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I again wish to thank the many volunteers of the Army Engineer Spouses’ Club. Each year they spend a couple days stuffing thousands of letters for us. They join us at the AEA offices at the Kingman Building to work the letters. AEA also makes a $750 donation to the AASC scholarship fund.

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CONTRIBUTING WRITERS
BODNER, Karlene
CLAYTON, Whitney
DALEY, CPT Kevin
FAUDREE, SFC Wesley
GILL, Jim
HELTON, LTC Michael, MPH
HOGEBOOM, LTC C. Patrick IV
LARDINOS, CPT Scott
MAY, MAJ John
MEDISKER, MAJ Brett
MURPHY, Bryan (USN)
NACHABE, Abe (USN)
SHUPAK, CPT Shane G.
SPARKS, Chief Ronald
SPENDLOVE, Andrew D.
WEVER, MAJ Paul (USAF)

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THE PRINT ISSUE for November/December was a little shorter, a little lighter, but still jam-packed with great stories of our Engineer family and how we care for our own and our communities.

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Beth O’Hara, Editor
AFGHAN DIVESTMENT STRATEGY: RIGHT-SIZING THE ANDSF Basing Strategy for Force Optimization

by KARLENE BODNER and CPT SCOTT LARDINOIS

The ANDSF must conduct a critical review of the needed infrastructure to keep the force structure and physical inventory in balance. ANDSF must divest any physical capacity deemed excess to reduce the overhead costs in both dollars and manpower. Add to the conversation the threat of leaving ungoverned spaces as insurgent safe havens, and you have several reasons why the ANDSF need a correctly proportioned physical portfolio.

Over the last decade, the U.S. has invested $8.9 billion in construction projects for the ANDSF. In addition to the new facilities built specifically for the ANDSF, as Coalition forces drew down the Afghans took ownership of the installations left behind. The ANDSF were instructed to strongly deter Coalition forces from demolishing any installations, per the NSC Spanta letter 1719. The size of the ANDSF will remain at 352,000 soldiers until the end of 2017. CSTC-A estimates the current infrastructure portfolio is oversized for a force of 352,000 soldiers and unsustainable based on the $4.1 billion budget the U.S. will provide. CSTC-A has estimated the yearly shortfall for the ANDSF at $110 million for sustenance and $89 million for fuel; the U.S. will no longer fund these. This imbalance is the problem that the Afghan Divestment Strategy (ADS) seeks to address.

The ADS is a joint initiative led by CSTC-A Combined Joint-Engineer (CJ-ENG) and is broken into three phases. The first phase, initiated in December 2014, consisted of a survey of 365 bases for the Afghan National Army (ANA) and 1,115 facilities for the Afghanistan National Police (ANP). CJ-ENG, regional Training, Advice and Assist Command (TAAC) leaders, advisors, and ANDSF facility engineers evaluated each location to determine appropriate candidates for divestment. The team assigned each location a score based on its proximity to future security operations and the economic value it presents for commercial use.

The analysis in Phase 1 revealed that 161 of 365 ANA bases and 205 of 1,115 ANP facilities were excess. The study also identified that of the 366 bases and facilities screened, 263 are easy to divest. CJ-ENG consulted with the Ministry of Interior (MoI) and Ministry of Defense (MoD) leaders and developed a prioritized divestment list based on these 263 locations. Divestment options include transfer to other GIRoA agencies and selling or leasing the facilities for commercial development. MoD is currently offering to the ANDSF leadership facilities for commercial use.

The potential for economic development is most substantial at existing airfields. Airfields are highly established centers of gravity in contrast to some of the smaller operating bases under consideration. Because of the requirements necessary for an airfield to function and because of co-location of Coalition forces, these locations received a disproportionate amount of infrastructure investment in some locations, such as Bagram and Kandahar, these airfields resemble small cities rather than austere military posts. For example, the 56 megawatts of power generation available at Bagram rivals most Afghan cities. Furthermore, Kandahar has some of the largest cold-storage warehousing in the region and its own water-bottling plant. A few of the runways at these locations are even capable of landing a space shuttle. Herat and Mazar-e-Sharif airfields are geographically positioned next to large population centers and abundant natural resources. The opportunities for GirAoA and other investors to develop these airfields are limitless and present an encouraging way forward for a variety of industries.

Phase 2 of ADS is currently under development by the Assistant Secretary of the Army Installations, Energy, and Environment (ASA (IE&E)). This phase will provide a defensible analysis of the existing infrastructure to include targets, milestones, guidelines, and recommendations for divestment. Recommendations will be offered to the ANDSF leadership for concurrence to ensure that forces have optimal facilities and infrastructure for mission accomplishment while remaining financially sustainable on a permanent basis.

Phase 3 of ADS also is currently under development by the ASA (IE&E) in anticipation of a future need to decrease the Tahsilk end-strength below 352,000. This phase will focus on identifying only those specific bases and facilities that provide critical operational or capacity to the ANDSF mission.

Similar to Americans who weathered the Great Depression, years of poverty have taught the Afghans to keep everything they can hold. Consequently, a strategy to divest excess bases and facilities is a culturally bold initiative. In the case of the ANDSF, facilities, however, this culture simply is unsustainable given GIRoA current GDP and the decreased contributions of the Coalition. As GirAoA continues to establish itself as an independent, sovereign, and democratic nation, the U.S. and Coalition partners must advise them down a path of long-term success. It is critical that the ANDSF accept and implement the ADS strategy for the economic stability of Afghanistan’s military.

KARLENE BODNER is a long-term Department of the Army civilian senior construction program manager with the U.S. Army Corps of Engineers, who volunteered to become a Ministry of Defense advisor with the Afghan Ministry of the Interior. She is currently serving with the ANP Branch of CSTC-A. CJ-ENG on Camp RS in Kabul, Afghanistan.

CPT SCOTT LARDINOIS has been a U.S. Army Reserve engineer officer for more than 11 years, and he is currently serving as an ANA Project Manager for CSTC-A CJ-ENG in Kabul, Afghanistan. He served as a route clearance platoon leader in Ramadi, Iraq, in 2006-2007. In his civilian life, he is a full-time firefighter for the City of Madison, WI.

[karlene.m.bodner.civ@mail.mil] [scott.e.lardinois.mil@mail.mil]
INFRASTRUCTURE TRAINING ADVISORY TEAM

by CPT SHANE G. SHUPAK

THE INFRASTRUCTURE TRAINING ADVISORY TEAM (ITAT) is a unique organization within the coalition forces. ITATs were originally created during Operation Iraqi Freedom as an afterthought when the coalition forces finally realized a need for the national security forces to sustain their own buildings and critical infrastructure. After its establishment in Iraq, it was not until 2010 that COL Michael Wehr established an ITAT under NATO Training Mission–Afghanistan. The team’s responsibility is to train host-nation personnel to maintain the billions of dollars of infrastructure built by coalition forces since 2001. For nearly a decade, the coalition has rapidly built infrastructure as Afghan National Defense Security Forces (ANDSF) stood up and trained to establish a security across the nation. ANDSF lacked the ability to self-perform sustainability tasks for all the infrastructure and facilities. The ITAT advises the ANDSF Facilities Engineers (FEs) on a wide range of facility- and infrastructure-related areas, gradually decreasing their reliance on external contracts. The team also is responsible for facilitating ongoing training for FE personnel to ensure sustainability of all the facilities the ANDSF receive and are responsible to maintain. The ITAT’s role is to help ensure that all facilities at ANDSF locations are operational and in good working order. Advising efforts to ANDSF predominantly include critical infrastructure: power, water, wastewater, and building sustainability.

Along with providing leadership and support to the Train Advise and Assist Command (TAAC), ITATs, the ITAT HQ advises the ministerial-level organizations that support the FEs. These organizations for both the Ministry of Defense (MOD) and the Ministry of the Interior (MOI) include the Construction Property Management Department (CPMD) in the MOD and the MOI Facilities Department (FD) in the MOI. The ITAT HQ assists CPMD with creating, developing, and modifying their current policies, processes, and procedures. These efforts include the development of their Standard Operating Procedures (SOPs); the creation of standardized Operations and Maintenance (O&M) contract templates; the review of proposed Tashkil (authorized allocation of equipment/personnel per unit) modifications for both the personnel and equipment Tashkils; creation and review of their budget for the upcoming fiscal year; and everyday ongoing Train Advise Assist (TAA) efforts with the CPMD staff.

The MOI FD, much like the equivalent on the MOD side, is advised by the ITAT HQ to assist them with creating and modifying their current policies, processes, and procedures. The MOI FD is going through an entire reorganization effort currently to create a functional facilities support group. This group will cover multiple geographical- ly dispersed facilities and ensure that they will be able to keep the buildings in good working order for years to come. Significant advising efforts include recreating Tashkils and the budget review and approval processes. The ongoing TAA of the MOI FD and the MOI HQ FE staff has and will continue to ensure the path ahead improves and ensures a sustainable future.

