

The Air Force is in the process of reshaping to meet the requirements of an era where smaller, more capable forces must meet unpredictable threats. *Global Reach—Global Power* has been the blueprint of this reshaping and has become a part of our day-to-day operations, our resource allocation decisions, and our vision of future air and space power. This companion White Paper on the evolution of *Global Reach—Global Power* expands and elaborates upon its underlying tenets and points toward aerospace power's maturing role for a future filled with new challenges and opportunities.

## New Environment, New National Strategy

In the fifty years from Pearl Harbor to the collapse of the Soviet Union, Americans acted on the belief that the United States was safest in a world in which ideas, goods and people could move freely—and that such a world was not possible without substantial, persistent American engagement in it. Generations of citizens did their part to meet the special responsibilities of this nation to nurture such a world.

The events of 1991—from the Persian Gulf War to the end of the Cold War—reaffirmed, yet redefined, the context within which America's global leadership is conducted. In 1991 the great, global threat to our security passed. But dangers of a different sort remain, and conflict persists in many regions. More nations possess sophisticated weapons and technologies, and in other nations the roots of democratic government are still taking hold. For the 1990s and beyond—as for much of this century—there will be no substitute for American leadership.

To support this leadership, American military forces must find the right balance of complementary roles, functions and force structure for a new security environment. Many features of this environment are already taking shape, and the Department of Defense is responding. A regional focus is replacing decades of preoccupation with the Cold War standoff. The new security environment will not be defined by planning for a major war in Europe or a spiralling arms race. Although emerging threats will

not be easy to foresee or fully evaluate in the same way as the NATO-Warsaw Pact confrontation, the likelihood that U.S. military forces will be called upon to defend U.S. interests in a lethal environment is high. The new definition of global engagement focuses on countering these regional hotspots and on preserving collective security in a fragmenting world.

The demands of the new environment play to the inherent strengths of air and space power. In an age of uncertainty, with the location and direction of future challenges almost impossible to predict, space forces allow us to monitor activities around the world and to know the battlefield even before our forces arrive. With smaller forces overall and fewer deployed overseas, airpower's ability to respond around the globe—within hours, with precision and with effect—is an invaluable capability that is America's alone.

Aerospace power has become central to the way that our nation uses the military instrument. Our global power assures our friends that they are not alone. With our global reach, potential adversaries understand that distance does not mean disinterest. In all of its forms *Global Reach—Global Power* is a formula for American engagement. The principles outlined below enable the Air Force to deliver the watchful eye, helping hand or clenched fist that the situation may demand and which the nation has come to expect.

# Global Reach—Global Power: Five Principles

A clear view of aerospace power's inherent strengths guided us through rapid changes in response to the end of the Cold War and the beginning of the defense draw-down. At the same time, the concepts of global reach and power point forward, toward future programs and planning to further develop these strengths. Since 1990, *Global Reach—Global Power* has become the overarching structure within which we program and evaluate Air Force funding and operations. Spanning the spectrum from versatile combat forces to building U.S. influence through operations short of war, the maturation of air and space power is evident in each of the five pillars of *Global Reach—Global Power*:

SUSTAIN DETERRENCE—  
Nuclear Forces

PROVIDE VERSATILE COMBAT CAPABILITY—  
Theater Operations and Power Projection

SUPPLY RAPID GLOBAL MOBILITY—  
Airlift and Tankers

CONTROL THE HIGH GROUND—  
Space and C31 Systems

BUILD U.S. INFLUENCE—  
Strengthen Security Partners and Relationships

Sustaining global reach and power in the long term depends on pursuing the innovative technologies and concepts of operations that offer the highest pay-off in capability. Air and space forces possess an almost unparalleled potential to capitalize on advanced technologies—more so than most other forms of military power that are more constrained by limits of geography and physics. Technology and other

factors are driving a change in the relative value of forces, opening up more roles for air and space power. Correspondingly, air and space forces are becoming instruments of choice for rapid, tailored responses in a range of contingencies.

