

The USAF Chief of Staff talks about airpower, the Air Force, and the future.

First Force

By John A. Tirpak, Senior Editor

TECHNOLOGY is finally catching up with the predictions of early airpower theorists, and the US Air Force is rapidly becoming—if it has not already become—the unique “enabler” of virtually any military campaign by the United States, according to Gen. Ronald R. Fogleman, the Air Force Chief of Staff.

In a series of interviews with *Air Force Magazine*, and in recent speeches, General Fogleman has described the Air Force as the key needed to obtain entry into practi-

cally any theater of operations and the weapon of choice in dealing with most of the no-notice, come-as-you-are conflicts and crises the US is likely to face in the future.

In the array of military capabilities available to the US, the Air Force has become the First Force.

General Fogleman’s views, and the realities underpinning them, are likely to have a significant impact on the upcoming national strategy review and debate, likely to begin in earnest next spring. The review will





Painting by Nilo Santiago / USAF Art Collection



General Fogleman wants to make sure the Air Force maintains the lethality, sustainability, and punch to do the “heavy lifting” necessary to win a war.

explore the question of whether the existing strategy of being able to fight two nearly simultaneous major regional conflicts (MRCs) is sound and whether it is possible to carry it out with the current force structure.

The Chief outlined why, in his opinion, debate over the so-called “four air forces” issue has been put to rest. Further, he described the Air Force’s increasing reliance on bombers to carry out national strategy, the evolving role of aircraft carriers and air expeditionary forces, the rising importance of unmanned aerial vehicles, and the potential for directed-energy weapons to revolutionize warfare.

Oversell

Early proponents of airpower, such as Billy Mitchell and Giulio Douhet, “promised more than they could deliver,” remarked General Fogleman. “The technology really wasn’t there to fulfill the vision” of a force aloft that could dominate the battlefield and decide most of what happened on the surface below.

However, the advent of nuclear weapons and, later, the emergence of stealth technology, precision conventional weapons, and a global reconnaissance capability, have had a dramatic impact. The vision of an Air Force that is first among equals in both security and power projection is “really starting to come of age,” the General said.

“I sincerely believe that the inher-

ent characteristics of airpower will make it the weapon of choice by the national command authorities, as we get deeper and deeper into this transition from the Cold War” into whatever follows, he asserted.

The General went on, “Early in a conflict—with our range, our speed, our flexibility, our maneuverability, our lethality—airmen will normally be first engaged. They will get there first; they will be in a position to set the battlefield while other forces are employing.”

Only after air dominance has been achieved—to enable safe transit for airborne and seaborne forces into the theater—will it even be possible for a regional commander in chief to make the transition to a naval or land strategy, said General Fogleman. Only then could a CINC reapportion forces so that the Air Force might serve a supporting role to a land or maritime strategy.

“People need to understand that the American way of war has changed,” General Fogleman said.

In a speech at an airpower doctrine seminar at USAF’s Air War College at Maxwell AFB, Ala., in April, General Fogleman noted that US military leaders who conducted Operation Desert Storm in 1991 had reached a critical conclusion. “We discovered,” he said, “that conventional air operations could not only support a ground scheme of maneuver but also directly achieve operational- and strategic-level objectives—independent of

ground forces or even with ground forces in support.”

He said airpower “has fundamentally changed the nature of warfare, but our joint and combined doctrine has not caught up with this development.”

The General took pains to make clear that he rejects the idea that the Air Force can win wars by itself, a charge often leveled at the Air Force with little supporting evidence.

“Don’t misunderstand me,” he told his audience. “I’m not claiming we have all the answers or can go it alone. That’s certainly not the case.” Rather, said the General, USAF must “ensure that our doctrine provides us the tools necessary to orchestrate airpower in conjunction with other component operations, because this produces tremendous synergistic effects.” The capabilities of the Air Force must always be employed “to accomplish the objectives of the joint force commander—the commander in the field,” he said.

More Equal Than Others

But he also said that, in his last six years of joint assignments, “one of the fundamental truths I’ve discovered is that joint warfare is not necessarily an equal-opportunity enterprise.”

The General described the 1991 Gulf War—which set new standards for speed of success and minimal casualties—not as a “template” for how all future wars will be waged but rather as “a proving ground” for the modern capabilities of airpower. The air campaign—including the airborne sensors that provided superior knowledge of enemy movements—was a decisive demonstration “that the technology has caught up with the vision,” General Fogleman said. “The capability has been proven.”

