

Falls City Engineer

U.S. Army Corps of Engineers Louisville District

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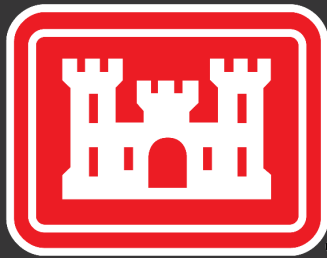
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continue in western Kentucky





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On the cover: Crews remove debris from the right of way along Walnut Street in Mayfield, Kentucky Jan. 26, 2022. (USACE photo by Katie Newton)

Commander's Comments

Team Louisville,

We are well into the new year, and we have hit the ground running despite challenges with COVID and winter weather systems that continue to make life challenging and unpredictable. Our COVID-19 cases in the district are decreasing significantly, our virtual open house was a success, and we continue to make steady progress with helping the community of Mayfield recover.

We continue to lead across the region and deliver for our partners and stakeholders with world-class excellence. This is a testament of our strong project delivery teams that remain focused on the definition of winning in USACE – delivering quality projects on time, within budget, and safely. As we move through February, I ask each member of our Louisville District team to put an emphasis on safety. Preventing accidents from occurring in the workplace requires each of us to fully participate in our safety program. Everyone is a safety officer!

Our Louisville District engineers help to deliver solutions for the Nation's toughest challenges. In February, we will be highlighting some of our incredible teammates as part of National Engineers Week – a week that celebrates how engineers make a difference in our world.

Enjoy this issue of the Falls City Engineer, which focuses on the great efforts of our people and teams who comprise this district. Stories include updates on the virtual open house, debris removal efforts in Mayfield, National Engineers Week, the National Roofing Program, and project updates for the Louisville VA Medical Center and the Multi-use helicopter training



Col. Eric Crispino
Commander and District Engineer
Louisville District
U.S. Army Corps of Engineers

facility at Fort Campbell. We also have an article about how our Green River Lake facility is used for life-saving swift water training.

Finally, I want to thank all of you for being so resilient during these first few months of the new year. It can be very stressful as our workload continues to increase.

Thank you for what you do every day to make the Louisville District the great place it is.

Building Strong! Louisville Proud!

Col. Eric Crispino

Eric D Crispino

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Emergency Operations

Tornado recovery efforts continue in western Kentucky

Abby Korfhage, public affairs

On Dec. 10-11, 2021, history-making long-track tornadoes hit western Kentucky and caused widespread devastation to the area, especially to the City of Mayfield. Since then, the U.S. Army Corps of Engineers Louisville District has been on the ground supporting the disaster response.

USACE works under the direction of the Federal Emergency Management Agency to support state and local governments in responding to major disasters. Under the direction of FEMA, the district has been working in partnership with state and local agencies to help Mayfield and Graves County get back on their feet.

The Louisville District has received eight total mission assignments from FEMA in western Kentucky, which included performing debris assessments in 16 counties declared under federal emergency declarations, providing technical assistance and technical monitoring of debris removal operations in surrounding counties, and most notably, a request for direct federal assistance for debris removal in Graves County, which suffered the most destruction.

"We activated our Emergency Operations Center on Dec. 11 and began deploying teams to necessary areas as quickly as possible," said Robert Burick, Louisville District Emergency Operations



George Minges and Matt Hagewood, Louisville District, oversee debris removal operations on Cardinal Lane in Mayfield, Kentucky Jan. 4, 2022.

Manager. The district mobilized subject matter experts to perform assessments of debris, infrastructure, and critical public facilities.

Nearby in Greenville, Kentucky, more than 100 personnel from USACE Pittsburgh District and the 249th Engineer Battalion Prime Power Team and contractors were on the ground staging generators for use as part of the Temporary Power Mission. 61 generators were ready for installation, if requested by the State and FEMA.

After the Temporary Power Mission

concluded, the task to remove debris from the hardest hit areas in Graves County remained. The district received a mission assignment from FEMA to begin debris removal and disposal there on Dec 21, 2021.