The ITATs at the TAACs advise the facilities departments at the Afghan National Army (ANA) Corps and Afghan National Police (ANP) Provincial level. There is an ITAT in each of the TAACs, which currently include TAAC North, East, South, West, and Capital. There are also two additional Advise and Assist Command (AACs) in the Southeast and Southwest who provide ITAT support. The ITATs work with the FEs in the ANA Corps and Brigades to improve the processes and procedures; establish O&M of critical infrastructure and facilities; write O&M contracts as needed; submit MOD 14s (Ministry of Defense Form 14 – Request Form) for Tashkil fills and Tashkil change requests; develop and submit the yearly budget requirements; program for future on-budget construction projects; and transition coordination construction projects to the ANA. This is in addition to the ongoing TAA of the MOE staff at the sites for the daily items and issues that arise. ITATs accomplish TAA in the ANP by advising the FEs at the Provincial Headquarters. Similar to the ANA, the ITATs work with the FEs at the Provincial HQs to improve the processes and procedures, budget requirements planning for the upcoming year, and transition coordination projects to the ANP. This is in addition to the day-to-day TAA of the FE staff at the sites. The changes occurring at the MOI FD are directly affecting the Tashkils for the ANP FEs. The ITAT key engagements have included development of the Institutional Training Program; development of the Marshal Fahim National Defense University (MFNUD) campus; oversight of the new MOI and MOI HQ facilities; support with identifying infrastructure for the Afghan Divestment Strategy (ADS); standardized O&M contract templates; and the total revamping of the MOI FD and ANP FE structure. The ANA Engineer School (ANAES), located in Mazar-e-Sharif, provides the only institutionalized FE training in the entire country. This is where FEs initially learn how to conduct O&M on facilities, prepare budgets, and learn all the forms, processes, and procedures required to perform their duties. MFNUD is the ANAs elite military education campus, and it includes two schools as commissioning sources. The National Military Academy of Afghanistan (NMMA), modeled after the U.S. Army’s West Point, trains cadets to earn a four-year bachelor’s degree and a commission in the ANA upon graduation. Their campus completed construction in 2012. The ANA Officers Academy (ANAOA), following the British Sandhurst school model, offers a commission after one year of training. The construction of permanent ANAOA facilities is ongoing and nearing completion. The ITAT will ensure a smooth transition of the completed buildings to the ANA. The ITAT also will help establish an O&M program specific to the facilities, including training for the tradesmen who...
will be responsible for maintaining the ANA’s facilities. The ITAT supports the divestiture of excess infrastructure by the ADS program. This will involve divestiture of 36% of the current ANA facilities and 50% of the ANP facilities across the country. The standardized O&M contract templates will assist the FE departments in uniform and detailed requirements for future power, water, wastewater, and building O&M contracts. These contract templates will ensure that all the necessary items are in each O&M contract moving forward and will be covered every time. These O&M contracts will assist the FE department in ensuring that 36% of the current ANA facilities and 50% of the ANP facilities will be responsible for carrying the torch into the future. [shane.g.shupak.mil@mail.mil]

CPT SHANE G. SHUPAK served as an ITAT Advisor, CJ-ENG Directorate, CSTC-A, from 17 July 2014 to 5 May 2015. He originally is from Brenham, TX. [shane.g.shupak.mil@mail.mil]
ity for CPMD units in the field. The basic repairs and preventive maintenance capability of the FEs will ensure cost savings by extending the useful life of current infrastructure.

Doctrine development is the next important step for the ANDSF FE training program. While the initial training enables them to develop the first set of standardized, skilled NCOs, the long-term benefit of centralized training will be its ability to adapt the needs of the ANDSF. Adaptation requires a well-developed process for incorporating lessons learned and research into subsequent procedures, standards, and training.

Right now, doctrine development offices exist at both the ANAES and at CPMD, but little has been produced from these offices. Because the lessons learned from the field will take time to develop, it would greatly benefit the ANDSF to place personnel who can test new ideas through CPMD’s research lab, research existing standards, and develop ANDSF standards that maximize the use of local materials and capabilities.

The ANDSF FE program will ensure the long-term use of its current infrastructure, but doctrinal development rests on the shoulders of the ANDSF. Training officers and enlisted soldiers initiate the capability and, over time, the lessons learned should be used to develop new courses and course material. The long-term benefit of setting up a FE capability will be realized as FEs develop cost-saving methods through experience and exposure to different technologies. Doctrine development is imperative to continually improving the cost savings realized by the ANDSF CPMD. While they have been given a leg up in the shared initial costs, once facilities reach the end of their useful life, only a well-established doctrine process will position the ANDSF to quickly adapt their next generation of facilities to minimize initial and long-term costs.

MAJ PAUL WEVER is an Afghanistan/Pakistan Hand serving in the CSTC-A, attached to the ANA Hybrid Advisor Team from November 2015 to September 2016. He is putting his 13 years of Air Force civil engineer experience to the test by standing up the ANA EBS FE training program.

[paul.s.wever.mil@mail.mil]
A SIGNATURE FACILITY FOR THE ANA
NEW MINISTRY OF DEFENSE HEADQUARTERS IN KABUL, AFGHANISTAN

by LOAN HARRIS

FROM THE MOMENT AFGHANISTAN’S MINISTER OF DEFENSE OCCUPIED THE BUILDING in the summer of 2015, the new Ministry of Defense (MoD) Headquarters (HQ) became the focal point of Afghanistan’s military planning and operations. Vital national security decisions will be made at the Afghan’s MoD HQ, the equivalent of our Pentagon. The National Military Command personnel were scattered among several buildings in the Kabul area, to include the existing MoD HQ, a five-storey, Soviet-era office building. The goal was to provide a 2,500-personnel building that would become the symbol of the Afghan National Army (ANA) and house the offices of the MoD’s senior leadership and support staff.

MoD Design Competition

To reflect Afghanistan’s culture and heritage, a design competition was developed by the Planning and Design Team (PDT) to encourage local university talent to present their designs for the prestigious National MoD HQ. Design competitions were held among Afghan architectural engineering students from the Kabul Poly Technic University (KPU) and Kabul University to design the elevations and other architectural features of the proposed building. The PDT assembled a competition design package consisting of the 35% design floor plans (sanitized) for each of the five floors and roof, building and wall sections, site utility plan, and brief scope of work. On 19 September 2008, a jury of MoD general officers, MoD Infrastructure Management Department Compound, Combined Security Transition Command (CSTC-A), and Air Force Civil Engineer Center (AFCEC) personnel judged the top four entries. Khaja Masood’s design from KPU was the winning submission, Waheda Froton came in second, and Ahmad Tamin and Ahmad Ramin Sadiq finished third. Masood worked with the PDT to incorporate the elements of his design into the 35% design drawings. The final design drawing was a combination of the first and second place winners.

MoD Construction

This project is the result of a tremendous coordination effort between CSTC-A, MoD, ANA, and AFCEC. Achieving a bridge between cultural and language barriers ensured a successful collaboration on this huge endeavor. After 16 months of coordination, the Minister of Defense approved the new MoD HQ building schematic and design. Construction of the 38,511 square-meter six-floor building, in the heart of Kabul, Afghanistan, initially was awarded as a Cost Plus Fixed Fee contract by AFCEC on 21 April 2009.

Due to myriad challenges, setbacks, delays, and exhausted funds, the construction on the MoD HQ building stalled and the site “winterized” in preparation for a follow-on Firm-Fixed Price re-procurement on 31 December 2013. At the time funds were exhausted, construction was only 83% complete. The U.S. media perceived this as a high-profile indignity.

In April 2014, MG Harold Greene sought to obtain funding from the U.S. Congress to “Complete the Mission.” MG Greene previously served as the Army’s Deputy for Acquisition and Systems Management, a role in which he oversees acquisition reform initiatives. His acquisition and engineering background structured the MoD HQ re-procurement. CSTC-A proposed moving forward by combining the remaining scope into one Firm-Fixed Price contract and to control costs by improving both contract oversight and project management.

MG Greene was instrumental in crafting both a funding solution and a contract delivery method that U.S. officials could support. His relationship with high-ranking Ministry of Finance (MoF), MoD, and ANA officials was essential as he successfully conveyed to the Afghans that the reconfiguration of the MoD HQ contract did not indicate a lack of U.S. or Coalition Force support. Rather, he helped them understand that we have an obligation to be good stewards of our nation’s fiscal resources and that the reconfiguration of the MoD contract was critical to fulfilling that obligation. Without MG Greene’s endorsement, the project would likely not have been re-procured.

CSTC-A was successful in clearing obstructed business license concerns regarding the prime contractor and gaining clearance for Leahy Amendment certifications on the $60 million PY14 FAP previously budgeted. On 31 July 2014, the AFCEC awarded a contract and the contractor given immediate notice-to-proceed on preliminary administrative tasks to complete construction of the MoD HQ considered critical to Afghanistan’s future.

With attacks in Kabul rising, the MoD contractors, Gilbane Federal and SSCC, did a remarkable job in solving latent constructability issues and overcoming challenges that overwhelmed previous teams for more than five years. Team morale was high and focused on a “Complete the Mission” attitude. Gilbane’s sound work plan—which includes optimal working sequences and ideal timing for executing each individual activity—enhances work efficiency and enables contractors to fulfill the contract within budget and on a reduced construction schedule while enhancing/maintaining safety and quality. Furthermore, by starting de-mobilization early and maintaining current resource levels of 650 daily onsite workers throughout project completion, Gilbane was able to forecast an earlier project turnover.

MoD HQ Occupation

Completing the construction of the HQ building is just the first step toward operational capability. MG Semonite, Commanding General CSTC-A, championed the installation of furniture, IT, specialized equipment, and security systems upon construction completion to fast-track occupation for the MoD staff by July 2015. Coordination between CSTC-A and the ANA to ensure a timely and smooth turnover of facilities is underway.

MG Greene was killed in action on 5 August 2014 while touring new construction in Kabul, becoming the highest-ranking U.S. officer KIA since the Vietnam War. The MoD team dedicated a plaque in his honor at the building’s entrance. A June 2015 ribbon-cutting event was scheduled to celebrate completion of the MoD HQ. The new MoD HQ will help make the ANA more efficient in their daily operations. The transfer of authority marks an important milestone when Afghan soldiers will take the lead for security across the country.

LOAN HARRIS is assigned at Headsquarters Resolute Support in Kabul, Afghanistan, as the AFCEC program manager, as part of CSTC-A, CJ-ENG Directorate. She is a career civil servant with more than 14 years of experience in military infrastructure engineering.
The New Afghanistan Ministry of Interior Headquarters Complex

INTRODUCTION

The New Ministry of Interior (MoI) Headquarters will be Afghanistan’s national facility intended to oversee all Afghan National Police (ANP) functions. This article provides an overview of the New MoI HQ construction project, from concept to completion. It covers procurement/construction, and process and challenges that Combined Security Transition Command-Afghanistan (CSTC-A), Combined Joint Engineers (CJ-ENG), and MoI advisors encountered as we selected the way forward on the occupation plan. We will discuss how CSTC-A decided to build the New MoI HQ in support of creating a secure Afghanistan a respectable facility from which to command and control all six pillars of a growing ANP force. We also will talk about the three-phase approach to the procurement and construction. Phase I included the primary and secondary entry control points and perimeter wall construction. The New MoI HQ and communications buildings, along with water, electric and sewage utilities make up Phase II. Phase III consists of the National Police Command Center (NPCC), dining facility, auditorium, barracks, and administrative buildings. Finally, CSTC-A CJ-ENG and key MoI advisors have partnered with senior leaders from the MoI to map the way forward for the procurement and installation of furniture, information technology equipment, and the MoI HQ Building security system. We also will discuss how CJ-ENG built the team to execute the off-budget furniture, IT, and security systems procurements.