The Gulf War was also an example “of what airpower can do when you have an enlightened commander in chief,” the General told *Air Force Magazine*. He said Gen. H. Norman Schwarzkopf, the overall commander of coalition forces in the Gulf, “was under a lot of pressure to kick off the land campaign early, . . . [but] he understood that with his airpower, . . . landbased [and] seabased, he had a tool [with which] he could be working on the other guy’s center of gravity while he was building up his land forces.” This, in turn, “took away

the requirement to engage in some kind of bloody frontal assault.”

The General also asserted that airpower gives the national command authorities an option to take swift action in an unanticipated crisis where other means of force, whether land- or seabased, are too far out of position to affect unfolding events in a timely fashion.

Asked to predict whether the next strategy review would revisit the issue of why the US needs “four air forces,” General Fogleman said he feels the nation is beyond that.

“That [argument] is kind of on the fringe,” said the General. “You don’t see a lot of that anymore.” He said that the 1992 national military strategy overhaul, along with two subsequent roles and missions reviews, clearly indicated that the air arms of the other services are “an augmentation to their service” and are complementary to each other and to the role served by the Air Force.

Comparisons, however, simply underline the fact that the US must have a single service dedicated to the air and space mission, he said. “You absolutely need a full-capability, . . . full-service Air Force.”

“Within the United States Navy,” he explained, aviation “is just a portion of what they focus on. Within the United States Army, you have an air arm. It is just a portion of what they focus on. What you discover is, institutions that do not focus entirely on a subject . . . tend to give it less than full attention.”

He noted that the principal engines of victory in the Gulf War—space systems, stealth, precision guided munitions, air-superiority aircraft—were all the product of years of effort by the Air Force.

Full Time

USAF is “the only Air Force that focuses on air- and spacepower . . . [science and technology], research and development, testing, fielding, sustainment—across the board—as a *primary* focus,” General Fogleman said. “This isn’t a part-time job. Part of my force isn’t focused on something else; we are focused on aerospace matters.”

The General added that, now that the US is principally joined to the rest of the world not by land or sea routes but by air and space links, it is an aerospace nation. “And if you

have an aerospace nation, it needs a full-time Air Force that pays attention to the full spectrum, . . . that is focused solely on aerospace needs.”

Without such focus, the Gulf War might well have turned out differently, the General said. “I’m not sure that in a service that just pays part-time attention to airpower and aerospace weapons, that [such technologies as stealth and precision munitions] would have evolved,” he said.

Naval aviation had been optimized for fleet defense and combat in littoral regions, not for long-range precision attack. Army aviation has evolved into a movement, fire support, and scout function.

The performance of airpower in the Gulf and since has shown “the value that comes from having airmen in charge of aerospace,” the General observed.

The Air Force’s capabilities have

grown even more formidable since Desert Storm, General Fogleman pointed out. “An awful lot of improvements occurred just within the last five years,” he said.

Synthetic aperture radar, which makes it possible to see through clouds, and Global Positioning System capability, which gives both platforms and weapons precise location information, have been widely disseminated throughout the force.

In addition, laser-guided bombs have become more accurate, reconnaissance has become faster and more comprehensive, and “our aircrews have become better—better trained” and more highly disciplined, General Fogleman said.

He scoffed at naysayers who have insisted that the Gulf War was an aberration and that the performance of airpower there can’t be duplicated elsewhere. Their argument, he said, was that the desert was an ideal and uniquely airpower-friendly battle-

The Value of Focus

Airpower in Korea, Vietnam, and the Gulf

What follows is an excerpt from “Aerospace Doctrine—More Than Just a Theory,” the speech Gen. Ronald R. Fogleman, USAF Chief of Staff, presented to the Air Force Doctrine Seminar held at Maxwell AFB, Ala., April 30, 1996.

“It’s interesting to reflect on our experience in Korea. The Air Force had thirty-eight aces in that conflict. There was only one Navy ace during the war and only one Marine Corps ace—and he was an exchange pilot with the Air Force! This does not have anything to do with individual aviation skills. The Navy and Marines had, and still have, superb aviators. In Korea, the Navy and Marine Corps found themselves entering a conflict without the equipment that would allow them to prevail in the air. We found the aircraft of these two services unable to engage the MiG-15 [the first operational Soviet jet fighter], so the opportunities for kills were just unavailable.

“On the other hand, the Air Force had paid attention to air superiority and had developed the F-86 to perform that role. The F-86 was there at the time we needed it. That was the reason the Air Force far exceeded the other services in the number of aces. It didn’t have anything to do with individual skills; it had to do with paying attention to a fundamental mission area.

