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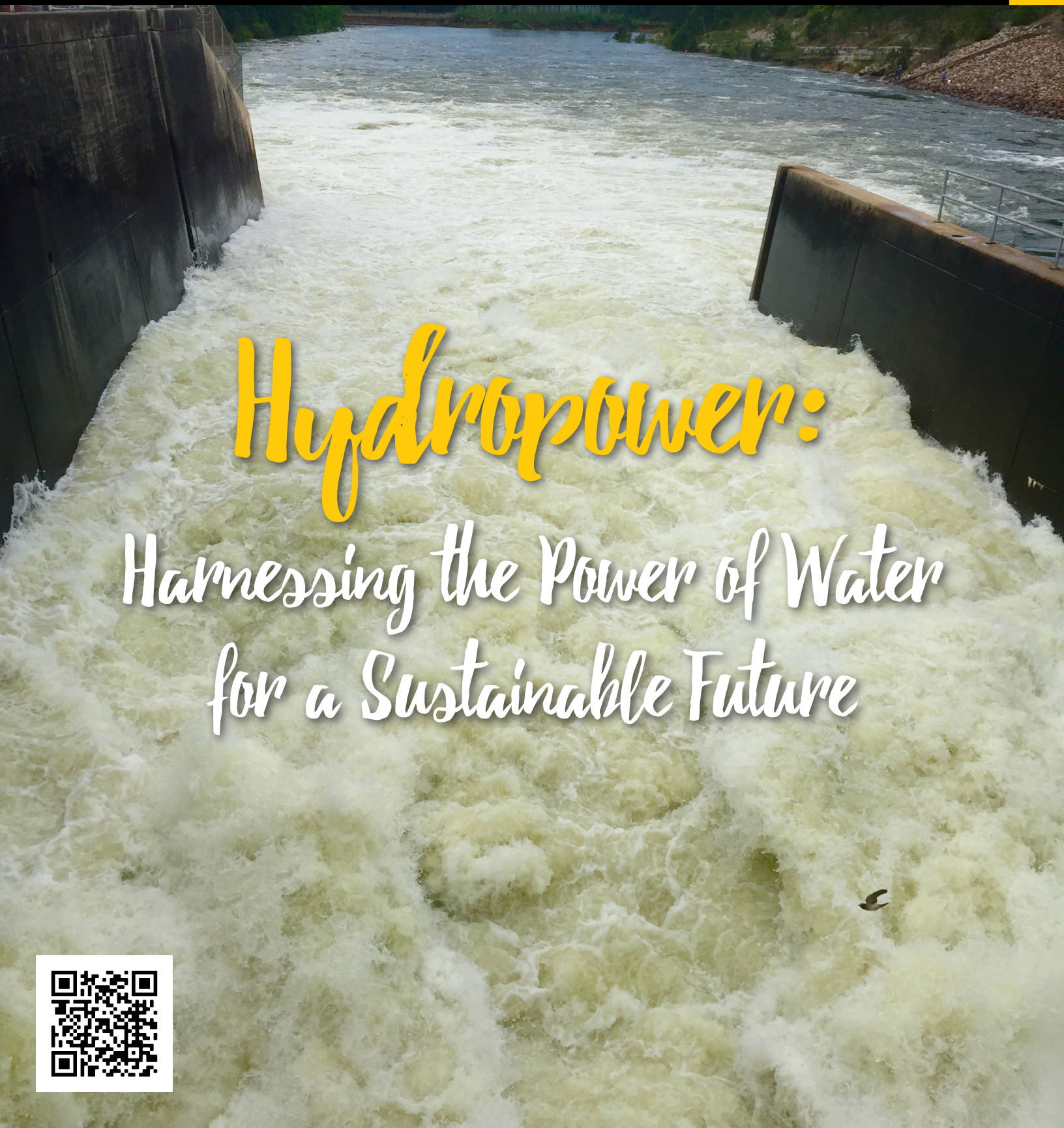
Fort Worth District
CORNERSTONE MAGAZINE



Hydropower:
Harnessing the Power of Water for a Sustainable Future

Cornerstone Magazine

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Cornerstone Magazine

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Commander & DPM Column

As I reflect on the past year since assuming command of the Fort Worth District, I am filled with a profound sense of pride and gratitude. Our achievements over the last twelve months are a testament to the dedication, professionalism, and hard work of each member of this incredible Team of Teams!

We have navigated numerous challenges and have accomplished significant milestones. From my first 30 days in command witnessing End of Year closeout to visiting every office across our vast district, our collective efforts have consistently exemplified the highest standards of excellence and commitment to our mission.

One of the most rewarding aspects of this past year has been witnessing the unwavering teamwork and camaraderie that define our district. Every project, big or small, has showcased our ability to collaborate effectively and support one another, ensuring the success of our mission and the well-being of our communities.

As we move forward, I am confident that our district will continue to lead with innovation, resilience, and integrity. The challenges ahead are formidable, but with the same spirit and determination that has brought us this far, we will undoubtedly rise to meet them.

Thank you for your tireless dedication and exemplary service. It is an honor to lead such a distinguished group of professionals and technical experts in the best district in the U.S. Army Corps of Engineers. I look forward to all that we will accomplish together in the coming year as we celebrate our 75th Anniversary as the Fort Worth District.

In closing I want to welcome COL George Walter and his family to the Southwest and Pacesetter Team!"

Essayons. Cornerstone of the Southwest!

#28

COL Calvin A. Kroeger
Fort Worth District Commander

As we approach the 75th anniversary of the Fort Worth District I want to take a moment to reflect on our remarkable journey since our establishment in 1950.

From our early projects to our current endeavors, the Fort Worth District has consistently demonstrated its commitment to engineering solutions for our nation's toughest challenges.

Our success is deeply rooted in the strong partnerships we have cultivated over the years. As we look to the future, it is essential that we continue to nurture and expand these valuable partnerships, ensuring that we remain a trusted and reliable partner in every endeavor.

Our civil works efforts have resulted in preventing over $156 billion in flood damages for the citizens of Texas, while our military teams have significantly improved the quality of lives of our Soldiers through military construction amongst the military installations in our AOR. And our Interagency team has significantly improved national security through border infrastructure development. They are also improving the care for our veterans by building new medical care facilities.

One of our greatest achievements has been our unwavering commitment to keeping people safe. Whether through our robust infrastructure projects, flood risk management efforts, or our responsive emergency deployments, we have consistently risen to the occasion. I am particularly proud of how our team steps up to fill critical roles during deployments, exemplifying the true spirit of service and resilience.

As we prepare to commemorate 75 years of the Fort Worth District, let us all recommit to upholding the legacy of the U.S. Army Corps of Engineers.

Thank you for your dedication and hard work. Here's to many more years of success and innovation.

ESSAYONS!

Mr. Arnold "Rob" Newman
Deputy District Engineer,
Programs and Project Management

The Importance of Safety in the Workplace:
A Focus on the Fort Worth District's Safety and Occupational Health Program

By: Benoit Palmer, Chief of Safety

Safety and occupational health are indispensable aspects of any workplace. This holds especially true for organizations like the Army Corps of Engineers, a vital branch of the military responsible for infrastructure development and environmental stewardship. We must prioritize safety and occupational health to ensure the well-being of our personnel and the successful completion of our mission. In this article, we will explore why safety and occupational health are of utmost importance in the workplace, particularly within the context of the Fort Worth District of the Army Corps of Engineers.

The primary reason for prioritizing safety in the workplace is to preserve human life. The district engages in various high-risk activities such as construction, demolition, natural resource stewardship, and hydropower generation. By implementing stringent safety protocols, training programs, and utilizing appropriate Personal Protective Equipment (PPE), the organization can mitigate potential risks and protect the lives of its personnel.

Promoting safety in the workplace helps prevent accidents and injuries. The district operates in diverse environments, including construction sites, waterways, and disaster zones. By adhering to safety guidelines, conducting thorough risk assessments, and maintaining well-maintained equipment, the organization can minimize the occurrence of workplace accidents, reducing the physical and emotional toll on the workforce.

Safety measures contribute to operational efficiency and productivity. When employees feel safe and secure in their work environment, they can focus on their tasks without distractions or concerns about their well-being. By investing in safety training and implementing proactive measures, the district can enhance the performance and efficiency of its workforce, leading to successful project outcomes.

The Fort Worth District, like any other organization, must comply with local, state, and federal safety regulations. Failure to meet these standards can result in legal penalties, reputational damage, and compromised operational capabilities. By prioritizing safety and staying abreast of regulatory requirements, the organization ensures compliance and maintains its credibility as a responsible and accountable institution.

A strong safety and occupational health culture fosters a positive work environment and boosts employee morale. When employees perceive that their well-being is a genuine concern, they feel valued and motivated. As a district, we should encourage open dialogue about safety, promote reporting of near-misses and hazards, and recognize and reward safe practices. This helps create a culture where safety is ingrained in everyday operations and becomes a shared responsibility among all personnel.

Safety is paramount in any workplace, and the Fort Worth District of the Army Corps of Engineers must prioritize it to fulfill its mission effectively. By preserving human life, preventing injuries, enhancing operational efficiency, ensuring regulatory compliance, and cultivating a positive safety culture, the organization can create a work environment that is conducive to success. The district should continually strive to improve safety practices, invest in training and resources, and foster a culture where safety is everyone's responsibility. By doing so, the organization can protect its personnel, optimize its operations, and continue to contribute to national security and infrastructure development.

Following His Own Road

Story and Photos by: Pat Adelmann

It's a long road from private to lieutenant colonel in the U.S. Army, a road filled with highs and lows, twists and turns. For Lt. Col. Joshua Haynes, it's also been a road traveled with the help of family, friends and mentorships.

One such friend and mentor is Maj. Gen. Kimberly Colloton, U.S. Army Corps of Engineers Deputy Commanding General for Military and International Operations. The two first met when Haynes was a captain.

Now Colloton found herself presiding over a ceremony at the Fort Worth Club, Nov. 6, 2023, during which time Haynes was being promoted from major to lieutenant colonel.

"This is a really special event, and it's truly an honor to be here to be able to promote one of our very best engineers to the rank of lieutenant colonel," said Colloton. "The Army doesn't hand out promotions for what you have already accomplished. Rather you've been selected for this rank for what our nation needs from you now, and into the future."

For Haynes, who has served as the deputy district commander for the Army Corps of Engineers' Fort Worth District since August of 2022, this is not his first meeting with Gen. Colloton. The two first met at Joint Base Lewis McChord when Haynes was a freshly pinned captain. He was the only staff engineer in 2nd Stryker Brigade Combat Team – 2nd Infantry Division and was challenged to execute the guidance of the operations and executive officers on the staff. So, he went to find assistance.

"I walked into the headquarters 555th Engineer Brigade and I looked for anyone that was sitting at their desk, and said 'I need help,'" Haynes said, remembering that first encounter.

It just so happened that it was Colloton who was sitting at their desk. She asked how she could help to which Haynes, being brutally honest, stated he wasn't sure what he needed to do as the only engineer on the brigade staff.

And that started the working lunches where she coached him on what he should be doing and placed him on a road to future success.

A decade later, when Haynes arrived for duty with the Army Corps of Engineers' Transatlantic Division, he was directed to see the commanding general to receive a briefing. It just so happened that the commanding general was Gen. Colloton.

"She asked me what I thought I was doing in the new assignment," Haynes said. To which he listed all the known projects and significant customers that he would be working with while in Jordan.

Colloton simply responded with, "Yeah, but I need you to do this instead."

This included significant tasks such as building a relationship that needed to be built between the U.S. Air Force and the U.S. Embassy in Jordan. Colloton went on to explain that Jordan was, and still is, a strategic ally and an important country to the U.S.

"That has been a reoccurring theme of getting help from others," said Haynes.

Having the opportunity to learn from others every day has been important to Haynes throughout his career. He gives credit for his success to this point to those he has met and the duty stations he has been assigned to.

"I know that the Amy will continue to select Josh for increased responsibility, and he will command somewhere," said Colloton. "We will continue to witness his humble hard working and servant leadership and the values that grew from those first foundational blocks that were laid down in Kansas."