Airpower—to include space—is a seamless whole that delivers a remarkable set of tools. Many of these tools—such as precision and stealth—were for the first time used *together* on a large scale in the Gulf. Others—such as real-time processing and dissemination of information to combat forces—are tools that we are improving at a rapid pace. Some, particularly in the area of space, will reach their full potential after the turn of the century. Qualitative improvements in each area add up to a major evolution in aerospace power *as a whole*. Instead of just reacting to events, aerospace power in the evolving post-Cold War world is a flexible tool that can help shape events.

To stay abreast of these evolutions in the basic attributes of airpower, we have implemented several major changes in our organization. One of the most dramatic examples is the shift away from a primary emphasis on strategic nuclear roles for long-range bombers. B-1 crews that once spent most of their training time in the nuclear role now fly more than two-thirds of their training sorties practicing a variety of demanding conventional missions. This is part of a broader process of eliminating outdated distinctions between “strategic” and “tactical”—for airframes and for major commands. Separating strategic systems from tactical systems no longer serves as a sound basis for organizing, training and equipping air and space forces.

Finally, we have defined a concise mission that gives focus to our capabilities and efforts. The mission of the Air Force is: *“To defend the United States through control and exploitation of air and space.”* The five pillars of global reach and global power implement this demanding charge.

### **Sustain Deterrence**

Nuclear deterrence is a bedrock requirement of national security. Even at reduced force levels, the triad of bombers, land-based missiles, and sea-based missiles remains the most stable and adaptable form of sustained deterrence. At the same time, changing nuclear requirements have freed some forces for primary conventional roles.

Two presidential nuclear arms reduction initiatives, the ratification of START, and the 1992 Washington Summit Agreement, reshaped nuclear forces and redefined the role of nuclear strategy for the Air Force. The newly inaugurated United States Strategic Command (STRATCOM), in Nebraska, took over responsibility for joint Air Force and Navy nuclear planning. Both services cooperating closely in one command creates the right setting for integrated force structure and strategy decisions.

With the many positive changes since the end of the Cold War, the nuclear deterrent is still a fundamental aspect of our national security and a key underpinning of our new strategic partnership with Russia and the other nuclear states of the former Soviet Union. Flexibility in deterrence will be more important than ever as the world navigates through a decade in which many predict the emergence of weapons of mass destruction in more countries around the world. Of the many uncertain threats the future may hold, nuclear proliferation is one of the most disturbing. Nuclear deterrent forces must be constituted to give any potential nuclear adversary second thoughts.

### **Provide Versatile Combat Force**

Modern aircraft and precision weapons have transformed the battlefield and the relative value of weapon systems. While complementary forces of all the Services will be essential, the Air Force offers, in most cases, the quickest, longest range, leading edge force available to the President in a fast-breaking crisis. Conventional airpower provides exceptional flexibility across the spectrum of conflict. The Air Force can deter, provide a presence, or put ordnance on a target set anywhere in the world in a matter of hours.

Providing forces tailored for the theater air campaign is the foremost challenge for Air Force power projection forces. Air superiority is the foundation. When it comes to air superiority, the Air Force is not interested in an even match. We want to win the air battle over enemy territory and we want no enemy air attacks on our forces. Our ability to move forces into theater, to refuel, to reach out, depends on guaranteed control of the air. Modern fighter forces move forward fast, bringing persistent firepower to seize and hold control of the air, or strike ground force targets with lethal effect. F-15s from Virginia were the first forces to touch down in Saudi Arabia in August 1990 in response to the invasion of Kuwait. Flexibility and lethality enable air forces to hedge or eliminate risk in the period before other forces can reach the fight. The F-22 will ensure America sustains these capabilities into the 21st Century.

A truly versatile power projection force for theater operations cannot focus on old stereotypes of how air and space power are applied. Aircraft are platforms designed to achieve effects—it is how they are used that determines whether the effect will be strategic or tactical. Desert Storm planners took advantage of this. “Strategic” B-52s attacked armor concentrations and conducted obstacle breaching. “Tactical” F-15s and F-16s struck nuclear and chemical facilities, and F-117s hit key targets in downtown Baghdad. Labels can be counterproductive in an era of regional

conflicts—and in light of the flexibility of modern airpower. Increased speed, flexibility and lethality reinforce that it is the effects—not the systems—that matter.

