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**Title:** AEF Pack Versus Annual Tours: Is Breaking Templates and Traditions the Answer For AFRC/CE?

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Preface

The field for this assignment was pretty open—the content in some way had to be about the Air National Guard or Air Force Reserve. Being a civil engineer, I figured I may as well take on a topic that might do some good for my community or teach me something I can use in my career. I solicited input from several previous bosses and other civil engineer leaders on possible topics they felt might be worthwhile. The list included Colonel Jon Verlinde, a previous Headquarters Air Force Reserve Command Director of Civil Engineering (HQ AFRC/CE). He responded by suggesting I talk to Colonel Wayne Lemoi, the HQ AFRC/CE Readiness Division Chief, and hinted that I wouldn’t fall short of finding information.

I contacted Colonel Lemoi, and through our conversations we decided it would be best if I spent some time with him and his staff, so I arranged a visit. While driving to Robins AFB, I felt that if I was able to secure a couple hours of Colonel Lemoi’s time I’d be pretty happy. Our meeting started at approximately 0900 and after furiously taking notes, asking questions, looking at sketched diagrams, understanding slides, and copying papers I finally left around 1630. Colonel Lemoi and one of his branch chiefs, Lieutenant Craig Rutland, were definitely interested in having their issues and solutions heard. They were passionate about doing the right thing for the civil engineer community. On a later date, Lt Col Rutland spent nearly an hour on the phone with me while we discussed a series of clarification questions I had sent via email.

I can’t say enough about my appreciation to Colonel Lemoi and Lt Col Rutland for the time they dedicated to me and the wealth of information they provided.
Abstract

The Air Force is immersed in the Expeditionary Aerospace Force (EAF) philosophy and has aggressively taken on implementation of this concept through the employment of Aerospace Expeditionary Forces (AEF). These force packages provide the full spectrum of aerospace power to combatant commanders in tailorable units to use as any situation dictates. One selling point of the AEF system is that it provides stability and predictability to airmen.

As a Total Force partner, the Air Force Reserve community has stepped up to participate hand-in-glove with the active duty members as one force. From an aviation-centric mindset, this works well for both the active duty and Reserve forces. However, such is not necessarily the case for Reserve expeditionary combat support, specifically in the civil engineer community.

Primarily through interviews with key members of the Headquarters Air Force Reserve Command Civil Engineer Readiness Division, the author explored challenges the Reserve engineers face in being active participants in the AEF system. The issues range from simple differences from the aviation community to difficulties in working with the traditional Reserve 2-week tour concept to continuity problems at deployed locations. The author proposes four solutions: volunteerism backed by predictable mobilization, pure volunteerism to relieve active duty tempo, deploy as special projects teams, and employ Directed Annual Tours to backfill active duty units at CONUS bases.
Chapter 1

Introduction

The Air Force is now immersed in the Expeditionary Aerospace Force (EAF) philosophy and has aggressively taken on implementation of this concept through the employment of Aerospace Expeditionary Forces (AEF). These force packages provide the full spectrum of aerospace power to combatant commanders in tailorable units to use as any situation dictates. One selling point of the AEF system is that it provides stability and predictability to airmen.

As a Total Force partner, the Air Force Reserve community has stepped up to participate hand-in-glove with the active duty members as one Expeditionary Aerospace Force. From an aviation-centric mindset, this works well for both the active duty and Reserve forces. However, expeditionary combat support (ECS) is a very necessary piece of the force puzzle, but a sometimes-overlooked piece. It appears that the AEF system works well for active duty ECS, but such is not necessarily the case in the Reserve community, especially for Air Force Reserve civil engineers.

This paper takes a quick look at the EAF, followed by some of the issues Reserve civil engineers have in being active participants in AEF packages. The issues range from simple differences between the aviation and civil engineer communities to difficulties in working with the traditional Reserve 2-week tour concept. The examination of issues also includes problems civil engineers experience as a community in a deployed location when Reserve teams frequently
deploy in an out in 2-week cycles. Finally, this paper offers four options to consider for providing stability and predictability to Reserve civil engineer participation in the AEF system. The options range from volunteerism backed by predictable mobilization to backfilling active duty teams at CONUS locations.

Air Force Reserve civil engineers are feeling a tendency toward becoming part-time active duty members as opposed to the true “reserve force in a time of need” they signed up to be. The EAF appears to be here to stay and the Reserve community will likely remain a committed participant. The process for engaging Reserve civil engineers must improve or mission readiness of the total force may suffer.
Chapter 2

The EAF

The Air Expeditionary Force construct put predictability into the lives of our people, so they know when they were going and they’d know when they were coming home.

—General John P. Jumper
Air Force Chief of Staff

“The AEF [Aerospace Expeditionary Force] concept is how the Air Force organizes, trains, equips, and sustains itself by creating a mindset and cultural state that embraces the unique characteristics of aerospace power—range, speed, flexibility, precision—…”

1 The Expeditionary Air Force (EAF) is a concept the United States Air Force implements through the use of AEF packages. The purpose of these packages is for the Air Force to be able to present aerospace forces to the combatant commanders (CCs) which are tailorable to the task at hand, as well as rapid, responsive, and reliable.

