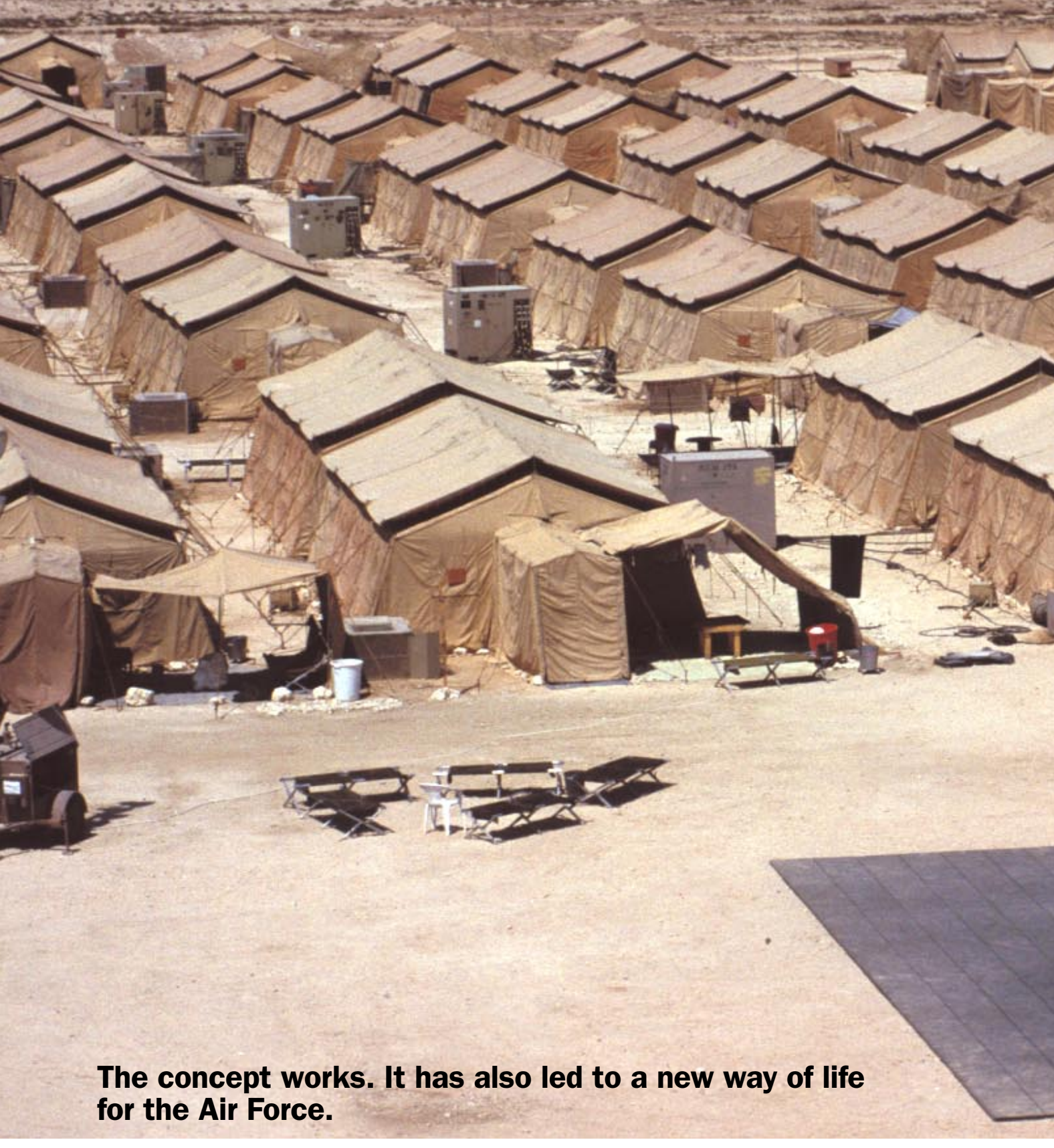