What lies ahead in this next chapter, no one knows. But one thing is for sure, Haynes is ready to mentor the leaders of tomorrow. ■

THE CORNERSTONES OF THE DISTRICT

Story and Photos by: Pat Adelmann

The U.S. Army Corps of Engineers' Fort Worth District held their annual Administrative Professionals Day luncheon before a packed audience on April 30, at the City Club in Fort Worth.

Administrative professionals are the backbone of the U.S. Army Corps of Engineers' Fort Worth District, providing essential support and ensuring the smooth operation of daily tasks. From managing budgets and coordinating schedules to handling correspondence and organizing files, these professionals play a crucial role in keeping the district running efficiently.

The theme for this year is celebrating the cornerstone of the office," said Kelly Beck, the guest speaker for the event and retired operations division administrative officer. "A cornerstone is a stone that forms the base of a corner of a building, joining two walls, usually set in a prominent location. In many ways, that's what the administrative professional does, they hold the walls together and keep the building standing upright and tall. The backbone of the organization if you will."

Recognizing administrative professionals with this special day is an opportunity to show appreciation for the hard work and dedication of administrative professionals and to thank them for all that they do. They are often the first point of contact for visitors, representing the district with professionalism and courtesy. They are responsible for creating a positive first impression and maintaining a welcoming and organized office environment.

In addition to their day-to-day responsibilities, administrative professionals also play a key role in supporting the overall success of the district. They work closely with senior leaders and managers to help them stay organized and focused on their priorities. They may assist with research, data analysis, and project management, helping to streamline processes and improve productivity.

"This celebration has gone through several variations to echo the changing titles and responsibilities in the modern workforce," said Col. Calvin Kroeger, commander of the Fort Worth District. "While the titles may have changed over the years, the purpose of this event remains the same, to recognize the many contributions of these dedicated and respected professionals, what you could call the cornerstone of the offices."

Administrative professionals must possess a wide range of skills to excel in their roles. They must have strong communication skills, both written and verbal, to effectively interact with colleagues, visitors, and vendors. They must also be highly organized and detail-oriented, able to juggle multiple tasks and deadlines simultaneously.

Despite the demanding nature of their roles, administrative professionals are often unsung heroes in the workplace. They work behind

the scenes, quietly ensuring that everything runs smoothly and efficiently. Their hard work and dedication are essential to the success of the district.

"Administrative professionals provide real value to the offices they provide support for and the district at large. Their efforts should not, and will not, go unnoticed," said Kroeger.

This year, leaders across the district nominated 11 well-deserving administrative professionals for the title of the Fort Worth District's Administrative Professional of the Year.

They are:

- Marie Cardenas from Regional Planning Environmental Center
- Lynn Chapman from the Executive Office
- Alonzo Fielder from Operations Division
- Danyell George from Operations Division
- Vista Graham from Engineering and Construction
- Debra Herry from Operations Division
- Dorlinda Jackson from Engineering and Construction
- Karen Lister from Operations Division
- Brittany Shannon-Cubit from Operations Division
- Adamma Smith from Contracting
- Cynthia Wiginton from Operations Division

This years' winner, Lynn Chapman, has worked for the district for over 19 years, supporting eight different commanders. Chapman is known throughout the district as being wise, fair, and fastidious towards any documents that would see the commander's eyes.

Not one to seek attention, and true to her humble self, she diverted attention from her award and praised all the nominees.

"Congratulations to all the nominees today for your hard work," said Chapman as she accepted the award with tear-filled eyes. "For the admins that I've probably been really rough on, it's because I saw potential in you. I saw great potential in all of you and I hope I didn't scare you away. I hope our friendship will remain continuing on and on and on."

Administrative professionals like Chapman, are the unsung heroes who form the cornerstone of any successful organization. Recognizing and valuing their crucial role is not just a matter of appreciation but a strategic imperative for any organization aspiring to achieve excellence.

"Given the significant part many administrative staff play in supporting their teams in today's quickly developing workplace, they deserve to be highlighted now more than ever," Kroeger said when thanking the nominees.

The Author - Pat Adelmann

Pat Adelmann is a Public Affairs Specialist at U.S. Army Corps of Engineers, Fort Worth District.

A Distinguished Civilian: AN ADVOCATE OF TRUST

Story by: Brittany Scruggs
Photos by: Pat Adelmann

In the 1970s, Fort Worth District leadership took action to preserve the legacy of the outstanding people who contributed above and beyond expectations towards mission success of the district. The first "class" of 10 inductees to the District's Gallery of Distinguished Civilian Employees was in 1978.

On March 14, 2024, over 50 friends and family of the district celebrated as the 71st inductee, Mr. Donald Wiese, was honored for his accomplishments.

Col. Calvin Kroeger, commander, Fort Worth District, U.S. Army Corps of Engineers, opened the ceremony with welcome remarks. "Don is a true steward of our engineer regiment and our profession, and it is an honor to recognize him today."

"I had the pleasure of speaking with Don and his wife Kim, and I can see why he was nominated for such a prestigious award," Kroeger stated.

Donald Wiese began his federal career with the Fort Worth District in 1974 as a park ranger at Benbrook Lake. This role laid the foundation for a career of excellent service and contribution.

As Don quickly advanced in his career, he assumed lead roles at the district office for multiple high-visibility initiatives within the operations division. His outstanding achievements during this period included preparation of district-wide policy and guidance on shoreline management, forest management, hazardous tree management, natural resources mitigation, endangered species management, and National Environmental Policy Act (NEPA) implementation.

Tim MacAllister, chief of operations division, recalled moments where Don's impact truly shined.

"Don's reputation, and expertise enters the room before he does, especially with navigating through many challenges with NEPA," MacAllister said. "The biggest lesson I learned from him was how we can balance the mission without sacrificing our principles and maintaining the wildlife management areas as needed."

Don implemented the environmental review guide for the operations division's environmental compliance program in the Fort Worth District and organized major timber salvage efforts after record flood

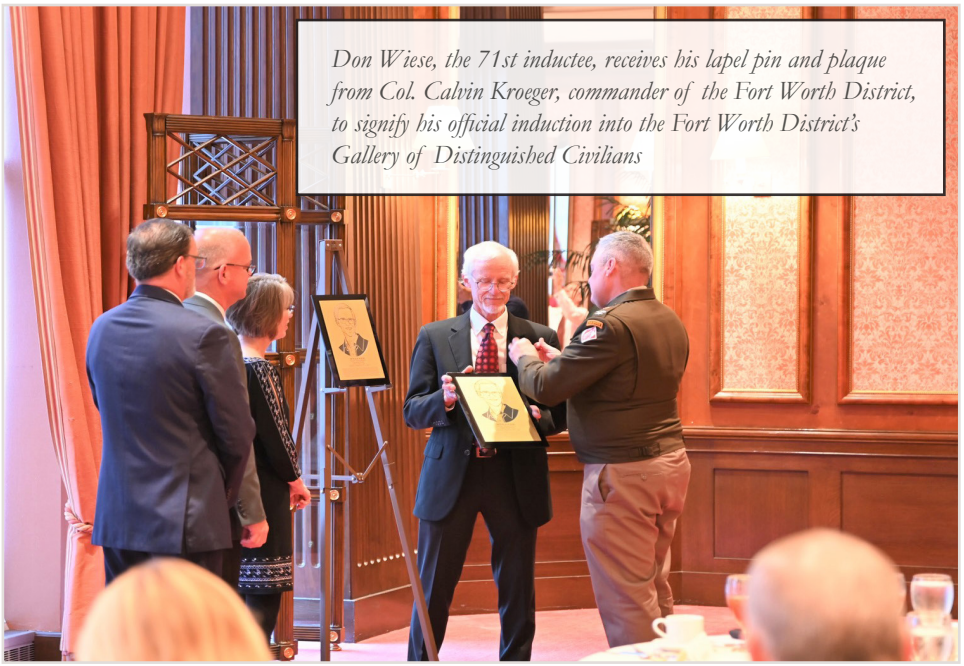
events in East Texas. He played a key role in the operation and maintenance oversight of the 25,000-acre white oak creek mitigation area during the district's mission expansion from 16 to 25 multipurpose reservoirs.

Don also worked on emergency operations associated with Hurricane Rita in 2005, Hurricane Ike in 2008, and the Arkansas Ice Storm in 2021.

Don was also appointed as the environmental stewardship business line manager for the district and contributed to multiple national level working groups, to include the national stewardship advisory team, to advise and bring awareness to needed and on-going ecosystem management research and performance measures related to operational USACE projects.

He consistently provided technical input, leadership, and management for assigned studies, primarily lake project master plan revisions, to ensure national/regional water resource, recreation, natural resources, and real property needs were addressed. These efforts covered 15 different lake projects across six different districts.

Don impressively surpassed all challenges presented in his unwavering support to the Fort Worth District. His biggest challenge included the development of environmental stewardship training utilizing a two-phase training program for more than 100 park rangers, lake managers and natural resources specialists. The training was comprised of land management history and policy followed by specific emphasis on processing land use requests, managing encroachments, and pursuing proactive management of natural resources.



Don Wiese, the 71st inductee, receives his lapel pin and plaque from Col. Calvin Kroeger, commander of the Fort Worth District, to signify his official induction into the Fort Worth District's Gallery of Distinguished Civilians

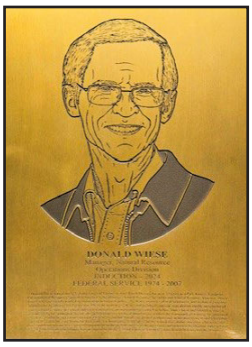
Don retired in December of 2007 with 33 years of expertise, mentoring, and leadership under his belt, but returned to the district as a rehired annuitant on four separate appointments between 2008 and 2021.

Arnold Newman, deputy district engineer, reflected on Don's biggest impact post-retirement. A key aspect of his work being the production of quality operations master plans within the operations division's budget framework.

"After Don's retirement, we persuaded him to return as a rehired annuitant for five more years in the regional planning and environmental center," Newman explained. "It was at this time that he made his biggest impact on the district, region and enterprise by partnering with Eric Irwin to build the RPEC's reputation into a nationally recognized entity for quality master plans and being the go-to center for teaching others how to do operations master plans."

Apart from his five years working in RPEC, Don spent the greater part of his career in the operations division. He has continued to be a pillar for the district and community at large by being an advocate for people, readiness, and partnerships.

For more than 40 years, Don Wiese has played a pivotal role in the overall success of the operations and maintenance missions and has exceeded the expectations placed upon him in support of the U.S. Army Corps of Engineers, Fort Worth District, and the Nation! ■



SWF Training Supervisors to be Better Leaders

Story and Photos by: SWF Public Affairs

Understanding the critical role supervisors play in the careers of their staff and employees, the U.S. Army Corps of Engineers' Fort Worth District held a Supervisor University training class for more than 100 district employees at the district headquarters, Feb. 27-28, 2024.

Fort Worth District deputy commander, Lt. Col. Joshua Haynes, kicked off the event with a leadership brief, followed by keynote speaker, Sam Zakhem, the HQ USACE branch chief for Performance Management and Data Analytics in Military Programs.

The Supervisor University training is a creative and innovative training initiative to enhance both leadership and supervisor roles. The training focused on the soft skills that leaders need to possess. Included in the training were self-assessment classes such as Knowing Oneself, Listening and Speaking Skills, The Secrets of Effective Teams/Conflict Management and Relevance of Leadership Training.

It is well-known that quality leadership, from top to bottom, is a vital component of maintaining a vibrant and effective workforce.

"I think we have good supervisors in the district that are very knowledgeable in their fields," said Mitch Mosler, the U.S. Army Corps of Engineers' Fort Worth District training coordinator and workforce development specialist. "Most are good at taking care of their personnel but still need valuable tools to make them more successful in their leadership role."

At first glance, one might think that leaders and supervisors are synonymous; however, there are some subtle and distinct differences between the two. Not all supervisors are good leaders, not from lack of effort, but they may not have the tools, training, or experience needed to be effective in their current role.

Leaders tend to concentrate more on the resources and goals of their team or organization.

