FREEDOM BUILDER

November/December 2011

Office call
Huntsville commander checks in on staff in Kabul

Water works
Corps of Engineers digs deep for clean water at Bagram Airfield

Human touch
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Closing the distance
Deployed parents reach back to kids on the homefront

US Army Corps of Engineers®
Afghanistan Engineer District

Clearing the air

Corps of Engineers removes smoke from trash fire at Bagram

FREEDOM BUILDER

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The mission of Freedom Builder is to support the Commander's Internal Communication Program for the Afghanistan Engineer District-North. It also serves as the Commander's primary communication tool for accurately transmitting policies, operations, technical developments, and command philosophy to the Afghanistan Engineer District-North.

The Freedom Builder Magazine is available online at
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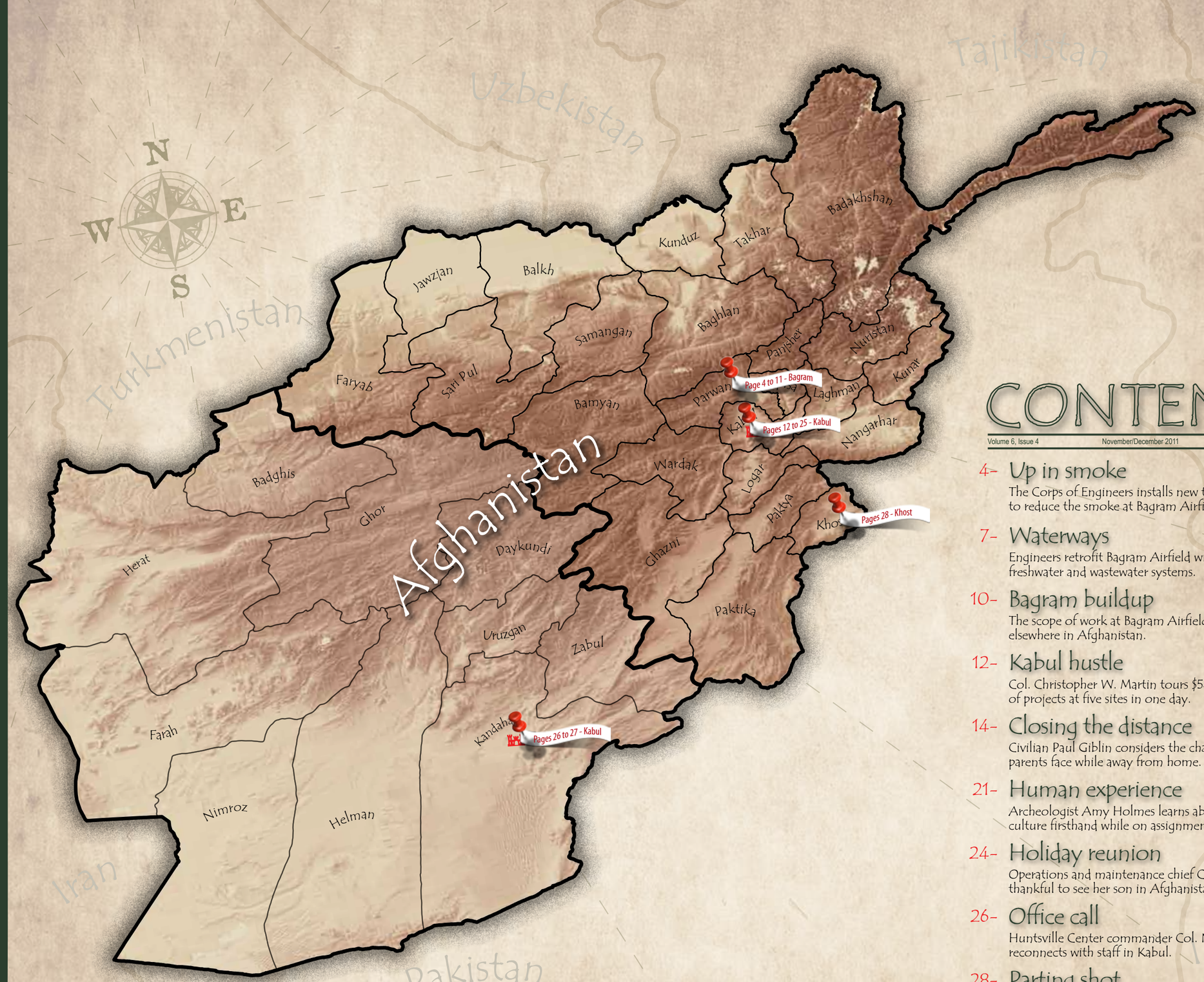
Cover image:

A C-130 cargo plane flies through a tower of smoke caused by burning trash at Bagram Airfield.

(Full story on pg. 4)

Photo by | ***Mark Rankin***



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Up in smoke

New trash incinerators reduce smoke at airfield

Story by | *Paul Giblin*

Photos by | *Mark Rankin*

A bulldozer dumps a load of trash into a burn pit just 300 yards from the runway at Bagram Airfield.

BAGRAM, Afghanistan – U.S. Army of Engineers personnel are constructing a $5.5 million trash disposal plant at Bagram Airfield to replace a trash disposal plant that threatens aircraft safety at the international base.

Currently, most trash generated at the base is burned in open pit or in several small incinerators that are located just 300 yards beyond the runway. Bulldozers constantly shovel rubbish into the fire, creating thick columns of brown smoke.

Documents with sensitive data are burned nearby at a complex with several incinerators housed in shipping containers. They pipe out columns of smoke as well.

The threat to aircraft operations is threefold: The smoke hinders visibility for pilots, the heat lifts debris into the air, and the piles of garbage attracts birds that cross the flight path. Furthermore, particularly during colder months, the smoke creates a putrid fog that hangs over large swaths of housing areas at the base and the adjacent village of Bagram.

It's a high-profile project.

"This is the No. 1 priority to get this turned on, because we have to get that garbage away from the airfield because of the hazards," said Corps of Engineers construction representative Keith Benson of Norfolk, Va.

A key factor to the new garbage disposal plant is that it's located about a mile from the runway, military housing and the village. In addition, the twin incinerators at the facility burn at 1,800 degrees Fahrenheit, which produce less smoke than the smaller, cooler-burning incinerators near the runway.

The 10-acre facility features a large covered and lighted sorting facility, where employees working by hand will sort through trash, to separate recyclable material from true rubbish. From there, the remaining trash will placed into the receiving bins of two commercial-grade incinerators that were manufactured by Consutech Systems in Richmond, Va.

The construction work is being handled by the firm EMTA AFCON JV, which is based in Ankara, Turkey. Construction

The $5.5 million trash disposal plant features twin incinerators that were shipped to from Richmond, Va.

started in October 2009 and is expected to be complete within weeks, if not days.

The incinerators are fired with fuel similar to jet fuel and have the capacity to torch 32 tons of trash a day. The process to start them and heat them to the proper temperature takes more than a day. Once the units hit 1,800 degrees, workers will keep them operational 24 hours a day.

"Once you get these incinerators hot – 1,800 degrees, I mean that can burn up anything – there is constant pressure to push it through the system," Benson said.

Workers start the process by dumping non-recyclables into large compartments on one side of the incinerators. Then trash is pushed into the brick-lined burning chambers, pushing forward trash that previously had been placed into the ovens.

Generally, it takes about seven hours for items to process through the burning chambers, Benson said. The resulting ash emerges from the other end of the chambers where it is mixed with a water-based solution and compacted into soggy cubes about three feet tall.