2 AEFs were created in the 1990s in response to high operations tempo and deployment problems. Responding to Iraq’s threatening moves against Kuwait in 1994 highlighted some of the problems the U.S. experienced with ragged deployments. 3 As much as being able to solidly present force packages to the CCs, the Air Force also “hoped to provide a measure of stability and predictability for its airmen…”

4 The AEFs represent 10 “buckets of capability” comprised of the Air Force’s power projection forces and expeditionary combat support (ECS). Two of the 10 AEFs are matched together for deployment vulnerability over a designated 3-month window.
Five of these 3-month windows comprise a complete AEF cycle. For a particular unit assigned to an AEF, the 15-month cycle is comprised of 10 months of normal training (unit missions, basic proficiency, and exercises), 2 months of deployment preparation (focus on area of responsibility specific events, if known), and the 3-month vulnerability window. A graphical representation of the AEF Rotational Cycle is given below in Figure 1. In April 2002, approximately 173,000 of the over 350,000 active duty forces were in the AEF Library, which is the database of positions identified as deployable. The Air Force is making a concerted effort to extend the Library and “capture” all positions that can serve in an AEF package. As of September 2002, the Library included 247,000 positions.

![Figure 1 15-Month AEF Rotational Cycle](image)

NOTE: AEWs to be realigned to the ten AEFs in Cycle 4 (June 2003)

Furthermore, an adjustment being made to the AEF packages as the EAF concept matures is what is called the “teaming concept.” The Air Force leadership desire is for members within a
unit to deploy together and to “follow their iron” to deployed locations. This concept allows units to train and execute missions together. Though the teaming concept may cause some wings to experience significant shortages in one or two big hits, over an entire cycle commanders prefer this to the impact of having portions of their units gone in bits and pieces. Wings are more able to plan functions, inspections, and leave.

In response to ragged deployments and hardships created for airmen in unpredictable and frequent deployments, the Air Force developed the EAF philosophy and is employing it through AEF packages. These packages enable the Air Force to provide stable and predictable steady-state deployments for airmen, while presenting the full spectrum of aerospace power to the CCs in tailorable packages. Today the Air Force speaks of itself more in capabilities of AEFs than it does in wings. The Expeditionary Aerospace Force is today’s Air Force.

Notes

4 *ibid.*
5 AFI 10-400, pg 4
6 Correll, n.p.
Chapter 3

AFRC/CE Challenges

The use of AEFs will...allow us to cut OpTempo—that is the number of days our troops spend away from home—because widespread use of AEFs will allow us to better integrate Air National Guard and Air Reserve Forces into our contingency deployments, giving us additional capability from our existing Reserve and Guard units.

—F. Whitten Peters
(Acting) Secretary of the Air Force

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

—John T. Correll
author, “The EAF in Peace and War”
Air Force Magazine

It all depends where you grew up. I think the biggest change is probably in the combat support arena.

—Major General Timothy A. Peppe
Special Assistant to the Vice Chief of Staff for Air Expeditionary Forces
(quoted in Correll’s article)

As the United States Air Force ventured out to make EAF and presentation of forces through AEF packages a way of life for the U.S. military’s air arm, Air Force Reserve Command (AFRC) admirably stepped up as a Total Force player and committed to take on four percent of the AEF taskings.1 To some in the aviation career fields, the transition for the Reserves to an expeditionary air force was not much of a change. Their way of life as a Reservist was already somewhat expeditionary. However, such is not the case for the ECS field, notably for civil
engineers. As Lt Gen James Sherrard testified to the House Armed Services Committee (HASC) in 2001, “…deployments in the past primarily involved aircrew members and maintenance support personnel, so it [EAF] was an adjustment for some Expeditionary Combat Support personnel such as security forces, civil engineering and services.”\(^2\) Being fulltime players in the AEF packages presents challenges for the Reserve civil engineer community. Traditional tour lengths, training requirements, predictability/operations tempo (OPSTEMPO), differences with the aviation community, UTC manning, AFRC commitment shortages, and retention are all hurdles for the Air Force Reserve civil engineers to climb in working within the AEF concept. As a concept, the AEF may be effective in presenting forces, but its claims of bringing stability to tours and making life predictable is not playing out as advertised for civil engineer Reservists.

**Traditional Tours**

Many ECS Reserve personnel, specifically civil engineers, have historically followed the traditional Air Force Reserve training regimen of one weekend per month and one two-week tour per year. Quite often, they completed these tours in the continental United States (CONUS) with a specific training goal, while any overseas tours that came up were often created to complete specific projects for host units or to participate in Joint Chiefs of Staff (JCS) exercises. The tours and training regimen followed a relatively pre-planned and predictable schedule each year. The annual 2-week tour is a requirement, and AEF tours do not necessarily count toward the requirement.\(^3\) Therefore, even if a Reservist completes an AEF tour, technically he/she is still required to complete an annual tour during the year. This additional time away can obviously add to stress on families and employers. According to Lt Gen Sherrard’s 2001 HASC testimony, “While we have received few complaints from our Reservists’ employers, our people tell us that their bosses have started to question their participation.”\(^4\)
Working within the traditional 2-week tour template in an AEF system also creates challenges for the HQ AFRC/CEX staff. The typical AEF tasking of a 90-day tour doesn’t necessarily fit well in the traditional one weekend a month, two-weeks a year training tours civil engineer Reservist signed up for. To fill a single 90-day tasking, an active duty unit has to task one person to fill one line item. HQ AFRC/CEX, on the other hand, in trying to work within the traditional Reserve two-week regimen, has to come up with six people per line item—six two-week tours per 90-day tasking.\(^5\) Broadening the scope to include filling an entire UTC for a 90-day tasking, HQ AFRC/CEX tasks six different units per 90-day tour. The increased number of taskings not only causes difficulties for the CE community, but the constant rotation of 2-week tours to fill a 90-day AEF package adds more stress to the Air Force’s high-demand/low-density transportation system. Some tour lengths are being extended to 90 days partly because of the “inability to rotate large numbers of people on a two-week basis at forward operating locations because of a lack of transportation.”\(^6\)