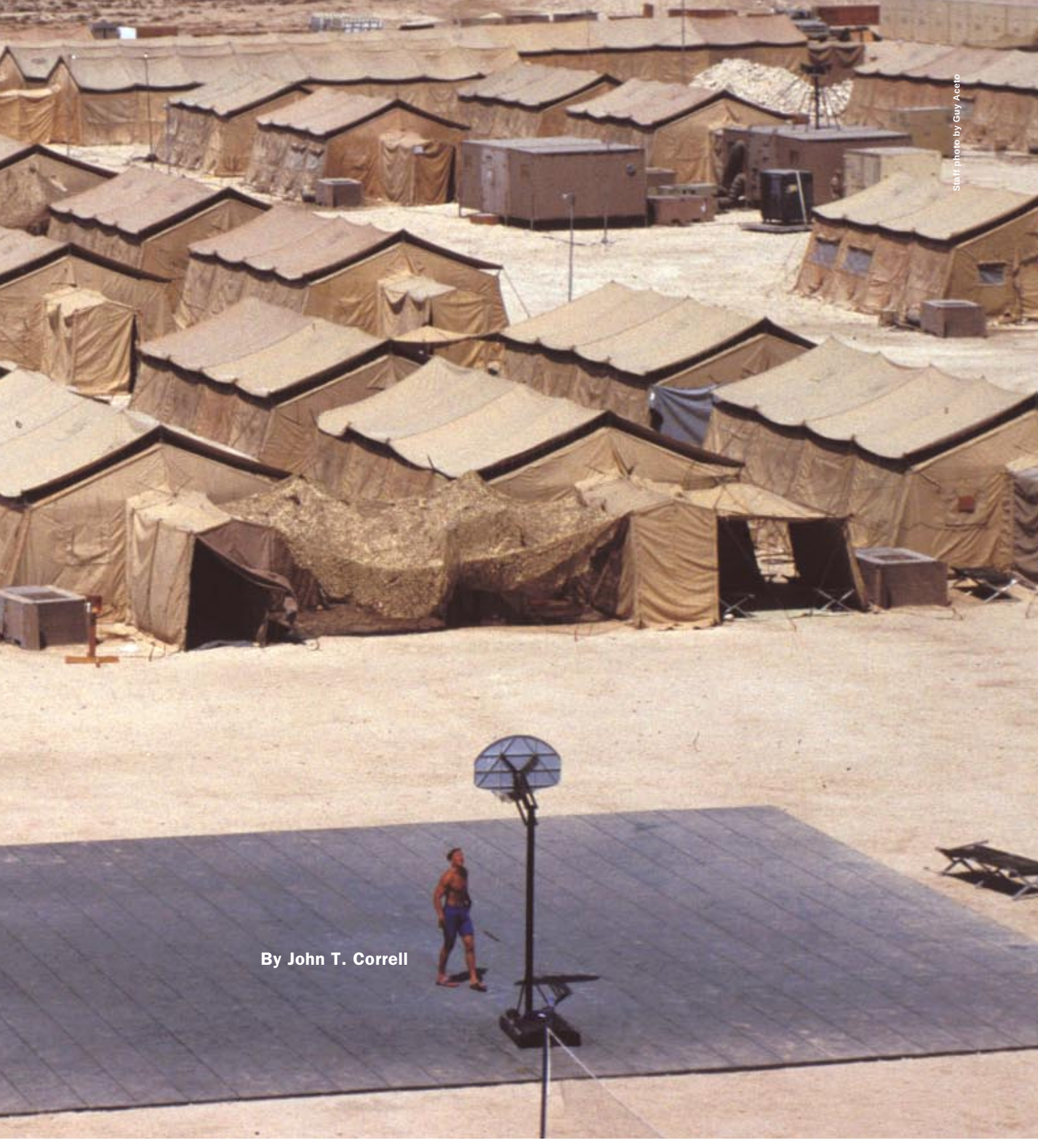