The ash cubes are stored on a concrete pad to cool for two or three hours, then deposited into a pit lined with a rubber membrane for eventual burial. Pipes underneath the pit siphon the excess liquid, which is filtered.

The mountains of trash are so monumental that Corps of Engineers officials are considering whether to bring some of the smaller shipping container-size incinerators to the new plant until they've torched the excess, Benson said.

"There's just so much trash to burn. It's a big operation," Benson said.

After burning the backlogged trash, the incinerators' 32-tons-a-day capacity will keep pace with the daily trash production on the base, he said.

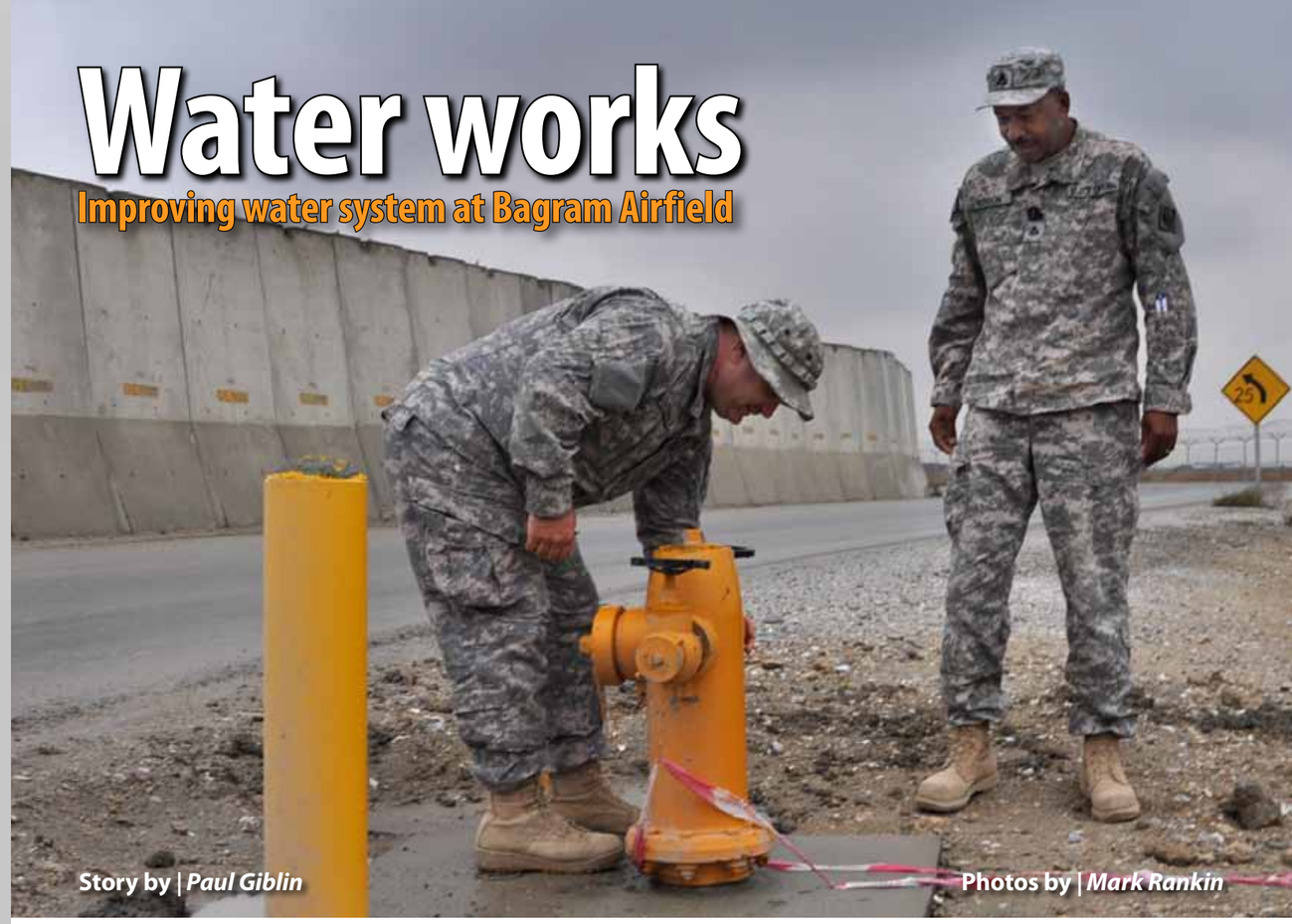
Because the new incinerators burn at such high temperature, they produce far less smoke and ash than the older incinerators. So not only will the smoke be further away from the runway and the population centers, there simply will be less smoke.

The plant also features an administration building, fencing and other anti-terrorism measures.

Construction representative Keith Benson opens a heavy door to one of the van-sized burn chambers at the new trash disposal plant at Bagram Airfield on Nov. 8. When in use, the chambers reach 1,800 degrees Fahrenheit.

Water works

Improving water system at Bagram Airfield



Story by | *Paul Giblin*

Photos by | *Mark Rankin*

Construction representatives David Hoopengarner (left) and Keith Benson check the pressure at one of 284 fire hydrants at Bagram Airfield on Nov. 9.

BAGRAM – The smell of ash hung in the charred remnants of the United Arab Emirates' army compound within Bagram Airfield, three months after a fire destroyed it.

Insurgent fired a rocket into the compound, igniting a workshop on Aug. 19. Wind quickly spread the fire from structure to structure, burning barracks, offices and vehicle hangers. Emirates soldiers saved some of their armored vehicles and other equipment, but several vehicles and most of their camp burned to the ground.

Emergency personnel prevented the inferno from spreading to an adjacent U.S. compound and other areas within the coalition base, which houses as many as 31,000 people, but the 30-man Emirates compound was a total loss. Three months after the fire, solid puddles formed from the melted bullet-proof windows of armored vehicles still glimmered on the ground.

An irony is that the U.S. Army Corps of Engineers was nearing completion of a network of 284 fire hydrants that firefighters will be able to use in just such an emergency. The hydrants became operational on Nov. 14. The bright yellow hydrants are roughly 360 feet apart, spread across the entire coalition air base.

The hydrants are part of an extensive water infrastructure upgrade that is scheduled to be complete

in its entirety in late December 2011. The $41.7 million project also includes installation of three deep wells and a distribution structure and a sewage collection and treatment system.

Construction is being handled by the construction firm Zafer Taahhüt Insaat ve Ticaret A.S., which is based in Istanbul. Construction began in August 2008.

The water infrastructure project required excavation along Disney Drive, which was named after fallen Amy Spc. Jason A. Disney of Fallon, Nev., and an adjoining sidewalk. Disney is the base's main thoroughfare and is crowded with bumper-to-bumper traffic nearly 24 hours a day.

The military airport has served as a strategic center of operations for Afghan, Soviet, Taliban and coalition military forces at different times since it was created in 1976, yet it has lacked an adequate water infrastructure system the entire time.

"In terms of protecting all the employees and all the military folks that are here, it's real important to have that fire system in place," said Lt. Col. Douglas Vanderhoof, the officer in charge of the Corps of Engineers' Bagram Area Office.

Until the hydrants were installed, firefighters relied extensively on pumper trucks, which as the Emirates compound fire illustrated, are inadequate for the base that's used as one of primary distribution centers for coalition forces in Afghanistan. Between 26,000 and 31,000 military and civilian personnel are housed at the base daily, depending on troop movements.

The hydrants follow the base's seven-mile perimeter road and dot the most densely populated areas.