"I really wanted to focus on the leadership aspect in this training session as most civilian supervisors don't get the leadership training that I, and most veterans, received coming up through the military," said Mosler.

With a curriculum focused on building soft skills, Zakhem was a natural choice to bring to the front of the class.

During the pandemic, he created over 15 leadership development modules on his initiative, to on-board remote branch employees and keep them connected.

The U.S. Army Corps of Engineers' Fort Worth District held a Supervisor University training class for more than 100 district employees at the district headquarters, Feb. 27-28, 2024.

His training courses were so successful, he is now sought out USACE-wide, and beyond, to deliver his classes.

"I've been doing these sessions for four years now, reaching around 25,000 students in total attendance," said Zakhem. "Four years ago, the pandemic triggered unplanned and massive changes in where and how we live and work. I found that over the years, we tended to focus, almost exclusively, on technical skills and processes and that's not enough in a fast-changing and volatile world."

Aside from the training presented to the Fort Worth District, Zakhem has also delivered sessions to the USACE Professional Women Network, the HQ Small Business Office, Omaha District Contracting office, the Transatlantic Middle East District and Baltimore District Leadership Development Programs.

Other federal agencies such as the Defense Logistics Agency and FEMA-Puerto Rico have come to Zakham for training as well.

"I thought the instructor presented the material in a very understandable way," said Gerard Henry, Fort Worth District deputy chief of Contracting. "He was able to translate leadership concepts that we learned as military officers into the civilian perspective. The course helped me to expand my thought processes and put things into perspective when it comes to managing, training, and mentoring my personnel."

The Civilian Personnel Advisory Center provided other classes during the Fort Worth District's Supervisor University training which centered on personnel issues such as avoiding management-created problems, addressing misconduct issues, probationary periods and grievances and appeals.

"It is my intent to offer this course at least two times a year, with our next training scheduled in October," Mosler said. "A survey goes out to the supervisors to inquire on which subjects they consider most valuable, and I reach out to the appropriate trainers and resources for that training need."

Other programs and initiatives the district offers to train and develop its employees include Prospect courses, the Leadership Development program, and the Mentorship program.

USACE Fort Worth District Website

Meet U.S. Army Corps of Engineers, Fort Worth District Operations Technical Maintenance Lead Engineer Deanna Pienaar who is deployed to Maui helping with the Hawai'i Wildfires federal response. In her home district Pienaar performs routine inspections at dam projects in the Trinity region, completes works projects in her assigned area, and scopes and executes repair and construction projects at the dams.

In Maui, Pienaar is an Office Engineer at the Emergency Field Office in Lahaina where she assists in helping the debris removal mission run smoothly.

"I volunteered to contribute to the mission in way I can, and my background and experience can help the wildfire mission activities," said Pienaar. "Also, I wanted to learn the specific expertise USACE has to respond to missions at any time as needed. The more I learn and know the more I can contribute."

This is Pienaar's first deployment with USACE, but she has other non-USACE disaster response experience. Pienaar said that this mission will stay with her.

HAWAI'I WILDFIRES RESPONSE MISSION
USACE EMPLOYEE SPOTLIGHT

DEANNA PIENAAR
TECHNICAL MAINTENANCE LEAD ENGINEER
USACE - FORT WORTH DISTRICT

US Army Corps of Engineers®

U.S. ARMY

“I am definitely going home a different person. The personal and cultural connection to this work is not anything I have experienced before; this experience has had a profound impact on me and will stay with me forever.”

Hydropower:

Harnessing the Power of Water for a Sustainable Future

Story and Photos by: Pat Adelmann

As the gates leading from Sam Rayburn Lake open, the water rushes towards the Kaplan turbines some 100' below. The river begins to rise and swell below the dam as the ground below your feet vibrates with the power of the water's flow. Fifty megawatts of electricity enter the grid to power homes near and far.

"Hydroelectric generators are unique in the expedient way they can start and be producing power to the grid," said Thomas Webb, Piney Woods regional hydropower manager for the U.S. Army Corps of Engineers, Fort Worth District. "A hydroelectric generator can start and be producing electric power in a matter of 5-10 minutes, unlike fossil fuel or nuclear power plants."

According to the Corps of Engineers Hydropower Center of Excellence, hydropower is the largest single renewable source of electricity, generating more than all other renewable technologies combined: 27% of all renewable electricity; 6% of all electricity and 1% of all primary energy.

Hydropower is the process of converting the energy of flowing or falling water into electricity. It is a versatile and flexible energy source that can be harnessed in various ways, including dams, run-of-river systems, and tidal power. The most common method involves building dams across rivers, creating reservoirs that store water. When the water is released, it flows through turbines, which spin generators to produce electricity.

The Corps of Engineers, Fort Worth District manages three hydroelectric power plants that can provide up to 90 megawatts of power per hour to support the Texas power grid. This is enough electricity to power more than 100,000 homes.

The amount of electricity the Fort Worth District produces is based on an agreement with the Southwestern Power Administration and the amount of water in each reservoir.

While the dams were built and are maintained by the Corps of Engineers, only the flood pool behind the dam is controlled by the Corps. Everything below that level is controlled by organizations like the Brazos River Authority who develop and distribute water supplies, provide water and wastewater treatment, monitor water quality, and pursue water conservation though public education programs.

"While in flood pool we tell them to generate full time," said Timothy Helms, a hydraulic engineer in training for the district. "There are different zones that define how much we can release from each. So, in zone one they can generate a good amount and as you move lower into the pool, we start to limit how much they can generate for water supply purposes and concerns of droughts."

One of the key advantages of hydropower is its flexibility. Many hydropower dams, including those in the Texas region, do not have consistent water flows, and are not utilized for baseload power. These plants are oriented towards load following or peak operations. Additionally, hydropower plants can be quickly adjusted to meet fluctuations in demand, making it a flexible energy source that can adapt to changing needs.

"Hydroelectric generators can also provide condensing services, a means in which the generator acts as a motor, not producing electric power, but rather utilizing electric power from the grid, to help stabilize voltages or system frequencies on a power grid," continued Webb.

"During emergency and unscheduled power grid blackouts, certain hydroelectric generators are generally the ones who perform system "black starts" as part of a power grid system restoration plan. This means that a hydroelectric generator would start and provide electric power to the grid and provide the necessary amount of electricity to other large base load generators such as fossil fuel and nuclear power plants so they can start up and restore the power grid."

Another significant advantage of hydropower is its environmental benefits. It is a clean and renewable energy source that produces no greenhouse gas emissions during operation. By replacing fossil fuel-based power plants, hydropower can significantly reduce carbon dioxide emissions and help mitigate climate change.

Furthermore, hydropower plants have a long lifespan, often exceeding 50 years, and require relatively moderate

maintenance. While moderate, it is a full-time job.

Webb said the Sam Rayburn Hydroelectric Power Plant was commissioned in September 1965. Even after a period of 58 years of operations, it still meets the electrical demands of our Southeast Texas communities and regional area daily thanks to the plant staff.

"At the power plant we're basically working on the hydropower units, so we're maintaining the turbines and any auxiliary equipment" said Michael Rogers, the Corps of Engineers senior mechanic for more than 10 years at the Sam Rayburn Hydroelectric Power Plant. "This includes the mechanical seals, hydraulic pumps, air compressors and air systems as well as the generators themselves."

Hydropower also offers numerous social and economic benefits. It creates job opportunities in construction, operation, and maintenance, contributing to local economies.

"If I could have found a job like this when I was a lot younger, I would have really sought after it. I didn't know jobs like this existed when I graduated high school," said Gary Justice, the civil engineering technician at Sam Rayburn Lake. "I grew up about thirty minutes from here and started going to Mill Creek Park when I was 5 years old. To be able to work at a place I've always dreamed about living, just down the road, has just been a blessing to me. It's an awesome job and a great place to work."

Additionally, hydropower projects can provide irrigation for agriculture, improve water supply, and control flooding, benefiting communities and enhancing their resilience to climate-related challenges. According to the Institute for Water Resources, hydropower is better for the environment than other major sources of electrical power, which use fossil fuels. Hydropower plants do not emit the waste heat and gases—common with fossil-fuel driven facilities—which are major contributors to air pollution, global warming, and acid rain.

However, it is essential to acknowledge that hydropower is not without its challenges and potential drawbacks. A Massachusetts Institute of Technology Climate Portal article from 2021 states hydropower can also cause environmental and social problems. Reservoirs drastically change the landscape and rivers they are built on. Dams and reservoirs can reduce river flows, raise water temperature, degrade water quality, and cause sediment to build up. This has negative impacts on fish, birds, and other wildlife.

"One might say a negative is that hydroelectric power plants use water, which can change reservoir levels that can impact recreational areas and boat ramp availability, especially during dry summers and drought years," said Webb. "The positive side to that same scenario is that during hot and dry summers, usually power grids see more of a demand for electricity usage that is caused by air conditioning needs and other electric power consumption needs.

Having available water as a constant resource for this needed electric power generation can play a significant role in assuring electric power is available to meet the power needs and demands of our local communities. There are many more pros than cons. Hydroelectric power is Renewable, Reliable, Ready, and Relevant."

In the quest for sustainable and renewable sources, hydropower has emerged as a leader in green energy. Harnessing the power of water, this clean and reliable energy source has been utilized for centuries, and its potential for the future is immense. With the world's growing energy demands and the urgent need to combat climate change, hydropower offers a promising solution that can help us transition to a greener and more sustainable future. ■

The Angelina River below the Sam Rayburn Hydroelectric Power Plant and dam before and after the turbines are engaged for production of electricity.

Progress at the construction site of the future U.S. Air Force's Special Warfare Training Wing's Aquatic Training Center, at Joint Base San Antonio's Lackland AFB - Chapman Annex, Sept 25, 2023.

USACE THE FOUNDATION FOR

For more than 275 years, the U.S. Army Corps of Engineers have been known around the world for building the foundations of military capabilities in some of the most challenging environmental conditions.

Danny Olivas, one of USACE's South Texas Area Office resident engineers, and his team of quality control representatives and project managers, understand the most critical foundations they build aren't always measured by concrete structures.

"When you think about the capabilities that the Corps of Engineers has with managing the construction of physical buildings, it's satisfying to know that this facility is going to be providing the technical foundation of our future Air Force Special Warfare operators for generations to come," said Olivas.

Currently, the Air Force's Special Warfare Training Wing trainees use an outdoor Olympic-sized pool with a bubble on top. When complete, the new $60 million facility, encompassing more than 76,000 square-feet, will consist of two enclosed, climate-controlled indoor swimming pools of varying depths geared to meet the training needs for the Air Force's global combat operations. Both pools will have overhead catwalks and access doors to accommodate boat entry as well.

The new Aquatic Training Center will accommodate training for over 3,000 Air Force Special Warfare trainees every year.

"At the Special Warfare Training Wing, we build warrior Airmen to carry out the nation's most dangerous tasks in austere locations, and this aquatics training center will play a pivotal role in the development of their lethality as special warfare operators," said U.S. Air Force Col. Nathan Colunga, SWTW commander, at Joint

Story and Photos by: Richard Bumgardner

BUILDS FUTURE USAF WARFIGHTERS

Base San Antonio-Chapman Training Annex.

As the premier Air Force training wing for special operators, SWTW provides initial and advanced skills training for Air Force ground combat forces. This training includes entry-level and apprentice courses for Special Tactics, Combat Rescue, Combat Control, Pararescue, Special Reconnaissance, and Tactical Air Control Party officer and enlisted specialties.

During a tour of JBSA construction projects, Maj. Gen. Kimberly Colloton, the Army Corps of Engineers' deputy commanding general for Military and International Operations, visited the new aquatic center construction site and was impressed with the breadth and scope of the project.

"I really think this is going to be a world-class facility that will empower our young Airmen," Colloton said. "They'll be given the best training they can receive, to be able to do the difficult mission that they're going to be asked to do. It's neat to be part of that, to see our Corps of Engineers team delivering that facility, which is on time, on budget, and of the highest quality."