The concept works. It has also led to a new way of life for the Air Force.

The EAF in Peace



Staff photo by Guy Aceto

and War

By John T. Correll

AEROSPACE Expeditionary Forces were invented in the 1990s to solve chronic deployment problems. More than anything else, the Air Force hoped to provide a measure of stability and predictability for its airmen, who were constantly being dispatched overseas on one short-notice contingency assignment after another.

It was not apparent at the time what a big difference this

USAF photo by MSgt. Tim Helton

Way of Life. *About half of USAF's active duty troops are in an Aerospace Expeditionary Force, and the number is rising. A deployed airman still must find time for the necessities, such as this one taking his re-enlistment oath.*

change was going to make. The AEFs have become a new way of life for the Air Force.

Airmen are still assigned to their regular units at their home stations. But most likely they also belong to an AEF, and for three months out of every 15, that governs where they will be and what they will do.

About half of the airmen and officers in the active duty force are already in an AEF, and the number is rising. Guard and Reserve participation is so high that a fourth of the deployed forces come from the Air Reserve Components.

The Air Force has grouped its power projection forces and the forces that support them into 10 "buckets of capability," each called an AEF. (The other abbreviation, "EAF"—for Expeditionary Air and Space Force—refers to the concept and organization.)

Secretary of the Air Force James G. Roche told Congress in February that "a nominal AEF has about 12,600 people supporting 90 multirole combat aircraft, 31 intratheater airlift and air refueling aircraft, and 13 critical enablers. The enablers provide command, control, communications, intelligence, surveillance, and reconnaissance, as well as combat search and rescue."

Increasingly, the Air Force describes itself operationally in terms of AEFs rather than wings or wing equivalents.

A full AEF rotation cycle is 15 months. It is divided into five three-month periods, and during each of these, two of the AEFs are vulnerable to deployment. Those two AEFs should be more than enough to handle steady-state deployments, such as enforcing the no-fly zones in Southwest Asia.

In the event of a pop-up crisis the AEFs can't handle, they are backed up by two designated Air Expeditionary Wings, which can be on the scene and begin combat operations in 48 hours.

An airman may or may not be tapped to deploy during the three-month period when his or her AEF is in the barrel. Either way, after that window of vulnerability closes, the airman is not normally vulnerable for deployment again until the AEF comes up for its next rotation in the cycle, 12 months later.

The Call to War

The AEF concept, which had been working well in peacetime, shifted suddenly to a wartime footing after the terror attacks last September.

In his February presentation to Congress, Roche said the Air Force had deployed about 14,000 airmen to Southwest Asia for Operation Enduring Freedom and that Air Force crews had flown about 8,300 of the sorties to that point.

These requirements were on top of regular deployments, which included continuing enforcement of the no-fly zones in northern and southern Iraq and in what used to be Yugoslavia.

AEFs 7 and 8 were in the window of vulnerability when the war began.

"In the case of Operation Enduring Freedom, we drew upon forces from the vulnerable AEFs to fill our requirements," said Maj. Gen. Timothy A. Peppe, special assistant to the vice chief of staff for Air Expeditionary Forces. "There were forces in the AEF 7/8 that were in the vulnerability period but had not been deployed. These forces were the first ones we turned to—as advertised.

"When we ran out of available forces in select specialties in AEF 7/8 we turned first to the forces in the on-call AEW. We then reached forward into AEF 9/10 and rolled them forward.

"The most significant impacts were the requirement to open an unprecedented number of austere bases and at the same time step up security measures to Force Protection Condition Charlie at all our bases worldwide.

"This put stress on a small number of career fields. We had to modify the AEF rotations for approximately 1,600 personnel—who are required to stay longer than the normal 90 days. Some are staying for 135 days and a small percent will need to remain for up to 179 days."