Installation along the base's narrow roads proved to be challenging, Vanderhoof said. The base's roads are used by bulky military vehicles called Mine Resistant Armor Protected carriers, or MRAPs for short. Visibility from within the 7-ton to 25-ton rigs is limited.

"The hydrants are close by the road and MRAP drivers don't always see them. They'll run over them and they've got to be replaced. So that's an issue," Vanderhoof said.

The hydrants are designed to snap off, without damaging the underlying water systems, so damage from MRAP hits was limited. Still, after four hits, the Corps of Engineers ordered a modification to the contract that called for concrete-filled bollards to be installed next to each hydrant. The bollards increase visibility and provide protection against future vehicle strikes.

Another important component of the project was the installation of three deep wells around the base. Two are located along Disney on the west side of the base – No. 1 on the south end, and No. 2 on the north end. Well No. 3 is on the east side of the base. All three are nearly 400 feet deep, which are far deeper than wells used by

Insurgents fired a rocket into Bagram Airfield on Aug. 19, igniting a fire that destroyed most of the United Arab Emirates army compound.

The $41.7 million water infrastructure upgrade features nine 211,000-gallon water storage tanks.

Bagram village residents for agricultural purposes.

"We went to the lower aquifer," said Corps of Engineers construction representative David Hoopengarner. "It makes it so that the local area is not being affected by us taking their water from their aquifer."

Another benefit is that water taken from deeper depths is not as likely to carry contaminants created by decades of warfare and unchecked discharge of industrial and household waste into the environment, he said.

The water is filtered for natural impurities at the well stations, Hoopengarner said. "It's got a lot of turbidity in it – particles, silt. It's not real dark or anything, but it's not drinkable or fit for human consumption right out of the ground," he said.

The water is pushed through 30 separate filters to remove sand and other particles. "Basically, it's just the same stuff you see on top of the ground that's down in the ground. It's just getting picked up from the pumps," said Hoopengarner, who is on a temporary assignment to Afghanistan from Winchester, Va.

Each pumping station features three 211,000-gallon water storage tanks.

Pumping station No. 2 was activated on Nov. 14, while No. 1 is scheduled to start Dec. 5, and No. 3 on Dec. 15. After confirming that Nos. 1 and 3 are functional, Corps of Engineers officials will put them on stand-by status, to allow time for each of the coalition forces on the base to tap into the new main waterlines. As demand increases, wells Nos. 1 and 3 will be brought back into full service, Hoopengarner said.

Initially, the new source of water is being used for non-potable needs, such as hydrants, showers and toilets. Following additional testing, the water is expected to be certified as drinkable water. "Nobody has deemed it potable water able to drink, but we're working on that. There's really nothing wrong with it," he said.

Currently, the base water from commercial sources, requiring a fleet of water tanker trucks. A key advantage to the well network will be reducing number of trucks transporting water along Disney, Vanderhoof said.

The wastewater treatment plant became operational on Oct. 12. It has the capacity to treat as much as 1.5 million gallons of waste water a day, or the equivalent of the wastewater created by half of the base's population. That, in turn, reduced the number of sewage tanker trucks needed to haul off wastewater.

Bagram buildup

Workers construct a drainage system that will channel rainwater under a taxiway at Bagram Airfield.

BAGRAM, Afghanistan – The scope of work directed by the U.S. Army Corps of Engineers through its Bagram Area Office differs significantly from the scope of work supervised by the Corps of Engineers in the rest of northern Afghanistan.

The Bagram Area Office is located within Bagram Airfield, a large international air base that houses between 26,000 to 31,000 military and civilian personnel, and dozens of aircrafts ranging from C-130 cargo transport planes to F/A-14 fighter jets.

As a result, the Bagram office's portfolio features a great concentration of construction work to accommodate U.S. and coalition military forces. In contrast, the other area offices within northern Afghanistan have a greater focus on construction to benefit Afghan army and police forces.

Consider this: As of Dec. 2, across the district, 54 of 318 construction projects, or approximately 17 percent, were associated with U.S. and coalition military forces. The equated to $791.4 million of $2.9 billion, or approximately 27.7 percent, of total spending.

On the same date in the Bagram office though, 30 of 45 construction projects, or roughly 66.7 percent, were tied to U.S. and coalition military forces. That corresponded to $426.8 million of $642.6 million, or 66.4 percent, of the office's spending.

Overall, Bagram office personnel run 30 of the district's 54 military construction projects, and accounts for $426.8 million of the district's $791.4 million military construction budget. That equates to approximately 55.6 percent of the entire district's military construction projects, and 53.9 percent of all of the district's military construction spending.

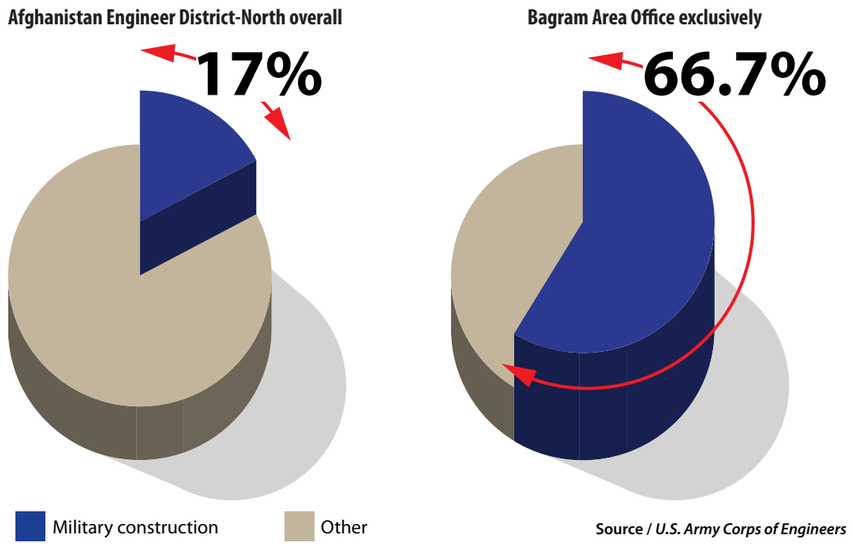
The Corps of Engineers is installing permanent – or at least semi-permanent facilities – at the base, said Air Force Lt. Col. Daniel Gerdes, who took over as the officer in charge of the Bagram office in December. After the bulk of U.S. and coalition military personnel pull out of Afghanistan, a limited number are expected to remain at the airfield.

"Bagram is going through a significant transition during the next year to two years," Gerdes said. "We're transitioning out of a get-it-in, get-it-done, support-the-surge mindset into a long-term, five-year, 10-year vision for the base."

Details and dates always are subject to change, but for the time being, the master plan looks similar to master plans for a similar-sized base in the United States. "The structures that are going in are concrete and mortar, rather than plywood and tent skins. That is a major step," Gerdes said.

Bagram's military construction emphasis

The Bagram Area Office's scope of work is much more oriented toward military construction than the overall district's scope of work. Here's the breakdown by the percentage of projects as of Dec. 2:



Source / *U.S. Army Corps of Engineers*

Graphic by | *Joe Marek*

The current scope of work features a variety of projects. Among them:

- A network of drainage systems for $9.9 million.
- Road construction valued at $14.3 million.
- A complex for special operations forces, comprised of two phases for $12.1 million and $16.9 million.
- A key component of the overall drainage system will be a tunnel for rainwater to flow under a taxiway near the north end of the runway.

Previously, rainwater collected in a wash – or to use the Afghan term, a "wadi" – near a taxiway. The water then spilled over the taxiway, leaving mounds of sand and silt in its wake. The new drainage system will direct the water into a reinforced culvert, then through a tunnel that was bored under the taxiway.