Power projection forces focus on increasing their ability to provide initial response and sustained firepower for an air campaign in any theater. Long-range bomber forces have unmatched potential to provide both. B-52s launched from Louisiana delivered conventional ALCMs on targets in Iraq on the first night of the war. With fewer bombers dedicated to the nuclear role, enhanced conventional capabilities will yield long-range platforms capable of striking critical targets in the first days of any campaign—and sustaining operations over the long term.

Advanced conventional capabilities and smart employment tactics are the keys to operational success for all power projection forces. A rising curve of technological sophistication in areas from precision munitions to information processing is already increasing the effectiveness of platforms in a range of missions. Enhanced survivability is another boost. With stealth, F-117, B-2 and F-22 crews can identify with Winston Churchill's saying: "There is nothing more exhilarating than to be shot at without result," while most of the time denying the enemy any opportunity to shoot at all. Survivable platforms with precision weapons command decisive force, and can wield it to great effect in a highly compressed period of time.

**The primary mission of the B-2**

is to enable any theater commander to hold at risk and if necessary attack an enemy's warmaking potential, especially those time critical targets which, if not destroyed in the first hours or days of a conflict, would allow unacceptable damage to be inflicted on the friendly side.

**Such Targets Include:**

- Emerging capabilities for the production, support and use of weapons of mass destruction
- Massed conventional forces of an adversary threatening or invading a friendly state
- Enemy air attack assets and other offensive capabilities
- Key nodes of enemy command, control and air defense

**The B-2 Mission Statement issued in February 1992 reflects a renewed emphasis on conventional operations.**

Intelligence is another crucial variable for combat forces. As important as collection is, dissemination of intelligence to the right people at the right time is the ultimate measure of success. Robust information architectures and a partnership between operators and suppliers enable power projection forces to better achieve

the flexible, effective operations that air and space forces are capable of providing.

Mature use of airpower in the future will rely not just on advanced technology and concepts, but on ever-increasing complementarity between land and sea-based airpower, and between land, sea, air and space forces. Tight budgets put a



premium on choosing the right upgrades and new systems. The Air Force and the Navy have both an opportunity and a responsibility to hone their cooperation for future air operations. As our national strategy depends more and more on control from the air, leading-edge land and sea-based air forces will rely on compatible communications and planning systems. Precise direct-attack and stand-off munitions from the same family will increase effectiveness and operational flexibility for all air forces. At the operational level, Navy expertise in operating “from the sea” and against the littoral complements Air Force advantages in deep strike missions, large-scale air operations, and massive firepower. True jointness is using the right tools at the right time.

Both land and sea-based air forces are stepping up to a widening role in forward presence operations. Forces deployed permanently or temporarily overseas provide a flexible tool, ready to watch and monitor, or to form the tip of the spear for response to a crisis. Even with reduced force structure and overseas bases, long-term presence in Europe and the Asia-Pacific region is central to our defense strategy. Global reach and power also means maintaining the ability to deploy forward from the United States. The composite wings in Idaho and North Carolina are structured to deploy within hours. Forces based in and operating from the continental United States also have a widening role in projecting power and presence forward as needed. B-2s on the ramp in Missouri can deliver precise firepower anywhere in the world, within hours.

### **Supply Rapid Global Mobility**

Mobility is the sinew of global reach—and a capability that will serve our strategic interests well into the future, especially with a reduced overseas presence. Our national security strategy calls on us “to be able to deploy substantial forces and

sustain them in parts of the world where prepositioning equipment may not always be feasible, where adequate bases may not be available, and where there is a less-developed industrial base and infrastructure to support our forces once they have arrived.” Mobility forces preserve a tremendous asset: the ability to operate from CONUS and to move rapidly to any spot on the globe, whether building an air bridge for ground forces or speeding support for air forces already on the scene.