Roche said that in career fields such as security forces, engineers, communications and information, and medical, "we have reached into future AEFs to source enough people to meet the current requirement. Low-density, high-demand assets such as Airborne Warning and Control System aircraft and special operations aircraft have deployed almost their entire inventory to meet the war effort."

Brig. Gen. Allen G. Peck arrived at Langley AFB, Va., to take command of the Aerospace Expeditionary Force Center the week before the terror attacks.

"Nobody on Sept. 10 would have thought that within a week, we'd have a large part of our Air Force on the road, but that is where we were," Peck said. "And that is what we use the AEF construct for. If it is your period in which you go and if you are tapped on the shoulder, it is time to go."

To meet the sudden demands, Peck

USAF photo by SSgt. Ricky A. Bloom

Time To Go. *Reservists, such as this Air Force Reserve Command A-10 pilot at Bagram in Afghanistan, carry a substantial share of the USAF deployment workload.*

said, "we used the [AEF] construct as the mechanism, rather than random sourcing or going out in some scattershot fashion." Although it was designed for peacetime, "I think we have demonstrated that, in fact, the AEF is a construct the Air Force can use to present forces from steady-state crisis on up to Major Theater War."

Beginning With Pancho Villa

In a sense, the Air Force has always been expeditionary. In 1916, Capt. Benjamin D. Foulois and a squadron of Curtiss JN-3s helped Gen. John J. Pershing chase Pancho Villa through the Mexican countryside.

There are other expeditionary examples in the Air Force's history, notably the Composite Air Strike Forces that Tactical Air Command sent to contingencies abroad in the 1950s and 1960s.

During the Cold War, Stateside units stood ready to deploy as reinforcements in case of war in Europe or the Far East, but for the most part, an airman's duty was at the home base, whether in the United States or overseas.

Through the 1980s, the Air Force was large. Its primary mission was containment of the Soviet Union. It had numerous bases abroad, with forward bases and an extensive supporting infrastructure in place.

Today, the mission is engagement. The Air Force has a third fewer people and two-thirds fewer overseas bases, yet it conducts four times more deployments and often must take its own infrastructure along.

In the 1990s, the Air Force found itself responding to one contingency after another. These deployments, distributed unevenly across the force and often coming on short notice, were a chronic source of hardship for airmen.

"We had been dealing with these things, treating them as unique events," said retired Gen. Michael E. Ryan, former Air Force Chief of Staff. "Except that they never seemed to go away."

The straw that broke the camel's back was in October 1994, when Iraq made some threatening moves toward Kuwait. The Air Force had aircraft on the scene quickly, but the deployment was ragged.

This accumulation of problems prompted the Air Force to explore the idea of expeditionary task forces. The goals were to make the deployment workload fairer and more predictable for Air Force people, to smooth out the raggedy deployments, and—as opportunities presented themselves—to demonstrate the Air Force's power-projection capabilities.

The officer chosen to lead the effort was Lt. Gen. John P. Jumper, then commander of 9th Air Force. Jumper, the present Chief of Staff of the Air Force, is generally regarded as the father of the EAF concept.

Between 1995 and 1997, four experimental Air Expeditionary Task Forces deployed to Bahrain, Jordan, and Qatar.

The EAF concept was developed between May 1998 and August 1998. This effort restructured the entire Air Force force structure into 10 AEFs. This was a significant step beyond the earlier AEF work. On Aug. 4, 1998, the Air Force announced the move to the EAF/AEF concept.