Other work will divert water into existing wadis and creeks around the base. The overall project began in October 2010 and is scheduled to be complete in December 2013.

The road project will replace miles of dirt roads with paved roads, reducing dust in the summer and mud in the winter. The project also will relieve some of Bagram's infamous traffic congestion, which is caused by too many cars, delivery trucks and military vehicles squeezed onto the existing roads.

Road construction is hampered by factors that are unique to the setting: Unmarked landmines and other unexploded ordinance left by Soviet and Taliban forces, and heavy concrete T-walls and earth-filled blast walls that sometimes stand in intended new routes.

Landmines and other unexploded ordnance must cleared, and new blast walls must be constructed and the existing walls removed before roadwork can begin.

The project began in October of 2009 and is set to be complete in December 2012.

The special operations forces complex will allow the secretive military personnel to operate with near-complete autonomy in a facility that essentially will be a base within a base.

The first phase started in March 2010 and is scheduled to be complete in May 2012. The second phase began in October 2010 and likewise is slated to be finished in May 2012.

"We're in a significant transition, and you're going to see that go on and on, as we go on," Gerdes said.

Kabul hustle

Projects bustle around capital city

Story and photos by | *Paul Giblin*

Hundreds of workers for two firms work side by side on two schools for the Afghanistan National Army.

KABUL – U.S. Army Corps of Engineers officials toured several projects that represent the breadth of the agency's efforts to develop facilities for the Afghanistan National Army and Afghanistan National Police on Oct. 25.

The projects:

- Two schools for the Afghan army valued at $28.6 million and $13.9 million apiece.
- A complex with 25 ammunition bunkers for the army valued at $5.6 million.
- A headquarters complex for vehicle operations for the army budgeted for $4.9 million.
- Extensive renovation of a vehicle maintenance facility for the Afghan police budgeted at $1.9 million.

All five of the projects are being built under the direction and oversight of construction professionals assigned to Afghanistan Engineer District-North, which is based in Kabul, the capitol city.

"There are a lot of good projects going on out there. We have a tremendous amount of work being done," said district commander Col. Christopher W. Martin, who headed the delegation that toured the sites.

> "I'm very impressed with the quality of the projects we're getting."

"I'm very impressed with the quality of the projects we're getting," he said. "We can tell we're doing something good for the Afghans in order to help them take over the security, constructing their facilities to do maintenance on some of the police vehicles and at the same time building them a school to train their officers and their soldiers in the ability to support the Afghan army."

The schools are being built adjacent to one another near the existing Kabul Military Training Center. The Afghan army will use the facilities to teach its service members administrative duties associated with managing the emerging military force that is projected to grow to more than 171,000 troops this year.

Combined, the projects will accommodate 3,000 troops.

The bigger of the two schools is the Human Resources and Finance School. The construction work is being handled by the firm FCEC UI Projects JV, which is based in Kabul. Work began in March of 2011 and is scheduled to be complete in November of 2012.

The scope of work includes six barracks, a dining facility that can seat 1,000 at a time, classrooms, roads, a waste water treatment plant and an electrical system, and more.

The other school is the Logistics School. Construction is being done by Kahkashan Balkh Building & Road Construction Co., which is based in Mazar-E Sharif, a city in northern Afghanistan. Work began in March 2011 and is expected to be complete in July 2012.

Signs mark the sites of future buildings at the vehicle operations complex.

The facility will feature four barracks, classrooms, three administration buildings, support facilities such as latrines and laundry facilities and related structures.

The complex was a hive of activity with about 450 workers at the human resources school, and 250 at the logistics school. A key component for the process is coordinating the side-by-side construction projects and the efforts of two contracting companies, said project engineer Antonio Castro.

Workers razed an unsafe Soviet-era warehouse and used the foundation for a new warehouse at a vehicle maintenance complex.

"Every week we have a progress meeting for each contractor and after the progress meetings, we have a coordination meeting among the Corps of Engineers, the HR/finance school and the logistics school to thrash out any issues," he said.

Among the primary topics are ensuring that the elevations of the buildings on the twin sites can accommodate shared utilities, and access for work crews and equipment in and around the bustling sites that are located across an unfinished road from one another.

"So far, everything is going well,"

Ammunition bunkers at Pol-E Charkhi feature concrete construction.

Castro said. "The coordination meetings last just 30 minutes, because most of the time, the two contractors discuss their issues between themselves. They're here every day. They see each other every day. If there are some issues that they need us to negotiate, we discuss them in the negotiating meetings."

The ammo bunkers are being built in Pol-E Charkhi on the outskirts of Kabul. The work is being done by Hashmat Khalil Rezai Road & Construction Co., which is based in Kabul. Work started in September 2010 and is projected to be complete by March 2012.

The facility includes 25 large concrete-walled bunkers, a road through the site and security features. Thick concrete walls had been poured for 23 bunkers and forms were in place for the remaining two, said resident engineer Gerald Allen.

Work was stopped for six weeks following the abduction and murder of James W. "Will" Coker on Oct. 5, but has since resumed. Coker was a Corps of Engineers contracting officer representative who was stationed at near-by Camp Blackhorse. The circumstances of his death are being investigated and details have not been released.

"They had gotten a good rhythm going," Allen said of the construction workers. "Hopefully, they'll pick that right back up."

The police vehicle maintenance center renovations and army movement operations headquarters also are being developed side by side.

The maintenance center, which is being used as construction continues, is the primary location where the national police force services its fleet of vehicles, which is comprised largely of Ford Ranger pickup trucks.

The renovation features six primary buildings: a warehouse, a heavy maintenance building, a tire and battery shop, a body shop, a woodshop and a main office. The construction is being handled by Technologists Inc., which is based in Rosslyn, Va. Work started in July 2010 and is scheduled to be complete in January 2012.

All new vehicles pass through the facility before joining the police fleet, said Shane Kobialka, a Corps of Engineers project engineer.

Construction workers shape rebar used to build the ammunition bunkers.

"They take in basically lots of Ford Rangers – other vehicles also – then outfit them with radios, light bars, all the equipment they need to perform their function," he said. On the day of the tour, hundreds of the compact pickups were parked all around the complex. The forest green police trucks are omnipresent on Afghanistan's overcrowded and rutted roads.

One of the most difficult parts of the renovation was working with an existing Soviet-era warehouse on the site, Kobialka said.

"It was rusted through. It had been hit by debris from mortar shells," he said. "Originally, we were going to de-skin it and re-skin it and that was all. But when we took the skin off, all the structural integrity of it kind of fell apart. All the trusses started leaning and sagging, so we did a modification to replace it."

Crews razed the structure, resurfaced the existing concrete slab and erected a new warehouse. Crews also upgraded the electrical systems of several existing buildings to bring them up to the standards of the new buildings.

About 100 Afghan workers are on the site daily, he said.

The army vehicle operations headquarters, which is known as the Central Movement Agency, includes an administration building, barracks, a vehicle wash rack, a weapons storage building, an auditorium, a gymnasium and related facilities.

The facility is used to perform maintenance on the army's semi-trailer trucks and other heavy equipment. "Basically, it's a one-stop shop," said Charlie Bechtold, a construction representative for the Corps of Engineers.

The construction also is being done by the firm FCEC UI Projects JV. Work started in September 2012 and is set to be complete in January 2012.

Overall, it is progressing smoothly, but shipments of structural steel are being stalled in Karachi, a coastal city in Pakistan, Bechtold said. FCEC UI executives told Corps of Engineers officials that they are exploring other routes to get the steel into the land-locked country through its northern borders.