NEW MoI HQ BACKGROUND

The MoI ensures the security of Afghanistan from internal threats, and it is charged with protection of its values. Deputy Ministers (DM), such as the Deputy Minister of Security and Deputy Minister of Support, have special responsibilities for key operational, planning, and administrative sectors of the ANP.1 These DMs report to the MoI; they are required to manage, train, and equip their staff and field operatives. During the last several years, the MoI increased the size of the ANP force to 157,000 personnel in order to support the MoI’s ten-year vision for the ANP to “become a unified, capable, and trustworthy civilian police service. Its primary responsibility will be to enforce the rule of law; maintain public order and security; detect and fight crimes; control borders; protect the rights, assets, and freedoms of both Afghans and foreigners in Afghanistan according to national laws; and operate without ethnic, gender, language, or religious discrimination.”

The MoI had good reason to want a new MoI HQ. The current MoI HQ had deteriorated facilities, and the NPCC, Facility Department, and other key MoI functions were spread out in different parts of Kabul from the MoI HQ compound, inhibiting close lines of communication. Further, the MoI had become a large national-level institution with 157,000 personnel and a critically important mission to the people of Afghanistan. An organization with the importance of the MoI should have quality facilities; this warranted the construction of a new HQ facility.

PROCUREMENT/CONSTRUCTION

Located just west of the Kabul Afghanistan International Airport (KAIA), the MoI chose the plot on which the New MoI HQ rests because it was the only piece of land owned by the MoI that had adequate space to join the MoI HQ, all of its DM functions, and NPCC at one location. The New MoI HQ project was so large, with more than 30 buildings, that CSTC-A decided to divide the project into three phases.

Phase I — The U.S. Army Corps of Engineers (USACE) awarded the Phase I contract in September 2011 to Abdulhak Gardez Construction Firm (ACF). Construction consisted of an asphalt access road, interior access road network, entry control point, interior site grading and drainage, parking and utilities. The entry control point includes a canopy, guard shack, and gate house. Utility work consists of telecommunication and electrical system duct banks for the new ECP and existing Guard Towers. USACE completed Phase I construction in July 2014. USACE transferred Phase I to CSTC-A in September 2014.

Phase II — USACE awarded the Phase II contract to Yukel Insaat A.S. in June 2013. The work includes the construction of the MoI HQ building, communications buildings, water supply and distribution, wastewater treatment plant, power plant, fuel storage, utility distribution, and other supporting infrastructure. This contract was a re-solicitation due to termination for default of the previous contractor, Technologists Inc. The project is complete with the exception of minor deficiencies that USACE is addressing with the contractor. Modification for the interior signage is underway. USACE will issue a separate contract for terrazzo tile flooring on stairs within the building. Other features of the contract included an entry control point, supporting structures, parking, force protection, grading, and drainage.

Phase III — Macro Vintage Levant JLT (MVJLT) is the Phase III contractor. Overall, the project consists of the NPCC and various administrative buildings, life support and mission support facilities to include barracks, dining facility, auditorium, warehouse, vehicle maintenance facility, ammunition secure storage, and a running track. The original contractor, Lakeshore Toltest Corporation (LTC), completed approximately 72% complete and scheduled to be complete on 26 December 2015 with a projected beneficial occupancy date of 30 June 2016. CSTC-A issued letters of direction for a water solution for all phases, security, an addition of a helicopter pad, terrazzo tile stairs, wastewater treatment plant, and interior signage. Modifications for security, helicopter pad, and interior signage are underway. USACE currently is evaluating a water solution with the designer of record due to the insufficient quality of water.

CJ-ENG and USACE are developing a gender area for female ANP service members. These facilities will include a barracks, daycare, conference center, and gym. The greatest issue and concern with these projects is their interdependence. The facilities and infrastructure in Phases I and III depend on the completion and integration of the power, water, and sewer utilities contained in the Phase II contract. These utility systems are required for the Phase II contract support Phases I and III. Phase II needs the support buildings of the Phase III, administration, barracks, etc. Completion of the three project phases are required for a completely usable facility.

CROSSING THE FINISH LINE

CSTC-A’s goal always was to ensure that the MoI moved into a complete and useable facility. During a 31 January 2013
briefing to the MoI HQ transition committee, CSTC-A and MoI leadership, and the MoI branch advisors briefed leadership on the intent of the MoI HQ transition as well as the timeline. On 7 December 2014, CSTC-A and MoI leadership, along with the MoI branch advisors, discussed the intent and rationale for the new MoI HQ. The MoI leadership, including the Chief of Staff, the G-6, the G-3, and the CJ-ENG, asked for further details on the transition, including the timeline, the budget, and the scope of the work. The MoI leadership agreed to support the transition and to maintain the current MoI HQ for at least one year to allow for a smooth transition. The MoI leadership also requested that the MoI branch advisors provide a detailed plan for the transition, including the scope of work, the timeline, and the budget. The MoI branch advisors agreed to provide a detailed plan for the transition and to work with the MoI leadership to ensure a smooth transition.
ADVISING AFGHAN ENGINEERS

by ANDREW D. SPENDLOVE

I found the conventional wisdom of taking several weeks or even months to gain full acceptance by our Afghan engineer counterparts to be incorrect. A counterpart is the assigned Afghan official to the advisor, based on similar backgrounds and skills appropriate to the mission. My counterpart is the department head of the Construction & Property Management Department (CPMD), responsible for all facilities within the Afghan National Army (ANA). The department head and his directors solve problems and provide guidance the same as my division chiefs and I do.

The leadership of the CPMD performs equally to facility engineers everywhere in the world. I led the largest overseas engineers everywhere in the world. I led the largest overseas engineers, plants and facilities within the Afghan National Army (ANA), theater. I contributed to the base divestiture. The challenges I faced at USAG Grafenwöhr were similar to those faced by my Afghan counterparts, albeit at a greater scale in Afghanistan.

My first encounter, as the senior advisor to the brigadier general who heads the CPMD, illustrates the engineer difference I experienced. Trying to be respectful and get through my long agenda without appearing pushy, I hesitated and the general asked if he could look at my list. Of course, I handed him a copy and, from that moment, the general drove the discussion by addressing all the points. Why do we believe that we can advise senior Afghan leaders that are fully competent in their fields? Understanding our corporate history explains this. The U.S. military facility engineer learned from more than a hundred years of experience in hundreds of bases located all over the world. We derived our experience from the deserts of the Gobi and Sahara, cold regions from Antarctica to North America, jungles of Asia to Africa, literally all over the world.

The training of the U.S. military facility engineer, perhaps the best in the world, utilizes this vast experience. As advisors, we must pass this information on to our counterparts, just as we received it.

Sometimes as advisors, we spend too much time focusing on the differences and not enough on the common bonds. All of us want the same thing; to understand the situation, and then apply your background knowledge to problem-solving. Otherwise, the Afghans will realize that you are not really listening. This means you do not care and are solving the wrong problem.

Acceptance is not automatic. These high-level folk have a lot of work to do and the advisor needs to show that he can help them. To do this, I established my credentials, showed respect, and recognized their greater experience. I outlined my 30 years as a facility engineer. I showed respect by wearing a suit and tie to every engagement. What probably had the largest impact in building partnership was admitting that my ideas might not work in their situations. Listening with empathy and understanding with comprehension is vital in building trust.

I found the biggest challenge was a lack of resources, both money and human capital, and to get outside organizations to support the CPMD. The entire ANA structure is new, only about a decade old compared to our 200+ years. Defining the relationships and lines of communication requires effort and patience during this developmental stage. Training new young engineers will take another decade before they are ready in the quantities and qualities needed.

As advisors, we need to realize this. The Afghan society is one of politeness. The Afghans will avoid coming outright and saying, “No.” Rather, they will politely intimate that your ideas may not work. Empathic listening will serve you well in these situations. I have found that team-work still is the best method. Just like me, my Afghan counterparts want to do a good job, but sometimes we put them into a no-win situation by applying our systems and deadlines to them. When I write an agenda, it is our agenda, not my agenda. Sometimes I must promote the U.S. agenda. Work together as equals and succeed. Tell them how to do their job and fail. The CPMD engineers provide improved facilities for the ANA. Together, we are building a better Afghanistan.

ANDREW SPENDLOVE is a career civil servant with more than 30 years of experience in fields ranging from facility engineering, real property maintenance, and master planning to disaster preparedness, and personnel & project management. He was the Director of Public Works for United States Army Garrison Grafenwöhr for the previous 5 years.
RESPONSIVE ENGINEERING: MEETING THE NEEDS OF THE U.S. FORCES–AFGHANISTAN

ABSTRACT: The Forward Engineer Support Team–Advance’s technical competencies and capabilities have been in high demand throughout Operation Enduring Freedom. Despite the reduction of forces for the NATO’s Resolute Support mission, the team remains continually engaged in meeting the requirements of U.S. forces.

by MAJ BRETT MEKKER

How do we prevent perimeter wall breaches caused by flooding? What is the cost of building repairs? Where can a facility and function be relocated, and at what cost? What is an expedient design using local construction means and methods for a 100-meter bridge crossing multiple canal elevations? How can we improve force protection at base entry control points? These engineering problems are just a selection of those directed to the 553rd Engineer Detachment, Forward Engineer Support Team–Advance (FEST-A) during the team’s first 75 days on the ground.

FRONT LINE POINT-OF-ENTRY

Worldwide, the FEST-A provides engineering solutions to U.S. forces deployed to remote, far-forward locations. The FEST-A is an expeditionary eight-person team with competencies and capabilities of working in civil, structural, environmental, electrical, mechanical, and geospatial engineering disciplines. Members of a FEST-A team bring the depth of their expertise and apply the breadth of their experience to unique requirements in austere and risky environments. The FEST-A additionally serves as the “front line point-of-entry” for the warfighter.