However, the first regular AEF

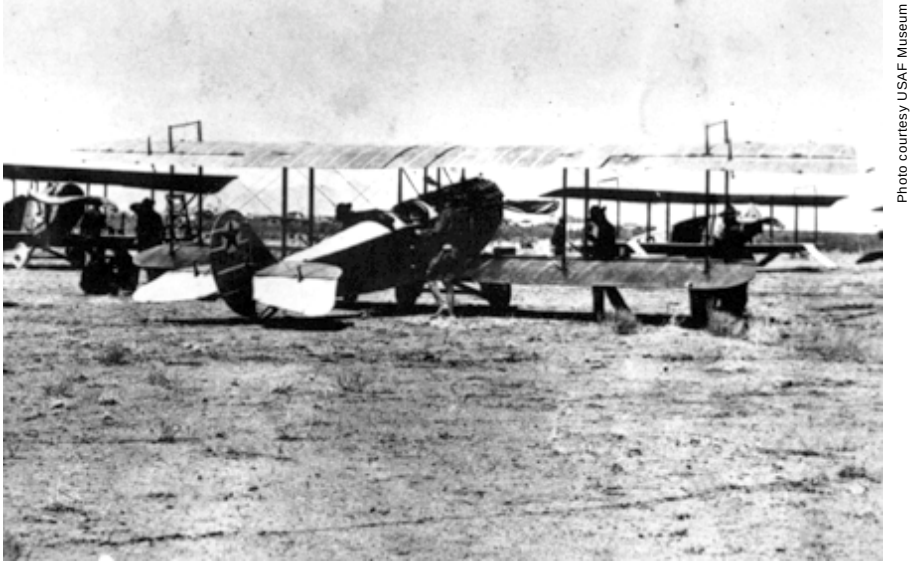


Photo courtesy USAF Museum

Long History. *The Air Force's expeditionary roots date back to 1916, when Jennys such as these helped the Army chase Pancho Villa through the Mexican countryside.*

AEF Rotation Cycle 3

	March 1, 2002 – May 31, 2002		June 1, 2002 – Aug. 31, 2002	
	AEF 1	**AEF 2**	**AEF 3**	**AEF 4**
Lead Combat Wing	388th FW	7th BW	366th Wing	48th FW
Lead Mobility Wing	92nd ARW/ 60th AMW	92nd ARW/ 60th AMW	60th AMW/ 305th AMW	60th AMW/ 305th AMW
On-Call AEW	4th FW/ 366th Wing	4th FW/ 366th Wing	3rd Wing/ 4th FW	3rd Wing/ 4th FW

1st FW, Langley AFB, Va.; 2nd BW, Barksdale AFB, La.; 3rd Wing, Elmendorf AFB, Alaska; 4th FW, Seymour Johnson AFB, N.C.; 7th BW, Dyess AFB, Tex.; 20th FW, Shaw AFB, S.C.; 27th FW, Cannon AFB, N.M.; 28th BW, Ellsworth AFB, S.D.; 48th FW, RAF Lakenheath, UK; 60th AMW, Travis AFB, Calif.; 92nd ARW, Fairchild AFB, Wash.; 305th AMW, McGuire AFB, N.J.; 355th Wing, Davis–Monthan AFB, Ariz.; 366th Wing, Mountain Home AFB, Idaho; 388th FW, Hill AFB, Utah.

Staff photo by Guy Aceto

Standing Deployments. *Certain "contingency" missions for each AEF cycle are virtually certain. Here, an F-15 returns from a patrol in one of two no-fly zones over Iraq—a mission that has continued since the Gulf War in 1991.*

cycle did not begin until October 1999. A few months previously, the air war over Serbia had taken the equivalent of five AEFs, a level of effort that did not go unnoticed by Air Force planners.

"We will be able to deploy an AEF in 48 hours," Ryan said in the service's vision statement, published the following summer. If need be, he said, "We will be able to rapidly deploy additional AEFs—up to five AEFs in 15 days."

The EAF was nearing the end of its second 15-month rotation cycle when the terrorist attacks occurred last September.

The nerve center of the EAF is the Aerospace Expeditionary Force Center at Langley. It is there that requests from theater commands are matched up with assets available in the current AEF buckets of capability.