"Operations are running smoothly and we're making steady progress," said George Minges, Louisville District Emergency Management Chief.

As of mid-February, more than 300,000 cubic yards have been removed.

"Our goal is to manage the debris in a safe manner using the most efficient and cost-effective methods possible," Minges said. "Public safety and the safety of our team and contracted personnel is our number one priority."

The process itself is straight forward. Property owners are asked to sort debris and move it to the curb for pickup by USACE-contracted personnel with self-loading bucket trucks.

"We pick-up debris that is along the public right of way, so anything within 15 feet of the curb that our trucks can reach, we'll haul off," Minges said.

The debris is then transported to the West Kentucky Landfill where crews track the type and quantity of debris being unloaded. Construction debris, such as bricks and drywall head to the landfill while vegetative debris is placed in an adjacent field for incineration.

Incineration is a typical method used to



As of mid-February, the U.S. Army Corps of Engineers has removed more than 300,000 cubic yards from Graves County in Kentucky.

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safely reduce a large volume of vegetative debris left after natural disasters, Minges said. "It's an effective method that provides additional capacity for us to bring in more vegetative debris."

As part of the debris removal mission, the Louisville District is also removing leaning trees, hanging tree limbs and stumps from the right of way in Graves County.

Currently, more than 30 personnel are deployed in support of the recovery efforts. Kendall Johnson, Operations Division Safety and Occupational Health Specialist and Debris Mission Safety Officer, has been with the Louisville District for

approximately three months and jumped at the opportunity to help local communities close to his home.

"I want to help as many people as I can," Johnson said. "I told my own kids, some kids do not have a home anymore, and I can't replace all those things, but I can at least help get the debris out of the way and maybe they can start the healing process."

In addition to Louisville District employees, personnel from the Kansas City, Baltimore, Tulsa, Mobile, Huntsville, Nashville and Vicksburg districts have also answered the call to help.

Mitch Roberts, project manager and Debris Planning and Response team

member with the Kansas City District, is working alongside the Louisville District Debris Planning and Response Team to support the recovery efforts. The Kansas City district established a debris team in spring 2021, and Roberts says the mission in Mayfield is preparing their team for future events.

"Louisville District was gracious enough to allow us to shadow their mission, so we are as prepared as possible when we get our own mission," Roberts said. "I volunteered for the Kansas City PRT to help those recover from disasters. It's a good feeling to help cleanup and to help the community get back on their feet after this disaster."

Civil Works

Green River Lake partners with emergency responders

Abby Korfhage, public affairs

The U.S. Army Corps of Engineers is one of the nation's leading providers of outdoor recreation. The Louisville District alone had over 15 million visitors to their 17 lakes last year. While the lakes provide many great recreational opportunities, they are also often used in partnership with federal, state and local agencies to provide educational resources or to serve as training grounds for emergency responders.

Each year the Campbellsville Fire Department works closely with district personnel to conduct lifesaving, swiftwater training in the tailwater area at Green River Lake in Campbellsville, Kentucky.

"We are proud to partner with the Campbellsville Fire Department each year to support this training exercise which helps to save lives," said Lori Brewster, Green River Lake Project Manager. "They receive a license from our Real Estate division and coordinate with Operations Division and the Water Management team so they can host the training."

The course itself includes five days and over 50 hours of training, according to Chris Taylor, Campbellsville Fire-Rescue Chief.

"We have several of our mutual aid partners from across the Commonwealth to participate in the class," Taylor said. "We take brand new students and turn them into competent people trained in swift-water rescue at the same time our past students and instructors assist with the class giving every rescuer more exposure to moving water."



Courtesy of Campbellsville Fire and Rescue

Campbellsville Fire Department performs annual swift water training in the tailwater area at Green River Lake in Campbellsville, Ky., Dec. 2, 2021.

Taylor works closely with Brewster to ensure proper coordination and ideal training water conditions.

