



Airmen board an aircraft to deploy from Barksdale AFB, La., to Al Udeid AB, Qatar, last September. More than 350 Barksdale airmen deployed for Operation Inherent Resolve.

# THE NEW AND IMPROVED AEF

## BUT NOT YET PERFECT

By Amy McCullough,  
News Editor

The Air Force went to war in Iraq in 1991, soon after the Cold War ended, and there was a sense that the dual victories could allow a reduction in the force and signal a decline in the service's operational tempo.

Both assumptions proved wrong. The Air Force has been at war nonstop for over 25 years—in Iraq, the Balkans, Afghanistan, Iraq again, Libya, Iraq again, and Syria—and force reductions during that time have made it a necessity that those in uniform deploy more often and for longer periods. The service has repeatedly had to make tough choices during those 25 years of combat—between readiness for nonstop combat and investments for tomorrow.

No one expects the pace of operations to decline anytime soon.

### USAF continues to refine its deployment model in the face of uncertainty.



An airman embraces his wife on his return from a deployment to Al Udeid Air Base, as part of the expeditionary Air Force.

To cope with the pace of deployments, and to ensure that the burden of operations is spread as fairly as possible around the force, the Air Force created the Air and Space Expeditionary Force concept, known as the AEF. It scheduled roughly comparable groups of combat and other forces for deployment at regular intervals, with a known dwell time. The idea was that USAF people would know when they would be away, and for how long, so they could properly prepare for deployments and get their professional military schooling and training accomplished during their time at home station.

Left: USAF photo by A1C Dennis Hoffman. Top: USAF photo by S/A-Curt Beach

**SSgt. Michael Finney marshals an F-16 on a runway in Southwest Asia in November. Air Force Chief of Staff Gen. David Goldfein wants USAF to work its way back to deploying teams of airmen, not individuals.**



**SrA. Rhea Flambeau (l) and SrA. Grayson Bryant (r) guard a base security zone in Southwest Asia.**

The relentless operating tempo, though, has meant that sticking to AEF timelines was frequently impossible, and the system has had to evolve over the years. It will do so again.

“Squadrons have been asked to bear the brunt of an incredible deployment tempo and manpower shortages, which have had a direct impact on readiness and our warfighting missions,” said Chief of Staff Gen. David L. Goldfein, in an August 2016 white paper.

He pointed out that manpower levels often hover between 60 to 70 percent

of that required at Stateside bases, “with many key supervisors and leaders deployed or dual-hatted.” The remaining airmen work overtime, and units struggle to manage parts and equipment shortages. As a result, he said, “we have degraded the core fighting unit of our Air Force.”

It’s time for “a reset,” Goldfein told reporters at AFA’s Air, Space & Cyber conference last September. He outlined his top three focus areas. Over the next four years, Goldfein wants the service to 1) revitalize the squadrons, 2) strengthen

joint teams and leaders, and 3) advance multidomain, multifunction command and control.

Part of what Goldfein wants to do is ensure USAF can simultaneously maintain the current operational tempo while improving the training mission at home.

Brig. Gen. Brian M. Killough, director of strategy, concepts, and assessments, has been tapped to lead a team that will spend the next four years trying to figure out how the Air Force can better develop joint leaders. The way USAF presents forces to combatant commanders will be one piece of that puzzle.

“We need to reset how we deploy airmen to a fight,” said Goldfein in another white paper, released in October 2016.

“Over the past 15 years, we migrated away from deploying as teams to often deploying as individual airmen,” he wrote, noting the service does its “best work” when “training, deploying, employing, and redeploying as teams.”

USAF photo by SSgt. Kenneth McCann



USAF photo by TSgt. Katherine Spessa

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USAF photo by SA. Tyler Woodward

An F-22 Raptor in Southwest Asia. F-22s are providing close air support and have performed more than half of all Operation Inherent Resolve escort missions.

USAF will “never be the component that sticks rigidly to a fixed team size for deployment” because the nation needs the service to be flexible, he said. “However, over the last few years, more airmen have deployed into combat as individuals at the expense of airmen and unit readiness.”

Goldfein has purposely “resisted forward movement” on any of his three focus areas until leaders have built up their teams and created a plan of action. As of early January, Killough and his team were still finalizing that plan, but it was expected to be sent to Goldfein for review “in the near future,” USAF spokeswoman Erika Yepsen said.

“Our approach to strengthening joint leaders and teams is an evolution, not a revolution,” Killough told *Air Force Magazine* in a written statement. The current AEF construct has evolved “to the point where our airmen are training as teams at home station. Now the next step is to ensure they also deploy as

teams, which is a key line of effort for the Chief of Staff’s second focus area.”