**Training**

The high number of taskings inherent in the traditional 2-week tour within the AEF construct has the potential to impact mission readiness—participating in AEF packages is starting to impact training. Civil engineers are required to complete three categories of contingency-related training—Category I (CDs, books, films, etc.), Category II (hands-on), and Category III (Silver Flag exercise—deployed CONUS site).\(^7\) Reservists complete most of the CAT I and CAT II training through a combination of unit training assembly (UTA) days (one weekend per month) and annual tours (AT). In addition, a unit is required to complete a Silver Flag exercise every 45 months, which units usually complete as one of their annual tours. Units are normally required to also complete an Operational Readiness Inspection (ORI) once every
five years. On top of those requirements are the “practice” evaluations in preparation for ORIs, staff assistance visits (SAVs), unit compliance inspections (UCIs), JCS exercises, and AFS-specific upgrade training that can’t be accomplished over UTA days.\(^8\)

In a 5-year period there are five annual training tours. One can be used for Silver Flag with a few days remaining on the front or back end of the exercise. Another can be dedicated to an ORI. After fulfilling these requirements, three annual tours remain to complete CAT II training, SAVs, UCIs, exercises, and upgrade training. Throwing AEF tours into the mix further complicates the scenario. Technically AEF tours aren’t supposed to count as AT because deployed locations are not training environments. In this case, Reservists are required to complete ATs in addition to AEF tours. This may help in providing additional opportunity for training, but at the same time increases the operations tempo (OPSTEMPO) for Reservists by requiring more time away from work and families each year to fulfill both training and AEF taskings. Some units make an effort to help the Reservists by counting AEF tours as AT. In a 5-year timeframe, a unit will participate in AEF twice, so the AEF tours can fulfill two AT requirements. Combining AEF tours (as AT) with Silver Flag exercises and ORIs equates to four ATs over five years, and the math shows only one AT remains to fulfill the remaining training requirements. The post September 11, 2001 environment compounded the training problem with units being asked to volunteer every other cycle as opposed to every third cycle.\(^9\) It’s too early to tell if this will be the new steady state or not, but in any case, the difficulties in meeting training requirements may come to a head in reduced readiness status of the force.

**Predictability**

Though the Air Force created the AEF concept to provide stabilization and predictability to active duty forces, it is actually resulting in less predictability and increased OPSTEMPO for
Reserve civil engineers. Active duty members are assigned to a particular AEF package and are only vulnerable for deployment during the 3-month window of that particular AEF. Outside of that window, the active duty unit is not vulnerable for steady-state taskings and can continue with normal training, exercises, and pre-deployment preparation. Reserve units, on the other hand, are vulnerable across the entire 15-month cycle. The vulnerability comes in the volunteer nature of the Reserve community.

Though it is sometimes difficult to fill taskings with all volunteers, so far the AFRC Civil Engineer Readiness Division (HQ AFRC/CEX) has been able to do it. Reservists are aware of their AEF tasking up to a few months prior to the start of a cycle; however, from that time on and over the course of a 15-month cycle, the volunteer status of a Reservist can change, and often does, sometimes with very little notice before the deployment. In these cases, HQ AFRC/CEX will go out to units playing within the cycle and seek volunteers. Reservists are under considerable pressure to answer the requests for volunteers. Feedback is reaching the HQ AFRC/CEX staff that a degree of “brow-beating” is taking place to get Reservists to play in AEF packages. Reservists earn “points” through UTA and AT annual participation. If they don’t earn enough points in a year, it’s considered a “bad year.” If a Reservist receives two bad years, he/she is removed from the Reserve program. The feedback is that some Reservists’ bosses won’t sign off on their points if they don’t participate in AEFs. This doesn’t appear to be widespread, but is an indicator of dissatisfaction in the Reserve community.

**Opstempo**

Not only has deployment predictability increased with AEF participation, but as partially described in the training discussion, playing in AEF packages has not been a stabilizing factor for OPSTEMPO. In fact, it has been very much the opposite. Working to complete training
requirements while participating in AEF is obviously a tempo increase. Moreover, AEF deployments themselves add to a Reservist usual AT schedule. The additional effort required to prepare for overseas deployments affects tempo, as well as the problems often encountered with travel in and out of the theater. To be on station for 15 days, a Reservist has to plan for 19 days away from family and work to account for travel, which is more time than the traditional 2-week annual tour.\textsuperscript{12} Tight schedules in returning to work on time and recovering from overseas travel are additional stressors. All in all, what is supposed to be a stabilizing system for the force is actually unpredictable and more demanding for Reserve civil engineers.