Rapid deployment is a combat force multiplier. Fighter forces paired with precision weapons are a formidable combination that our mobility fleet deploy worldwide and sustain at high in-theater sortie rates. Just two C-5 sorties per day could deliver all the precision guided munitions used by F-117s in the Gulf. About four days worth of the airlift at the peak of Operation Desert Shield could supply *all* the PGMs used by *all* aircraft during the war. New systems such as the F-22 will be able to operate with even less support, packaging ready airlift with advanced firepower into a truly leaner, meaner force. In other cases, supplying global mobility *is* the air campaign. The Berlin airlift in the winter of 1948-49 accomplished vital strategic objectives. Rapid delivery of supplies during the 1973 Yom Kippur War kept Israeli forces in the fight.

Tankers are the lifeblood of global reach and global power. Air refueling assumes increasing importance as a force multiplier in a period of smaller forces and declining forward basing. Tankers build air bridges to sustain high rates of airlift to any point on the planet, sometimes flying more sorties than the airlifters. Strike packages rely on tankers to extend range and payload, and guarantee air forces the global reach to deploy rapidly and to employ effectively. Land-based tanker forces are indispensable to support a range of theater air operations. In Southwest Asia, joint U.S. and Coalition forces depended on USAF tankers for operations beyond the littoral. Due to these requirements, tankers and airlifters have received a proportionally smaller cut than other elements of our force structure.

## Control the High Ground

Control of the air has become a prerequisite for the American way of war. Similarly, at the dawn of the new century, space forces' superiority of speed and position over surface and air forces points to control of space as a prerequisite for victory. Control of the high ground is the means to provide information on the disposition of enemy forces, bomb damage assessment, the time and location of ballistic missile launches, precise navigation, secure communications, and more. The Air Force's space sentinels and our U-2s, RC-135s, JSTARS, and AWACS aircraft provide the United States with the real-time information necessary to anticipate and monitor a crisis and act, when necessary, with a decisive information advantage over our adversaries. AWACS deployments provide another form of presence, by improving situation awareness in cases where a large presence is inappropriate or not possible. JSTARS will serve as the eyes and ears of the joint force commander. These forces complement and support land, sea, and air forces—giving the United States the edge in combat and helping to achieve our national security goals throughout the spectrum of conflict.

During the Persian Gulf War, America's *de facto* control of space allowed us to keep continuous watch on the enemy—providing commanders with situational awareness that allowed them to cut through the fog of war. Extending this kind of control into the future means both ensuring access to space—one of the fundamental national interests of the United States—and ensuring our exploitation of space in situations even when an adversary challenges us there. Space superiority is joining air superiority as a *sine qua non* of global reach and power.

Protecting our forces, deployed or at home, from ballistic missile attack is another essential. As weapons of mass destruction proliferate, the Air Force must extend its ability to protect our theater forces, our allies, and our homeland by holding ballistic missiles at risk—all the

way from prelaunch through space to reentry. With one-quarter of the budget spent on space, the Air Force is uniquely well-positioned to provide all aspects of space power. Over 90% of the trained forces, most of the infrastructure, and about 80% of funding for DoD's space related assets comes from the Air Force. The Air Force conducts 90% of all DoD operational launches and currently has command and control of 99 active satellites.

While the basic concepts are understood and being applied, there is still tremendous potential for growth in our thinking, hardware, control, and exploitation of space. Space is breaking the confines of its R&D heritage and becoming more integrated with terrestrial forces. As space becomes more and more integrated with our day-to-day operations, we will create the new concepts, doctrine, and strategies that will be required to support the joint forces commander.