### SAY YOU WANT AN EVOLUTION

Almost from the outset, the AEF was forced to evolve, as demands outstripped the available manpower. In the first version, there were 10 “buckets” of capability, such as fighters or support, all under a single wing commander. Those AEFs were paired in groups of two, which deployed nose-to-tail in 90-day increments. Although they were created “almost simultaneously,” it took nearly two years for the Air Force to adjust the training pipeline to match the battle rhythm, said Bradley Higginbotham, chief of the AEF operations and readiness division.

After more than a decade of fighting wars in Iraq and Afghanistan, the process evolved, moving away from the original AEF construct, which focused on unit-based deployments.

The standard 90-day deployment was extended to 120 days in 2004

and then again to six months in 2010, with varying lengths of time between deployments.

The Air Force had hoped to return to those 90-day deployments without having to surge, but continuous combat operations made that impossible. The solution at the time was the tempo banding system, which Donald Cohen, the global force management branch chief, referred to as the “second evolution of the AEF construct.”

The complicated system included five bands for Active Duty—all at different deploy-to-dwell ratios—and two separate bands for the reserve component. Under the tempo band system, the deployment of small elements, sometimes even a single airman, from a squadron, became the norm.

The demand-driven system was designed to be flexible, but the battle rhythm was quickly thrown out of whack and many Air Force specialty codes found themselves in a continuous cycle of one-to-one deployments,



USAF photo by SRA Miles Wilson

**Airmen run through a postflight check on an E-8C JSTARS aircraft at Al Udeid. Aviation units, including maintainers, make up about half of airmen deployed at any given time.**

meaning airmen were spending just as much time at forward locations as they did at their nominal home stations.

“Under the band system, if the demand increased, we changed the battle rhythm,” said Cohen.

The result, said Col. Clarence Lukes Jr., the war planning and policy division chief, was an “unpredictable” and “very volatile” system that made it nearly impossible for airmen to know when they would next deploy or when they’d get back.

The service recognized this “perturbation” to the AEF construct and decided it was time to get back to the business of deploying as teams, said Higginbotham.

Then-Chief of Staff Gen. Mark A. Welsh III approved the new model, dubbed AEF Next, in April 2013. The goal was to create a more cohesive

deployment cycle and get the majority of the Active Duty force back to a one-to-two deployment-to-dwell cycle.

That meant an airman would deploy for six months and then spend 12 months at home, allowing wings to meet combatant commander requirements while maintaining a proper pace of training at home station.

The concept was based on the assumption that after combat operations stopped in Afghanistan, forces would withdraw and the Air Force would finally get a break from the unremitting operational tempo.

That relief never came, but AEF Next went ahead anyway, in October 2014. USAF has made progress since then thanks in large part to the contributions of the Guard and Reserve, which have been integrated more thoroughly into the rotational system.

According to Higginbotham, the Air National Guard and Air Force Reserve now own about 45 percent of the USAF force structure. About a third of that consists of agile combat support career fields such as security forces, civil engineering, medical, and logistics—basically any base function not directly connected to the flying units. The rest of the reserve component’s force structure centers around aircraft.

“When we look at our taskings since 2014, ... the Guard and Reserve typically picked up between 10 to 15 percent of the taskings. They now fill about 30 percent of the taskings,” Higginbotham said. The reserve component also has a unique deployment model—members deploy for six months and then have a 42-month reset period before deploying again.

USAF has consistently deployed about eight percent of its force over



USAF photo by S/A Miles Wilson

**Airmen load cargo onto a C-17 at Al Udeid.**



USAF photo by TSgt. Robert Cloys

**SSgt. Chris White, a weapons load crew chief, loads a GBU-54 on an F-16 at Bagram Airfield, Afghanistan.**

the last decade. “We’re still deploying about 25,000 airmen. The tempo is about the same, but the complexion of the force is different,” he noted. Instead of mostly “pointy-nosed airplanes” and ISR platforms deploying to the US Central Command area of operations, the force structure is shifting more toward nonlethal assets that can help rebuild the Afghan military and economy.

Just like the initial AEF implementation, it’s taken some time to synchronize training with the new system.

Nearly two years into the new process, “we’re beginning to see the training line up to six-month deployments with a 12-month interim between them,” Higginbotham said. “We can get the proper training links at the right time” so airmen can get

upgrades to the 3-, 5-, and 7-levels in a more orderly fashion (various skill levels within an Air Force specialty code).

“It all means airmen are more prepared when they deploy today than they were five years ago,” he said.

The problem before was that not only had tempo banding thrown the battle rhythm into flux, but the Air Force was going through a significant force-shaping effort at the same time, drawing down to the smallest end strength in its history.