**The Aviation Community**

Prior to the EAF concept being implemented across the Air Force, aviation Reservists were already participating in a somewhat expeditionary manner, at least when compared to the non-flying community. Aviators and their crews participated in contingencies at a higher rate than non-aviators. By the nature of their business and to maintain currency, they may have flown in missions all over the world as many as 2-4 times per month, almost as “part time” active duty personnel as opposed being a crew in reserve.\textsuperscript{13} Moreover, participation in AEF fits better into the employment schedule of many flyers where they can scatter missions amongst days off from airline jobs.\textsuperscript{14} An argument can be made that airline pilots have more time available to participate in the Reserves because their “full time” job is inherently flexible and their work hours are controlled. In a very simplified example, airline pilots cannot fly more than 30 hours per week, or 100 hours in 30 days, or 1,000 hours in a calendar year.\textsuperscript{15} Military flight hours do not count against full-time job hours, so there is room to schedule Reserve missions without taking time away from their full-time jobs. In contrast, a non-pilot work week is approximately 40 hours—or 2,080 hours over 52 weeks (some people work more, some work less). Civil
engineers typically fill employment in five- or six-day-a-week jobs with little flexibility in hours. They must take time away from work to fulfill Reserve commitments. The increased tempo of participating in AEF has exacerbated the challenge of scheduling around employment.

Another contrast between CE and the aviation community is in the employment of Air Reserve Technicians (ARTs)—personnel working full time as a civilian in the same capacity they fill as a Reservist. According to a slide prepared on the HQ AFRC staff, the aviation community (including maintenance) has approximately 30 percent of its force as ARTs.\(^\text{16}\) CE, on the other hand, has less than 2.5 percent.\(^\text{17}\) The significance is that when an aviation unit deploys, a good portion of the personnel are doing the same job they were doing when they were at home station. In fact, the job itself moves with the unit. Almost 98 percent of the civil engineers, on the other hand, are employed outside of their units (except those unemployed). In fact, almost all of the CE ART positions are staff personnel (at the squadron and numbered air force levels), who are mainly responsible for day-to-day administration of the units.\(^\text{18}\)

**Manning UTCs**

The manning structure of CE Reserve units also can make filling taskings difficult. In Reserve units, the unit manning document (UMD) is essentially the same as the unit’s UTCs—in other words, there are few redundant positions in a unit.\(^\text{19}\) In contrast, an active duty unit typically has more people on their UMD than the number of personnel required to fill UTCs. This enables a unit to slide people in and out of UTCs are necessary, including last minute changes. Reserve CE units are manned to UTC positions, so keeping a UTC trained to the necessary levels and then manning it for a deployment can be challenging. Even if the UTC is trained and ready, it’s entirely possible not all the members will volunteer for a tasking (the
desire of HQ AFRC), so without an overage of personnel holding the same AFS, a particular unit may not be able to fill a UTC with volunteers.

**Command Hurdles**

As mentioned previously, AFRC stepped up to a four percent commitment to “play” as a total force in the AEF. The standing commitment takes the role of a Reservist outside his/her traditional role of “use me when the country needs me” to more of a part-time active duty member. Not only is adjusting to the expeditionary nature of being a Total Force player in the EAF a challenge, but so is meeting some of the internal AFRC challenges of contributing to meeting the Command’s four-percent commitment. From one cycle to the next, one functional manager may have fewer overall taskings. This was the case for civil engineers (CE) between EAF Cycles 2 and 3—CE was tasked 22 percent less in Cycle 3 than in Cycle 2.\(^{20}\) When HQ AFRC/CE worked with its units, they were able to meet 691 of the total Cycle 3 taskings, which met the AFRC four percent goal.\(^{21}\) However, some AFRC functional area managers (FAMs) did not make the four percent commitment. The AFRC AEF Cell believed they saw residual capability within CE and tasked them for 192 more lines, which took CE to 5.3 percent of the Cycle 3 Air Force-wide CE taskings.\(^{22}\) A closer look revealed that other FAMs had more residual capability than CE, but didn’t step up to the commitment.

Nevertheless, the faulty logic in AFRC AEF Cell’s glancing look at CE’s residual deployment capability is that they did not take into account the fact that CE has 13 unique Air Force Specialties (AFSs).\(^{23}\) It’s possible that certain ranks can be substituted, and even some skill levels can be substituted, but unique AFSs cannot be substituted—a fireman can’t be substituted for a plumber, for an electrician, for an explosive ordnance disposal technician, etc.
Retention