Through the U.S. Army Corps of Engineers (USACE) Reachback Operations Center (UROC), the FEST-A provides access to the resources of the world’s largest engineering agency. A lot is asked of FEST-A members. Their work encompasses the ability to quickly assess a situation, determine the engineering requirements vice organizational wants, and deliver solutions in ever-changing and challenging environments. The contingency operating environment impacts the engineer’s assessment and solution. Because of the topographic constraints, available construction material, and local construction means and methods, FEST-A members are adaptive and agile. They must rely on their breadth of experiences to think and apply their expertise in any given situation.

The 553rd FEST-A, from the USACE New York District, has displayed these skills during the detachment’s nine-month deployment to Afghanistan in 2015. For the first time in theater, one FEST-A was responsible for support to the entire U.S. Forces–Afghanistan (USFOR-A). Throughout the Combined Joint Operations Area–Afghanistan (CJOA-A), the 553rd FEST-A has augmented the engineering and planning capabilities in support of decisionmaking. Within the first 75 days in theater, the team has completed more than twenty projects totaling more than $7 million in design work and as much as $7 million in design work and as.

RESPONSIVE TECHNICAL ENGINEER SUPPORT

As the sole FEST-A in theater, our strength is our inherent ability to move quickly to project sites, complete requirements, and provide products to meet the needs of our higher headquarters and their operational planning and goals. The 553rd is funded through the USFOR-A Overseas Contingency Operations funds and maintains a tactical control command relationship with the USFOR-A’s Joint Engineer (JENG) Directorate. This allows the FEST-A to rapidly support the JENG in emerging engineering requirements across the entire theater.

Each FEST-A rotation into theater has seen differences in its command relationships as well as the type of projects asked to execute. The 553rd’s command relationship at the USFOR-A level is appropriate for the 2015 mission set. This mutually beneficial relationship has allowed the JENG to establish the FEST-A’s priority of work and effort and allowed the FEST-A to support multiple trains, Advises, and Assist Commands over the course of the deployment.

In support of the overall Resolute Support mission, the FEST-A’s established priorities are focused on providing technical engineer support to U.S. forces. The team fills a capability gap that is not inherent within the traditional U.S. Army force structure as well as the U.S. force structure supporting Resolute Support. The 553rd’s work effort for the first 75 days in theater is focused within four broad categories: base camp development and planning, force protection, facility development, and Commander’s Emergency Response Program (CERP) projects.

Within two weeks of assuming the FEST-A mission in Afghanistan, the 553rd was asked to conduct a base camp master planning assessment for one of the few remaining bases in the CJOA-A. As bases close and operational and support functions move or consolidate, much planning is required to relocate base and operational services. With specific training in establishing and closing base camps, the FEST-A is able to apply its working knowledge of the base camp development process and develop overall base site planning documents. This particular project required a multi-disciplinary team of...
Today you face many challenges as you procure equipment and manage your fleet. You need to determine which machines burn the least amount of fuel. What equipment can you acquire to ensure the safest jobsite? How does the new equipment meet sustainable operation objectives? How will you support equipment in remote locations? Most importantly, how can you acquire equipment that provides the best value at the lowest cost? Your team at Caterpillar understands these challenges and works with you to minimize your risk with cost, safety, sustainability and support.

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CONTACT YOUR CATERPILLAR ACCOUNT MANAGER

Fred Erst
p: 309.675.4405
Erst_Frederick_J@cat.com
- US Army
- US Army Public Works
- US Army National Guard
- US Army Reserves
- US Army Corps of Engineers

Ike Malson
p: 309.578.8068
Ike.Malson@cat.com
- US Army
- US Army Public Works
- US Army National Guard
- US Army Reserves

Scott Tomblin
p: 309.578.2344
Tomblin_Scott@cat.com
- US Marine Corps
- US Navy
- USMC/USN DPW

Jason Walker
p: 309.578.8068
Walker_Jason_C@cat.com
- US Air Force
- US Air National Guard
- DRMO

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Part Three: Reverse Engineering: Reducing the U.S. Footprint in Afghanistan

by MAJ JOSH MAY

Since the end of the Surge of U.S. Forces to Afghanistan in 2012, the U.S. military continues to reduce its physical footprint in Afghanistan. In the past four years, the U.S. and Coalition forces have closed or transferred back to the government of the Islamic Republic of Afghanistan nearly 900 bases. These bases range from small, squad-sized checkpoints to fully operational bases with a population number in the thousands. The transition to Resolute Support (RS) not only marked a change in mission but also a significant reduction in U.S. forces on the remaining bases. As of March 2015, RS has 21 bases remaining open with the U.S. responsible for 14 locations. The transition from OIF to RS also dramatically reduced the number of military engineers in the Combined Joint Operations Area-Afghanistan (CJoaA) primarily due to force management level limitations. One of the consequences of the reduction in engineer numbers meant the majority of work associated with reducing base camps fell to contractors with the remaining military staff engineers providing oversight.

Military Managed, Contractor Executed

Among the remaining engineers, a Construction Management Team (CMT) has the responsibility to serve as the theater manager of a Multiple Award Task Order Contract (MATOC) which directly executes base camp reduction. The CMT is under the command of the Resolute Support Sustainment Brigade (RSSB) which has the responsibility to execute the retrograde of material and equipment out of theater. However, the CMT also works in close coordination with the U.S. Forces-Afghanistan (USFOR-A), JENG and the military engineers on the RS (NATO) staff to plan and coordinate engineer efforts at transitioning bases with U.S. Title X equities.

The CMT provides construction management or, in this case, “de-construction,” across the CJoaA by coordinating the allocation of the MATOC teams to support the CJoaA’s base expedite reduction plan. The CMT sends out an Liaison Officer (Non-Commissioned Officer (LNO) to meet with the Base Commander (BC) and Base Operating Support-In-Integrator (BOS-I) engineer several months before the arrival of the MATOC teams. The purpose of this visit is to review the BC’s base reduction plan and conduct a thorough walkthrough of the base. The primary output of this initial visit is to develop an estimate of how many “platoon months” (the amount of work an average Army construction platoon can complete in a month) of work it will take to reach the desired base endstate. The CMT

SFC Brian Hart and SSG Michael Jones of the 573rd CMT (JBLM) ensure the electricity is de-energized before grading and clearing on a project site at Bagram Airfield.
The LNO provides input into the MATOC allocation chart which is broken down by team, location and month. The CMT in coordination with the USFOR-A JENG adjusts the schedule and reprioritizes necessary to meet requirements based off updated guidance or changes in scope. The LNO also is responsible for developing the detailed Scope Of Work (SOW) for each individual project on a base prior to the MATOC team’s execution of the project. After completing the approval process, this serves as the tasking order for the MATOC team. The LNO visits regularly once a MATOC team is on a base to track progress, adjust SOWs, or develop new SOWs for reduction work that is uncovered as the result of completing a prior project.

**RESOURCES OF REDUCTION**

The MATOC is structured for the creation of up to eight teams of approximately 20–35 personnel each. Each team can be tailored to meet the base reduction requirements. Currently, seven of the eight teams are comprised of one expat overseeing 3–5 Other Country Nationals (OCNs) with the remainder of the team comprised of Local Nationals (LNes). The eighth team is split into two squads of 10 OCNs each and is trained to recover large Tension Fabric Structures (TFS) which are placed back into the Army Preposition Stock if they are in a usable condition. At each base, the contractor procures the required equipment on Re-Locatable Buildings and Containerized Housing Units. Recovery of TFS, the teardown of unused guard towers, and other projects as required at bases across the CJOOA-A. While they are capable of completing the required tasks and their schedule can be adjusted as required, they are not as agile as military engineers and are allocated 30 days to relocate from one base to another. Base and Garrison command must use the full gambit of available tools to assist with base downscaling requirements. MATOC, unit (self) along with indefinite delivery/indefinite quantity, low-cost contracts (LCC), and “no-cost” contracts (NCC) are used to reduce a base location. While not necessarily new, LCC or NCC are typically short-duration contracts executed by a LN contractor. The BC and BOS-I identify base reduction projects which support base “right sizing” and determine which projects are good candidates for a LCC or NCC. The BC pays the LN contractor a fair local wage for the project under a LCC; for a NCC, the contractor is allowed to keep the material from the structure(s) he tears down (the most common item for NCCs is lumber). These contracts allow the BC to complete base reduction projects at a reduced cost and in a timely manner without having to wait for the arrival of the MATOC team(s).

The BC and BOS-I need to be familiar with the various base reduction enablers that will help them successfully draw down the base. A wide variety of resources are available but, because of their limited numbers, many require theater-level coordination. Contracted property assessors (both real property and personal property, known as Base Closure Assistance Teams); property handlers (think Theater-Provided Equipment, Retrograde Property Assistance Team (RPAT), and Mobile RPAT); equipment maintainers; Defense Logistics Agency Destruction Services; and transporters (both air and ground) all assist with base reduction, a majority of which fall under RSSB mission command. Some of these enablers have military personnel within their ranks, but the majority of the work is executed by contractors. While they are capable of performing the tasks associated with base reduction, they sometimes require longer notification times in order to get their personnel and equipment moved to new locations.

**PLANNING BASE CAMP REDUCTION**

Similar to base camp construction, in order to go smoothly base camp reduction requires a significant amount of planning and preparation. The BC is responsible for the development of the detailed plan and timeline for the reduction of the base. There are a number of factors which shape the reduction timeline:

1. Ongoing operational/mission requirements
2. Personnel numbers (military, government civilians, contractors)
3. Identification of all U.S. property which requires retrograde, transfer, reduction, or, in some cases, abandonment
4. What needs to be done with critical infrastructure (waste-water and water treatment plants, electrical grid and power plants, solid waste management)
5. Force protection enablers
6. Contracts (number, type, end dates, their reduction timeline requirements, property on the base, etc.)
7. Environmental mitigation, if any
8. Who the base is going to be transitioned to and what it will look like at the end

These factors only serve to shape the initial planning timeline and synchronization matrix. Often answering one question generates others. Starting early is essential in order to allow enough time to gather all initial and follow-on facts. Higher headquarters and tenant units must provide accurate information to the BC in order to help paint an accurate picture of the required effort and available resources. Once initial facts and answers are gathered, the BC can attack some easily identifiable projects which support “right sizing” of the base while it puts the remaining pieces into place on the base reduction synchronization matrix. This involves reducing services on the base, taking down unused tents and buildings, retrograding equipment which is no longer required, and other tasks which support the movement of equipment and materiel off the base.