The construction of the SWTW Aquatic Training Center is a combined effort between engineers and project managers from USACE's Fort Worth District, in collaboration with counterparts at 802nd Civil Engineer Squadron, Special Warfare Training Support Squadron, Air Force Civil Engineer Center and civilian contractors.

"It's exciting to walk around the project and see the progress. Every time I look, there's new growth which takes us one step closer to the first cohort of Special Warfare Airmen jumping in next year," Colunga said.

Under the guidance of Olivas and his team, construction of the SWTW Aquatic Training

Center will be a transformational step towards building the foundational attributes and capabilities of future Air Force special warfare combat controllers, pararescue, special reconnaissance and tactical air control party Airmen.

Projects of this magnitude help modernize the military to combat the challenges of Great Power competition, which former Chairman of the Joint Chiefs of Staff, Gen. Mark Milley stated would be needed for future combat operations.

As one of the four pillars of U.S. military power, modernization is about more than weapons, it is also about building the bench for military leaders of the future.

"As we shift gears and prepare for the future fight, this aquatics training center will integrate human performance and training to hone the combat dive capability and increase our training capacity," Colunga said.

The Aquatic Training Center is just one of many projects that the Army Corps of Engineers' Fort Worth District is managing in the JBSA area.

"This project, and several others, are once-in-a-lifetime projects, ones that will be available for generations and generations of future war fighters long after I depart the Corps," Olivas stated.

The USACE team is also providing the construction management for building eight Airman Training Center buildings at JBSA-Lackland that will each house more than 1,200 trainees at Air Force Basic Military Training; managing the construction of secure facilities for the Air Force Personnel Center expansion; renovating and repurposing Civil-War era buildings at JBSA-Fort Sam Houston; building innovative new childcare centers at four different bases; and converting an aircraft hangar to a climate-controlled, precision measuring equipment lab and building environmental shelters for aircraft maintainers, both at JBSA-Randolph. ■

Maj. Gen. Kimberly Colloton, U.S. Army Corps of Engineers' Deputy Commanding General for Military and International Operations, listens to Gerlyn Ortiz, a civil engineer with Southwestern Division's Fort Worth District, as he describes construction challenges at the site of the 323rd Army Band's facility, at Fort Sam Houston, May 4, 2023.

Project managers and engineers from Southwestern Division's Fort Worth District, provide a tour of the future U.S. Air Force's Special Warfare Training Wing's Aquatic Training Center, at Chapman Annex of JBSA San Antonio's Lackland AFB, Texas, May 4, 2023.

Maj. Joshua Haynes, deputy commander for U.S. Army Corps of Engineers Southwestern Division's Fort Worth District, thanks stakeholders from the U.S. Air Force's Special Warfare Training Wing, Army Corps of Engineers staff, and contractors, at a beam signing ceremony for SWTW's Aquatic Training Center.

SWF Legal Corner
The Hatch Act:
Social Media Use Refresher

Social media is everywhere in today's world and accessible to most employees, even while at work. So it is important for federal employees to understand how their use of social media can run afoul of the Hatch Act.

In general, all federal employees may use social media and comply with the Hatch Act if they
remember the following three prohibitions:

1. **On Duty or in the Workplace Prohibition:** Employees may not engage in political activity while on duty or at work. Political activity refers to activity directed toward the success or failure of a political party or partisan political group (collectively referred to as "partisan groups"), or candidate for partisan political office (candidate).
2. 24/7 **Prohibition:** Employees may not knowingly solicit, accept, or receive a political contribution for a partisan group or candidate.
3. 24/7 **Prohibition:** Employees may not use their official authority or influence to affect the outcome of an election.

Further restricted employees are subject to an additional restriction and may not engage in political activity that is on behalf of or in concert with a partisan group or candidate.

Examples of prohibited activity on a personal social media account:

While on duty or at work, all employees may not:

- post or share a message about a candidate or a partisan group;
- tweet or retweet content supporting or opposing a candidate or partisan group; or
- invite others to a campaign rally or other partisan political event.

Even when off duty and away from work, all employees may not:

- tweet, like, or otherwise share a message that asks others to donate to a partisan group or candidate;
- share an invitation to a campaign or political party fundraiser; or
- use their official title or position to endorse a candidate.

In addition, further restricted employees may never:

- share or link to the account of a partisan group or campaign; or
- retweet a message from a partisan political group or candidate

Examples of prohibited activity on an official social media account or one that is being used for official purposes

Employees using such accounts may not:

- tweet or retweet a post about a partisan group or candidate; or
- follow or link to a candidate's campaign website or the account of any candidate or partisan group.

Reminders
Social Media Use Refresher

- These restrictions apply regardless of whether an employee is using government equipment or a personal device or whether the employee's social media account is private, public, or uses an alias.

- Employees are "on duty" when in a pay status, other than paid leave or another excused or authorized absence. For advice about teleworking employees, please see this advisory opinion.

- Agencies may have other rules or policies that govern an employee's use of personal or official social media accounts.

- More comprehensive social media guidance can be found on OSC's website.

Contact OSC's
Hatch Act Unit
(202) 804-7002
hatchact@osc.gov

Cornerstone USAF Aquatic

Story and Photos by: Richard Bumgardner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Cornerstone of USAF Aquatic Training

Story and Photos by: Richard Bumgardner

On a clear, blue-sky Texan day, personnel from the U.S. Army Corps of Engineers' Southwestern Division and Fort Worth District, joined with their customers from Joint Base San Antonio and Air Force's Special Warfare Training Wing, in dedicating the Maltz Special Warfare Aquatic Training Center, located on the Chapman Training Annex, April 2.

Named in honor of Master Sgt. Michael Maltz, a former Pararescue Indoctrination Course instructor at Lackland AFB, this state-of-the-art facility was authorized in fiscal year 2020 and awarded as a design-bid-build project in June 2021.

With this grand opening, the new $61.4 million facility with more than 77,000 square feet of classroom, training, and locker room space, will provide special operator instructors and their trainees with a world-class facility geared to meet the training needs for the Air Force's global aquatic combat operations.

"Today marks a significant milestone in our relentless pursuit of excellence and readiness as we forge these Airmen here in the Special Warfare Training Wing," said Air Force Col. Nathan Colunga, SWTW commander. "This building is truly impressive, purpose-built for our mission. From maritime infiltrations, to combat dive operations, to open ocean rescue, this facility will be the cornerstone of our aquatic training regimen."

Conceptualized more than 14 years ago and built over the past 2.5 years, the center will accommodate training for over 3,000 Air Force Special Warfare trainees every year when full operations begin later this month.

A key feature of the aquatic training center is the dual Olympic-sized pools with overhead catwalks for safety spotters and instructor observations, large access doors to accommodate boat entry, and dimmable lighting systems to simulate nighttime or low-level lighting

conditions to replicate combat conditions.

"Water is a formidable adversary," Colunga said. "It presents challenges and obstacles unique to the environments in which special warfare Airmen will operate. Through these doors, our trainees will hone their appointed skills, mastering techniques essential to their success in the most demanding and hostile conditions."

Sheree Brown, the Corps of Engineers' project engineer for the facility construction, was assigned to the project after the initial planning phase but could see the tremendous efforts it took to design such an innovative building.

"I can only imagine the efforts and hard work it took to incorporate all of customer's very specific requirements and produce the plans and specifications to construct such an amazing facility," Brown said. "Now, having seen the final product, I'm extremely proud to have been part of such a great team that overcame many challenges to get this project across the finish line, and we did it!"

U.S. Army Col. James Schultze, who serves as the deputy commander at U.S. Army Corps of Engineers' Southwestern Division, toured the facility and was also impressed with the breadth and scope of the inspiring facility.

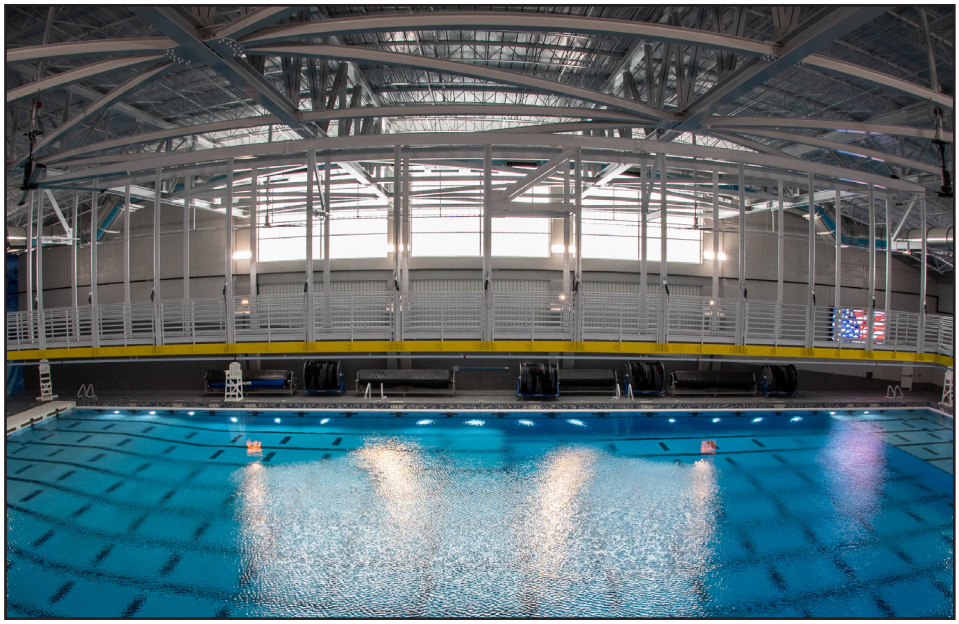
"It is 'one of the finest' such facilities in the Corps of Engineers' military construction portfolio, a training center that will truly enhance the readiness of our warfighters," Schultze said. "I would like to acknowledge the team from our Fort Worth District and their South Texas Area Office, who worked tirelessly to deliver this innovative facility on time, within budget, and of the highest quality."

Schultze went on to say that none of this would have been possible without strong partnerships between the USACE team, the Air Force Civil Engineer Center, the 802nd Civil Engineer Squadron, the 502nd Air Base Wing, along with construction contractors, and utility system owners, all to benefit the ultimate customers, the men and women of Air Force's Special Warfare Training Wing.

A project unlike any other in the Army Corps of Engineers' portfolio, this unique facility epitomizes the Army Corps of Engineers' commitment to building innovative facilities that enhance the readiness of some of the finest warriors in the world.

As future generations of warfighters walk through the front doors, this facility also stands as a permanent sign of the heroic acts and ultimate sacrifice of Maltz, as well as others, who have died in performance of their duties serving our Nation's calling.

Editor's Note: The Maltz Special Warfare Aquatic Training Center is just one of the more than $1.3 billion worth of construction projects that the Army Corps of Engineers' Fort Worth District is managing in the JBSA area.



A Special Kind of Hunt

Story and Photos by: Pat Adelmann

On a frigid Saturday morning in January, at a park in Navarro Mills, Texas, the unthinkable happened. Seven teenagers sat in silence as they scanned the area around them for movement. Instead of staring at a screen, they quietly watched their breaths turn into clouds of steam and rise out of the hunting blind.

Suddenly, a single shot pierced the morning calm followed quickly by phones vibrating from blind to blind. The first of four deer had been harvested during a special youth hunt hosted by the U.S. Army Corps of Engineers.

USACE Ranger Casey Hackler worked with the leadership of Trail Life of Denton, Texas, to make this special hunt possible. Together they brought 13 young men together for a hunt that could happen only at a location like Wolf Creek Park at Navarro Mills Lake.

"Trying to get 10-15 boys on a hunting trip weekend is going to be next to impossible and frankly it's just not going to happen, unless you know someone with an expanse of leased hunting grounds, this could never happen," said Clint Webb, the troop master for Lifeline Church's chapter of Trail Life. "It's just been awesome to be able to get this many boys out there in different shifts and different spots throughout the day. Just to give everybody that experience of getting up in a blind couldn't happen anywhere else."

Ranger Hackler became the hunting coordinator at Navarro Mills Lake last year. With close to 4,000 acres of wildlife management area open for public hunting, focusing on conservation and maintaining the health of the deer population are primary goals for her. While permits acquired to hunt during the general season meet the focus for most of the management area open for hunting, something had to be done for certain areas. That is where the idea for a special hunt was born.