“When you look at the aces in the Vietnam War, the Air Force had three, and the Navy had two. Our exchange ratio against a fifth-rate air force [that of North Vietnam] was about 2.55 to one—not a very successful outcome. I attribute much of this to the fascination and focus our Air Force had on nuclear war at one extreme and on the land battle at the other. So in the lead-up to Vietnam, we failed to pay attention to the larger issue of air superiority.

“Many of us flew the F-4, and it was a wonderful multipurpose airplane, but anybody who claimed to be using it as an air-superiority platform didn’t fly very many hours in the F-4. We had to go to it as an expedient, not as an aircraft designed for air superiority. “Afterward, we went to work and came up with the F-15. When we got into the [Persian] Gulf War, we saw that out of forty-one Iraqi aircraft shot down by coalition air forces, thirty-five were downed by Air Force aviators, three by the Navy, two by a single Saudi pilot [of the Royal Saudi Air Force] flying an F-15, and one by a Marine on exchange duty with the Air Force, flying F-15s.

“It’s a combination of equipment and the way you are trained to employ that equipment that produces these kinds of results. We can’t draw too big a conclusion from all this, but we ought to pay attention to this idea that there’s value in being focused on what you do—all the time. You can put your resources where they need to go, and this gets translated into other benefits.”

field: cold at night—making warm targets stand out—and lacking in the mountains and foliage that can hide the enemy.

Balkan Storm

General Fogleman pointed out that in the Balkans—an area characterized by mountainous terrain, dense forests, and extremely poor weather—the use of airpower against Bosnian Serb forces in August and September 1995 convinced the breakaway aggressors to fold their hand and come to the peace table at Dayton, Ohio.

“What you saw in Bosnia was a demonstration [of the proposition] that, if somebody draws up a set of political objectives, allows airmen to look at those, and has an airman tell you whether or not you are likely to achieve that outcome, and then turns it over to airmen—as they did—to prosecute that campaign, [then] airpower’s got a tremendous opportunity, generally, to influence events.”

In a future conflict—even a present-day war—the Air Force will be able to start conducting operations immediately, from the continental United States, without having to get ships into position or relying on costly cruise missiles, which the General said present a poor option for carrying out an extended campaign.

Whether the weapons are air- or sea-launched, “we need to understand . . . the role of cruise missiles,” General Fogleman said. It

comes down to how much it costs “every time you send one of those things out a tube. And if you’re talking about \$1.2 [million] to \$1.7 million a shot, you’re talking about a weapon that’s pretty good at getting some guy’s attention, but you’re not going to sustain an air campaign . . . at that price.” Even the formidable economic power of the United States would be “run into the ground” at such a rate.

It was for precisely this reason that the Triservice Standoff Attack Missile had to be canceled: too expensive to use in quantity. The successor system—the Joint Air-to-Surface Standoff Missile—has been structured to make affordability a paramount factor. The JASSM is now targeted to come in for less than \$400,000 per missile.

“It’s not just the lethality of the weapon, but it’s the practicality of being able to use it,” the General said.

He went on, “If we get ourselves engaged in a serious campaign, land-based air is what does the heavy lifting. It’s sustainable, and it brings a kind of lethality and punch that you don’t get” from surgical strikes with cruise missiles. He noted the price differential between a million-dollar missile and a \$16,000 Joint Direct Attack Munition—soon to be the Air Force’s standard bomb—both of which will deliver a 2,000-pound warhead with the same high precision.

Arsenal Ship

Because of this, he holds little esteem for the so-called arsenal ship concept forwarded by the Navy over the last year. The arsenal ship, postulated as a stealthy surface vessel crewed by a relatively few sailors, would pack a magazine of cruise missiles and lay off a coast. Such a vessel would have to be built in large numbers to cover the potential range of trouble spots.

Even if sparsely crewed—saving the high cost of personnel—such ships would be expensive to build, wouldn’t always be in the right place when needed, and would be expensive to operate.

The unpredictability of both the near- and long-term political situation is “going to increase the importance . . . of the conventional bomber force,” General Fogleman asserted. The bomber’s ability to react within hours—from the continental United States—to any crisis, armed with advanced weapons that can do great precision damage on a single pass, has already become the linchpin of national strategy. Under the two-MRC strategy, bombers will begin crippling an enemy as other forces arrive in-theater. Once other forces have picked up the bulk of the air campaign, bombers will be available to “swing” to a second crisis, buying time for deployment to the second theater.