A further consideration for Reserve engineers with the cultural change to the supporting steady-state AEF packages is the potential affect on retention? The AFRC corporate answer is that the Command is holding steady on retention and recruiting goals are being met. “Overall retention in the Air Force Reserve Command is at 90 percent,” AFRC Commander, Lt Gen Sherrard told Air Force Television News. In CE it’s hard to say. In 1995 there were approximately 8,900 Reserve CE authorizations. They’re now down to approximately 4,800 authorizations. The authorizations have dropped faster than people have attrited, so it’s hard to see whether there’s a retention issue or not. HQ AFRC/CE is receiving anecdotal information that retention could quickly become an issue, especially in critical and stressed career fields. The unscientific feedback is that that serving in the Reserves is no longer what it was advertised to be and it’s tending closer and closer to being part-time active duty—filling a more constant role than an actual reserve role. The HQ AFRC/CE staff not only is receiving retention feedback, but also hints about decreases in attracting prior service personnel. Prior service personnel fill a significant portion of Reserve authorizations. In fact, the experience level gained from prior service members is one of the “marketing” aspects of AFRC. However, in CE the feedback from these personnel who have left the active duty for one reason or another is that continuing to serve in the Reserve forces is not as appealing as it once was. The feedback is real, but is anecdotal and not conclusive at this point. Hopefully factors such as high operations tempo and lack of predictability don’t become major factors in retaining Reserve members. If heavy reliance on Reservists continues, and some start to simply say “no” when asked to volunteer for deployments, the Air Force state of readiness could suffer.
Notes

1 Col Wayne Lemoi, HQ AFRC/CEX, and Lt Col Craig Rutland, HQ AFRC/CEXO, interviewed by author, 11 February 2003.
2 Lt Gen James E. Sherrard III, Chief of Air Force Reserve and Commander, testimony to the House Armed Services Committee, 18 July 2001. Available online from: http://web.lexis-nexis.com/universe/document?_m=b99886b01ee7c35ca943498d7f8a98c8&_docnum=1&wchp=dGLbVlb-lSlzV&_md5=9fefdc53d77a30d5068ca98bb7f63e70
3 Lemoi and Rutland, interviewed by author
4 Sherrard, HASC testimony
5 Lemoi and Rutland, interviewed by author
8 Lemoi and Rutland, interviewed by author
9 Ibid.
10 Ibid.
11 Lt Col King Gillespie, “AFRC Member Participation and Retirement,” (classroom lecture) EL 633 Total Force: Yesterday, Today, and Beyond, 18 January 2003, Air Command and Staff College, Maxwell AFB AL.
12 Lemoi and Rutland, interviewed by author
13 Ibid.
15 Lemoi and Rutland, interviewed by author
16 Ibid.
17 Ibid.
18 Ibid.
19 Ibid.
20 Ibid.
21 Ibid.
22 Ibid.
23 Ibid.
25 Lemoi and Rutland, interviewed by author
26 Ibid.
27 Ibid.
Chapter 4

Theater Challenges

Deploying CE Reservists to fill AEF taskings carries with it many “up front” challenges; however, the issues don’t stop there. The constant 2-week rotations generate problems at the deployed location as well. The high turnover inherent with traditional Reserve tours results in continuity challenges, possible administrative control issues, and low proficiency in the theater. Moreover, the structure of CE’s Reserve UTCs also contributes to difficult situations. Reserve personnel are skilled and bring a great deal to the fight, but the system they live and work within doesn’t mesh well with the steady state force presentation packages of the active duty.

Continuity

In March 2001, Lt Col Jimmy Wilson was the deployed base civil engineer at Al Dhafra Air Base in the United Arab Emirates (UAE). He prepared a bullet paper on issues arising from the Reserve forces’ 2-week rotations. In his situation, 58 of 75 people rotated every 2 weeks. Providing continuity for the rotating troops became a very real problem. Following is a list of issues he felt required long-term continuity.1

Base Reception/In- and Out-processing: arriving and departing personnel need assistance with quarters, base orientation, e-mail accounts, equipment availability, cell phones/radios, shop processes

PERSCO: 2-week rotations put a tremendous load on the PERSCO teams
UAE identification badges: requirement for travel outside immediate base compound, even other operations areas on the base. If badges are not immediately available upon arrival, personnel will not receive them within a 2-week tour. This limits personnel effectiveness.

Form 9s and Standard Form 44s: Time required to process Form 9s for purchases over $2,500 is in excess of two weeks. In addition, most shop materials/supplies are purchased using SF 44s. Training time to become familiar with local suppliers, materials available, customs, and driving requirements eliminate the use of 2-week personnel.

Off-base driving: Because of time required to obtain UAE driver’s license, 2-week personnel do not get in-country driving privileges—must depend on long-term personnel to drive off base for materials and supplies.

Base Details and Appointments: CE shares manpower load for supporting approximately 15 different base organizations and functions (15 different appointment letters are done each rotation) and 2 base details. Two-week personnel do not have time for familiarization with the base and with workmates.

Life Safety: UAE electrical codes do not resemble European or American codes—no real way to prepare for “the way things are done” in country. Equipment does not come with wiring diagrams, so electricians must figure it out on a case-by-case basis. A portion of the base is powered by 220V/50-cycle power commercially and another portion 110V/60-cycle internally. There are differing power sources for virtually every facility on base and color codes are different/random. This presents a major learning curve.

Equipment Operations in Confined Areas: Operational areas are very small/confined. Close proximity of people and equipment present significant safety hazards.

Utilities: Utility maps are inaccurate and water/sewer lines are near the surface, so the potential for accidental breakage is high. Systems are composed of U.S., Italian, and UAE parts—few match. Once again, a major learning curve that is difficult (if not impossible) to overcome in a 2-week tour.