Construction of the side-by-side Afghanistan National Army army schools is expected to be complete in 2012.

Closing the distance

Deployed parents among us consider kids on the homefront

Commentary by | *Paul Giblin*

Photo by | *Joe Marek*

Chief Master Sgt. Chad Brandau aboard a helicopter flying to Sharana, Afghanistan, on July 21.

KABUL – Jan. 1, 2012, will mark the third consecutive New Year's Day that I've spent half a world away from my wife and our sons.

Like tens of thousands of other military service members and Department of Defense civilian employees, I'll spend the day in Afghanistan, where the decade-long war and reconstruction effort continue simultaneously.

I work as civilian employee of U.S. Army Corps of Engineers, stationed at the organization's headquarters for northern Afghanistan, a base called the Qalaa House compound in downtown Kabul.

While living and working in a war zone presents an array of challenges, one of the most difficult, and perhaps the most important, is finding active and meaningful ways to be involved in my sons' lives despite the distance. Casey is a sophomore at the University of Arizona in Tucson; Tim is a senior in high school and lives at home with my wife Sandra in Phoenix.

Staying connected to kids back home is a regular topic of discussion among the older set at Qalaa House.

I've spoken at length about those challenges with several colleagues, including Air Force Chief Master Sgt. Chad Brandau of Tucson, Ariz.; Army Lt. Col. Terri Wise of Fort George G. Meade, Md.; and civilian Andy Jordan of Wilmot, N.H.; among others.

Mostly, the parents among us serve as sounding boards for one other, listening to each other describe our children's tonsillectomies and art show awards, which we only know about second-hand ourselves. We tell each other that we're not really the missing-in-action parents that we suspect we truly are.

The effect of deployments on children is a topic that's received considerable professional study in recent years. A frequently cited study published by the journal Pediatrics in December 2009 offers a stark assessment of the well being of children with deployed parents.

The study, "Children on the Homefront: The Experience of Children From Military Families," was based on computer-assisted telephone interviews of 1,507 sets of military children between 11 and 17 years old and their non-deployed parents.

The researchers examined how children were doing socially, emotionally and academically. They found that children with deployed parents reported more "stressors" in their lives than children from a general national sample.

They determined that older boys, and girls of all ages, reported significantly more difficulties in school, family and peer-related settings. Specifically, the kids had more trouble dealing with household chores and school responsibilities.

The researchers also found that deployed parents' length of time away from home, and poor mental health of non-deployed parents contributed to the kids' difficulties as well. To compound the matter, other studies have indentified links in the lengths of military deployments and poor mental health of non-deployed spouses.

Not surprisingly, the 2009 study showed that children who had deployed parents, but lived among other children with deployed parents in military housing, did better than children with deployed parents who lived off base.

To be certain, separations for long periods of time cause change for everyone involved. About 350 military and civilian personnel live and work at the Qalaa House compound, which is a complex about the size of a high school in the United States.

Most of the compound's living quarters are double-occupancy metal shipping containers like those on semi-trailer trucks. Most of the offices are situated in buildings that previously were luxury homes, at least by Afghan standards. The namesake Qalaa House building previously was the Iraqi embassy.

Photo by | *Brandau family*

Chance Brandau (8) with his book of emails and photos from his dad. The photo below was sent with a message saying, "These are some of the kids who are afraid their school might get flooded if we can't help them."

Photo by | *U.S. Corps of Engineers*

The conditions at Qalaa House are better than at most U.S. military bases in Afghanistan. Many service members sleep in tents and their duty stations often are somewhere among the county's mine-rigged streets, dunes, washes and poppy fields.

While deployed, military service members and civilian employees alike miss a significant number of milestone events at home – birthdays, high school swim meets, proms, ski trips, the day the kid passes the driver's license exam, the day the college acceptance letter arrives.

I've been 7,765 miles away on each and every one of those days. As a result it's usually the conflicts in my mind, rather than the conflict around me in Afghanistan, that keep me awake at night.

Brandau, who has served in active duty for 25 years, has been through it twice.

He has two adult sons, Chase who lives in Minnesota, and Clint who's in the Army and stationed at Fort Huachuca in Sierra Vista, Ariz. He and his wife Patty have another son Chance, who's 8. They live on base at Davis-Monthan Air Force Base in Tucson.

Brandau's current 365-day tour in Kabul is his second in Afghanistan. He previously served a 455-day tour at a small base in the village of Jalalabad near the Pakistan border. Before that, he had eight other deployments that ranged from 90 days to six months apiece, around the globe.

In all, he's has spent about five years of his career stationed away from home. Without question, the time away took a toll, said Brandau, the top enlisted service member in the unit.

"For my first two sons, I never got to be the Tooth Fairy. I had two boys and never got to be the Tooth Fairy once. Do you know what I mean? There are just certain things you

miss. That's the hardest part," he said.

Maturity, hindsight and technology have helped him close the gap with his youngest son.

During his first deployment to Afghanistan a few years ago, Brandau regularly e-mailed photos and short letters about his daily life overseas. He dispatched photos he took of people and scenes around him, and photos that colleagues snapped of him.

"It was just something for him to see a picture – maybe me standing with an Afghan child or giving someone a bottle of water," Brandau said. "Then I would tell him what the picture was about. He really liked them, so I just kept them going."

> **"For my first two sons, I never got to be the Tooth Fairy. I had two boys and never got to be the Tooth Fairy once. Do you know what I mean?"**

Unknown to Brandau at the time, his wife Patty had been printing the e-mails and compiling them in a three-ringed binder. It became Chance's personal picture book, which he flipped through whenever he chose.

On Brandau's current tour, he's kept up the practice, e-mailing photos and letters, though the letters are longer now because his son is old enough to read. His wife and son have been compiling the dispatches into a second book. In addition, they've been e-mailing him photos and letters about life back in Arizona.

"That's the key right there – doing the little things," Brandau said. "If next May when I roll out of here, if I had a three-ring binder, and took that home and showed him that I was saving all those pictures that he sent, just like he was doing, well, stuff like that goes a long way."

Jordan, a civil engineer from Wilmot, N.H., also has been on previous deployments, but his current six-month tour marks his first since he has had children. He was deployed for 14 months as a Soldier in Iraq in 2005 and 2006.

Jordan, who now serves as the deputy manager for the Corps of Engineers' provisional reconstruction team program, and his wife Jennifer have two children, Tristian, who's 2, and Juliannah, who's 1.

The time away has been difficult. Jordan missed several of his daughter's early achievements. "I missed her first steps, her first words, her first birthday, all the stuff you're not supposed to," he said.

A couple of factors are working in Jordan's favor though. He was keenly involved in his children's upbringing before he deployed, so the emotional connections were well established before he left, he said.

Furthermore, his kids are young enough that they don't have a strong concept of time. "They know that Daddy's at work and they know it's been a little while. They don't realize that it's been forever," he said.

Jordan speaks with his children by phone, but because they're so young, their conversations are simple and brief. He credits his wife Jennifer for involving him in their children's daily activities. Often, that takes the form of arts projects.

"I get things in the mail from them all the time, things that they make, things that they color," Jordan said. "My son will put stickers on them. He'll glue gobbly eyes and bells and all kinds of arts and crafts stuff on them. He always has to make something for Dad."

Jordan, who serves as the deputy manager for the provisional reconstruction team program, was worried that his children might forget who he was while he was gone. He was relieved when he went home on R&R that both his kids knew exactly who he was. "That was reassuring, to know that my family is still my family, no matter what," he said.