"Whether the training happens is dependent upon us having water storage available to support their needs and the water releases coordinated with us and our water management team," Brewster said.

There are quite a few factors that go into any release decision, according to the Louisville District Water Management team. These include the time of year, current and forecasted weather, and pool elevation to name a few. Typically, swiftwater training requests require the release of large flow rates to simulate the necessary conditions.

"Depending on the requested training dates, we can either let a little more water out or hold a little more water back in the

week or so leading up to the training to make sure the amount of water released during the training fits within our overall operating objectives," said Adam Connelly, Louisville District hydraulic engineer. "The water management team does recognize the value of these trainings for public safety, and we are always more than willing to accommodate them as long as they fit within our overall operating plan."

It is not uncommon for trainings like this to be conducted at USACE lakes, and rightfully so.

"This training was instrumental in a rescue that occurred on Jan. 1," said Brewster.

According to their Facebook page, Campbellsville Fire-Rescue saved several people who were stranded in their vehicles

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due to flood waters in the area. Rescuers used a self-bailing raft to save some, and when that wasn't enough, due to fast water conditions, rescue crews deployed a motorized rescue boat. All of which is taught during the crucial trainings at Green River Lake.

"The partnership with USACE is absolutely critical in the success of our training program and also instrumental with successful rescues in the past," Taylor said. "Everyone involved from the USACE level from the license request with Real

Estate to the operations manager and water management work really hard to get us the water conditions that we need to have a realistic but safe training opportunity."

Taylor's team conducted swiftwater training in December at Green River Lake and is planning another for March.

"At the end of the day, we do our best to operate the projects to squeeze every amount of benefit we can get out of them while staying within our approved operating criteria," Connelly said. "Supporting these community events/requests go a long way in building positive relationships within the respective

community and a positive public opinion of the Corps. We are always willing to consider these types of requests to continue that good will."

Taylor echoed the importance of the community relationship. "This unique partnership leads to successful rescues and properly trained rescuers able to operate safely," Taylor said. "We appreciate the support, assistance and partnership that we have with USACE. Green River Lake is a major asset to our community, and we appreciate the working relationship with USACE to make Green River Lake a safer place to recreate and enjoy."



Campbellsville Fire and Rescue Special Operations personnel, along with members from the Lexington Fire Department, complete swift water refresher training at Green River Lake in Campbellsville, Ky., Jan. 25, 2022.



Training participants enter Green River Lake in preparation for swift water training in Campbellsville, Ky.

Louisville District constructing one-of-a-kind multi-use helicopter training facility at Fort Campbell, Kentucky

Charles Delano, public affairs

The U.S. Army Corps of Engineers is building a \$5 million Multi-use Helicopter Training facility to replace the current Special Helicopter Operations Complex training facility at Fort Campbell, Kentucky.

This one-of-a-kind facility consists of a deck landing trainer designed to replicate a Destroyer Designed Guided DDG-103 class ship, nicknamed the “U.S.S. Truxton” and will include an attached six-story structure. The landing pad will incorporate the same lighting with a similar aircraft storage configuration as on board the DDG ship.

A one-story and two-story landing structure for rotary wing aircraft will be built next to the landing deck to accommodate different types of troop offload training.

The key feature of the MUHT will be to provide a rooftop and sea vessel flight deck configuration to facilitate training not currently available with the SHOC facility. The new training structures and configuration will facilitate safe and realistic training for aircrews and ground operators prior to operating in a harsh over-water or high-building environment.

The design of the six-story structure was particularly challenging due to foundational requirements to support the needed loads. With no standard design for this type of training structure, architects and engineers had to work on the design from the ground up, which required the use of fabricated components rather than off-the-shelf.

Unfavorable soil conditions, numerous subsurface limestone deposits and sink holes required the design of a drilled pier foundation system which incorporates a six-story pier for support. Additionally, the structure was moved from its originally planned location to facilitate better soil conditions.