The center is headquartered in a converted warehouse that looks nothing like major operations centers used to look. Much of the work is done quietly and efficiently on desktop computers in strings of cubicles.

It is staffed by about 140 military people and civilians, including Guard and Reserve, and 53 civilian contractors.

The theater commander's requirements for deploying air forces are loaded by the air component—for example, Central Air Forces in case of Central Command—into the Joint Operational Planning Execution System, which is monitored by the AEF Center at Langley.

In an emergency, the process can move fast. People at the center say that in a matter of hours they can nominate sourcing for a war plan, build the TPFDD (Time-Phased Force Deployment Data), and set up the necessary requirements for transportation to move the forces.

The UTCs

Once everything is verified and coordinated, "we flow the levy down to the unit, and that is what Personnel uses to generate orders that tell Senior Airman Snuffy he is going someplace," Peck said.

The most basic building block of an AEF is the Unit Type Code, which "consists of people and equipment tied together with a mission capabilities statement," Peck said. It might, for example, identify a 13-person security force squad, with stated capabilities and with specified weapons and equipment. There are more than 50,000 UTCs.

If a theater component needs to guard a base, officials might ask for the appropriate number of QFEB2s, putting it in UTC building blocks rather than listing numbers of people and kinds of equipment, Peck said.

In bygone days, he said, UTCs were designed to pick up 24 aircraft and send them to, say, Spangdahlem, Germany. "What we are finding is, we don't fight like that. We fight in sixes and twelves in many cases.

Sept. 1, 2002 – Nov. 30, 2002		Dec. 1, 2002 – Feb. 28, 2003		March 1, 2003 – May 31, 2003	
AEF 5	**AEF 6**	**AEF 7**	**AEF 8**	**AEF 9**	**AEF 10**
355th Wing	20th FW	27th FW	28th BW	2nd BW	1st FW
305th AMW	305th AMW	60th AMW	60th AMW	60th AMW/ 305th AMW	60th AMW/ 305th AMW
4th FW	4th FW	366th Wing	366th Wing	366th Wing/ 4th FW	366th Wing/ 4th FW

We've had to deconstruct the Cold War UTC module into more bite size things that reflect the way we are going to build the blocks today."

The AEF "Library"

The database of positions identified as deployable to an AEF is called "the Library." As of April, 173,000 positions—in an active duty force of about 355,000—were in the Library.

Some positions, such as those of missile launch crews, are not regarded as deployable. There are various exceptions, such as forces in Korea, who are exempt from AEF duty. Still, the expectation is that the Library will eventually take in at least 250,000 positions.

Aircrews and support people from line units were tabbed early for the AEFs. Enrollment now extends to other organizations as well.

"We have an ongoing effort to capture the higher headquarters, the people above wing level, into associate UTCs that would make them available for deployment," Peck said.

Before his present assignment, Peppe was the Air Force chief of safety. "I basically said that all military people in the Air Force Safety Center at Kirtland [AFB, N.M.] are eligible to deploy," Peppe said. "That is another 120 people. What we have to do now is align them in a UTC so that, if they are needed, we know what capabilities they can bring to the fight."

Setting the ultimate example, Gen. Robert H. Foglesong, the Air Force vice chief of staff, put his executive officer's position in the Library and made do without the exec when he deployed.

The EAF represents more of a cultural change for some than it does for others.

"It all depends on where you grew up," Peppe said. "I think the biggest change is probably in the combat support arena. As a guy who flew RF-4s at Bergstrom [AFB, Tex.], we were tied to Aviano, Italy, under an operations plan. We were also tied to Korea."

Thirty-day deployments to Italy or Korea were routine for the aircrews, but "the civil engineers didn't have to go and do any runway repair or build a tent city or anything. And the security forces didn't have to go because we had some people already in place over there," Peppe said.

"I think the biggest change has been the need for us to determine what combat support capabilities need to be ready to move quickly. And in some cases, quite frankly, those capabilities will have to move before the iron moves, because you have to get the airfields ready to receive."