Conclusions:
- Two-week rotations create a continuity and leadership void
- Infrastructure, operational, life safety, transitional, host nation relationship issues exist and pose an unacceptable, mission-related risk

Beyond these issues, the transportation in and out of Al Dhafra caused several other problems. Uncertain airlift both in and out of the theater as well as intra-theater, made what
little continuity they had even less likely with very tight windows of opportunity. Overlap sometimes consisted of a “high five” on the ramp. Airlift uncertainties also contributed to problems with Air Reserve Component (ARC) engineers completing their 15 days on orders prior to departure and not legally being under control of the local commander—at that point they were not actually on duty as military personnel and could not be forced to stay and provide continuity. Also, because passenger airlift was on a 7-day schedule and aircraft departed within hours of arrival, departing teams couldn’t leave on the same aircraft as arriving teams and still provide worthwhile overlap, thereby resulting in a 7-day overlap before the next departure. When one team would complete their seven days of overlap, it would be time for them to start transitioning to the next team. In addition, the entire schedule over the length of the cycle schedule would be off by a week, so an additional rotation or an extension would be required to pick up the final week. With these issues, the 7-day overlap was not initiated and commanders dealt with the lack of continuity—eventually planners avoided assigning a high proportion of ARC personnel at one location. The lower proportion of ARC personnel decreased the impact of the issues, but didn’t eliminate them. Long-term personnel still needed to cover problems and took time to bring new people in and send other personnel out. In the end, the scenario at Al Dhafra did work out because enough personnel volunteered for longer tours to keep the unit afloat.

**ADCON/OPCON**

The 15-day tours can also raise administrative control (ADCON)/OPCON issues. An example came up with firefighters at a deployed location. Their orders ran out while they were there. The deployed wing commander knew that without a sufficient number of firefighters, he couldn’t operate his wing, so he claimed OPCON and ordered them to stay. AFRC had ADCON
and wouldn’t extend their orders. Which trumps? Technically, once their orders expire, they’re civilians. In this particular case, the issue was solved when replacements arrived, and the ADCON/OPCON issue remained open.

**Proficiency**

Being on station for only 15 days also raises proficiency issues. As alluded to above, every deployed infrastructure is unique. Infrastructure at home station is not the infrastructure at Silver Flag, which is most definitely not the infrastructure at many deployed locations. This raises another contrast to the aviation community—though there are some differences in maintaining and flying an F-16 at home compared to a deployed location, they are relatively the same. CE teams can only train to a certain level in the CONUS—full proficiency is gained by experience on the ground where even something as simple as finding parts is a challenge. When troops deploy on a 15-day tour with a day of travel, 1-2 days of getting over jet lag, 10-12 days of gaining familiarity with the base and particularly with the infrastructure, another day to pack out, and a final day to travel back their proficiency and value added are low.

**Manning**

An additional issue with deploying Reserve engineers into the theater is the manning structure. Reserve UTCs are structured with higher rank than active duty teams in order to provide for progression as well as to appeal to prior service personnel. With the higher rank on the teams also comes higher skill levels; consequently, there are few airmen and even fewer 3-level personnel on Reserve teams. Bringing a team with higher skill level isn’t usually a problem as long as people are willing to do the assigned jobs, but bringing in higher ranks can cause difficulties. There are times when the Reserve teams will bring in personnel that have rank
higher than key personnel in the host units, to include flight commanders, foreman, and other supervisors. It’s not necessarily wise to hand over supervisory duties for what is seen as a temporary stay, so it’s up to the personnel involved to handle it professionally. Dealing with awkwardness has even gone as far as HQ AFRC/CEX being asked not to send lieutenant colonels, majors, and some senior NCOs.\textsuperscript{9} Regardless, dealing with situation of constant, quick rotations of personnel with higher rank than the long-term personnel isn’t healthy or fair to either the host unit personnel or the Reservists.

Deployed units are busy executing their day-to-day duties in a contingency environment. Handling issues that are inherent in support teams coming in 2-week rotations is more than should be expected. Deployed commanders and supervisors shouldn’t have to worry about frequent continuity challenges, low proficiency of “temporary” teams, and fluctuating rank issues. These problems can wear on a unit and impact mission effectiveness.

\textbf{Notes}

\begin{enumerate}
\item[	extsuperscript{1}] Lt Col Jimmy Wilson, 763 EARS/CE, Bullet Background Paper on Civil Engineer Shop Continuity, 15 March 2001.
\item[	extsuperscript{2}] Capt Davison, HQ AFRC/CEE, Bullet Background Paper on Nov 00 AFRC/CE ADVON Visit to Al Dhafra AB, UAE, 21 November 2000.
\item[	extsuperscript{3}] \textit{Ibid.}
\item[	extsuperscript{4}] \textit{Ibid.}
\item[	extsuperscript{5}] Col Wayne Lemoi, HQ AFRC/CEX, and Lt Col Craig Rutland, HQ AFRC/C EXO, interviewed by author, 11 February 2003.
\item[	extsuperscript{6}] \textit{Ibid.}
\item[	extsuperscript{7}] \textit{Ibid.}
\item[	extsuperscript{8}] \textit{Ibid.}
\item[	extsuperscript{9}] \textit{Ibid.}
\end{enumerate}
Chapter 5

Options to Consider

Let Reservists be Reservists.