“Both the USACE and construction contractor have worked tirelessly to work through some initial constructability issues and to provide the highest quality project possible,” said Terry Stewart, deputy ACoS engineer, U.S. Army Special Operations Aviation Command. “They are both committed to an on-time project completion while remaining within budget.”

The training facility is scheduled to be completed in August 2022.



Charles Delano

A multi-level tower is being constructed as part of a U.S. Army Corps of Engineers project to build a multi-use helicopter training facility at Fort Campbell, Kentucky, Dec. 7, 2021. The \$5 million project will include the tower, landing deck, elevated platforms and storage building.



Charles Delano

Elevated platforms and storage buildings are being constructed as part of a U.S. Army Corps of Engineers project to build a multi-use helicopter training facility at Fort Campbell, Kentucky, Dec. 7, 2021. The \$5 million project will include a multi-level tower, landing deck, elevated platforms and storage building.

Construction on the new Louisville VA Medical Center clears a major milestone

Michael Maddox, public affairs

The construction site of the new Louisville VA Medical Center has seen a lot of changes since the first shovels of dirt were ceremonially dug during the groundbreaking ceremony Nov. 11, 2021. Contractors have been busy performing various earthwork activities as well as drilling on the site in preparation for the first blasting to break up the bedrock under the site which took place Feb. 21.

The prep work on a site before the major construction activities begin may not present the appearance that a lot is taking place, but it's key in setting the success of a project, said Melody Thompson, project manager for the Louisville VA Medical Center construction project.

"There's been a lot of earthwork going on. When we were designing the project, we always knew that there was going to be a lot of site work before folks started seeing the physical structure come out of the ground, so as people pass by the site they might not realize the amount of work that's already been accomplished," she said. "They've cleared the site, resolved some encroachments and set up their perimeter. We have a significant amount of infrastructure – storm and sanitary work that's begun. They've also started blasting and the next significant milestone will be when they start drilling piers."

The most recent activity on the site was the recent completion of the first blast to further prepare the area for future construction work.

Blasting is required to install key portions of structures on the construction site along with utilities for the facilities, according to Tim Hitchcock, USACE Louisville District area engineer for the project.

"Big picture, blasting is required to allow for the overall construction of the facility. This is due to elevation of the underground utility connections, mechanical systems, foundation/building construction, etc.," he explained.

Hitchcock blasting like what is taking place on the site is a standard practice in all large-scale construction projects that encounter bedrock and allows for savings in time and taxpayer's dollars.

"Blasting was the best choice for this project due to the relatively shallow depth



Michael Maddox

A milestone in the construction of the Louisville VA Medical Center took place Feb. 21 as the first blast of the project was completed. Blasting, which is a construction practice used in removing bedrock, is required to install key portions of structures on the construction site along with utilities for the facilities. Construction is scheduled to be complete in 2026.

of the limestone bedrock and the natural lay of the land," Hitchcock explained. "The other common construction practice to remove bedrock is by using construction equipment that utilize hydraulic hammers. This methodology tends to take considerably more time than blasting and creates a significant amount of noise pollution over protracted periods of time."

"The only way to avoid rock removal completely would be to adjust the existing grades of the site by the importation of material to build the site much higher than it currently is. This would cause other issues in relation to construction, site access, the aesthetics for the surrounding community, and would add considerable expense to the project," he added.

Thompson said even though Mother Nature has caused some delays this winter, she feels the team is on target in the construction process.

"Our construction team is awesome. They are being very deliberate in setting up this project for success - that means that we ensure that the systems are in place to be successful," she said. "Tim Hitchcock, Erich Hoehler, Bruno Bruszewski, Scott Hearne and their teams really work hard, and now we're starting to get the momentum going."

Now that blasting has begun, Thompson is looking forward to the next major activities planned for later this year.

"Blasting was a significant accomplishment. Next, we will be getting the final government offices on site so our team can be together in one location. They're reviewing and working on structural steel submittals, drilling piers will start soon, and if all goes as

planned, we will see them pour decks in the September timeframe," she explained.

