

Even as troop numbers are reduced in Afghanistan, engineers continue to complete high priority projects. This paradox of building new to enable troop reductions keeps civil engineers engaged across the entire theater.

As U.S. and NATO forces begin troop withdrawal from Afghanistan, additional expeditionary infrastructure is required to handle the change in mission and reduction in forces. Forward operating bases must be closed, and their units will fall back to main support bases before finally moving out of theater. The challenge is providing retrograde infrastructure to battle space owners while still meeting the reduced boots-on-ground numbers dictated by the President.

This challenge has been met by expanding Air Force engineers' roles in large construction projects and integrating Prime BEEF and RED HORSE into a single organization — the 1st Expeditionary Civil Engineer Group. Established in March 2012, the 1 ECEG serves as a force enabler for the combatant command and battle space owners, allowing engineers in the combined and joint operations area in Afghanistan and surrounding Gulf nations to quickly respond to engineering priorities. Over the last year, Air Force engineers have also implemented a new way of doing business, called "Over the Horizon."

According to Col. Pat Baker, 1 ECEG commander, Over the Horizon gives commanders "the ability to move engineers throughout the theater to meet mission requirements, while maximizing manpower utilization across the area of responsibility during day-to-day ops."

As part of this new program, Air Force engineers don't spend their entire deployment assigned to just one base. For example, in the past Prime BEEF Airmen filled base-level positions to sustain airbases at deployed locations. Now they are sent to forward locations for a specific requirement, using a hub-and-spoke method that provides flexibility as current and emerging missions evolve.

The Over the Horizon construct required a new organizational approach and the 1 ECEG was retooled to meet Air Force Central Command needs. The 777th Expeditionary Prime BEEF Squadron provides technical engineering services to the Army Engineer Task Force in Afghanistan, while both the 577 EPBS and 557th Expeditionary RED HORSE Squadron provide troop labor construction and other special capabilities.

Over the Horizon has proven a successful construct for Air Force CEs to enable coalition forces in their planned troop withdrawal operations. One of the 1 ECEG's largest undertakings to date is the construction of Camp John Pratt in Regional Command North, a retrograde-focused base designed and built solely to assist units departing the AOR.

The entire camp was built with a combination of Air Force and Army engineers using troop labor along with some military construction-level building for a new strategic aircraft ramp and supporting facilities.

Army engineers provided a majority of the horizontal earthwork while Air Force teams from the 557 ERHS and 577 EPBS supplied the vertical expertise. Nine major projects and a host of smaller improvements encompass the majority of the effort at Camp John Pratt.

The 557 ERHS focused on direct support facilities and infrastructure to the new flightline, with construction projects that fit perfectly within RED HORSE's capabilities in heavy construction and expertise with concrete construction. An operational aircraft fuel farm and new access roads to the flightline provide support to heavy airlift operations. A fuel station, both for vehicle fueling and aircraft refueling trucks, will support vehicles and aircraft. Over 5,600 cubic meters of concrete were placed and 1,500 Hesco barriers installed to protect the fuel farm. A new fire station ensures emergency vehicles can meet response times and provide emergency services to the new strategic aircraft ramp and life support area.

The 577 EPBS took on the lighter vertical construction requirements involving an LSA and new tent facilities and infrastructure across 125 acres. A new dining facility comprising six shelters and a large area maintenance support shelter has the capacity to feed more than 2,000 personnel per meal. A LSA composed of 98 Alaskan shelters with supporting power and HVAC and 30 latrine and shower trailers will house up to 1,000 personnel as they move in from surrounding FOBs. A new 15,600-square-foot wash rack in the retrograde yard will assist with cleaning and prepping vehicles and equipment for shipment out of the country. Also, four tactical shelters were completed for the incoming KC-135 Stratotankers mission, the first time tankers will be stationed in the AOR. This saves hundreds of flight hours and thousands of dollars in fuel. With more than 1,650 cubic meters of concrete placed, the speed and capability of Air Force engineers made this mission possible.

Camp John Pratt construction proved the adage that engineers are stronger as team members than as individuals. The RED HORSE team assisted their fellow engineers with concrete work and heavy earthwork in the LSA. Prime BEEF subject matter experts assisted with building a double arch gable shelter for the fire station. The Army's 919th Engineer Brigade prepared the horizontal grading and tent pad preparation in the LSA. The cooperation and willingness to

work together made the camp's construction possible at a combined cost of more than \$9 million and despite the challenges the teams faced in the Southwest Asia AOR.

Site conditions changed easily and materials sometimes got diverted to other locations by the time craftsmen were ready to use them. The high mountains of northern Afghanistan are bitterly cold in the winter, which slowed construction work to a crawl. As the spring rain storms came, winds greater than 50 mph threatened to blow the new tents off their foundations, and did in one case. Temperatures soared to 85°F one day and then plummeted to 26°F the next, with freezing rain and stinging ice. Material shortages plagued some projects as specialized parts were difficult to find or had to be shipped great distances taking precious time out of the schedule. Vehicles and specialized equipment had to be repaired.

Through it all, the professional men and women of the 1 ECEG met all challenges and thrived with a can-do attitude and a resolve for problem solving. They will continue to lead the way to get the mission done, until it's done!

Maj. Stevens is the 577 EPBS Troop Construction Officer, deployed from the 99 CES, Nellis AFB, Nev., where he is the Operations Flight Commander.



(facing page) Dirt Boyz from the 577 EPBS pour the first lane of the wash rack for a retrosort yard at Camp John Pratt, at an undisclosed location in Southwest Asia. (above) Water and fuels system maintenance craftsmen from the 577 EPBS dry fit sewage lines for latrine and shower units at a life support area at Camp John Pratt. (U.S. Air Force photos)