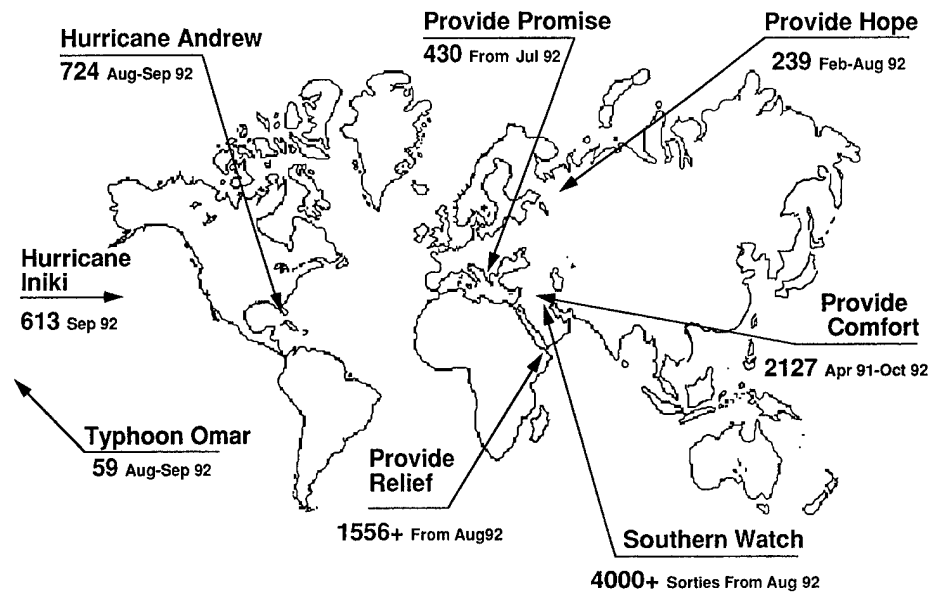
Space forces are today where airpower was before World War II. The mission of space forces, long considered support for combat or mobility "customers," is now an integral part of combat operations. Tomorrow, control of the high ground will draw space forces more fully into the versatile combat force, decreasing the time required to respond to aggression and allowing air forces to strike anywhere on the surface of the Earth with overwhelming but discriminate power.

## Build U.S. Influence

Effective military instruments need not always be used for war. Part of global reach and power is employing air and space forces to accomplish national security objectives by building influence abroad. Air Force professionals make an impact when they share their knowledge of defense organization and civilian control with counterparts in newly democratic states. Other tools—from training to airlift to air occupation—offer great flexibility that no other nation can match.

## Air Force Humanitarian Relief and International Operations

Number of Aircraft Missions for Selected Operations August to November 1992



**Snapshot of Air Force Operations From August to November 1992 shows variety of missions for global reach and power.**

Part of global power is the means to extend a helping hand, and to use airpower for diplomatic and humanitarian purposes, or in support of international objectives. In one particular week during the autumn of 1992, Air Force planes were supporting fire-fighting operations in California and Idaho, humanitarian relief efforts in Somalia, Turkey and Yugoslavia, and peace-keeping forces in Angola. Airlifting relief supplies to Russia in the winter of 1992 put global reach to work to build strategic partnership. Operation PROVIDE COMFORT offers another example: the same forces that participated in the Gulf War shifted to providing relief supplies to Kurdish refugees in northern Iraq. As always, Air Force planes are on hand in the United States—disaster relief to Florida's victims of Hurricane Andrew was just one example.

Air and space power are also reaching into new arenas. Peacekeeping represents one area where global reach—backed up by access to global power—is making a growing contribution. Operation OLIVE BRANCH dedicated U-2s to collect information to implement UN Security Council Resolution 687's provisions for

destroying nuclear capabilities and missile weaponry in Iraq. Without stationing masses of troops on the ground, the threat of airpower enables us to back up the small teams conducting inspections and control the behavior of Iraqi forces. In SOUTHERN WATCH, Air Force and Navy aircraft are enforcing a no-fly zone over Southern Iraq. Peacekeeping operations demand tailored responses—to monitor, inspect and enforce diplomatic solutions. Airlift, surveillance and ready, tailored combat power to deter or defend are among the contributions air and space forces can bring to international peacekeeping efforts.

Global access and influence ultimately depend on the bonds of alliance and international cooperation. Extensive programs with partners like Great Britain and Japan provide a conduit for Air Force professionals to share expertise and are a bulwark of global security. Security assistance, exercises with security partners, military-to-military contacts and foreign military sales are all part of the Air Force's global commitments. German F-4s and Tornados operate side-by-side with an American squadron at Holloman AFB in New Mexico. Emphasizing regional de-

fense strategies underscores the need for continued commitment to building influence with friends and allies through the flexible tools of airpower.