Thompson said working on this project is something she and her team are proud to be a part of.

"All the projects the Corps does are important and impact lives from environmental, to civil, to our military construction, but medical work gives back to our Soldiers and their families, to our retirees and our Veterans, when they are at their most vulnerable, when they need us the most," she said. "That's why we do what we do, that's why I have the best job in USACE. It is truly an honor to be a part of this project."

The \$840 million project designed by SmithGroup is being constructed by Walsh-Turner Joint Venture II, Chicago, Illinois.

The project includes the construction of a new 910,115 square foot medical center, parking structures, a 42,205 square foot central utility plant, roadways, sidewalks, and other site improvements.

The new 104 bed, full-service hospital located on Brownsboro Road in Louisville, Kentucky, will provide world-class healthcare for more than 45,000 Veterans in Kentucky and Southern Indiana.

The new hospital will integrate modern patient-centered care concepts to provide the best possible care for Veterans. In addition, to specifically address the needs of women Veterans, the new hospital will include a Women's Health Clinic with four Patient Aligned Care Teams.

Construction is anticipated to be complete in 2026.

To learn more about the project visit: <https://www.louisville.va.gov/newmedicalcenter/>

Louisville District's National Roofing Program sets standard for Army Reserve facilities

Abby Korfhage, public affairs

The U.S. Army Corps of Engineers Louisville District received its nationwide Army Reserve mission and the Air Force Reserve mission in the 1990's and, since then, countless facilities have been designed and constructed by the district. There are several subprograms that are centrally managed out of the Army Reserve Branch of the Louisville District Project Management Division, one of which is the National Roofing Program, also known as NRP.

"The NRP began as the National Roofing Initiative based on a mission to improve roofing facilities, minimize operational expenses, and maximize the quality of work life for our soldiers," said Jeff Bayers, National Roofing Program Manager. "Due to the success of the project delivery team, the initiative was established as a program for the Army Reserve."

The program began in 1997 and was brought to the Louisville District in 2005 for nation-wide roll out and execution.

"The NRP is a roof inspection and replacement program with the goal of minimizing roofing asset lifecycle cost through high quality design and construction," said Bayers.

According to the team, the success of a roof's performance over its expected lifespan depends upon using a qualified designer familiar with local conditions and engaging qualified contractors to construct the project using high quality materials and workmanship.

In the last 18 years, the National Roofing Program has executed approximately \$200 million in reroofing approximately 900 buildings at nearly 300 U.S. Army Reserve facilities in 46 states, American Samoa and Puerto Rico. The NRP has installed 12 million square feet of roofs and has never had a roof failure, even during hurricanes Katrina, Harvey, Sandy and Rita.

"What really sets the national program apart is the NRP has developed robust guide specifications and details and implemented the use of Registered Roof Consultants during design and Registered Roof Observers during construction," said Bayers. Additionally, the specifications include a requirement for a 20-year no-dollar-limit (NDL) systems warranty, the best the industry offers.

NRP roofs also reduce monthly energy use by increasing insulation requirements,



The National Roofing Program completed the re-roofing project at the U.S. Army Reserve Center in Grand Rapids, Michigan, in 2012.

and when appropriate, reduces the "heat island" effect.

"The NRP uses infrared thermal imaging technology in its inspection processes to examine moisture and other building envelope issues for solutions during construction," Bayers said.

Other best practices and details of NRP include: NRP installs walk pads around all equipment to protect roof and direct traffic; they require stainless steel pipe supports and paints all gas lines; they require installation of ladder access where needed, which improves safety, reduces damage to roofs - a means to access each roof area aids in preventive maintenance. NRP also provides specific details for roof-to-wall transitions and curbs because 70 percent of roof leaks come from roof-to-wall transitions, according to Tim McCellan, Louisville District roofing program technical manager

"Another reason the program has been successful is due to the close integration between construction and engineering on the team," McCellan said. "Construction representatives are active during the inspection and design phase, while engineering remains actively involved throughout the construction process."