“Early in the fight . . . landbased air is all you’re going to have available,” the General noted. “You may be lucky, and there may be a carrier in the area. But landbased air does the heavy lifting. And so we’ve got to posture ourselves to make sure that landbased air has the capability to do the heavy lifting. And that’s everything from buying the aircraft [and] the weapons that go on the aircraft to the support system to bed them down in forward bases, or semiforward bases, or operate them from the continental United States if we have to.”

Asked why the Air Force doesn’t beef up the bomber force, if it will be carrying such a critical part of national strategy, General Fogleman bristled. “We are, in fact, doing this,” he said. “This is a point people fail to realize.”

From 1994 to 1996, the Air Force requested no fighter aircraft, he noted, choosing instead to put \$2.7 bil-



The new generation of precision weapons is more accurate and less costly than ever before, making precision strike affordable throughout the force. This test F-16 carries a Joint Standoff Weapon.

lion into the upgrading of the bomber force, and putting “money in the budget to buy the latest generation of precision munitions” that will make them more potent. “So that tradeoff’s already been made,” he said.

“Better . . . Than I Thought”

The General acknowledged that “clearly, [the Air Force does] not have the number of bombers called for in the [1993] Bottom-Up Review” of defense, but he said advances in precision weapons and particularly the capabilities of the B-2 bomber “have encouraged me to believe that we . . . may be in better shape than I thought.”

He noted that, after upgrades are completed at the turn of the century, there will be twenty-one B-2s, ninety-five B-1Bs, and seventy-one B-52s, for a bomber force of 187 airplanes, of which “in excess of a hundred . . . will be deployable,” meaning they will be immediately ready for combat operations. The B-52 element was to have numbered fifty-five to sixty-six, but the final size of the force increased “because we’ve gone back and determined that sixty-six is not enough” to execute the mission, he said.

The issue of whether to buy more B-2s has been a sticking point between the Air Force and critics, but General Fogleman remains firm that the twenty-one will be adequate.

“It comes down to . . . how many B-2s do I really need?” he said. With each B-2 able to “strike sixteen aim-points in one pass, with a high degree of assurance that I’m going to kill the target,” and with a high likelihood of recovering the airplane, the B-2 program, he feels, is sized correctly.

With the B-2, the F-117, and the F-22, the Air Force will have a monopoly on US operational stealth aircraft for at least the next fifteen years. The Navy’s first stealthy aircraft—the Joint Strike Fighter—won’t be in service until at least 2011. General Fogleman was asked if, until then, USAF would need to do preliminary work before Navy aircraft could strike at a well-defended target.

“That’s the way the air picture is going to unfold, in my view,” the General said.

He explained that the Navy’s projected carrier deck-filler—the F/A-



Photo by Ted Carlson

Bombers make the difference. With no notice, only bombers can be in position to strike an aggressor anywhere in the world, buying time for the deployment of tacair assets, which in turn allow the introduction of land and sea forces.

18E/F—“was not the aircraft of choice for the Navy” to fulfill the carrier strike mission. Rather, the Navy had pinned high hopes on the stealthy A-12 attack plane, which was canceled in 1991 when high cost, technical problems, and delays put the program on a downward spiral.

“When the A-12 system went down the tubes, and their A-6 [attack aircraft] upgrade went down the tubes, and everything else that they had on the books in their tacair program went down the tubes, they were faced with a situation where they needed aircraft on carriers,” the General said. While the F/A-18 “was a good airplane, it had some limitations” in range, payload, turning ability and “bring back”—the ability to recover on a carrier without jettisoning expensive unused ordnance.

The Navy therefore had to upgrade the F/A-18 into a larger, more versatile—but multirole—platform for fleet defense, strike, and other missions. While it has some reduction in radar cross section over its predecessor, the C/D model, the F/A-18E/F is not considered a stealthy airplane.

“Marginal”

Indeed, the General Accounting Office recently said that since the F/A-18E/F is far more costly than the F/A-18C/D—but only a “marginal” improvement over it—a continued C/D buy, until the arrival of

the Joint Strike Fighter in 2011, would be most cost-effective.

“I think [the Navy has] bought [itself] a situation where, in the not-too-distant future, where you’re facing double-digit [surface-to-air missiles] and an environment that is . . . changed from what we have today, that [they] will have greater and greater difficulty” making successful penetrations of modern air defense nets, the General asserted.