—Col Wayne Lemoi
HQ AFRC/CEX

Using Reserve civil engineers to fill AEF force packages presents many issues from lack of continuity in the deployed theater, to additional stress on transportation, to the cultural adjustment of living within an expeditionary force. Assuming the EAF is here to stay and the AFRC will continue to play a role in steady state taskings, it’s necessary look at options for making the life of Reserve engineers more livable, predictable, and stable. Following are four options: using 90-day tours on a Command-wide volunteer system backed by mobilization, a pure volunteer system to provide relief for active duty personnel, dedicating Reserve engineers to “special projects” as opposed to base operating support (BOS), or dedicating more active duty personnel from each active duty base and using Reservists as backfill at CONUS locations on Directed Annual Tours. In each of these cases, success will depend on breaking away from the current template and traditional way of doing business.

AFRC highly encourages a complete volunteer effort for meeting AEF taskings, but that philosophy is being carried out within the Reserve traditional 2-week tour length and as much as possible within the AEF teaming concept. The 2-week tours increase the number of volunteers required and the template pushes for all UTC volunteers to be from a single unit (to follow the
unit’s iron). If total volunteerism is the desire of AFRC, then HQ AFRC/CEX must be allowed to carry it out wholeheartedly and center the process on it. They can be successful if allowed to ask volunteers to “sign up” for a full 90-day tour and if they seek volunteers to fill a UTC from across the Command rather than within a single unit.

**Volunteerism Backed by Predictable Mobilization**

Prior to September 11, 2001, HQ AFRC/CE was getting tasked for approximately 900 personnel per cycle, in other words, 900 people *15 days at a time* (13,500 man-days).¹ In this proposed option, HQ AFRC/CE would ask for 150 people *90 days at a time* (also 13,500 man-days). The downside for AFRC as a command is that 150 Reservists playing in AEF doesn’t sound as good as 900 people playing. At the end of the day, however, the Command serves the same number of man-days and affects significantly fewer people and employers.

HQ AFRC/CEX is maintaining an informal database of unsolicited volunteers. As of February 2003, the list included over 160 people and most were volunteers for at least 90-day tours.² These people are not necessarily from the same unit and an assessment of AFS representation was not completed; however, it is an indication of the number of people willing to throw their hat in to fill a full 90-day tour without even being asked. In the past, when HQ AFRC/CE asked for volunteers, they typically received about 10 percent volunteerism.³ Broadening the scope out to the 4,000 civil engineers in the command (excludes RED HORSE), the percentage equates to approximately 400 volunteers. This is well short of the 900 taskings necessary under the current 2-week tour system, but well above the 150 required for 90-day tours. It’s possible the percentage could go lower than 10 percent, but it would have to go down to under 4 percent to be less than the requirement.
The volunteer list is an indication of the number of “troughers,” or those who essentially make their living off serving in the Reserves. Using the current unemployment figures as a gauge, as of March 2003 the overall U.S. unemployment rate was 5.8 percent and the construction unemployment rate was 11.8 percent. Civil engineer Reservists may or may not represent the society as a whole, but for quick estimation purposes, using a number part way between overall unemployment and construction unemployment (say 9 percent), the approximate number of the 4,000 Reserve civil engineers unemployed is 360 personnel. Though this is a disappointing number to many, it is encouraging when seeking 150 volunteers for 90-day tours over a 15-month cycle.

Even with encouraging volunteer possibilities, there may be times when there are not enough people or the people with the required skills don’t volunteer. This complete volunteer system needs mobilization as a backup; however, not just a straight mobilization by tasked unit, but a system highly predictable over a good portion of a Reservist’s career. In a very broad-brush example, such a system may work something like the following example. Divide the 4,000 civil engineer Reservists over 10 EAF cycles (150 months or 12.5 years) to get 400 personnel per cycle. These 400 Reservists per cycle could be further divided out over 5 packages per cycle to get 80 personnel per AEF package. These 80 people would be placed “on the bubble” for a specific package in a designated cycle; therefore, a Reservist would only be on the bubble once every 12.5 years. With the Command-wide volunteer system in place, these personnel on the bubble would only be needed if volunteers didn’t fill the taskings—there’s a good likelihood that some people on the bubble might not be needed for AEF taskings at all. Of course, this is a very simplified calculation, and applying typical requirements for specific AFSs may reduce the spread, but this estimate is in the ballpark. Even if the years between being on
the bubble goes down by a third, it’s still eight to nine years, which should be reasonably tolerable over a Reservist’s career. Not only should Command-wide volunteerism for full 90-day tours backed by “on-the-bubble” mobilization be more predictable and tolerable to the Reservist, but also to the employer.

**Pure Volunteerism**

The AEF is set up as a steady state system designed for predictability and stability for active duty forces. A school of thought suggests that the active duty civil engineers should have enough forces to cover the AEF requirements. In this case, the Reservists can be used on a pure volunteer basis to relieve the personnel tempo of active duty engineers. The Reserve community wouldn’t commit to any lines for any of the cycles, but would advertise the type of taskings being covered by the active duty members and solicit volunteers. Considering the factors for optimistic volunteerism discussed above, the outlook for receiving volunteers is high. HQ AFRC/CEX can then offer these forces to the active duty to relieve some personnel scheduled to deploy in an AEF.