"I had always been interested in hosting something like this to just help manage the less hunted populations of deer around the lake, particularly here in Wolf Creek Park," Hackler said. "Because park is closed during the winter months, this is kind of an ideal location to host a special hunt. It also gives us opportunities to promote the image of USACE and build relationships with other organizations."

Hackler obtained eight antlerless deer tags from the Texas Parks and Wildlife Department through the Managed Lands Deer Program for two special hunts at Wolf Creek Park. Three of which were used for a hunt in December and the remaining five were made available to the hunters Trail Life brought out in January.

"For a lot of the boys this is their first experience to go out and attempt to harvest a deer," said Matt Honea, who will be assuming the troop master role with Trail Life from Clint Webb. "We also have a lot of leaders here that haven't had the

opportunity to learn how to hunt or go hunt either and they're getting that opportunity this weekend as well."

> *"I had always been interested in hosting something like this"*

Rather than having the hunt supervised by several USACE employees, there was another reason this hunt was special. The hunt in December and the Trail Life hunt in January were both organizationally led, meaning all the planning and execution of the hunts was done by the organizations themselves.

Trail Life USA from Denton, Texas sent 13 young hunters along with parents and chaperones to Navarro Mills Lake under an arrangement for a special hunt coordinated by U.S. Army Corps of Engineers Ranger Casey Hackler.

Jonah Wall (12) and Cordel Moore (16) prepare for an afternoon session special hunt held at Wolf Creek Park on the shores of Navarro Mills Lake.

Hackler worked with both organizations as each created a solid hunt plan and ensured everyone was abiding by the USACE hazard analysis to mitigate as many riskss as possible.

"I worked closely with both organizations to really plan out their own hunting times and work within our Corp of Engineers' left and right limits,' said Hackler. "I walked them through all the safety concerns and then let them know we're just here to help facilitate the hunt and we would be here in case they have questions."

Overall, both hunts were completed without mishaps and set the standard for special hunts going forward at Navarro Mills Lake.

While not all the young men from Trail Life were able to harvest a deer, they did have a very special kind of hunt. ■

Editor's Note: Navarro Mills Lake is part of the Army Corps of Engineers' Three Rivers Region. While this is the first special hunt in more than eight years at Navarro Mills, the region has a robust special hunt program. Last year, across the region, there were seven special hunts at four lake projects serving sixty-seven hunters and harvesting ninety-five deer and four feral hogs.

This year, there were eight special hunts at five lake projects serving seventy-one hunters and harvesting seventy-nine deer and seven feral hogs.

Navarro Mills Lake

Not Your Average Walk along The Beach

Story by: Pat Adelmann

Steve Lindamood, USACE debris subject matter expert for Hurricane Ian and Fort Worth District employee, left; Sarah Futrell, USACE Hurricane Ian safety officer and St. Louis District employee; and Col. Brian Hallberg, USACE Hurricane Ian Recovery Office and Norfolk District commander, monitor the Hurricane Ian debris mission at a temporary collection point south of Fort Myers, Florida, Oct. 23.

Photos courtesy: U.S. Army Corps of Engineers

Guam, Puerto Rico, Florida, Hawaii, and Galveston all sound like great locations for your average beach goer to sit back and relax while enjoying the sun, sand, and water. But for members of the U.S. Army Corps of Engineers' Fort Worth District, each of these locations have been anything but a walk along the beach.

Whether deploying to support natural disaster relief efforts or supporting Army units and other governmental and non-governmental agencies, there are several opportunities to deploy within Fort Worth District.

From Project Delivery Teams, Field Force Engineering, Expeditionary Civilian Coordination Office, and the Army Expeditionary Civilian Workforce, somewhere there is the right career broadening opportunity for you.

Members of USACE have deployed in support of floods, hurricanes, typhoons, wildfires, and other natural disasters in the continental United States and overseas. In some cases, district personnel deploy to a disaster as part of federal operational support and are one of the first to arrive on the scene to assist.

"District personnel have deployed across the United States and its territories, to include the U.S. Virgin Islands, Puerto Rico and Guam," said Jeff Mahaffey, Fort Worth District Chief of Emergency Management and Security Branch. "Anywhere there have been natural disasters, we have been there."

From initial damage assessments until people return to their homes, district personnel can be on the scene from cradle to grave of any recovery effort, such as is the case with the Maui wildfires this last August.

"You will find USACE personnel deployed to support public works and engineering for Presidentially declared events," said Mahaffey. "These are disasters where the Federal


Photo courtesy: U.S. Army Corps of Engineers

Emergency Management Agency is active in assisting response and recovery efforts. We are not only the Army's and the Nation's premier Engineer, but we are also known as 'FEMA's Engineer'."

Beyond natural disasters, deployments may be in support of Army units or governmental and non-governmental agencies deployed at home or overseas. Teams can be deployed for technical support and construction services to build anything from roads to hospitals.

One such program where the Corps of Engineers has technical capabilities that bridge the gap between warfighters, and the specialized capabilities that are needed, is the Field Force Engineering program.

"Military units don't always have the technical expertise so a lot of times we need structural engineers, electrical engineers, or mechanical engineers," said James Williams, Army Corps of Engineers' Southwestern Division's FFE program manager. "All these jobs are within the Corps of Engineers, to include logisticians and environmental personnel. The average military unit doesn't have a lot of these capabilities and even


Photo by: Richard Bumgardner - Transatlantic Expeditionary District

when they do, they don't have the experience."

According to Williams, FFE provides agile, responsive technical engineering and contract construction support capabilities to combat commands and their Army components worldwide during contingencies, exercises, and peacetime engagement.

The FFE also supports combat commands in the theater of operations by enabling forward deployed engineer assets to leverage stateside-based technical engineering centers through reach-back systems to installations worldwide.

"We'll manage talent throughout the Corps of Engineers," said Williams. "We typically start within our division, and then throughout the Corps of Engineers based on what our needs are."

Along with the FFE program, the Expeditionary Civilian Coordination Office is tasked with managing the recruitment, staffing expertise and administrative deployment support necessary to execute military contingency missions staffed with civilians around the globe.

"ECCO provides consistent administrative and human resource guidance and ensures staffing solutions are provided to forward commands in an efficient and timely manner," said Kay King, Chief, Deployment Administration Resource Team, a branch of ECCO. "The staff works diligently to provide forward commands, like the Transatlantic Expeditionary District, with volunteers who wish to deploy in support of contingency operations. These individuals possess the high-quality skill sets required to complete the USACE mission."

Beyond deployments that support specific Corps of Engineers programs and projects, the Army Expeditionary Civilian Workforce is continually recruiting personnel in support of operations in the Army's Central, European, African, and Southern Commands. Like the ECCO and FFE, deployments with the AECW are in direct support of Army military units deployed overseas.

Jonathan Celone, a senior project coordinator with the Fort Worth District, recently returned from a six-month deployment to Camp Arifjan, Kuwait.

"Deploying with the AECW worked out excellent," said Celone. "I picked up so many new skills, especially when it comes to facility maintenance. I worked in the Directorate of Public Works while I was over there. When working with Fort Worth District, I go out with various teams on facility condition assessments, one of the first groups that we reach out to at every installation is DPW. While on deployment, I directly worked with that group of individuals."

According to the Department of Defense, the AECW allows civilians to apply capability, experience, and knowledge as a crucial part of helping DOD accomplish its mission abroad.

Deployments with the AECW are typically six, nine, or 12 months in duration. Personnel deploying have the opportunity for great personal and professional growth.

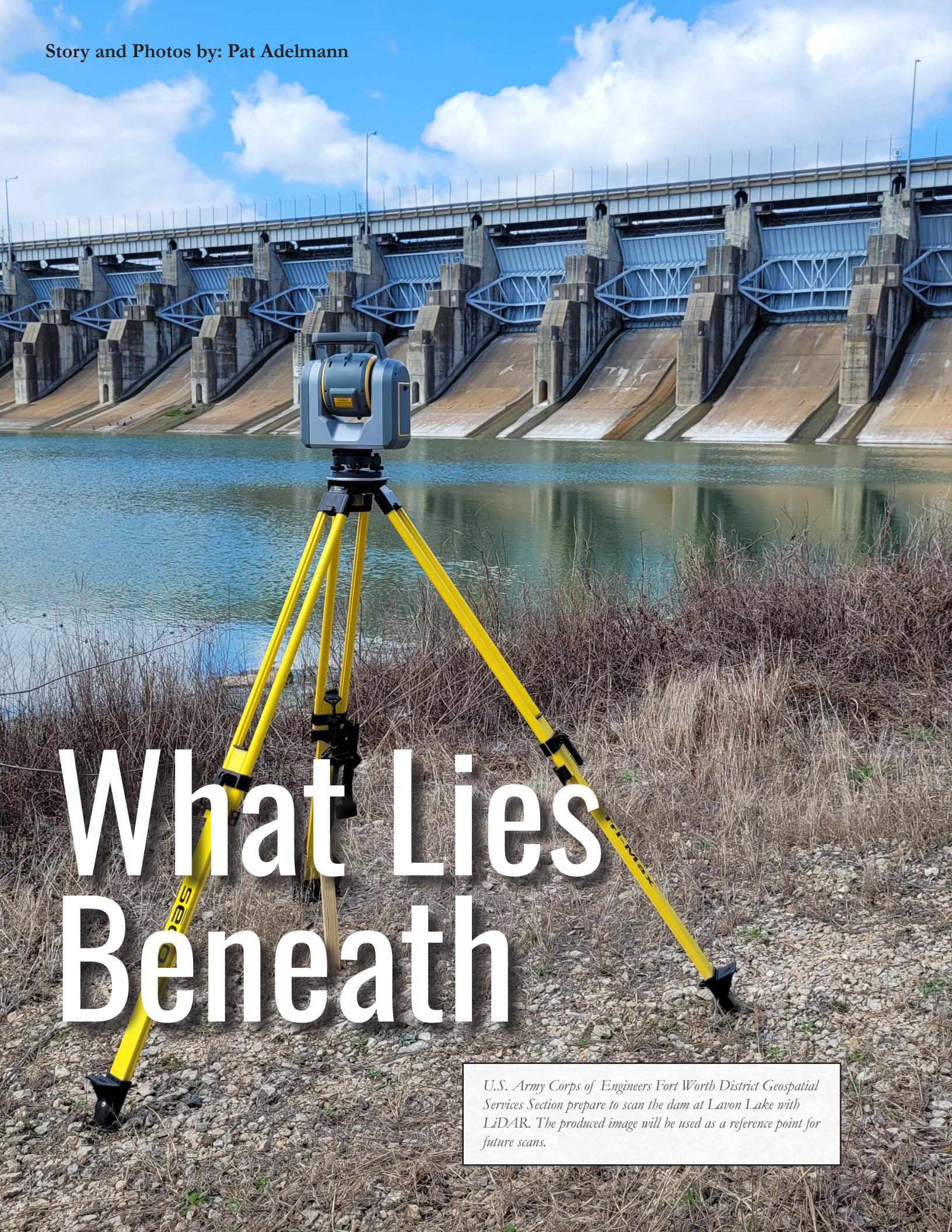
"The AECW has a more diverse portfolio of requirements, occupationally and globally," said Dianne Hibbs, a programs and policies specialist with the AECW. "The commands have their own deployment requirements, but they are typically limited to the primary mission skillsets of the organization (e.g., for USACE that is engineers). AECW has all types of positions available."

Regardless, if the deployment opportunity is with the Corps of Engineers or AECW, deployments do provide career broadening opportunities not found while at home station. They also provide an opportunity to support our military forces and truly make a difference in matters of importance to national defense.

"If you want to become more involved, and help our fellow citizens recover from disaster events, or supporting our warfighters overseas, step up and help out," said Mahaffey. "Now, more than ever, our societies are connected in terms of disasters, disaster response, and crisis management."■

Story and Photos by: Pat Adelmann

What Lies Beneath



U.S. Army Corps of Engineers Fort Worth District Geospatial Services Section prepare to scan the dam at Lavon Lake with LiDAR. The produced image will be used as a reference point for future scans.