“I understand how they got to where they are,” he added, “and I think they have to be honest with themselves about what the capability of [the F/A-18E/F] is. And I hope that just the fact that they don’t have stealth doesn’t drive them to the point of putting their head in the sand and ignoring the value of stealth.”

Penetrating enemy air defenses with nonstealthy platforms will still be possible but only with extensive jamming, preparation by numerous standoff weapons, and other measures not needed by stealth airplanes.

General Fogleman is heartened by the Navy’s commitment to buy the Joint Strike Fighter, but in the meantime, “the baggage associated with nonstealth operations in the twenty-first century is going to break the bank if they don’t watch it,” he warned.

He confessed to being nettled by a Navy white paper that made the rounds in the spring, touting the F/A-18E/F as a world-beater through 2015 and even putting the new Hor-

net roughly on a par with the Air Force's stealthy, supercruising F-22. General Fogleman saw the paper as an attempt to undermine the F-22 and regretted that it seemed to signal the end of what had been a cooperative understanding with the late Adm. Jeremy M. Boorda, Chief of Naval Operations.

"He and I understood that in this . . . tacair modernization plan, those F/A-18s are designed to do a multirole kind of thing; they're not designed to do what an F-22 does. And the F-22 is critical to be able to conduct surface warfare, I'm convinced."

The paper was "sloppy work, at best," the General said. "I cannot understand why Navy aviators put up with that."

General Fogleman does not see aircraft carriers as obsolete. "Maritime forces are ideal for some expeditionary kinds of things," he said. Aircraft carriers give you "the ability to sail into a littoral region and not have to worry about diplomatic clearance or beddown approval." The recent crisis during Taiwan's elections, for example, was "an ideal use" of aircraft carriers, the General said.

"It's not likely that we were going to put forces in Taiwan—that's too inflammatory," he noted. But the presence of carriers sent a message that was understood in Beijing.

When You Get Serious . . .

Nevertheless, if the US had gotten

into a serious scrape with China, "we would have had to have bombers moved into the western Pacific. . . . You're not going to take on China with a couple of aircraft carriers; . . . you're going to get serious."

General Fogleman said he fully expects that the air expeditionary force (AEF)—put to use several times this year—will substitute for aircraft carriers in certain situations.

An AEF is a combined force of fighters, tankers, attack airplanes, and other types of aircraft that deploy overseas for a limited time to provide presence and conduct operations. Tied to the AEF is a force of bombers in the US that will be available to it if needed. It is intended to be able to respond within hours to a sudden call to deploy.

The AEF "was not designed to provide a tool for people to make an argument that we ought to have fewer than ten carriers," General Fogleman explained. Instead, the AEF was created because "in a world in which we're all going to have less resources, we've got to find a way to satisfy" US global commitments. "You don't need an aircraft carrier in all parts of the world *if* there's some other service that's got the ability" to provide a comparable force. "There's more than one way to do these chores. Nobody ought to feel threatened by that."

However, "you cannot depend on—nor can this nation afford to build—the number of carrier task forces or

Marine expeditionary groups . . . to cover all the places in the world we may have to be," the General stated.

The AEF has been requested and provided on three occasions so far—in Bahrain, Jordan, and Qatar—and General Fogleman expects that regional commanders in chief will "begin to rely on it." All three AEFs have contributed to Operation Southern Watch operations over Iraq.

General Fogleman envisions having one AEF "at the ready" in CONUS while one is deployed in the field, "as the norm." Two AEFs in the field and one on call would be the maximum available "to keep a reasonable [operations tempo]."

Though the AEFs may increase personnel tempo rates, optempo will probably be the same with or without AEFs, the General said.

"These airplanes are going to fly whether at home station or . . . somewhere else."

An AEF "can generate a tremendous number of sorties—far more sorties than a carrier can generate," the General continued. "And it can do it over a longer period of time, without ever having to go into port or replenish." In addition, unlike a carrier, AEFs can be tailored.

"If it requires a relatively small package, we can [deliver] a small package. If it requires a bigger package, we can do a bigger package. But in each one . . . we have insisted that it be a balanced force," with bombers "on a string" back in CONUS, tied to the AEF.

As soon as the AEF activates and starts to move, bomber crews associated with it will begin mission planning and evaluating potential threats in the area where the AEF is headed. Once one is selected and ordered to deploy—always quicker than "the normal, deliberative schedules," the General said—another group of units will be activated for alert as the next AEF.

Though he would like to see the composite wing at Mountain Home AFB, Idaho, be the designated AEF, logistics and other problems have postponed that notion. However, the Air Combat Command staff "is back . . . working that," and it may yet happen, the General noted.