Staying connected with his children is a weighty subject for Andy Jordan, father of Tristian, 2, and Juliannah, 1.

Wise and her husband Christian similarly have a young daughter, Brooke, who's 3.

The senior intelligence officer for the district credits recent advances in technology for bridging the distance between Kabul and Fort Meade. She speaks with her daughter frequently by phone and Skype, a live video-over-internet service.

"It's tremendous, because you can actually see your kids and they're able to interact with you more. I think it brings you closer to your family when you're able to do that," she said.

Frequently, Wise said, Brooke will carry on a Skype chat while walking around the house with an iPhone. Other times, when Wise is finished speaking with her daughter and continues her conversation with her husband, Brooke will pop up in the background to wave to her.

In contrast, during a deployment to Iraq in 2005 and 2006, before her daughter was born, phone service was sketchy at best, she said. There was no video service.

Wise also was concerned that her daughter might forget who she was during her year-long deployment, but her concerns were dispelled quickly. "When I went on R&R, we were like two peas in a pod. Nothing changed," Wise said.

In hindsight, the timing of her current year-long deployment turned out to be ideal.

If Wise had deployed when Brooke was a baby, she might have missed valuable attachment time. In contrast, if she had waited until Brooke was in her pre-teens or teens, Wise would not have been around during critical years when her daughter may need a mother's guiding hand.

Yet, even during Brooke's in-between year, there have difficult moments. Wise recalled her daughter's reaction when she first arrived home on R&R. "She hugged me really tight and said, 'Mommy, I love you. And you promise that you will never, ever leave me again,'" Wise said.

Wise wasn't able to make that promise.

I certainly hope Brandau, Jordan and Wise are taking the correct approaches to parenting from afar.

I use similar strategies with my sons Casey, who's 19, and Tim, who's 16.

I e-mail photos and notes and letters home frequently, usually one or more a day.

Most of my e-mails are brief, but sometimes they're longer. If the occasion presents itself, I write short stories about only-in-Afghanistan moments, like a trip to a barber shop with an international staff at Camp Eggers, which is another base in the Green Zone.

As I recounted in an e-mail home, a woman employee waved me to take a seat, then secured a barber's cape around my neck. I gave her my usual instructions.

She walked around me and pulled tufts of hair here and there to gage the length. She combed my hair back. She stood behind me, crossed her arms and looked in the mirror. "Cut?" she asked in a heavy accent. She waited while I realized she had no idea what I just said. "Cut," I replied.

She gave me a nice buzz. A friend was there and snapped a photo. Later, I wrote a short dispatch about the venture, attached the photo and hit the send button.

Similar to Brandau's discovery, on a recent trip home I learned that my wife Sandra has kept every e-mail I've sent her since I arrived in Afghanistan. By now, she has several hundred. She told me she and the kids like to re-read them every now and again.

And naturally, I receive e-mails from home with the latest news about swim meets, class grades and lunches with the grandparents.

Lt. Col. Terri Wise is away from home for months at a time, but remains close to daughter Brooke, now 3.

With a little planning, the 11½-hour time difference between Afghanistan and Arizona is perfectly manageable for phone calls. We've worked out a schedule, so that Sandra, Casey and Tim know when to expect my calls.

"It is comforting to me to have you call," Sandra told me. "We don't have to talk long, but I need to hear your voice and need to know you are OK."

That sentiment, perhaps oddly, has led to an on-going joke. Even with a phone call, each of us figures the other should only be 95 percent OK. We'd have to be in the same place at the same time to get that final 5 percent.

It's amazing how much a short phone call can mean. Sandra and the boys went skiing while on a family visit in Colorado last year. Sandra called from a chair lift. I missed the call, but she left a voice message:

"Hi Gib! I'm calling you from the chairlift! We're on the Bonanza chairlift at Wolf Creek Ski Resort. OK. We're doing great. We'll call you tonight. Bye!"

That was from Dec. 28, 2010. I've replayed it dozens of times.

On a recent Monday, I received a call at noon Kabul time, which was 12:30 a.m. the same day in Arizona. My son Casey, the sophomore at UA, had just finished writing the first draft of a paper about the link between red meat and Type 2 diabetes. He wanted to know if I would read and critique it.

We talked a while about his paper and his weekend. My younger son Tim had been in Tucson and they went to a laser-light show at the UA planetarium. I told him that I had gone to laser-light shows at the planetarium back when the soundtrack was contemporary Pink Floyd, rather than classic Pink Floyd.

A minute after we said our good-byes, Casey's paper popped into my e-mail in-box. That evening, I read it, typed a few suggestions, promised myself to cut way back on red meat, and sent a reply e-mail. The next night, Casey e-mailed again. He said he had reworked a couple sections of his paper and turned it in. He expected a good grade.

Nothing short of rocket attack would have prevented me from doing that for him.

Sandra and I have tried to make R&Rs occasions to remember. We've taken our sons to Hawaii, Germany and France. We're working on plans for another trip in a couple of months.

Overall, working in Afghanistan is worth the trade-offs. It presents opportunities to be involved in a worthwhile cause, and a passageway to new career opportunities.

Before committing to a lengthy deployment in Afghanistan, I discussed the idea with my wife and sons over several months as the hiring process moved along. They understood my reasoning. They also understood the responsibilities and changes they would endure as a result.

They supported my decision. And they've supported each other during my long absences.

Though we're thousands of miles apart, we remain a close family; maybe even closer than we were before. Our communication is deeper and more thoughtful. Our time together is more appreciated.

On New Year's Day, I'll call home and we toasted our good fortune with sparking grape juice on different sides of the planet.

And along with Brandau, Jordan, Wise and every other deployed military parent, I'll have renewed respect for our respective spouses, the parents who are looking out for the children on the homefront every day, the parents who are doing the most to keep the kids from becoming a statistic in the next report.