Peck has seen the AEFs from both sides. Before he came to Langley last September, he was commander of the 363rd Air Expeditionary Wing at Prince Sultan AB, Saudi Arabia, running Operation Southern Watch with rotational forces and crews. In time, Peck believes expeditionary duty in the Air Force may become what sea duty is in the Navy.

"If you don't go do sea duty, you are dead in the Navy," he said. "Maybe there ought to be something similar in the Air Force. If

USAF photo by Scott H. Spitzer

Fair Share. *As USAF responded to one contingency after another in the 1990s, deployments were unevenly spread across the force. The EAF concept was devised to help distribute the load more fairly and instill some predictability.*

Staff photo by Guy Aceto

A Key Factor. *Airlift and aerial refueling forces are central to each of the 10 AEF buckets of capability. Each rotation cycle can call upon designated lead mobility wings as well as lead combat wings. Here, airmen load a C-5B.*

you stay at home and do a great job of doing e-mails at your desk all your life, sorry, that ain't what we're all about. You need to be part of this Expeditionary Air and Space Force."

The Iron List

From June through August, AEFs 3 and 4 and the forces associated with them will be in the rotational bucket. Some deployments are virtually certain.

For that three-month period, AEF 3 will have responsibility for covering the no-fly zones in Operation Southern Watch. AEF 4 is responsible for Northern Watch, counterdrug operations, and missions in the Balkans and Iceland.

The "Iron List" for this cycle alerts 32 different units that their aircraft are vulnerable for the AEF 3/4 rotation.

The lead wings are the 366th Wing from Mountain Home AFB, Idaho, and the 48th Fighter Wing from RAF Lakenheath in the United Kingdom. Lead wings provide leadership on deployments where there is no preexisting structure. They also provide the bulk of expeditionary combat support.

The on-call Aerospace Expeditionary Wings, providing backup for surprise requirements, are the 3rd Wing from Elmendorf AFB, Alaska, and the 4th Fighter Wing from Seymour Johnson AFB, N.C.

"Normally, Mountain Home and Seymour Johnson are the alternating Air Expeditionary Wings," Peck said. "For a variety of reasons, Elmendorf and Mountain Home have swapped positions. So, Mountain Home will be the lead wing for AEF 3, and the 3rd Wing at Elmendorf will be the on-call AEW."

Fighters in the assigned combat force for AEF 3 are drawn from Elmendorf, Hill AFB, Utah, Shaw AFB, S.C., and Pope AFB, N.C. Its bombers are B-52s from Barksdale AFB, La. AEF 4's fighters are from Lakenheath, Eglin AFB, Fla., and the South Carolina Air National Guard. Its bombers will be B-1Bs from Dyess AFB, Tex.

Both of the AEFs will be supported, if required, by such assets as B-2 bombers.

A Total Force

Over the course of the deployment cycle, a substantial share of the workload, including some 25 percent of the aviation requirement, will be handled by the Air National Guard and Air Force Reserve Command. Peppe said the Air Reserve Components provided about 10 percent of the combat support in Cycle 2 and signed up for 13 percent in Cycle 3.

"We just got into Cycle 3 on the first of March," Peppe said. "Instead of filling 13 percent of the expeditionary combat support tasking, they are actually filling 29 percent. So double what they originally signed up for."

There has been some speculation that the Guard and Reserve are overtasked at these levels, but Peppe said that "the air reserve component folks that we've talked to have indicated that they are able to handle the task at hand."

The Guard and Reserve presence is much in evidence at the AEF Center at Langley, where officers from those components handle some of the most responsible jobs. This is further indication of the cultural change that is under way in the Air Force.

USAF photo by TSgt. Jack Braden

Low Density, High Demand. *Some systems and their crews, such as these AWACS technicians monitoring air activity over Iraq, are in extremely short supply and therefore are always going somewhere doing something.*

The Air Force would like for the AEFs to be interchangeable, but at present, they are not.