Going Unmanned

General Fogleman has increased emphasis on the use of unmanned

Photo © Erik Simonsen



USAF will enjoy a monopoly on stealth for at least another decade, with F-117s, B-2s, and, soon, F-22s like this one. Against increasingly lethal air-defense threats, nonstealthy operations could "break the bank," General Fogleman said.

aerial vehicles (UAVs). Even so, the handwriting is not yet on the wall for the pilot, he said. "You're going to see a requirement for pilots into the foreseeable future."

However, he acknowledged that UAVs will start taking over some of the missions that pilots have traditionally been asked to do. "I think the first one of those will be in the surveillance, reconnaissance, and intelligence-gathering arena."

General Fogleman believes, for example, that sometime before the end of the next decade, the U-2 mission will be supplanted by the Tier III Minus/Tier II Plus UAVs. The absence of a pilot and life-support systems aboard allows increased range, higher altitude, and longer loiter time—big pluses in the reconnaissance business.

He noted that the crash of the DarkStar UAV at Edwards AFB, Calif., last spring demonstrated "that we have a little ways to go" before autonomous UAVs are fully reliable. Putting a "surrogate brain" into an aircraft "is not going to come cheaply or easily," he said, but he believes the technology will come.

After reconnaissance, he continued, the next area that starts to make sense as a UAV mission is an "unmanned attack airplane of some sort." Such an aircraft would be able to carry a lethal payload over a long distance and deliver it with precision.

"What you're looking for there is the optimum mix in a truck-like vehicle," but which would "leverage the tens of thousands of cheap Joint Direct Attack Munitions that we're going to have in the inventory" in the early twenty-first century, "without putting a man at risk."

The General speculated that the Block 50 version of the Joint Strike Fighter, due to make an appearance around 2020, "may very well be an unmanned aircraft of some type."

He has concluded that directed energy—and specifically the Airborne Laser system now being developed by two Air Force contractor teams—is a technology that will yield huge dividends. "The Airborne Laser is going to be to directed-energy weapons what the F-117 was to stealth and precision munitions," he said flatly.

The Airborne Laser, mounted in a 747-400 airframe and able to shoot



Unmanned aerial vehicles will begin taking over the reconnaissance mission during the next decade, and afterward UAVs may supplant manned aircraft on some strike missions as well.

down ballistic missiles in the boost phase, will, the General believes, become one of those capabilities like AWACS or E-8 Joint Surveillance and Target Attack Radar System aircraft that are always in demand by regional CINCs.

The Air Force has few allies in its pursuit of the technology, and for the near term, "we're just going to have to suck it up" and fund it alone, he said. However, "we have a conviction and vision to follow through with this program, and when it is a great success, everyone will want to be part of it."

Prospects for major crises in the decades to come led General Fogleman to launch long-range planning initiatives, instructing his futurists to postulate an Air Force with "about the same, less, or much more" funding. The initiatives include "New World Vistas," as well as "Air Force 2025"—an "alternative futures" study being conducted by Air University—and a RAND Corp. study on force structure. These efforts will be brought together and used as a blueprint to plan Air Force spending and any adjustments necessary in the upcoming strategy review.

For instance, the Air Force is re-examining what "balance" of Guard and Reserve units to active-duty forces will be right in the future.

"I'm not sure that we have the right mix," General Fogleman noted. "Put another way, I am not convinced that we might not be able to put more

of our fighter force into the Guard and Reserve." He suggested that the twenty tactical fighter wings might be evenly split into ten active and ten Guard/Reserve, from the thirteen and seven, respectively, that they now fill.

"But we will only be able to do that if our peacetime optempo experience allows us to," he added. "The fighter force structure may well be driven more by peacetime optempo than . . . by wartime requirements."

He added that there will be pressure to reduce the number of tactical fighter wings because of the greater per-plane capability that will be available in the F-22 and Joint Strike Fighter.

"I can't argue against that, other than [to say] there's some absolute minimum number that allows you to do the things you're tasked to do, day in and day out. We've got to work hard to understand what that number is."

The General said he's still trying to decide how the long-range planning effort will be institutionalized in the Air Force so that the work does not have to be repeated every five years or so. He is considering various approaches. "It's something that's going to be dynamic," he said. "The way the world's moving, there may be something that's embedded in [the studies] that doesn't look nearly as promising as something else this year, but next year, it may suddenly leap to the fore." ■