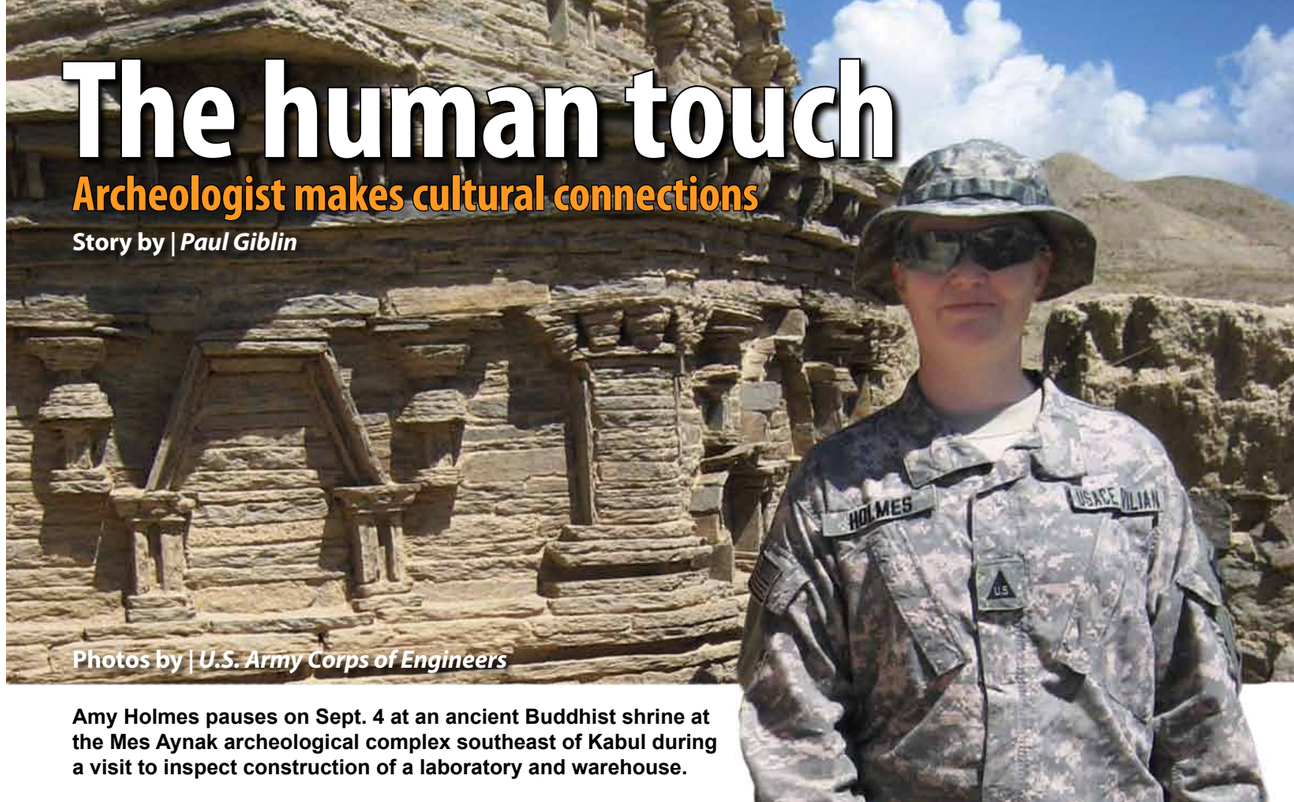
Photos by | *Giblin family*

Paul Giblin with sons Casey, 19 (center), and Tim, 16 (right), at a University of Arizona football game in Tucson during an R&R

The human touch

Archeologist makes cultural connections

Story by | *Paul Giblin*



Photos by | *U.S. Army Corps of Engineers*

Amy Holmes pauses on Sept. 4 at an ancient Buddhist shrine at the Mes Aynak archeological complex southeast of Kabul during a visit to inspect construction of a laboratory and warehouse.

KABUL – Long Beach archeologist Amy Holmes, who has built a career studying the nuances of ancient civilizations by examining artifacts they left behind, spent the past year learning firsthand about Afghan culture by working and living in the Islamic country.

Holmes, 38, served as a civilian employee of U.S. Army Corps of Engineers, redeployed to the Los Angeles District on Dec. 5, concluding a year-long tour during which she headed programs designed to teach job skills and to provide humanitarian assistance to the populace.

She worked closely with both Americans and Afghans on a program designed to teach engineering skills to an emerging generation of Afghan college students.

The program is critical to the United States' exist strategy for Afghanistan, because the new wave of engineers are expected to run and maintain hundreds of Afghan army and police buildings the Corps of Engineers has built during the past six years, she said. The country has a dearth of engineers because many of Afghanistan's educated residents fled the country while its universities deteriorated during decades of Soviet and Taliban rule.

One of the most rewarding projects during her tour was purchasing and delivering engineering textbooks for several universities across the country, Holmes said before she left Afghanistan.

"The engineering students at Kabul University were using either Russian textbooks from the '80s, or they were using photo-copied textbooks, so they

had a real urgent need," she said.

New books were purchased using funds made available through the Commander's Emergency Response Program, which are earmarked for humanitarian needs. The project was underway before Holmes arrived in Afghanistan, but she took over during the early stages and oversaw the program as books were delivered to five of six universities.

One of her most memorable experiences occurred in March when about 40 people worked together to unload books from a delivery truck at one of the universities.

"We formed a big line. It was neat because it was U.S. military and Afghan students. We all handed the book boxes from one to another and stacked them into their library. It was a fun group exercise," Holmes said.

The books have had a significant and immediate impact on the quality of education, said Susan Repon, an electrical engineer who serves as a quality assurance representative for the Corps of Engineers in northern Afghanistan.

Before the books were made available to the students, engineering student lacked the educational background to even ask questions about U.S.-quality engineering matters. They are absorbing the material quickly, and now are able to ask their American mentors technical questions, Repon said.

> **"I wouldn't have been able to do it without my husbands support."**

The Afghan students value the textbooks and efforts by Holmes and others to deliver the materials, said Repon, who is on temporary assignment from the Seattle District of the Corps of Engineers.

"The books are still in great shape," she said. "The students leave them in the library. They can use them on campus, but they can't take the books home, so they stay in great shape. They are so proud of those books."

Holmes also worked with U.S. Embassy and military personnel on an archeological project in Mes Aynak, a world-renown archeology site southeast of Kabul.

The Corps of Engineers designed a temporary warehouse

U.S. and Afghan personnel inspect foundation work for a laboratory and warehouse at Mes Aynak on Sept. 4.

for hundreds of 1,400-year-old Buddhist artifacts that an international team of archeologists is removing at a furious pace. The 9,800-acre site is slated to become one the world's largest open-pit copper mines soon. Bulldozers could start turning earth as soon as next year.

Her most significant cultural experiences were gained while working side-by-side with Afghan men and women employed by the Corps of Engineers at the Afghanistan Engineer District-North headquarters compound in Kabul.

For instance, Holmes typically wore her strawberry blond hair in braids, unlike virtually all Afghan women who cover their hair with head scarves. Both Afghan men and woman commented about her "hair pattern."

Amy Holmes prepares to travel aboard a Blackhawk from Kabul to Bagram for a conference on the Commander's Emergency Response Program on July 6.

More importantly, she learned that talking about an Afghan man's wife or daughters, even in the most casual way, is strictly taboo. It's considered an invasion of privacy. The standard even applied to a friendly Afghan colleague who had worked in the same office for months.

"In the United States, you go to work and you get to know your co-workers. 'How's your family? How's your wife? What did you do this weekend?' I started saying things similar to that and he just dodged the questions about his wife," Holmes said.

Once, after returning from a three-week vacation to Long Beach, she showed her Afghan co-worker photos from her trip. The colleague considered one of her photos particularly scandalous. The snapshot showed Holmes and her husband Joe Harris kissing on the front porch of their home.

"He said, 'Whoa! That's your husband. And who's that?'" Holmes recalled. "I said, 'That's me.' He said, 'Whoa!'"

After several months, the Afghan co-worker showed Holmes photos of his wife and daughters, but he never disclosed their names, she said.

The most difficult aspect of her tour was trying to maintain relationships with friends and family members in the United States, Holmes said. "You really get to know who you're friends are very quickly. You get to know who sticks by you, who talks to you on Facebook, who sends you e-mails," she said.

Some of her friends stopped communicating with her altogether because of their opposition to the war. "That was tough," she said.

In contrast, the physical separation drew Holmes and her husband closer together. "I wouldn't have been able to do it without his support. He kept the household under control and was always there for me when I needed to talk," she said.

They spoke by phone frequently.

Somewhat ironically, the most difficult aspect of returning to Long Beach was parting with her new cadre of friends in Kabul, Holmes said.

"I've made some great friends here," she said shortly before leaving. "You work with people and you see them so many hours during the day. Your world revolves around a certain group of friends that you see constantly. It's going to take an adjustment to move from one world back into another world."

U.S. Army Engineering and Support Center commander Col. Nello Tortora (left) greets Afghanistan National Army program project manager Joan Pamerien on Nov. 11, as supervisory workforce manager Stephanie Tucker looks on.