AEFs Not Equal

"Currently, our 10 AEFs are not the same," Roche told Congress. "For example, only three of the AEFs have precision, standoff strike capability, and only nine have an F-16CJ squadron for suppression of enemy air defenses. Until the disparity is rectified, the EAF construct will have limits—many low-density, high-demand and stealth systems remaining tasked at maximum levels."

Secretary of Defense Donald H. Rumsfeld has said that low density, high demand means "we didn't buy enough." The term refers mainly to Air Force capabilities, ranging from B-2 bombers to AWACS and Joint STARS surveillance and command-and-control aircraft.

A recurring nightmare is that the F-22 fighter will be added to the list. The production run was originally set at 750 aircraft, but was reduced by stages to 339 in the Clinton Administration. The budget cutters would like nothing better than to cut it some more.

The Air Force plans to begin integrating the F-22 into the AEFs as soon as the second squadron is operational.

"Our goal is to eventually have 10 fully capable AEFs with organic F-22s," an Air Staff officer said. "The current buy of 339 aircraft will not be enough to give us 24 aircraft in each of the 10 AEFs. We will need to move the number to 399 to have enough F-22s to provide equal capability across the AEF structure."

The Teaming Concept

The Air Force continues to make adjustments to the AEF concept to balance the complexity of considerations involved.

One of the challenges all along has been to avoid stripping home bases to man and equip the AEFs. In Cycles 1 and 2, the solution was to spread the home base's tasking out over the 15-month rotation.

The result for a wing commander, Peck said, was "people coming and going all the time. When am I going to do my exercises? When am I going to do my inspections? When do I do leave? When do I plan my big functions?"

A second drawback was that the rotational forces abroad were a mixture from many different wings and organizations. Judging from their performance, they overcame that problem, but the teamwork would have been easier had they been more accustomed to each other.

Cycle 3 introduced a "teaming concept," in which a wing's deployment taskings will be concentrated into one or two periods. Typically, Peck said, a wing's contributions will be "one big hit, one slightly lesser hit, then maybe a few some other times, but for the most part, they will be untouched for the rest of the time."

A wing commander will know, Peck said, that "during those two periods of the AEF cycle, I am going to have airplanes gone and people gone. Things are going to be kind of short. I am going to have extra augmentees on the gates. We've got to manage a little tighter. But I can see people go off to war and welcome them back as a group. They've got a shared experience. And the rest of the year we can plan exercises, training, inspections, and so forth."

Still more changes may be coming up in Cycle 4, which begins in June 2003. Foglesong has been meeting with the vice commanders of the major commands to develop recommendations. This venture will be a major focus for Peppe's group in the Pentagon over the next year.

Back when AEFs were being invented, one of the predictions was that theater CINCs would find it to their liking, since it would allow them to draw on buckets of capability to meet their needs precisely.

One satisfied customer is the biggest one, Army Gen. Tommy R. Franks, Commander in Chief of CENTCOM, the No. 1 user of deployed rotational forces.

"The Aerospace Expeditionary Force concept has proved valuable to United States Central Command because it has provided us with the ability to maintain airpower throughout the region," Franks said.

"The Air Force has used the AEF to continuously support Operation Southern Watch while maintaining the ability to react to additional contingencies such as Operation Enduring Freedom. I know that I can count on the men and women of the AEF for their support and professionalism, and because of this, I've had the air forces I need when and where I needed them. The AEF has proved its worth to me and Central Command." ■

USAF photo by SSgt. Greg L. Davis

Satisfied Customer. *USAF predicted theater CINCs would like AEFs because they meet their needs more precisely. "The AEF has proved its worth to me," said Army Gen. Tommy Franks, head of CENTCOM.*

John T. Correll was editor in chief of Air Force *Magazine for 18 years. This is his first article as a contributing editor.*