Hovering over the calm waters of the lake, a strange device silently surveys every nook and cranny of the unseen depths. With laser beams dancing across the bottom, it paints an intricate drawing of data points revealing the lake's mysteries.

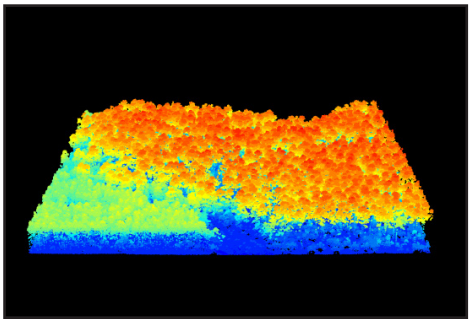
From the deepest depths to the sunny beaches, LiDAR's watchful eye holds the key to unlocking a world beyond what the naked eye can perceive. A thrilling adventure awaits those who dare to decipher the language of light.

In recent years, a technology called LiDAR, which stands for Light Detection and Ranging, has been making waves in various industries, from autonomous vehicles to video games. LiDAR is a remote sensing method that uses laser light to measure distances and create detailed three-dimensional maps of the surrounding environment.

The U.S. Army Corps of Engineers has been using this cutting-edge technology to revolutionize the way we see and interact with the world and how we map our surroundings.

"LiDAR is an extension of data collection, dissemination, visualization, and analytics," said Bryon Haney, U.S. Army Corps of Engineers' Southwestern Division Geospatial Program Manager. "Accuracy and precision are everything, especially if you're going to drape LiDAR imagery over a photo and take a two-dimensional image and make it a three-dimensional surface. This is especially important when tracking sediment buildup and bathymetry in our reservoirs."

Bathymetry is the study of underwater depths of ocean, lake, or river floors. In other words, bathymetry is the underwater equivalent to topography. NASA notes that early attempts to map the underwater world relied on shipborne methods like sounding lines made of lengths of rope and cable. But this could only measure a single point at a specific moment in time. Sonar allowed greater ease of measurement of vast bodies of water. Now LiDAR is painting a more accurate picture.



"We use photogrammetry [the art and science of extracting 3D information from photographs] and LiDAR to map our lakes," said Bryson Webber, Fort Worth District Geospatial Services Section Chief. According to the U.S. Geological Survey, LiDAR can be used to collect accurate data sets of lake-bed elevations. The lake-bed elevations and associated geographical position data can be merged with land-surface elevations.

The Fort Worth District uses LiDAR to measure where water and land come together. The turbidity of lakes, or cloudiness of the water, fed by a river makes deep measurements with LiDAR difficult.

LiDAR also allows USACE to create detailed maps of dams and levees without disturbing the ground. By scanning the area from above and within, LiDAR can reveal any hidden faults, such as fissures or below water slides, that are invisible to the naked eye. This non-invasive approach has the potential to revolutionize dam maintenance as LiDAR can see what humans cannot. The data points collected from dams displays the depth of the water, the types of land surrounding it, and other critical design elements.

"One of the things LiDAR has allowed us to do is actually get precise measurements inside interior spaces as well as check for any potential erosion along a levee," said Webber. "Before we either would have had to do manual measurements, or we could take videos and photos, but we wouldn't be able to get size measurements across the whole breadth of the conduit."

Because of the lack of off-the-shelf electronics to do specific jobs, the Fort Worth District GSS has designed and built a rover to take measurements in locations which would be dangerous to send a person at a fraction of the cost of hiring a contractor to do the same work. They are also designing a remote-controlled boat for measuring above and below the water's surface.

"The idea is to make a safer entry to evaluate [underwater] conduits and I have experience with building automated robotic equipment from previous work," said Webber. "I've built unmanned aircraft systems in the past and that same technology works on the rover. So, after seeingthe dam bot (a remote-controlled vehicle built on an ATV Frame), I figured I could build something similar for a fraction of the cost."

Beyond USACE, LiDAR is being used by significant state and federal partners such as the Forest Service, to accurately measure tree heights, canopy density, and biomass that

A final rendering of the LiDAR image of the Lavon Lake dam.

surround our lakes. This data helps in assessing the health of forests, identifying areas at risk of wildfires, and planning sustainable logging practices.

According to Jeff Atkins, a research biologist with the Forest Service, forest managers and researchers within the Forest Service have been at the forefront of applying LiDAR to National Forests and beyond since the technology became broadly available in the late 1990s.

"The Forest Service is also using LiDAR for terrain and geomorphological applications creating digital elevation products," said Atkins. "Work with three-dimensional LiDAR has included a heavy focus on fire and fuel load characterization, or measuring the amount of material on the forest floor and how flammable it is. The ability to map and monitor fuel loads in forests is crucial given the increase in wildfires over the last few years and decades driven by climate change, land use, development, and human encroachment and direct human interference."

> *"One of the things LiDAR has allowed us to do is actually get precise measurements inside interior spaces as well as check for any potential erosion along a levee"*

U.S. Army Corps of Engineers Fort Worth District Geospatial Services Section constructed a remotely operated vehicle that can carry a hand-held LiDAR unit. The vehicle can carry the LiDAR unit into areas that may be unsafe for a human to enter.

While LiDAR technology has already made significant advancements, its full capabilities are yet to be seen. Either used by itself or with other imaging systems, LiDAR is painting a clearer picture of our surroundings.

"LiDAR is enhancing and expanding what we do," said Webber. "There's no real way to detect minute changes or movement or current conditions without LiDAR."■

THE SOUNDS OF FREEDOM

Story and Photos by: Brittany Scruggs

Follow the white buses marked U.S. Air Force as they pick up new recruits from San Antonio International Airport and transport them to a tucked away location on Joint Base San Antonio. This hidden gem sits on almost four thousand acres of land designated for training the newest enlistees of the Air Force for the next eight and a half weeks.

Over the course of their basic military training, you can hear groups of individuals become one voice as they chant the melodic sounds of freedom — "Everywhere I go-o, there's an MTI* there, hut, two, three, four," to signify unity and the wingman concept.

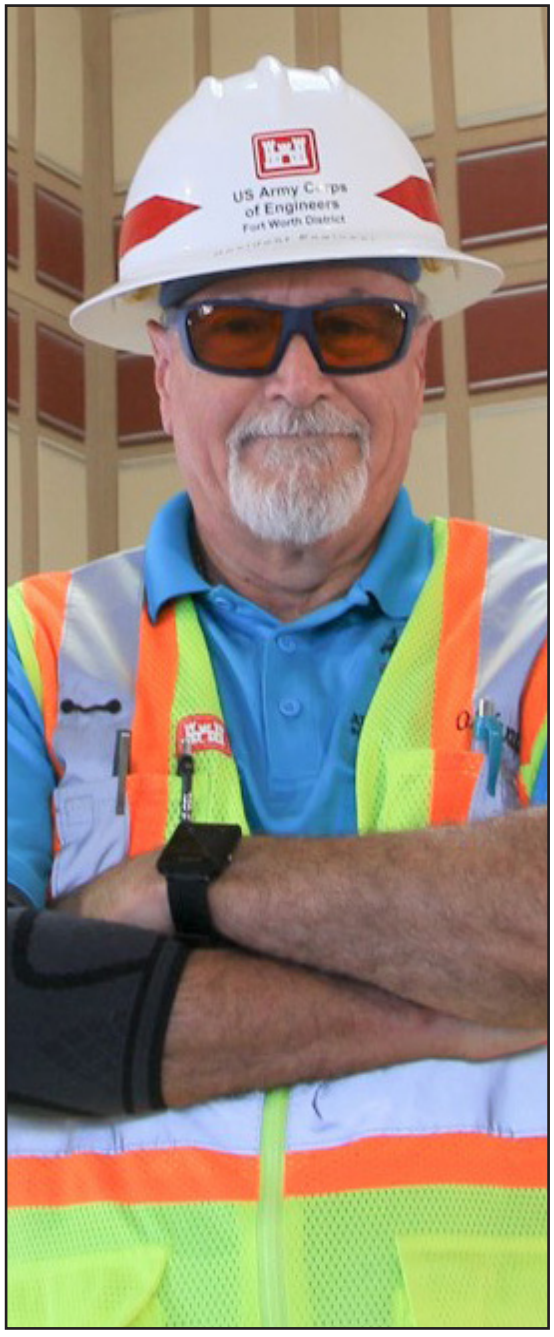
Before the first buses arrive carrying trainees from all walks of life and regions of the U.S., the Air Force readies itself by partnering with the U.S. Army Corps of Engineers, Fort Worth District, to award two contracts to build Airman Training Centers 5 and 6, and Dining Classroom Facility 3. These facilities make up an ongoing effort to build a training complex that mirrors ATC 1 – 4, and DCF 1 and 2, while tackling training challenges, such as the constant rise of extreme temperatures that extend beyond the traditional summer season.

As Daniel Olivas, the USACE ATC resident engineer, Fort Worth District, led a group through the construction site, he pointed out the creative design elements unique to this project. "Innovation remains at the forefront during this process, Olivas said. He continued, "San Antonio experiences extreme heat, so these dormitories enveloped with pre-cast concrete panels were constructed to create an atrium with a tunnel-like atmosphere that creates a breeze and continuously cools the inner portion of the Airman Training Center."

Once the buses arrive, basic training officially begins, and trainees become well acquainted with their new home — a 280k square foot, state-of-the-art, four-story building reinforced with concrete structures and standing seam metal roofs. With a few short marching commands and paces, recruits are within reach of supporting facilities such as a weapons cleaning pavilion, drill pad, and running track.

"Every design and build choice have put a keen emphasis on safety, ingenuity, and increased functionality," said Vanessa Pellegrino-Badell, USACE project engineer, Fort Worth District. She continued, "As an Air Force veteran, I have a unique viewpoint into understanding the hardships the trainees may face and I take pride in making sure their training environment is the least of their worries."

Though trainees go through rigorous drills, physical assessments, and knowledge-based assessments, the day would not be complete without receiving three balanced meals to help their body remain in optimal shape to sustain the day's



mission. With that, only the sounds of uniformed chants echoing between the ATCs stand between trainees and their meal on the fly, in the full-service kitchen that makes up the DCF. It is the third of its kind to provide dining on the first floor and eight auditorium-style classrooms on the second and third floors.

"The dining facility is approximately 162k square feet and can accommodate upwards of 2,000 Airmen," Daniel explained. "The sleek design of the new facility allows the Air Force to feed eight trainees per minute. That's less than half of what was possible in the previous dining facilities."

After eight and a half weeks of regimented training to turn civilians into highly skilled Airmen, graduation has arrived. "Left, right, left," becomes the sound of timing and proficiency. A parade field that once held the sounds of inexperience, unsurety, and individuality, is now filled with the sounds of cheers, cries, laughter, confidence, unity, and pride, as the newly sworn-in Airmen become official symbols of readiness, airmanship, and heritage.

As the sounds of graduation fade, you can hear new sounds in the distance. Those are the chants of trainees aspiring toward their graduation day. With each chant and sound, it represents what Americans hold dear – freedom. Freedom of choice woven into the very fabric of what our Nation stands for. So, as the same white buses marked U.S. Air Force, which picked up civilians, now picks up the future of our freedom; Airmen– ready to embark on their legacy of valor.

**Editor's Note: An MTI is an Air Force Military Training Instructor during the basic training process. Each group of trainees is assigned two MTIs that will remain with them during their eight-week basic training. Though they are assigned MTIs, there are always other MTIs near to reinforce safety and training and keep a watchful eye.*

The Author - Brittany Scruggs

Brittany Scruggs is a Public Affairs Specialist at U.S. Army Corps of Engineers, Fort Worth District.

Not your average Army Unit

Story and Photos by: Pat Adelmann

Imagine being an active-duty soldier, walking the halls and cubicles of your new Army assignment looking for someone in uniform to guide you in the right direction and not finding another soldier. There's no motor pool, no weapons room, and no personnel office.

You finally walk into the U.S. Army Corps of Engineers' Fort Worth District command suite and are greeted by two of the warmest smiles that remind you of walking in the front door of your childhood and being met by your mom.