“When you do a force-shaping exercise like we did, you tend to take [out] people who are toward the end of [their] career, who also are some of your most experienced trainers,” said Higginbotham.

The service was left with a choice: Send the most experienced airmen downrange, or leave them at home to train the next group of airmen set to deploy. The more urgent need was to send the experience to the fight, so the home station often lost out.

Higginbotham said the switch from tempo banding has allowed the Air Force to “stabilize the experience level at home station, so we can complete that readiness training for the airmen.”

Though a large portion of the force now meets the one-to-two goal—such

as in agile combat support, tankers, and airlifters—there are some specialties that are showing improvement but still struggling.

Special operations forces, for example, which operated at a dwell of one-to-one for many years, are only now “approaching one-to-two,” said Higginbotham.

The construct looks very different for the service’s multirole fighters, many of them at a one-to-four or one-to-five deploy-to-dwell, depending on how many missions the type flies.

Higginbotham, a former F-111 pilot, said, “When I was young,” USAF had multiple variants of the same plane, but the aircrew only had to learn one basic mission. “Now you take an F-22 or an F-35 and they do all of that.” Fifth generation fighters perform air superiority, ground attack, electronic warfare, intelligence, surveillance, and reconnaissance, and other missions all on the same aircraft.

“The training spin-up to do all of that in one wing, with one person, is incredibly difficult to sustain when you go downrange to a fight and you don’t use any of those skill sets,” Higginbotham explained. That’s why it takes longer at home station to make sure combat air forces remain combat ready, not just for the current fight, but for whatever the next requirement might be.

Lukes said before he was assigned to the Pentagon, he served as a vice commander and then commander of a wing where many of the airmen were forward deployed. The predictability made possible by the AEF Next model was “not only a positive sign for the airmen, but a positive sign for the wing itself, because it allowed us to plan out some of the things we needed to get done from an organize, train, and equip perspective,” he said. “As a deployed commander, I knew how long I was going to be deployed and how long I would be at home. It was a win-win situation from my perspective.”

## THE ARMY RECIPROCATES

Officials initially were hesitant to implement the new deployment model until the operational tempo eased up a bit. When it became clear that wasn’t going to happen, though, the Air Force started looking to the Army for help.



Two F-15E Strike Eagles fly near Mosul, Iraq. Coalition forces have flown thousands of combat sorties using a wide range of aircraft, striking enemy headquarters buildings, fighting positions, and other high-value targets.

“Frankly, ... we were being stressed ... because the Army had used up all of their deployment capability for their Guard and Reserve,” said Higginbotham. Without any Army reserve component soldiers available to perform deployment logistics, the Air Force had put on more of its own people to cope with moving large numbers of Army personnel through forward air bases. Because of USAF’s speed, it was often the first service in when Special Forces, Army, or Marine Corps units deployed to a new location.

The delay in getting the ground services to pick up forward sustainment functions taxed the pool of USAF personnel.

“Now, after five years, they have reset their force and they have access to their Guard and Reserve,” Higginbotham said. When the Air Force butts up against a one-to-two deployed limit on security forces, for example, it has the authority to request backfill from the other services or get contractors if necessary in order to prevent disruption of home-station training.

Of the 29 command force teams, Higginbotham said roughly half can be moved into the six AEF periods, allowing them to transition to the one-to-two deployment rate.



An F-16 at Bagram Airfield, Afghanistan. In the current AEF construct, many of USAF’s multirole fighter units deploy at a one-to-four or one-to-five deploy-to-dwell rate.

“We’re pretty close,” he said. Soon, “the way we upgrade people to do the organize, train, and equip sustainment will fall in line” with the battle rhythm.

The goal then shifts to sustaining the rhythm. Of the roughly 25,000 airmen USAF deploys, about half are aviation units, including maintainers. The other half is made up of agile combat support.

The half that is aviation units and organic maintenance already deploy as teams. “That’s the way they are structured,” Higginbotham said. As for the agile combat support, about 14 percent are still deployed as single airmen or pairs of airmen from a given unit.

Goldfein said he’s still not quite sure exactly what a “team” will look

like, but his initial direction was to look at a minimum three-person group, including a team lead, which could be either an officer or an enlisted airman. The most important part, he said, is that the team stays together through deployment and reintegration.

The Air Force will “leverage all the work we’ve done with AEF Next” and incorporate those lessons learned into the reset, added Goldfein.

“This is an effort that will evolve over time,” he said. “We’ll continue to look at team sizes and make sure we never lose sight of the end game, which is [to] support the combatant commanders ... but [to] equally support airmen and their families through reintegration.”

USAF photo by Capt. Corey Fratini. Top: USAF photo by SSgt. R. Alex Durbin