**Special Project Teams**

Another role Reservists could play in supporting AEF packages is to deploy to work special projects. Many Reserve units do this today, going on temporary duty (TDY) to a host unit and completing special projects while the host is able to focus on BOS. Sometimes a few units will go TDY in sequence for projects that take longer than a couple weeks. The same concept can be applied to projects in EAF locations. Reserve unit deployments can be scheduled months in advance and in anticipation of their arrival the host unit can set aside projects for the Reserve units to complete. Some of the same issues mentioned in Chapter 4 would exist, but the Reserve
units wouldn’t have to become familiar with the base-wide infrastructure and could focus on a particular project. A long-term member or two of the host unit could be assigned as the project as a foreman and a support link. The Reserve manpower would be in addition to the host unit personnel not in place of the long-term members. This concept serves to let the host unit focus on BOS while still completing special projects for the host wing.

**CONUS Directed Annual Tours**

A fourth option is for Reserve teams to backfill at CONUS bases in Directed Annual Tours, enabling the supported wing’s to deploy as many active duty personnel as necessary to support an AEF package. HQ AFRC/CEX could approach this as either the traditional 2-week tours, in as 90-day tours, or something in between. Approximately half the personnel in an active duty civil engineer squadron are civilian, so there is a continuity source for inbound Reservists. The CONUS “deployed” location allows Reservists to be productive sooner with less travel time and more familiar infrastructure. It also allows the host base civil engineer to step up and completely fill AEF requirements without breaking his/her base. In addition, the higher ranks in the Reserve UTCs may be more easily accepted and workable at CONUS bases with mainly civilians remaining behind.

If AFRC remains committed to being active in AEF packages, a process change needs to take place to stabilize the tempo and predictability for Reserve civil engineers. Four options to consider are volunteerism backed by predictable mobilization, pure volunteerism, special project teams, and CONUS Directed Annual Tours.
Notes

1 Col Wayne Lemoji, HQ AFRC/CEX, and Lt Col Craig Rutland, HQ AFRC/CEXO, interviewed by author, 11 February 2003.
2 Ibid.
3 Ibid.
5 Lemoji and Rutland, interviewed by author
6 Ibid.
7 Ibid.
8 Ibid.
Chapter 6

Conclusions and Recommendations

To sustain the Reserve and the Guard, we have to get them back into their traditional roles where they can be reserves again and roll in when we need them.

—Michael L. Dominguez
Assistant Secretary of the Air Force for Manpower and Reserve Affairs

But the reality is people in the Guard and Reserves do in fact have jobs and are not signed up to be full time. They’re signed up to be part time. They’re signed up to be helpful when needed. ... If we want to have a total force, if we want that concept to work, we’ve got to be respectful of the fact that people in the reserves and the Guard have jobs.

—Donald Rumsfeld
Secretary of Defense

The EAF philosophy is here to stay for the foreseeable future and AEF packages will be the force presentation structure. The total force concept becomes stronger with each deployment and AFRC will remain a committed partner in AEF force presentation. AEF packaging works well in the aviation community and in active duty ECS, but presents challenges to Reserve civil engineers.

Reserve civil engineers experience AEF challenges both outside of deployments and within the deployed theater. The traditional 2-week tours taken by Reservist don’t mesh real well with the 3-month taskings of AEF packages. Trying to work within both systems creates problems in increased number of taskings to fill, difficulties in completing training, lower predictability, and increased OPSTEMPO. Once in the theater, the 2-week rotations cause continuity and
ADCON/OPCON problems for host units. The high rank structure built into Reserve CE UTCs causes awkwardness with host units when teams are in place on a “temporary” basis. Reserve teams also experience lower proficiency with short tours in the theater.

Two possible solutions will require the CE Reservists to breakaway from the AEF teaming concept and from the traditional Reserve 2-week tours. One option is solicit volunteers from across the command to fill tasked UTCs and then mobilize shortfalls on a predictable schedule that may only affect an individual Reservist as little as once every 12 years. Another option is to work within pure volunteerism by advertising the UTCs being picked up by active duty members and offering the Reserve volunteers as substitutes and relief. Other options include deploying as teams to complete special projects for host AEF units or to use Directed Annual Tours to backfill active duty teams at their home station.

Admittedly, this paper only scratches the surface on exploration of the issues involved with civil engineer Reservists’ active participation in AEF and into developing details for solutions. Possible avenues for more in-depth and specific research include the retention of Reserve civil engineers, especially within stressed AFSs (this could include a look at the trend of non-prior service enlistments); aviator work schedules compared to non-aviators; the need for Reserve participation in AEF with the increase of active duty positions in the AEF library; and the rumor of Reservists being pressured to volunteer.

Even with only a scratch on the surface, this paper reveals the very real challenges for Reserve civil engineers. Their role in the total force is becoming less of a force in reserve and more of a force in action. The proposed options can slow the swing of the pendulum and restore their status as Reservists, where they are happy and willing to serve.
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