With more than 1,100 civilian personnel in the district, it is the size of a large battalion on a typical Army installation. The biggest difference between the district and a battalion is that there are only 16 soldiers in the district.

Of those 16 soldiers, Army Master Sgt. Justin Lindquist, the noncommissioned officer in charge of the 273rd Forward Engineer Support Team-Advanced, is the lone enlisted engineer.

The FEST-A is an eight-person team of military and civilian engineering experts. The 273rd FEST-A is assigned to the Fort Worth District as a rapid response team for deployments to support combatant commands, a joint task force, or Army units where short-term engineering planning and capabilities are needed.

"It's a culture change for sure," Lindquist said. "All of the interactions I've had have been great; everyone is understanding, happy, and even surprised to help an NCO with whatever problem I bring to them."

Lindquist is the engineer detachment's senior enlisted advisor to the FEST commander, just as he would be in any Army unit. It is a key developmental position for an engineer's career progression. He's still responsible for the unit's training on individual and collective tasks as well as management of unit resources and training on its equipment. He also manages the movement of the detachment to any contingency or overseas location.

Where things begin to differ is how he executes those tasks and the fact that he doesn't lead soldiers.

"The civilians assigned to the FEST are selected because they're a technical expert in their field," Lindquist said. "When it comes to their expertise, there isn't much I can show them that they don't already know. What I can try to do is develop their understanding that they can contribute more than what their respective disciplines can provide. That they are on the front lines of engineering decisions directly impacting soldiers on the ground and across the globe."

Another one of the 16 military personnel is Capt. Matthew Hartke, who recently commanded 90 soldiers before he left the 25th Infantry Division's Bravo Company, 70th Brigade Engineer Battalion, in Alaska.

He joined the district in July of 2023, and upon arriving, was assigned as the project engineer for the Dallas Floodway Resident Office.

Much like the changes in temperature between the two states, he found himself in a position he had not been in before, no soldiers to lead and no senior enlisted advisors like Lindquist by his side.

"It was an adjustment for me mentally," Hartke said. "I always had a senior NCO partner with me throughout my time the Army. So, not having that, and being just me on my own, was an adjustment."

While not what he is used to, Hartke found the civilians he works with to be a great asset, and like the senior NCOs he has had in the past, a wealth of knowledge. He finds himself relying on that knowledge to make large strides in his work efforts and his education as he studies for his Project Management Professional certification.

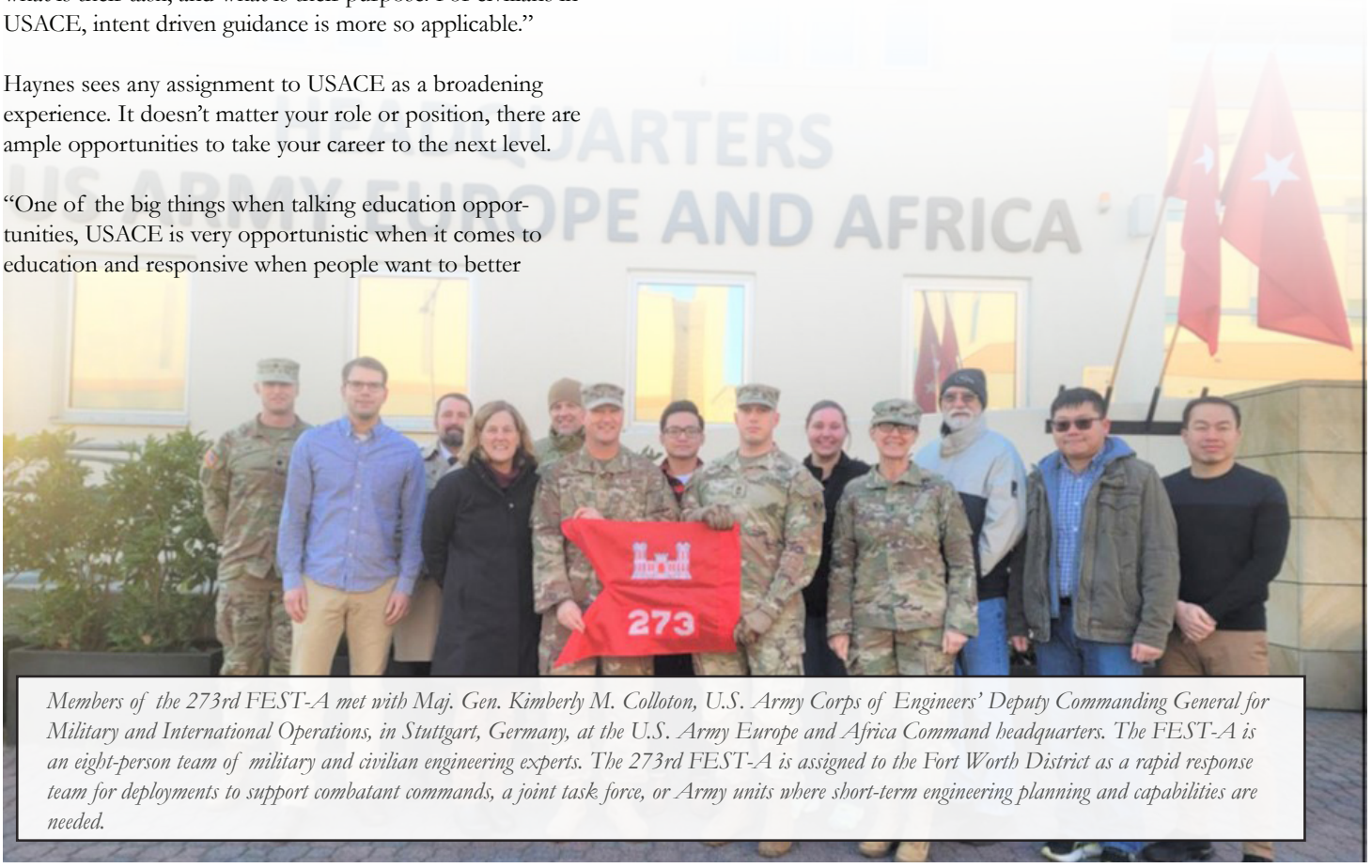
"This is on paper, and in reality, a broadening assignment for me," Hartke said. "This is a great way to broaden my horizons in terms of civilian construction and public works. I get to experience what I've been doing at a lesser extent in the Army with small projects. But take it a step farther and see how it translates to the bigger projects and project management as a whole."

Lt. Col. Joshua Haynes, Fort Worth District's deputy commander, is on his third assignment with USACE. This gives him a somewhat unique insight into the similarities and differences between being stationed with an engineer unit and USACE.

"One of the similarities is that both soldiers and our civilians look for guidance of some kind," Haynes said. "Soldiers need to know what they are doing tomorrow, what is their task, and what is their purpose. For civilians in USACE, intent driven guidance is more so applicable."

Haynes sees any assignment to USACE as a broadening experience. It doesn't matter your role or position, there are ample opportunities to take your career to the next level.

"One of the big things when talking education opportunities, USACE is very opportunistic when it comes to education and responsive when people want to better themselves with it," he said. "For military members, broadening our horizon on what we can do inside the military, and in USACE, is really based off the education USACE can provide or provide pathways for." ■



Members of the 273rd FEST-A met with Maj. Gen. Kimberly M. Colloton, U.S. Army Corps of Engineers' Deputy Commanding General for Military and International Operations, in Stuttgart, Germany, at the U.S. Army Europe and Africa Command headquarters. The FEST-A is an eight-person team of military and civilian engineering experts. The 273rd FEST-A is assigned to the Fort Worth District as a rapid response team for deployments to support combatant commands, a joint task force, or Army units where short-term engineering planning and capabilities are needed.

Story by: SWF Public Affairs

SWD's Regional Planning and Environmental Center Celebrates its 10-year Anniversary

In the mid-2000s, the U.S. Army Corps of Engineers, Southwestern Division experienced a significant decline in civil works planning missions throughout the region. The existing model of every district maintaining a fully capable Civil Planning and Environmental function became very challenging during this period.

Consequently, SWD leadership consolidated and streamlined most of its environmental and planning functions into a regional center, focused on efforts in Texas, Oklahoma, Kansas and Arkansas.

The Fort Worth District was tasked to become the host of the newly created organization now known as the Regional Planning and Environmental Center on Feb.9, 2014.

The initial charter of the RPEC was to consistently deliver high-quality products, regionally, to all the local sponsors and military services that each district serves, while maintaining robust competencies in the planning and environmental fields.

"In these fiscally restrained times, we must maintain core competencies, disciplines and abilities in the environmental and planning fields to ensure we keep a robust regional organization that can deliver quality services," said Eric Verwers, the RPEC's inaugural director from 2024-2017.

Since its inception, the RPEC has supported a wide variety of USACE missions. These include cleaning up formerly used defense sites, supporting flood risk management, restoring ecosystems and supporting new navigation projects. Its program, project, technical and study managers have led economic, environmental and planning components required to support civil works projects.

"RPEC is responsible for all planning and environmental compliance activities of civil works, military, and interagency and international support missions throughout the Southwestern Division's area of responsibility," said Fort Worth District's deputy district engineer, Rob Newman.

Examples include the preparation of National Environmental Policy Act and feasibility study documents for projects such as the Dallas Floodway, the Sabine Pass to Galveston Bay coastal flood risk management project, and the Brazos Island Harbor navigation project near Brownsville, Texas.

"The concentration of mission and resources in a regional center has resulted in unprecedented flexibility for putting resources where and when needed based on regional priorities," added Newman, who served previously for five years as the RPEC director.

Over the course of its first decade, the RPEC has also expanded its reach throughout USACE, providing both a nationwide and international reach. This reach includes project delivery in all 50 states and 15 other Nations.

"RPEC teams have supported the mission in Spain, Great Britain, Germany, Iraq, Jordan, Kuwait, Egypt, Afghanistan, Vietnam, Papua New Guinea, Korea and Japan to name a few," said RPEC program manager, Kevin Davee.

"The military master planning capability and environmental/cultural expertise make us a global asset for USACE. In many cases this has meant key expertise on the ground to support warfighters and military readiness not otherwise available," added Davee.

Although a decline of the Civil Works Planning missions throughout the Southwestern Division was a primary reason to form the RPEC, the establishment of the regional center has resulted in an organization that is very capable of taking on unique and robust challenges now and in the future.

"I think it is important to remember we must remain agile in terms of our mission, people or methods," said current RPEC director, Mandy McGuire. "We will continuously reevaluate and focus to make sure we are continuing to deliver and are postured to deliver what is required in the future."

With the first decade under its belt, the RPEC, with flexibility at its core, is poised to provide value to the Southwestern Division and to the Nation for many decades to come.

"RPEC will stay focused on our core purpose and skills in planning and environmental but look for ways to leverage them better. I feel the need for our services remains strong and will continue to grow stronger in the future," concluded McGuire. ■

Army Corps of Engineers' Afghanistan District commander, Col. Jason E. Kelly, second from right, poses with RPEC master planners Jill Schueckler, Rob Morrow and Eric Lam, during a deployment in 2018 to support Operations Resolute Support and Freedom's Sentinel by executing construction for U.S. Forces-Afghanistan.

A Handshake Agreement Worth its Weight in Gold

Story by: Justin Shelby and Brittany Scruggs

As recreation season ramps up, so have the safety measures. The Fort Worth District, U.S. Army Corps of Engineers, partnered with a local group, Friends of Lake O' the Pines, on a project to update the lake's courtesy docks, April 22, 2024.

The partnership for the project became official in June of 2023, with the parts and materials ordered, and the project being completed in April.

The total cost was estimated at $27k to cover the materials and labor. The Corps of Engineers handshake program provided $18,014 in funding for the parts, supplies, and materials, while Friends of Lake O' the Pines provided $8,386 in volunteer services.