U.S. security relationships during the Cold War extended to a relatively fixed set of formal allies and friends. In 1992, fighter and bomber exchanges with the Russians broke the last of that mold. Today, there is hardly a nation anywhere that does not want to deepen its military contacts with the United States. This offers us an unprecedented opportunity to enhance our own security as well as to encourage the cause of democracy globally. We stand

preeminent today as a military power, yet the military flourishes within an open society, responding to a democratic government. Attributes that we take for granted are a reservoir of practical experience to offer emerging democracies in Central Europe, the Soviet successor states and elsewhere. Carefully tailored programs of military contacts are one way to advise new democracies on processes for a modern military—from pay, promotion and recruitment to military justice, public affairs and legislative liaison—as they build structures that will defend, not imperil, their newly won freedoms.

## Global Reach—Global Power in Action

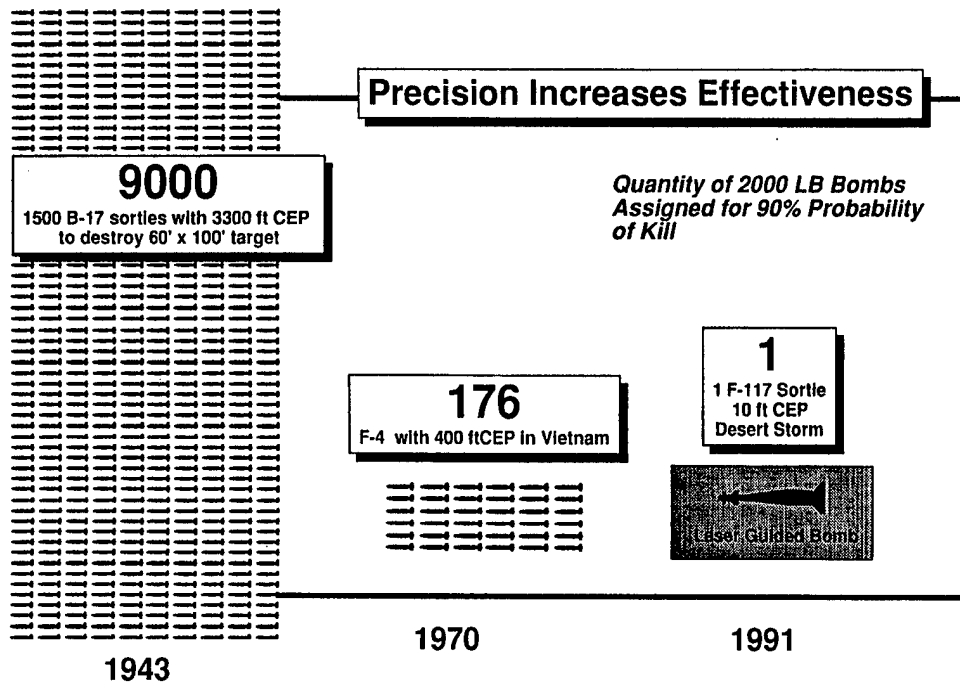
### Desert Storm

*Global Reach—Global Power* was validated under fire in the Gulf War. In 39 days, airpower grounded the Iraqi Air Force and systematically stripped the Iraqi Army of its combat power—enabling the fastest land offensive of the 20th Century. Airpower technology caught up with airpower theory in Southwest Asia. Air and space forces achieved a degree of effectiveness that earlier airpower pioneers foresaw, but which the technology of their day could not yet deliver. The air campaign paralyzed Iraq's capability to wage war, achieving effects that simply were not within the scope of earlier campaigns. In several categories from air defense to oil production, the 1991 air campaign produced effects on a greater scale than did the Combined Bomber Offensive in two and a half years of costly strikes on Nazi Germany. "The decisive factor in the war with Iraq was the air campaign," said House Armed Services Committee Chairman Les Aspin.

Several new factors made the air campaign decisive. In the Gulf, the role of the Joint Forces Air Component Commander (JFACC), the single commander for air assets, confirmed the revolution in employment and effectiveness of airpower—and the success of unified command. The JFACC and his staff had options available to them that went far

beyond the flexibility available to Eaker or Spaatz or Kenney—so far as to bear only a distant conceptual relation to the conduct of the air war in Europe or the Pacific fifty years earlier.