Huntsville commander checks in with employees in Afghanistan

KABUL – U.S. Army Engineering and Support Center commander Col. Nello Tortora and top members of his staff from Huntsville, Ala., thanked a group of Huntsville employees on Nov. 11 for contributing to the Corps of Engineers' mission to rebuild Afghanistan's ravaged infrastructure.

Tortora, Huntsville deputy commander Charles Ford and Huntsville director of ordinance and explosives Mike Hubbard rendezvoused with eight Huntsville employees at the Qalaa House compound, which serves as the headquarters for the Corps of Engineers in northern Afghanistan.

> **"None of us would be here to do our jobs without the support that you and all of the supervisors back at Huntsville Center have provided."**

Tortora thanked them for leaving the comforts of home to live and work in Afghanistan for periods ranging from six months to two years. Tortora met the employees during a weeklong tour in Afghanistan that focused on mine clearance and environmental remediation, which are areas of expertise among Huntsville Center personnel.

"This whole effort over here is the No. 1 priority for the Army Corps of Engineers," the colonel the employees. "There is no more important program than what you all are doing."

The Corps of Engineers' assignment to construct facilities for Afghanistan's army and national police force, and to build roads, dams and other infrastructure systems, tops the Corps of Engineers' duties with Defense Base Closure and Realignment program or any other big-ticket project in the United States, he said.

A factor that makes the team in Afghanistan even more exceptional is that the workforce is comprised piecemeal of Corps of Engineers employees and other government workers from across the United States and the world, he said.

"We don't have a group of civilians that are ready to just come on over here. We don't have them just standing by waiting to come over here. It's all volunteers," Tortora said.

"One of the things we're really proud of in Huntsville – and it's certainly because of you all – is that we've had well over our percentage of volunteers for the size of the organization that we are in Huntsville. I'm really proud of that because it shows that we have people in Huntsville who want to volunteer and want to make a difference for the Army Corps of Engineers and here in Afghanistan," he said.

Overall, about 16 Huntsville employees are on temporary assignments with the Corps of Engineers at locations across Afghanistan, which is the size of Texas. Eight other Huntsville employees are on assignments with other organizations in Afghanistan.

Tortora gave a commander's coin to each of the employees at Qalaa House for accepting the challenges and hardships associated with working in a war zone. The employees: program specialist Shah Alam, senior electrical engineering technician Paul Anderson, program manager Omar Ching, human resource specialist Jennifer Haapoja, contract specialist Nicholas Haas, financial management specialist Carla McNeal, construction representative James Nicolas and supervisory workforce manager Stephanie Tucker.

Then the eight presented Tortora, Ford and Hubbard flags that were flown in Kabul on Sept. 11, 2011 – the 10th anniversary of the terrorist attacks that preceded the war.

"We would just like to thank you for your support," Haapoja said while presenting the flags, which were framed along with certificates noting when they were flown. "None of us would be here to do our jobs without the support that you and all of the supervisors back at Huntsville Center have provided," she said.

The employees asked Tortora to accept a fourth flag for Dan Heinzelman, the Huntsville chief of resource management, who also has encouraged employees to work in Afghanistan. Heinzelman did not make the trip.

Afghanistan National Army program project manager Joan Pamerien, a former Army captain who has known Tortora since 1985, joined the group. She works for the Baltimore District.

Before the meeting, the colonel said he welcomed the opportunity to reconnect with Huntsville employees while more than 7,400 miles from the home office. Working in Afghanistan provides a once-in-a-lifetime opportunity for both professional development and personal fulfillment, he said.

"To be quite honest, the folks that generally volunteer to come over here are some of our more motivated people to begin with. When they come back, I think they have a better appreciation for the Corps' mission overall, a better appreciation for how they fit into the Army, and how they support the nation," he said.

Holiday reunion

Mother and son share Thanksgiving in Kandahar

Story and photo by | *Karla Marshall*

U.S. Army Corps of Engineers civilian Cheryle Hess got together with her Soldier son Thomas for Thanksgiving.

KANDAHAR, Afghanistan – Deployed Soldiers and civilians rarely expect to see family members during their deployments, so when a mother and son had the opportunity in Afghanistan, they grabbed it.

Cheryle Hess, 55, serves as the chief of Operations and Maintenance for the Afghanistan National Security Forces for the U.S. Army Corps of Engineers in Kabul in the northern portion of the country. Her son, Army Sgt. Thomas Hess, 29, serves as a geospatial engineer assigned to the 1st Stryker Brigade, 25th Infantry Division at Forward Operating Base Masum Ghar near Kandahar in the southern part of the country.

Yet, they spent part of Thanksgiving week together.

"I had to attend a conference at Kandahar Airfield and learned that at the same time Tom may be attending training there, so I was hopeful we could be together for Thanksgiving," said Cheryle, a retired Army Reserve lieutenant colonel from Great Falls, Va.

> "I am really grateful for this opportunity to spend time with my son."

"Coming from a military background and a military family, I knew the likelihood of me seeing Tom was remote, but it was worth a shot."

Tom checked with his brigade deputy commander and sure enough, his training was scheduled during the same time his mother would be at Kandahar. "I wasn't sure if I could see her, but when I talked to the brigade deputy commander, he gave me great news," said Tom, who graduated from Langley High School in McLean in 2001.

Both Cheryle and Tom spent a few days before Thanksgiving together at Kandahar Airfield, which is a large international military base 300 miles south of Kabul. Cheryle treated Tom and a few of his friends to dinner at a base restaurant called the Four Seasons and enjoyed meeting Tom's military colleagues.

"The rest of our family is back in the United States," said Cheryle, who began a yearlong tour in July. "But this is the next best thing."

Tom, who was married just a few months before he deployed for a yearlong tour in April, was grateful to have his mom close by. "I miss being home with my wife, Molly, and the rest of our family, but having my mom here is awesome," he said.

The Hess family is close-knit. Cheryle's husband Ron is an engineer who developed the computer hardware Tom uses in his job in Afghanistan. Her daughter Heather's husband Scott Yanoska developed the software for the system. "When I have computer issues at work, I can call my dad or my brother-in-law to troubleshoot," Tom said. "I'm lucky to have them both a short phone call away."

Cheryle agreed that strong family ties have made their time away easier. "Our family really works together in so many ways. My daughter is keeping everything running smoothly at our home in northern Virginia, which made it possible for me to deploy."

Tom returned to Masum Gahr from Kandahar on Nov. 22; Cheryle joined him there the following day. She served a Thanksgiving meal to the troops and got to meet more of Tom's co-workers and friends. Everyone in the unit was supportive of her visit to the small base, which made the time exceptionally memorable, she said.

"I am really grateful for this opportunity to spend time with my son," Cheryle said. "Not many people get to spend a holiday with loved ones while they're deployed."

At home, Cheryle serves as the chief of Installation Logistics as a civilian employee of the Army in the Pentagon. Tom is stationed in Fairbanks, Alaska.

Thomas, of Fairbanks, Alaska, and Cheryle, of Great Falls, Va., reunited in Kandahar.

Parting shot

Photo by | *Jon Jorgenson*

GHABIBL, Afghanistan – U.S. Army Corps of Engineers engineer Steven Zuk (center left) instructs Afghan construction workers in proper stone masonry practices at a school construction site in Khost Province on Nov. 16.

Corps of Engineers personnel are directing construction of two 10-classroom buildings – one for boys and one for girls respectively. The Jaji Maidan School, at a cost of $344,000, will provide the first indoor classrooms for girls in the region. Previously, girls attend class outdoors, if they attend school at all, Zuk said.

The work is being handled by Ziaullah Roads and Building Construction Co., which is based in Kabul. The project began in May 2011 and is scheduled to be complete in March 2012.