**National Responsibilities**

As we withdraw from Afghanistan after nearly 14 years of building numerous facilities across the CJOOA-A, we have a responsibility to properly remove unusable infrastructure and other property. While it is not a glamorous or exciting task, we want to leave Afghanistan better than we arrived, which means leaving the government with facilities and bases that it can use and maintain after we have gone. As engineers we play a significant role in ensuring that the physical footprint of each base is reduced timely, safely, properly, and in accordance with the commander’s intent.

[Maj Josh May] is currently serving as the Civil Engineer, 555th EN BDE, Joint Base Lewis-McChord, WA. He holds a BS in geospatial information science from the U.S. Military Academy at West Point, a MS in geological engineering from the Missouri University of Science and Technology, and is a certified Project Management Professional. He has deployed to Iraq three times and is currently on his first deployment to Afghanistan.
U.S. FORCES AFGHANISTAN ENVIRONMENTAL PROGRAM

by BRYAN MURPHY, USN, and ABE NACHABE, USN

FIRST THERE WAS STUNNED SILENCE UPON MY ANNOUNCEMENT THAT I WAS MARCHING OFF TO WAR AS THE U.S. FORCES AFGHANISTAN (USFOR-A) ENVIRONMENTAL CHEF. Then, after the initial shock had subsided, there was some well-intentioned advice about getting my head examined. Finally came the questions about the reason for even having an environmental program in a country ravaged by continuous warfare since 1978 following the Communist takeover. While not immediately obvious, the U.S. military has compelling reasons in a contingency environment to exercise responsible environmental stewardship.

The standards and processes applicable to USFOR-A are certainly not as stringent as state-side counterparts, but nonetheless adequately protect health, support mission accomplishment, comply with legal requirements, and minimize impacts on the environment.

The U.S. Central Command (USCENTCOM) governing regulation for protection and enhancement of environmental assets in its area of responsibility, including Afghanistan, lists the following environmental program goals:

1. Protecting the health of U.S., coalition, and host nation (HN) personnel while enhancing mission capabilities through pollution prevention and minimized exposure to hazardous substances.

2. Demonstrating environmental stewardship by minimizing the impact of U.S. military operations on the HN environment and natural resources.

3. Integrating applicable U.S., international, and HN environmental laws and standards.

4. Exhibiting environmental leadership through assisting coalition and HN personnel in proper environmental management and stewardship.

5. Establishing a life-cycle and sustainable approach to operations of U.S. forces and sites within the USCENTCOM area of responsibility.

Afghanistan is a challenging environment to implement and sustain an environmental program. At its peak, USFOR-A had more than 100,000 active duty personnel in Combined Joint Operations Area (CJ-OA)-A with up to twice that number of DoD civilians and contractors. These forces were spread across the breadth of Afghanistan in up to 800 installations of various sizes and sophistication. Afghanistan has very little infrastructure to support a western-style environmental program for a force that large, and, frankly, the Government of the Islamic Republic of Afghanistan (GIRoA) has more pressing priorities now than developing one. Land-locked Afghanistan is surrounded by countries not always sympathetic to the U.S. need to retrograde matériel and hazardous waste out-of-theater. After 13 years of bringing in a lot more weapon systems and life support for several hundred thousand people than has gone out, the U.S. withdrawal and disposal of material has been a significant effort. And, finally, there’s the security environment in which local companies that work with the U.S. military have suffered threats, kidnappings, and physical assaults.

Despite the challenges, or perhaps because of them, USFOR-A does promote responsible environmental stewardship in support of the U.S. military mission while minimizing impacts on the environment throughout CJ-OA-A. The program evolved over the years as the U.S. mission, force structure, and circumstances changed, but also in response to lessons learned from operating in a contingency environment. Two guiding principles have remained constant:

1. The U.S. will leave its closing posture of all U.S. installations and hazardous waste treatment and disposal of solid (non-hazardous) and hazardous waste, transfer/remove installations of various sizes and high-explosive training ranges in as good or better environmental condition than we found them.

2. The U.S. will leave behind no hazardous waste when we depart.

Several organizations have a hand in managing environmental aspects of the U.S. mission. The Logistics Civil Augmentation Program (LOGCAP) contractors do the heavy lifting on most bases—managing collection and disposal of solid (non-hazardous) and hazardous waste, treatment and/or disposal of wastewater, and so on. The Defense Logistics Agency (DLA) takes in all forms of excess or non-serviceable equipment which either re-distributes locally for reuse, de-militarizes (i.e., shreds or cuts into little pieces) for local recycling, or ships out-of-theater for disposal. The USFOR-A Environmental Branch role is assurance and assistance with environmental regulatory compliance, spill response, environmental corrective actions, and hazardous waste treatment for in-theater disposal. We all coordinate our efforts to make the whole program work.

USFOR-A engages a handful of contract environmental scientists and engineers to assess the environmental compliance posture of all U.S. installations throughout their lifecycles. An assessor conducts an Environmental Baseline Survey (EBS) of a new U.S. installation within 30 days of occupation. The EBS describes the site’s environmental, interesting features and current use and documents its current environmental condition. An assessor will return annually thereafter to conduct an Environmental Conditions Report (ECR) to document changes to the environmental baseline and assess the site’s current compliance with applicable U.S., DoD, USCENTCOM, and USFOR-A laws, regulations, directives, instructions, and standard operating procedures. The assessor briefs the installation’s leadership on identified deficiencies and recommends appropriate corrective actions. Finally, 90 days prior to closing or transferring the installation, an assessor will conduct an Initial Environmental Site Inspection Survey (ESIS) to identify deficiencies that require correction for an environmentally compliant release. The assessor will return within seven days of closure/transfer to verify that the installation accomplished the required corrective actions and document the installation’s environmental posture in a Final ESCS. To date, the USFOR-A environmental team has conducted more than 1,800 assessments and surveys which USCENTCOM will archive as protection from future liability. The environmental assessors possess a wealth of knowledge that USFOR-A leverages for more than just assessments. They serve as “independent duty” environmental managers at smaller installations without dedicated environmental positions, and train collateral duty environmental officers and assist with setting up environmental programs for deployed units and tenant commands.

The second USFOR-A environmental contract for an Environmental Response Team (ERT) was born of necessity in 2011. Initially, DLA disposed of most U.S.-generated hazardous waste in CJOA-A via ground transshipment through Pakistan to Karachi, then by sea for final disposition. After the closure and subsequent reopening of the Pakistan ground line of communication (GLOC), hazardous waste was no longer allowed to transit the route. As hazardous waste began accumulating on installations across CJOA-A, USFOR-A established the ERT, composed of hazardous waste managers, scientists, and handlers, to manage hazardous waste disposal.

The ERT established hazardous waste transition yards at several
ERT will remove and treat the contaminated soil. Also, ERT has stabilized the situation, the first responders to 121 environmental spills. After the first responders arrived, ERT sorted and packed 2.2M lbs of batteries, many of them lithium—categorized a hazardous waste—that had accumulated in CJAO-A since 2010. At that point, DLA was able to ship them to Germany for recycling. ERT also got into the mold-abatement business, greatly improving the indoor air quality of 264 concrete barracks throughout Bagram Airfield.

Similar to the transformation of hazardous waste management from shipment out-of-theater to treatment and disposal in-theater, the environmental leadership at Bagram Airfield is giving solid waste management a fresh look. This was once a simple matter of digging an open-air pit and burning the refuse to reduce volume. In 2010, at the direction of Congress, U.S. installations in CJAO-A began the transition to incinerators over burn pits, leading to much cleaner, more thorough waste disposal. Unfortunately, incineration requires a lot of fuel which exacerbates one of the U.S.’s primary force protection challenges, fuel truck convoys. Also, incinerators will not outlive the U.S. mission. In the past when the U.S. has transferred installations with functioning incinerators, the cash-strapped Afghan National Security Forces reverted to open-air burn pits over incineration rather than pay for the fuel. In response, Bagram Airfield has recently accelerated the trend of its solid waste management processes away from incineration to a greater reliance on recycling. The key players spearheading this effort include the Environmental Chiefs of Bagram Garrison and Fluor (the LOGCAP prime contractor), the ERT, and a local recycling company under contract with the Bagram Garrison. In essence, Bagram has become a laboratory of sorts for transforming total waste management in a contingency environment. None of the tried and true engineerings changes, recycling, and alternative fuel sources is earth-shattering or ground-breaking. However, combining them with a laser focus on driving down fuel consumption in the incinerator is unique:

- **The local recycler developed manufacturing facilities in the Kabul area capable of producing watering cans, flexible hoses, shoes, and toilet paper from recycling Bagram’s waste plastic and cardboard. It also developed a distribution network for wood-construction debris, coveted on the local economy as heating fuel. This infrastructure made recycling economically feasible, thereby providing Bagram with a reliable outlet for disposal of these three significant waste streams.**

- **The local recycler also developed a composting operation which converts food waste from the dining facilities into compost. Incinerating this “wet” waste had consumed a disproportionate amount of fuel. Instead, the recycler turned it into a useful, profitable product.**

- **The local recycler hauled away excess mattresses, bedframes, and cabinets resulting from the reduction in personnel at BAF over the past year along with excess paint. He used his distribution network to give these items away to local schools and community centers.**

- **Elimination of the above waste streams allowed Bagram to close one of two incinerator sites which used older incinertors in favor of a newer, more fuel-efficient model.**

- **In the meantime, Flour installed a purifier that removed moisture and contaminants from waste oil and spent fuel to make them suitable for incinerator fuel. It also ordered a small bio-diesel generator to convert the significant quantity of cooking oil and grease from the dining facilities into fuel for the incinerators. These measures displace a like amount of new fuel.**

The early returns from these adjustments to the Bagram waste management processes are encouraging. Average daily incinerator fuel usage dropped from 4,130 gallons from 1 October through 21 December 2014 to 2,425 gallons from 22 December 2014 through 24 February 2015, a 41% decrease. We expect further savings as alternative fuel sources increasingly displace new fuel. Also, solid waste disposal at Bagram has transitioned from almost 100% incineration to 55% recycling/40% incineration/5% landfill today. Looking ahead, several other potential systemic improvements to waste management in contingency environments might merit further consideration:

- **Off-the-shelf contingency incinerators that incorporate waste to power capability;**

- **Closer examination of the “cradle to grave” requirements and how they impact each material used in a contingency environment.**

- **Reorganization of how waste is managed in theater to bring hazardous, solid, and regulated medical waste functions into a single organization rather than splitting responsibilities three ways or more;**

- **Seed money from development funds to build waste management infrastructure such as a female engineer who was sent to Afghanistan as the USFOR-A Deputy Environmental Chief.**

The USFOR-A environmental program fulfills the USCENTCOM mandate to protect the health of U.S., coalition, and host-nation personnel and promote responsible environmental stewardship that supports the U.S. military mission while minimizing impacts on the environment. The program, while not without challenges, has more than kept pace over the years as the U.S. mission, force structure, and circumstances have changed. It has benefited from a wealth of talented professionals with the experience and motivation to experiment with better ways of doing business in the future.
Prime Power in the Combined Joint Operations Area – Afghanistan (CJOA-A)

by JIM GILL

Prime Power is responsible for the safe generation and distribution of electrical power supporting U.S. operations in Afghanistan. It is akin to the power companies in a state’s neighborhoods and municipalities. Its scope is much the same as the municipal power companies but with the added challenges of a war-time contingency environment with limited resources. This includes the fuels that are used, the maintenance materials that must be readily available, and the work force to operate the generator equipment and switchgear. Currently, the generating facility and the operations and maintenance of the distribution system are performed by contractors with oversight by the U.S. Army’s 249th EN BN (Prime Power). The battalion provides soldiers who are experts in power generation to United States Forces Afghanistan (USFOR-A) to serve as on-site contracting officer technical representatives (COTR) and power system subject-matter experts (SME). They bridge the gap between the installation customers (i.e., the garrison and its tenants) and the contractors themselves.

In addition to providing expert advice, they provide oversight of larger maintenance and equipment installation projects. An example of the more complicated types of maintenance and repair issues that a 249th soldier would have to deal with would be the repair of a 10-MW turbine generator. These million dollar plus machines can develop tremendous power in a relatively small footprint, but changing out the turbine inserts is a delicate process that can be extremely expensive if not properly installed and properly maintained. This particular type of turbine insert replacement has a delivery lead time of approximately 6 months, so mistakes on installation would be far reaching in terms of the power generation mission if something goes wrong.

Still, there are other smaller, but just as critical projects that require the same type of attention to detail to ensure seamless power production, such as the installation of smaller diesel-type generators to power individual facilities. Although the central generating plants are the first choice for power, particularly over and above individual (spot) generators due to the lower fuel-to-power efficiency of smaller generators, there are situations when spot generation is necessary. That need is generally associated with base transitions where spot generation is required to close the gap between demobilization of contracts and the power required until the last day of base operations. Preparations for spot generation include consolidating remaining mission requirements and base functions to minimize the infrastructure footprint and associated power requirement. In addition, an analysis of where to judiciously connect to the existing power grid is crucial for overall efficient operation and maintenance of the sub-systems. There always is a balancing act between required power and how to get that power to the customers with the least amount of additional hardware to install.

In summary, the prime power soldiers in this theater cover a range of power needs as broad and varied as the missions that they support. Rain or shine, these soldiers can be depended upon to deliver power that not only keeps the lights on but powers the full spectrum of mission support requirements from dining facilities to aircraft hangars and everything in between.

ENGINEERS AND EOD WORK TOGETHER FOR A SAFER AFGHANISTAN

by SFC WESLEY FAUDREE

Combustion Engineers and Explosive Ordnance Disposal (EOD) have always had a tumultuous relationship. Exaggerated by a clash of missions—from the combat engineer’s mission of breaching obstacles to EOD’s mission of rendering unexploded ordnance (UXO) and improvised explosive devices (IED) safe—in the wars in Iraq and Afghanistan. However, the need for additional combat power and effective clearance teams brought about the combined arms route clearance operation (CARCO) and the integration of EOD teams to combine the location and the clearance phases. Some might argue that IEDs are just another obstacle on the battle field and should be cleared by engineers, but long ago we learned that defeating the IED threat requires multiple avenues of approach. While destroying the IED in place is the safest method to defeat the device, it does not provide the forensics information necessary to attack the network. Train the force also as a critical function of defeating the IED threat and is one in which engineers and EOD have come together to support coalition and Afghan forces.

As the official combat mission in Afghanistan came to an end on 31 December 2014, the theater switched from a primary mission of combat operations to a train, advise, and assist mission designed to provide the Afghan National Defense and Security Forces (ANDSF) with the support it requires to create a lasting legacy of success. The Ministry of Defense placed all engineers and EOD functions together under the Engineer Corps in the Afghanistan National Army. In turn, this has led to a close relationship between the engineers and the Counter IED Advisor Cell, composed primarily of EOD techs, Electronic Warfare Officers, and Joint IED Defeat Organization (JIEDDO) personnel in the Combined Security Transition Command – Afghanistan. Similar to the CARCO combination to defeat IEDs, these two groups are actively engaged under Operation Resolute Support at the ministerial level to engage the Afghan general officers involved in the C-IED fight.

The combined relationship even reaches into Joint Task Force-3 (JTF-3) / U.S. Forces – Afghanistan (USFOR-A) headquarters; the Joint Engineer (JENG) staff section hosts the only EOD representative on the USFOR-A staff. While slightly orthodox, the office pairing has proven to be as successful a relationship as the one on the battle field. EOD has provided critical support to the High Explosive

FOR A SAFER AFGHANISTAN

by SFC WESLEY FAUDREE

Combustion Engineers and Explosive Ordnance Disposal (EOD) have always had a tumultuous relationship. Exaggerated by a clash of missions—from the combat engineer’s mission of breaching obstacles to EOD’s mission of rendering unexploded ordnance (UXO) and improvised explosive devices (IED) safe—in the wars in Iraq and Afghanistan. However, the need for additional combat power and effective clearance teams brought about the combined arms route clearance operation (CARCO) and the integration of EOD teams to combine the location and the clearance phases. Some might argue that IEDs are just another obstacle on the battle field and should be cleared by engineers, but long ago we learned that defeating the IED threat requires multiple avenues of approach. While destroying the IED in place is the safest method to defeat the device, it does not provide the forensics information necessary to attack the network. Train the force also as a critical function of defeating the IED threat and is one in which engineers and EOD have come together to support coalition and Afghan forces.

As the official combat mission in Afghanistan came to an end on 31 December 2014, the theater switched from a primary mission of combat operations to a train, advise, and assist mission designed to provide the Afghan National Defense and Security Forces (ANDSF) with the support it requires to create a lasting legacy of success. The Ministry of Defense placed all engineers and EOD functions together under the Engineer Corps in the Afghanistan National Army. In turn, this has led to a close relationship between the engineers and the Counter IED Advisor Cell, composed primarily of EOD techs, Electronic Warfare Officers, and Joint IED Defeat Organization (JIEDDO) personnel in the Combined Security Transition Command – Afghanistan. Similar to the CARCO combination to defeat IEDs, these two groups are actively engaged under Operation Resolute Support at the ministerial level to engage the Afghan general officers involved in the C-IED fight.

The combined relationship even reaches into Joint Task Force-3 (JTF-3) / U.S. Forces – Afghanistan (USFOR-A) headquarters; the Joint Engineer (JENG) staff section hosts the only EOD representative on the USFOR-A staff. While slightly orthodox, the office pairing has proven to be as successful a relationship as the one on the battle field. EOD has provided critical support to the High Explosive
Training Range (HETR) clearance program. This program is instrumental to increasing the safety of U.S. and coalition forces, the Afghan people, and assisting the Government of the Islamic Republic of Afghanistan (GIRoA) in meeting their goal of being “Mine Free in 2023.” While the U.S. does not use landmines, the removal of UXO from training ranges is included in the GIRoA goal of being mine free. To date, the HETR clearance program has removed more than 51,000 UXO and 10 million pieces of scrap accumulated over 13 years of range operations.

The technical knowledge of EOD also has been an important factor in multiple force protection projects. Indirect Fire (IDF) is a constant threat on Bagram Airbase and usually comes in the form of 107mm rockets. The T-wall, a movable concrete wall section, is the preferred force protection measure to counter the IDF threat. However, with any protective measure comes limiting factors such as availability and cost. It is imperative that T-walls are placed in the locations where they provide the most protection and EOD has been able to support this through analysis of potential fragmentation patterns and rocket trajectories. Engineers and EOD remain in two separate Army corps but must continue to support each other to accomplish the mission.

Essayons and Initial Success or Total Failure!

SFC WESLEY FAUDREE is currently assigned to U.S. Forces – Afghanistan as the Explosive Ordnance Disposal NCOIC. His home unit is the 203rd MI BN in which he serves as a platoon sergeant and senior weapons technical intel analyst. He has served in the military for 17 years, including 9 on active duty, and is a graduate of Oklahoma State University.

[ wesley.c.faudree@afghan.swa.army.mil ]

A PackBot robot heads downrange to place a charge on a suspected IED.

CPT Kevin Daley receives training on the disposal of ordnance containing white phosphorus from EOD.

EOD prepares to dispose of a large cache of captured enemy munitions.
by JIM GILL
with contributions from
CHIEF RONALD SPARLING

OVERVIEW
TASK FORCE PROTECT OUR WARRIORS AND ELECTRICAL RESOURCES (POWER) CONSISTS OF TWO LINES OF EFFORT: THE ASSURANCE OF BOTH FIRE AND ELECTRICAL SAFETY.

This Congressionally mandat ed program directs the inspection of all facilities occupied by U.S. personnel for electrical or fire protection deficiencies that concern life, health, and safety hazards.

This task force applies lessons learned and best practices from the Task Force Safety Actions for Fires and Electricity (TF SAFE) developed in Iraq in August 2008 in response to electrocutions associated with faulty electrical building practices, which resulted in the deaths of several soldiers in expeditionary shower facilities.

Later, Congress passed the FY 2010 National Defense Authorization Act, Sec. 807, thereby enacting legislation further enforcing the requirement for the military to take necessary steps to alleviate electrical and fire safety hazards at all installations occupied by U.S. forces, civil servants, and contractors.