With stealth, the JFACC used his forces to strike the enemy across the length and breadth of his territory, on the first night, with no losses among the F-117s. With the air supremacy stealth helped achieve, the Coalition struck the enemy by day with near impunity. Forces loitered over target, using precision weapons to destroy aimpoint after aimpoint in the same target complex. The same strike aircraft "plinked" armored vehicles, killed enemy aircraft in their hardened shelters and destroyed bunkers that served as the nerve centers of the Iraqi war machine. The commander's freedom to moderate losses and accomplish objectives was an advantage the JFACC could exercise consistently for the first time. Strikes unfolded in real time as the JFACC watched on a display data-linked to him in his headquarters by AWACS and other sensors. Precision weapons and high assurance of mission success confidently linked strategic objectives with aimpoints—making strategic bombing more discriminate, reducing losses, and achieving measurable results with fewer missions. The chart below illustrates the decreasing number of bombs required to knockout a typical target.



**Over five decades, advanced platforms and precision munitions revolutionized the effects of airpower by shortening the time and sorties required to strike a target.**

Allied aircrews shut down Iraq's oil production, electricity, transportation, communications, and ability to produce weapons of mass destruction with a mere 1% of the bombs dropped in eleven years in Vietnam. Iraq's leaders could not effectively reinforce or maneuver their military forces. Discriminate and simultaneous attacks inflicted paralysis—not devastation.

The success of the air campaign revolutionized the conduct of war. General Colin Powell spoke to the role of airpower: "I will say this—and I've said it before and I'll say it again: airpower was decisive in that war." Modern airpower demonstrated that it can undercut the enemy's basic ability to wage war and deny opposing ground forces the ability to execute their scheme of maneuver, while also inflicting heavy damage on those forces to cripple their operational effectiveness. With precise and rapid application of airpower

to paralyze and wear down enemy forces early on, ground forces have relatively less to do, and can move quickly to consolidate gains when ground operations begin. In the future the role of air and space forces are part of a new form of combat where, in the words of Vice Chairman of the Joint Chiefs of Staff David Jeremiah, "it will no longer be necessary to close with the enemy in order to destroy him."

The experience of Southwest Asia challenges the Air Force to concentrate precision and refine simultaneity to expand the contribution of airpower to the joint conduct of war. Five and ten years from now, the force will be smaller than it was in 1991, but more lethal, and hence more capable. Signs of the response to that challenge are visible in the major procurement programs, the new Air Force doctrine manual, the command organization and the commitment to quality in personnel and training.

The winning edge in the Gulf War came

from strategy, technology, and most of all, our people. Competence and years of realistic training made the difference in the success of air and space power. The quality of our highly trained people is essential to carrying out the missions of *Global Reach—Global Power*.

### **Shaping the Future**

Visions succeed through implementation as well as articulation. The experience of Desert Storm was the final impetus that led us to re-examine and change some old practices to better structure the Air Force for a new era. As General Merrill A. McPeak explained: "The real test of an institution is how it handles success. Everyone recognizes the need for change after failure. What should make us proud is that ... we are way ahead in crafting an Air Force that fits the needs of the next century."

The Air Force reshaped to apply global reach and power in circumstances where theater warfare—not a global Soviet threat—is the emphasis. Strategic Air Command, Tactical Air Command, and Military Airlift Command divided airmen into separate communities, so in 1992 the three merged into the new Air Combat Command and Air Mobility Command. Air Force Materiel Command melded Systems and Logistics commands into a single organization for cradle-to-grave weapon system management. In Air Force Intelligence Command, one commander now has responsibility for functions once scattered across the Air Force. The scope of these changes was enormous. In terms of resources and personnel, the restructuring of major Air Force commands dwarfed any of the mergers, acquisitions, divestitures and consolidations that took place in the private sector over the preceding decade. More important, reshaping positioned the Air Force to decentralize, and to take down the walls that divided airmen and the functions of airpower into limiting categories.

Air Combat Command (ACC) blends

the firepower of the Air Force into one command. As a result the Air Force is better prepared to respond to new challenges in any theater. Composite wings are one feature that carries this philosophy to the level of day-to-day operations. Different aircraft can combine in one wing to train together in peacetime, preparing fight the way they would in war. Under this structure, the commands no longer support the outdated distinctions that matched tactical aircraft to armies and long-range aircraft to a primarily strategic nuclear mission. ACC's crews train for a variety of conventional roles—both fighters and bombers aiming to be as proficient at hitting tanks as they are at hitting enemy war-making capacity. Factors like range and payload type outweigh command culture when a theater commander needs responsive, effective firepower.