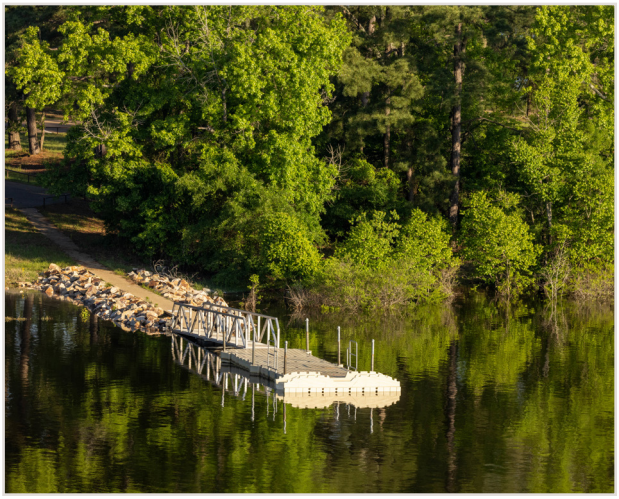
Cody Berry, Natural Resources Manager, recalled the importance of this partnership.

"Next to flood control, one of our main purposes is to provide safe opportunities to visitors for recreation at the lake," Berry said.

The Corps of Engineers' staff at Lake O' the Pines maintains and operates multiple courtesy EZ Dock systems on the reservoir which are strategically located around recreational facilities to maximize ease of use to its 650K annual visitors.

Current president of Friends of Lake O' the Pines, Kristi Thomas, spoke on the importance of their partnership with the Corps of Engineers.

Thomas said, "We appreciate the Corps of Engineers for letting us be a part of making our community safer." She continued, "We live in an area with a diverse waterway—from fresh water to bayou, and I know our entire staff, especially Becky Rockwell, the previous president, and board member Karla Garcia, are dedicated to keeping our water ways maintained while continuing



to foster a positive relationship for years to come with the Army Corps of Engineers!"

This project retrofitted the existing dock at Johnson Creek day use with safety railing, while still allowing utilization as a courtesy dock. In addition, kayak and canoe launch platforms were added to recreation areas at Johnson Creek day use, Buckhorn Creek campground, and Lakeside day use.

This partnership allowed both USACE and the local partner to work together to complete a much-needed amenities upgrade for the community, as no kayak and canoe launches were previously present on the lake.

Thomas recalled, "We've already received a lot of buzz around the new additions because other groups have reached out and are eager to come out to the lake and try the safety features. That's a win in our eyes."

Working together reinforced the continued positive relationships between USACE and the local community and introduced new members of the local group to each other to accomplish a goal-orientated mission. This project increased safety and ease-of-use for all users.

Berry praised the work accomplished between the Corps of Engineers and Friends of Lake O' the Pines. "This was a successful team effort on both our parts," said Berry. "We encourage everyone to come out to Lake O' the Pines this summer and try the new features of the docks. As always, remember safety, wear your life jacket, and be aware of changing lake conditions," she continued.

The Fort Worth District, U.S. Army Corps of Engineers, places a keen emphasis on having a 'Team Effort' mindset that ties directly back to supporting local communities and partners while delivering a safe location for recreators to enjoy. The handshake agreement fully embodies this mindset and will continue to provide a safe environment for generations to come! ■

The Corps of Engineers' staff at Lake O' the Pines maintains and operates multiple courtesy EZ Dock systems on the reservoir.

Photos courtesy of the Lake O' the Pines Friends Group member, Kristi Thomas

Army Holds First-of-its-Kind Career Fair in Arlington

Story and Photos by: Pat Adelmann

Sabrina Thomas, a talent acquisition specialist with the U.S. Army Corps of Engineers' Little Rock District, speaks with potential candidates about opportunities with USACE during a first-of-its-kind whole Army career fair.

The traditional sights and sounds of Globe Life Field, home of the Texas Rangers, were replaced with something brand new on Saturday, April 13.

Instead of fans wearing jerseys cheering on the hometown team, potential candidates from throughout the Dallas Fort Worth metroplex carrying resumes entered the upper concourse of the stadium. They were looking for possible careers with more than 40 Army organizations including the U.S. Army Corps of Engineers' Southwestern Division. The division had representatives on hand from Fort Worth, Galveston, Little Rock, and Tulsa Districts.

The first-of-its-kind career fair was the brainchild of the Army's Civilian Human Resources Agency. By combining active duty, reserve, and guard components, as well as civilian employment opportunities, the total Army recruitment and outreach event was meant to highlight the Army as the employer of choice in the metroplex.

"The fact that we - for the first time - are combining civilian, active, guard, and reserve recruiting under one roof is historic," said Katie Egbert, a project manager with CHRA. "To have all these resources, and all these influencers, and Army personnel together to coordinate with the public and really share the Army message, that's the big story here."

According to the U.S. Army Recruiting Command, which enlists qualified applicants into the Army and Army Reserve, 71% of youth do not qualify for military service for various reasons. But they may be able to serve the nation in another capacity as an Army civilian.

An Army-centric career fair has been discussed and rumored for years. USAREC has considered such an event, but it has never come to fruition.

"So, there's always great ideas out there," said Command Sgt. Maj. Dustin Denney, Dallas Army Recruiting Battalion. "The difference between this event and all those other great ideas is somebody actually took the ball and ran with this one and turned it into a reality."

Having the opportunity to attend the event locally allowed the Fort Worth District to highlight current careers they are hiring for and forecasted openings to a larger pool of possible candidates. Many people see Corps of Engineers and presume that they must join the Army or that

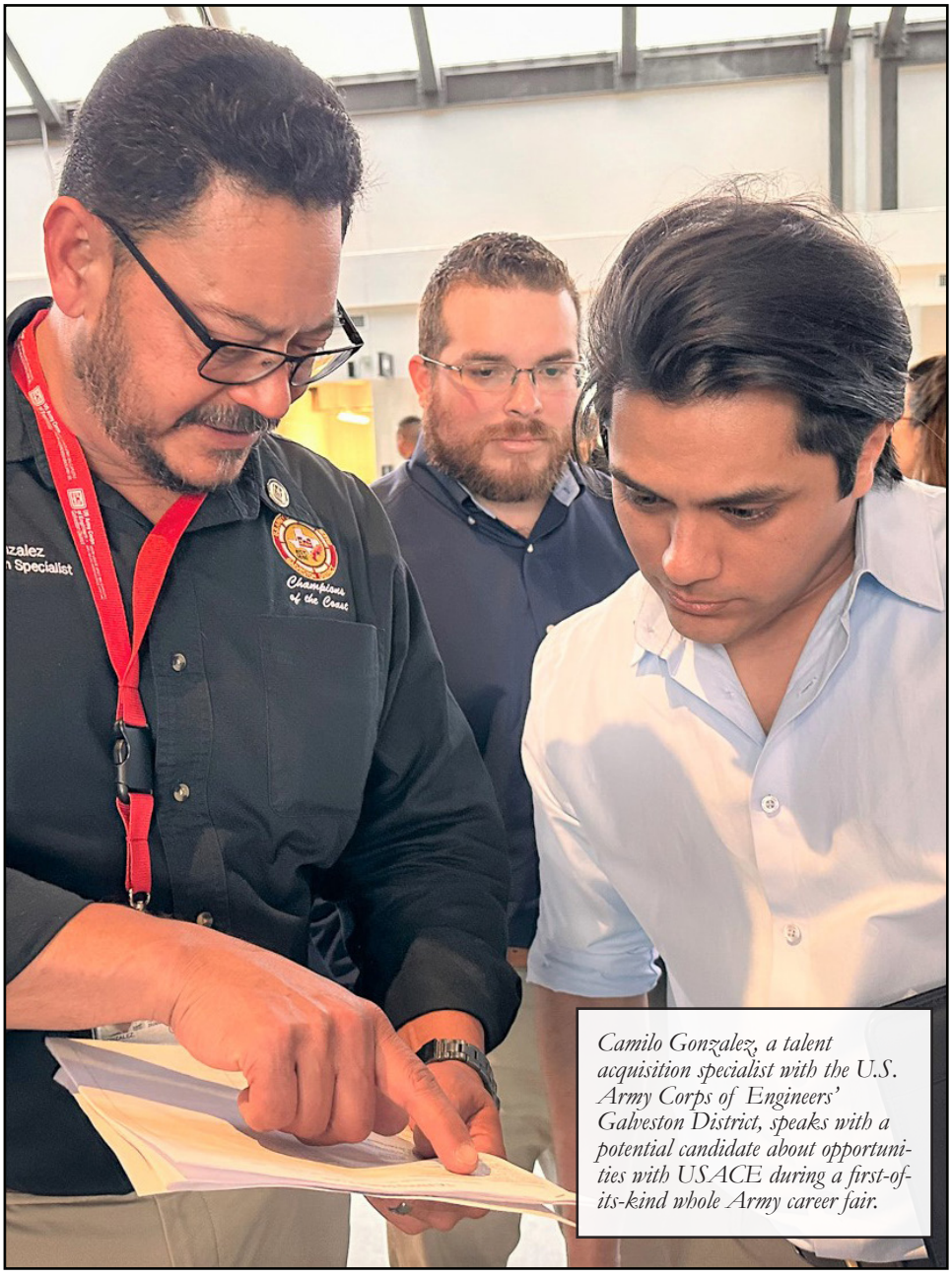
they only hire engineers.

"Our focus and mission at a career fair are to 'build careers' regardless if that career is in engineering, accounting, park ranger or any number of other civilian positions," said Andrew White, Fort Worth District talent management specialist. "USACE is committed to helping candidates achieve their career goals and we look forward to having them join the team."

With representatives from Army Cyber, Futures, Medical, Space and Missile Defense Commands, and many more, the opportunities for job seekers are endless.

"Everybody has been encouraging me as I've talked to the different organizations," said Rodney Williams, a recent Army retiree. "This is opening my horizons and getting my interest peaked as I network. I had no idea how many jobs I could possibly qualify for based off my experience in the Army as a generator mechanic."

According to Egbert, the success of the career fair was the right people were at the right place and the right time. They were able to gather the necessary people and resources and make their vision a reality. ■



Camilo Gonzalez, a talent acquisition specialist with the U.S. Army Corps of Engineers' Galveston District, speaks with a potential candidate about opportunities with USACE during a first-of-its-kind whole Army career fair.

Top Left: Steven Jones, an equal employment specialist and disability program manager with the U.S. Army Corps of Engineers' Fort Worth District, speaks with Monique Davis, left, and Tamaya Reese about opportunities with USACE during a first-of-its-kind whole Army career fair.

Top Right: Paden Sickles (right), an Army veteran and entrepreneur, looks on as Katie Egbert, a program manager for the Army's Civilian Human Resource Agency, addresses key leaders and centers of influence during a breakfast prior to the career fair. The pair were part of a junior leader panel discussion whose discussion topic was cultivating community growth through generations.

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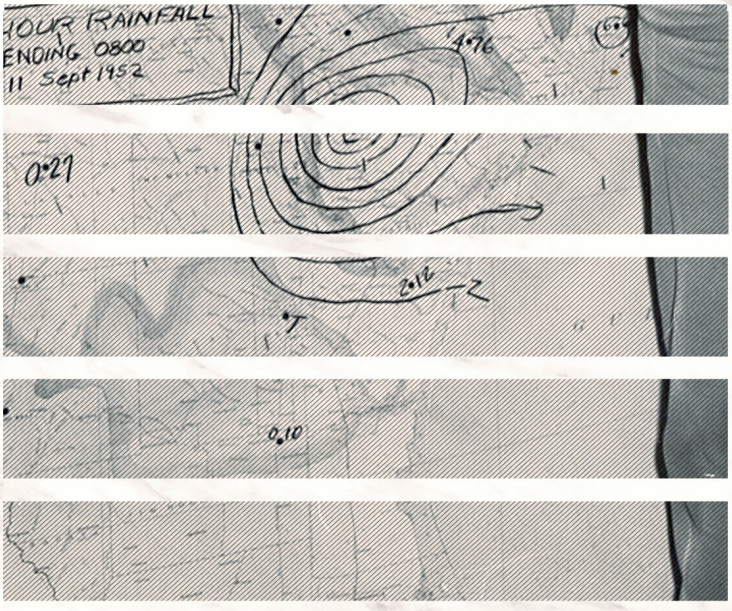

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