The Fire Safety line of effort is similar to the electrical safety component, with added responsibilities of providing training for fire wardens and fire brigades, evaluating potential candidates for time-based deviation waivers to fire-protection building codes, providing government oversight of contracted fire-protection services, and contributing to construction inspection.

TF POWER: ELECTRICAL SAFETY
Currently, TF POWER electrical inspectors are performing inspections on more than 20 coalition military installations of varying sizes and locations throughout Afghanistan. The group consists of 10 two-man contracted electrician teams, with oversight by government master electricians, who focus on those buildings and facilities that are not receiving maintenance via the Logistics Civil Augmentation Program (LOGCAP) Base Operating Support (BOS) contract. There are two additional two-man teams operating under the direction of the Defense Contract Management Agency (DCMA) with focus on those facilities which are maintained by LOGCAP.

The primary objective of the electrical inspection teams is to seek out and identify electrical hazards on circuits of 600 volts or less (considered low voltage) so that they may either be fixed on the spot if only a minor repair is required, or de-energized and rendered safe. In the event that major repair or renovation is required to eliminate the hazard, facility users and leadership are advised of the situation in order to pursue the appropriate resolution.

A typical problem in Afghanistan has to do with improper grounding and bonding of electrical circuits. Grounding and bonding ensures that anyone coming in contact with a piece of equipment or appliance will not be shocked by absorbing an electric current through their bodies. A typical type of grounding and bonding repair that is made by the hundreds on a weekly basis involves adding a grounding “pigtail” wire from the ground wire in the wiring cable to a junction box itself. This eliminates any chance for a shock from contact with any other metal parts connected to the box such as the switch cover screws that secure covers to the box. This type of box could be a simple junction box used to hold a light switch or a plug-in receptacle for appliances. Although this is a fairly simple fix, it is this kind of detail that saves lives as it separates people from electrical currents.

The danger for this type of shock is amplified many times when this sort of grounding issue is associated with a wet environment such as a shower or laundry facility and is exactly the kind of failure mechanism that led to the electrocutions that took place in Iraq. This scenario is played out time and time again as the inspectors meticulously work through facilities junction-by-junction, circuit-by-circuit, connection-by-connection, leaving no stone unturned as they search out any and all opportunity for the slightest contact with even the lowest of currents and voltages.

In addition to the detailed work listed above, TF POWER, in concert with prime power technicians, also deals with more glaring and imminent danger issues associated with high- and medium-voltage distribution and equipment such as Main Disconnect Panels (MDP) and transformers. These panels are the connection points between the prime power grid transformers and the first electrical panel
downstream of the transformer with a circuit breaker. Most of us never deal with these panels and transformers or know that they exist until the power goes out and the power company shows up. However, with the draw-down and the associated relocation and demolition of buildings on installations, there is quite a bit of MDP work disconnecting and reconnecting these main panels to support the Resolute Support mission going forward.

In summary, whether it is a periodic inspection of billeting quarters or response to more urgent issues such MDP failures, TF POWER is on site to mitigate potential hazards wherever they may be.

**TF POWER: FIRE SAFETY**

The fire safety program has overall responsibility to provide theater-wide technical guidance. The U.S. Forces-Afghanistan (USFOR-A) Fire Chief and Deputy Fire Chief manage the CJQA-A Fire and Emergency Services (FES) program. This program develops policy and guidance, provides oversight and technical services to the installations, and serves as the senior FES advisor to the USFOR-A Command.

The main objective of the USFOR-A fire safety program is to provide a fire-safe environment for all personnel working and living in the CJQA-A. One of the ways we accomplish this is to ensure all installations abide by the USFOR-A Fire Prevention Standard Operating Procedures (SOPs) and have an active fire-warden program. Fire wardens ensure sound fire-prevention procedures are established and practiced in their area of responsibility. At installations that do not have established fire services, the USFOR-A Fire Chief and Deputy provide fire-warden and fire-brigade training. Fire wardens and fire brigades are an integral part of assuring overall safety of our personnel by providing immediate corrective action to identify and mitigate or eliminate fire hazards and deficiencies.

Fire wardens perform monthly fire-prevention inspections in all areas under their supervision. Many of the fire hazards that are identified are not only poor housekeeping practices, but improper use of electrical equipment. All electrical equipment should be inspected for serviceability and electrical standard compliance.

Our goal in the fire program is to educate and train personnel to recognize fire hazards before they exist. A fire-prevention program in Afghanistan continues to provide a fire-safe environment operating in expeditionary campaigns.

This critical program adopts and applies best practices learned from years of experience operating in expeditionary environments and has proven vital to mission support by ensuring the safety of both personnel and property. This model is now a standard component of the warfighter’s toolkit for future contingencies.

**USFOR-A Fire Prevention Standard Operating Procedure, 1 November 2012**

5.9. Electrical Equipment: Electrical equipment will be manufactured in accordance with OSHA 29 CFR 1910.399 Subpart S and National Fire Protection Association (NFPA) 1 Section 11.1. Installation and use will be in accordance with NFPA 70 Article 90.7, National Electric Code. All components shall meet Underwriters Laboratory (UL), European Marking of Conformity (CE) or equivalent nationally recognized safety requirements and shall be labeled appropriately.

Operation of all electric equipment that is not appropriately labeled or recognized as safe or hazardous will be discontinued immediately.

a. Cooking appliances such as coffee makers, toasters, toaster ovens, hot water heaters, microwaves, flying pans, etc., are prohibited in all living areas (B-Huts, CONEX housing, RLBs, Brick and Mortar dormitories, tent or any other area where personnel are billeted).

b. All approved appliances shall be directly connected to their respective power supplies; the use of extension or power strips is not authorized.

In conclusion, the TF POWER program in Afghanistan continues to operate a robust preventative safety program including daily physical inspection and repair activity, as well as educational and hands-on training campaigns.

This critical program adopts and applies best practices learned from years of experience operating in expeditionary environments and has proven vital to mission support by ensuring the safety of both personnel and property. This model is now a standard component of the warfighter’s toolkit for future contingencies.

**JIM GILL**

works for the Facilities Policy Division of the HQ, Department of the Army, Office of the Assistant Chief of Staff for Installation Management in the Pentagon. He has a bachelor’s in mechanical engineering from The Ohio State University and a master of science from the University of Wisconsin, Parkside. He currently is deployed to Afghanistan working in the USFOR-A Joint Engineering Directorate as the Chief of TF POWER.

[ james.d.gill@afghan.swa.army.mil ]
FORCE PROTECTION WHILE DESCOPING DURING RESOLUTE SUPPORT

by CPT KEVIN DALEY

The number one priority for commanders throughout the war in Afghanistan has always been the safety of our service members, coalition partners, civilian workforce, and contractors. This is all encompassed within base force protection measures.

Despite the years of construction, there still is a requirement for consolidation projects and force protection improvements as U.S. Forces–Afghanistan (USFOR–A) supports train, advise, and assist (TAA) operations under the Resolute Support mission. The need to build may be counterintuitive in the face of continued base transitions, downsizing of temporary infrastructure, and drive to continue the effort of pivotal personal and equipment. The circumstances have brought a plethora of challenges to meet force protection construction requirements. Planning for future base transitions, downsizing, and the continued drawdown of material and force manning levels is a major priority for USFOR–A.

The force protection projects are weighted against the downsizing timeline. As engineers, providing the commander a suitable plan that supports decommission efforts while not compromising the level of protection necessary was the priority. In order to align the force-protection plan with decommission efforts, the need to compare construction timelines to base closure dates is critical. There are some cases in which it is not beneficial to construct a project due to the fact that by the time the project is complete it may only be used for a short period. While in the past a force-protection project would be approved and constructed, now other mitigation measures are given closer scrutiny. For instance, the relocation of personnel and functions within a base is given greater weight vice executing more construction.

Within a few hours of arriving in country, I was tasked with taking over a force-protection project. To familiarize myself with the project, I looked over old archived files from earlier force-protection projects. The files showed a decade’s worth of force-protection improvements which transformed the base into an extensive and complex fortress. Therefore, we turned inward to find materials to complete the project, and our eyes were opened. The Sapper saying “P for plenty” can explain the amount of construction materials we found available for force protection. The drawdown of personnel and functions plus years of continuous improvements left an abundance of materials and equipment. By coordinating efforts with Garrison Command and others around the base, we were able to obtain those materials and take from other decommissioning efforts. This alone decreased the overall construction timeline significantly, generated a cost savings, and helped ongoing base decommission efforts.

Another challenge when consolidating an operational base is that space within the smaller footprint becomes a premium. The newly required force-protection project was to mitigate the significant threat of a vehicle-borne improvised explosive device (VBIED). Standoff distance was an important factor which was difficult to concede. While searching for a solution, we sought subject-matter expertise from the U.S. Army Corps of Engineers Reachback Operations Center (UROC) located at the U.S. Army Engineer Research and Development Center (ERDC).

The reachback capability was extremely helpful in solving the problem related to our specific force-protection mitigation blast situation. We provided UROC/ERDC with the problem set of threat, restricted space, plus available materials, and the professionals were able to recommend a suitable design. The plan was quickly developed with an in-depth analysis of personnel, equipment, and structure survivability against various sized VBIED threats.

ERDC provided the data, analysis, and mitigation strategies that allowed for a decrease in standoff distances by utilizing a combination of materials and design which saved in space. The Forward Engineer Support Team–Advance (FEST–A) was then able develop the full project scope and detailed design. An ancillary benefit was that it also prevented multiple facilities from having to be relocated which indirectly gave more options to the base master planner.

The initial draft force-protection project plan was heavily scrutinized against the aforementioned factors of cost, time to construct, and future base decommission. The team sought ways to reduce both cost and time while mitigating risks. Given the necessity to quickly get the blast wall in place, our approach was to seek simple solutions which minimized time and effort to construct. Taking advantage of UROC enabled us to consult with subject-matter experts and develop a plan that saved both space and time. The use of the proposed design and existing force-protection materials further decreased the timeline and cost by an estimated 40%.

The ongoing base decommissioning makes the proposal to build seem like a counterproductive idea. However, as bases consolidate, protecting our forces remains a top priority. This necessitates that engineers continue to innovate, taking full advantage of the skill, expertise, and material both here in country and back in the States in order to take on any challenge and to get the job done.