Air Mobility Command (AMC) lines-up most of our mobility and refueling assets on the same team, enabling the American response to reach its destination anywhere on the globe. Integrating airlift and tankers enhances mobility, reach and combat power across the breadth of America's armed forces. The uniquely American capabilities to airlift anything, anywhere and to extend the range of our firepower are the foundation of global reach and power.

The merger of Systems Command and Logistics Command into the new Air Force Materiel Command (AFMC) reflects these organizational changes and infuses modern management principles into every aspect of the business of the Air Force. AFMC's job is to turn global power and reach concepts into capabilities—to design, develop and support the world's best air and space weapon systems. AFMC has laid its cornerstone in the Integrated Weapon System Management (IWSM) concept, giving us cradle-to-grave management of our systems.

Finally, we are responding to a new security environment and building on the excellent performance of Air Force Guard and Reserve forces in the Gulf by giving them new missions and expanding their

roles in traditional tasks. Although active manpower has been reduced by more than a quarter since the mid-1980s, Guard and Reserve personnel strengths will maintain their current levels. In our fighter force, ARC units will grow from one-third to over 42% of the total force by 1995. If one includes the air defense interceptors of our National Guard, fully 48% of Air Force fighter cockpits will be filled by Reservists

and Guardsmen. Similarly, nearly half of all our strategic and tactical airlift aircraft are in the Guard and Reserve, as are 56% of all our airlift flight crews. The restructuring of our bomber forces will also allow us to transfer some B-52 and B-1s to Guard and Reserve units where citizen-airmen can contribute to the bomber's expanding conventional role.



## Conclusion

In its most simplified terms, the goal of our national military strategies during the Cold War was to *contain*. A new era demands that we sharpen our ability to *shape* the international environment. Shaping our alliances, assuring a favorable security climate, and crafting the most effective response to crises are the core objectives our military strategies must support.

Two challenges confront the Air Force as we strive to enhance our contribution to national security. The first is to maintain the forces we will need to deal with residual or emerging threats around the globe. The second is to create, steadily and affordably, the backbone of our forces for after the year 2000. Both challenges demand that our nation maintain a superior core of military capabilities that guarantee the flexibility and effectiveness of our military response to a wide variety of situations.

Core capabilities for the nation range across service lines. They include the ability to maintain global situational awareness and to inflict strategic and operational paralysis on any adversary by striking key nodes in his war-making potential. At the same time, we must hold emerging strategic capabilities in potentially hostile states at risk, while being prepared to defend against limited missile attack. Another core capability is maintaining sufficient, quality forces that can be deployed worldwide to deter or defend. Assured access to air and space are as important to the Nation's economic well-being as they are to its security. Access to any region requires air, maritime and space supremacy. As a new range of challenges arise we will be

called upon to assist international efforts for relief, peacekeeping and drug interdiction, and a range of other missions short of war. To ensure success for the long haul, we will also need to sustain a research and industrial base sufficient to keep our technological edge.

One of the most important aspects of the *Global Reach—Global Power* planning framework is that it shows us how to prudently trade some force structure to maintain a high level of readiness and investment in critical modernization programs. Ongoing review of the roles and functions of the services is indispensable, and will create the climate where each service can perform at its best and bring the optimum contribution to the joint conduct of warfare. The Air Force of the 1990s is smaller in numbers, yet more capable of sustaining core capabilities and countering a wide variety of challenges to our nation's security and our interests abroad. Air and space forces must be prepared to shoulder increased responsibility for bringing decisive capabilities to bear in a range of combat operations and in military operations short of war.

America is an aerospace nation. Our aerospace forces and technology are a national treasure and a competitive edge, militarily and commercially. Now, more than ever, we have the opportunity to mature the abilities of Air Force air and space forces and make them even more useful tools for meeting our national security objectives—through *Global Reach—Global Power*.