CPT KEVIN DALEY currently is assigned to U.S. Forces–Afghanistan Joint Engineers on BAF. He holds a B.S. in civil and environmental engineering from Rowan University, NJ. He has served as a platoon leader and an XO in a horizontal engineer company.

https://www.army.mil/
UNITED STATES ARMY CORPS OF ENGINEERS
CIVILIANS IN AFGHANISTAN

by
LTC C. PATRICK HOGEBOOM IV

SINCE 6 APRIL 2004, WHEN THE UNITED STATES ARMY CORPS OF ENGINEERS (USACE) AFGHANISTAN ENGINEER DISTRICT WAS ESTABLISHED, 6,770 CIVILIAN AND MILITARY PERSONNEL HAVE SERVED IN THE AFGHANISTAN COMBAT ZONE. Today, the Afghanistan Engineer District is now called the Transatlantic Afghanistan District (TAA) and it relies on an all-volunteer force of highly motivated USACE civilians. TAA is focused on national security by supporting NATO coalition partners and the Afghan construction requirement owners. The district is providing the Afghan government with facilities and services to build and maintain a safe and stable Afghanistan. USACE has completed more than 1,000 projects while simultaneously maintaining an all-volunteer, deployable civilian workforce. Civilians make up more than 85% of the district with a third of the employees on their first deployment. As the rest of the NATO coalition force draws down, USACE is pushing to complete the currently assigned projects by December 2017. The healthy mix of first-time and veteran deployers helped USACE complete the nearly $11 billion Afghanistan program.

In 2015, USACE had just more than 110 civilians, representing nearly every USACE division and district. These dedicated professionals are delivering vital facilities and services to the Afghan people. Although most coalition forces in Afghanistan were directed to cut their military presence by as much as 75%, USACE was able to maintain its personnel strength due to a half century of reform, converting military specialties to civilianized Department of Defense positions. Working overseas on military programs was not always a USACE responsibility. After taking over the military construction mission from the Quartermaster Corps in the 1940s, USACE has been busy performing military program work around the world. From 1940 to 1964, USACE worked in the British Atlantic territories, Saudi Arabia, Korea, Afghanistan, and Iran. From 1976 to 1986, USACE constructed a $14 billion Saudi Arabia Foreign Military-funded program, which is still the largest program ever constructed in USACE history. By 1990, USACE civilians had all but taken over the most technical jobs within the Corps of Engineers. When Kuwait was invaded by Iraq, a few USACE civilians were caught in the crossfire and safely evacuated, and some returned to help rebuild Kuwait. Due in part to the success of USACE civilians deployed to support the Gulf War, the decision was made to deploy more USACE employees to support the Iraq and Afghani stan construction efforts.

USACE has more than 33,000 highly trained professionals stationed throughout the United States and in more than 30 countries around the world; however, only in the past 20 years has USACE deployed civilian employees to a combat zone. Afghanistan is still dangerous and is one location most would not expect civilians to be stationed. Normally the rebuilding phase comes after the cease fire or the end of the conflict. Economic catalysts, building partner capacity, and the construction of facilities for the rapid increase in the Afghan Army and National Police forces to counter ongoing insurgent activity required immediate USACE involvement.

USACE civilians have been given the opportunity to work alongside the military during Operation Enduring Freedom and Operation Freedom’s Sentinel. Employees like James “Mike” Lee, District Resource Manager, views his recent deployment as a “once-in-a-lifetime event.” When asked why a USACE civilian should deploy, Mike said, “I believe any USACE employee who has the ability should deploy at least once, because it will be the highlight of their professional career.” USACE civilians have deployed to fill a variety of positions, to include project engineers, geospatial information systems specialists, administrative support personnel, and contracting officers. FEST-A and specialists who were able to tackle avalanche studies, earthen dam assessments, maintain operations and maintenance contracts all have been essential to the overall USACE mission. Gordy Simmons, TAA Chief of Engineering and Construction, is proud of his employees. He encourages other Chief of E&Cs from across USACE to “send me your best and I guarantee to send them back better.” The USACE civilians in Afghanistan have done a remarkable job executing the USACE priorities. The work the District completed during the past 11 years has enabled the Afghan government to take the lead in providing security to the Afghan people. The work in Afghanistan isn’t finished. USACE employees will continue to be called upon.

▲ USACE Transatlantic Afghanistan District employees (left to right) Frank Garcia, Andre Baker, Portia Stagge, James “Mike” Lee, and Rito Sabanal, outside the District Headquarters on Bagram Airfield, 28 February 2015.

LTC PATRICK HOGEBOOM, P.E., served as the Deputy District Commander for the U.S. Army Corps of Engineers Transatlantic Afghanistan District from June 2014 through June 2015. He commanded the 1-361st EN BN (TF Redhawk). He holds engineering degrees from Virginia Tech and Missouri University of Science and Technology.

If you are interested in learning more about USACE deployment opportunities, please go to http://www.tad.usace.army.mil/Careers/Deployments.aspx to see what contingency area positions USACE currently has available.
TRANSATLANTIC AFGHANISTAN DISTRICT: DRAWING DOWN TO MEET RESOLUTE SUPPORT REQUIREMENTS

by WHITNEY CLAYTON

The U.S. Army Corps of Engineers has had a presence in the Middle East for decades, assisting with the improvement of infrastructure and facilities, so it’s no surprise that they would be tasked with rebuilding Afghanistan as well. The work that was completed during the past twelve years has made Afghanistan a safer, more well-designed place to live and has given the Afghan people the ability to conduct government and military operations out of structurally safe and modern conditions.

For twelve years, USACE personnel have deployed to support projects; with that came the daunting task of logistics, to set up and deconstruct each Forward Operating Base (FOB) as missions change and projects close down. With the drawdown of troops and the change of mission in Afghanistan from Operation Enduring Freedom to Operation Freedom’s Sentinel, USACE continues to close out projects and right-size the staff with the intent to be functional with a smaller workforce. What used to be two full-sized districts, with several smaller area and project offices to support all over the country, is now one headquarters element with three project offices and two area offices.

Perhaps one of the most daunting aspects in contingency logistics, especially with the constant restructuring and downsizing of the USACE footprint, is maintaining property accountability. Currently, the logistics personnel at USACE Transatlantic Afghanistan District (TAA) are working on Operation Clean Sweep. This program requires logistics staff members to visit the remaining locations where USACE personnel and property exist and to account for 100 percent of property and supplies. Visiting FOBs and accounting for property allows USACE logistics officers to ensure excess property is disposed of properly and that all sensitive items and required property are assigned to the appropriate property book and hand receipt. As the remaining FOBs draw down to meet Resolute Support requirements, having property completely accounted for will make the logistical component of the office closure more successful.

One of the biggest transitions USACE experienced is the significant downsizing of what was once Transatlantic Afghanistan-South District to the Kandahar Resident Office within a year. The space in Kandahar, known to most as the Castle Compound, was the largest consolidated USACE presence in Afghanistan. Due to the guidance on the drawdown of troops and personnel, the Kandahar office underwent a massive downsizing in calendar year 2014 in order to have minimal presence by the end of the year. The scope of the Kandahar office may have posed a logistical nightmare to some, but because of the professionalism and dedication of the USACE employees stationed there, the overall downsizing of this office was viewed as a success.

As part of the right sizing, long-time contracts for Global and sub-contractor Vertical were eliminated, allowing USACE to use their internal J2/J3 assets to perform their own ground movements, provide security, and schedule various forms of military airlift. The diminished contractor support left logistics responsible for turning in more than $730K of property transfers. More than 850 pieces of office furniture, valued at more than $730K, were transferred to other units and more than 1,900 items valued at more than $4M were turned into the Defense Reutilization and Marketing Office (DRMO) for disposition. Between USACE’s Automated Personal Property Management System (APPMS) and the Army’s Property Book Unit Supply Enhanced (PBUSE) organizational property books as well as Theater-Provided Equipment (TPE), the logistics

▲ Building 10 at the USACE compound at Kandahar is deconstructed.

▲ MRAPs are moved from Kandahar to Bagram Airfield.

▲ Buildings were deconstructed in Kandahar. The largest consolidated USACE presence in Afghanistan was the Castle Compound, but because of the professionalism and dedication of the USACE employees stationed there, the overall downsizing of this office was viewed as a success.

▲ MRAPs are moved from Kandahar to Bagram Airfield.
Army Engineer

November/December 2015

PART THREE

ENGINEERING IN RESOLUTE SUPPORT • AN IN-DEPTH SERIES

Whitney Clayton

served for 6 months with TAA-HQ as the J-4 Fleet Manager. She has worked for USACE for more than years as the Deputy, Chief of Logistics and Transportation Officer for the Middle East District, Winchester, VA.

[whitney.m.clayton@usace.army.mil]

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In addition to the everyday equipment that was turned in, the Kandahar logistics team was also responsible for containers and vehicles that were used to support missions throughout the Afghanistan South area of responsibility (AOR). During the transition, 21 tactical vehicles, consisting mostly of different styles of Mine Resistant Ambush Protected (MRAP) vehicles, were turned in or transferred. For the smaller FOBs in Helmand and Herat, items, mostly weapons and security team property, was valued at just under $2M. Finally, the TPE property that was turned in held the largest value with 642 items valued at more than $39M.

In a year, the Kandahar office was able to turn in more than $45.5M worth of equipment. Overall, USACE logisticians in Afghanistan are working business as usual to operate in the Resolute Support environment. Closing down multiple FOBS, moving the headquarters’ location, and drawing down the largest USACE office from a district, to an area and then to a resident office in a year could have failed if it weren’t for the dedicated logisticians that USACE employs.

Day-to-day logistics operations continue to support mission requirements from the current headquarters location in Bagram while the projects and staffing draw down to a number that mirrors Resolute Support requirements to sustain and assist Afghanistan. USACE logisticians, as with logisticians in any command, will continue to have a presence in Afghanistan until the last project is finished and the remaining engineers and support staff are ready to redeploy and prepare for the next mission.

**WHITNEY CLAYTON**

served for 6 months with TAA-HQ as the J-4 Fleet Manager. She has worked for USACE for more than years as the Deputy, Chief of Logistics and Transportation Officer for the Middle East District, Winchester, VA.

[whitney.m.clayton@usace.army.mil]
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