Louisville District's construction division has the only two Registered Roofing Observers, also known as RROs, with Larry Drane and Jeff Cannady. The other members of the NRP team from construction division include James



Allgeier, Mike Brooks, John Hearn, Dan Kornblum, Matt Hagewood, Cole Gehlhausen, Nick Bibelhauser, Joel Switzer and Jeremy Heinemann.

The NRP team is always looking for innovative ways to improve the program. Several Louisville District NRP team members, to include Bayers, McClellan, Sheryll Impellizzeri, Ryan Fagan, Andrew McCauley, and Bill Firisin, recently attended a workshop in Charleston, South Carolina to learn more about BUILDER, the Army's building asset management system. The workshop covered the wide-ranging capabilities of the BUILDER environment and how it can be used for asset management and sustainment of existing system components of facilities. NRP is currently supporting a pilot program integrating approximately 80 roofing specific site investigations in BUILDER.

"Our planning and execution cost for running the program are very low amounting to less than 2.5 percent of construction execution," said Bayers, who has been working with the program for 14 years. "My favorite part of the program is the success we have had delivering high-quality products to the Reserves knowing how appreciative they are, and the fact that operation and maintenance costs on the roofs are near zero."

The NRP reduces energy use, is ecofriendly, eliminates maintenance, and most importantly, provides soldiers great facilities for battle focused training.

Louisville District hosts virtual open house for prospective contractors

Madison Thompson, public affairs

The U.S. Army Corps of Engineers Louisville District hosted a virtual open house Jan. 27, 2022, for businesses seeking to work with the federal government. The free annual event is open to businesses, large and small, interested in working with the Louisville District. The event included briefings from Louisville District Commander Col. Eric Crispino and other members of district staff and opportunities to network with district leadership throughout the event.

The event began with opening remarks from Col. Crispino as he welcomed more than 200 participants who attended the event.

Crispino acknowledged that life has been busy for the district, but said he was excited for the year to come.

"The Corps has a record sized program ahead of it. We are looking for similar sized programs in the future. We have a lot on our plate, but it is a good thing," said Crispino, who also went on to discuss the overall mission of the Louisville District

and how we define winning as a district. "We define winning as finishing quality projects ahead of time, under budget, and safely."

After Crispino's opening remarks, other program leaders, including Cristie Mitchell, Reserve Branch Project Management Chief, and Rachel Haunz, Chief Military/IIS Project Management Branch (P3MD), discussed the reserve and military programs within the district.

Following the program briefings, contractors were able to participate in different networking break-out sessions. This allowed them the opportunity to discuss upcoming work with different offices, including engineering, project management, contracting division and small business.

Candi Burchel, Acting Deputy of Small Business, who organized the event, stated that even through the challenges of conducting a completely virtual event, the event was a resounding success.

"The feedback that I have received from contractors is that they really enjoyed

the set up and how easy it was to find the link, presentations, and the networking sessions," said Burchel. "The contractors stated that they liked the amount of time that was dedicated to the networking sessions as it allowed them to attend multiple different offices. The overall feedback was that the contractors found value in the information provided for the office presentations and networking sessions."



Louisville District highlights engineering teammates during National Engineers Week 2022

Madison Thompson, public affairs

The U.S. Army Corps of Engineers has been engineering solutions for our nation's toughest challenges for 246 years. Engineers create new possibilities all the time and the engineers at USACE are no different. During National Engineers Week, Feb. 21 to 25, engineers are recognized for their notable contributions to society.

To celebrate, the Louisville District is highlighting team members from different engineering disciplines. Each engineer focuses on a different facet of engineering. While some engineers focus on things like remediation and construction, others spend their time negotiating contracts and designs. Other civil engineers deal with the financial side of engineering and more.

As the nation's engineering and public works agency, USACE delivers quality projects and programs, on time and within budget, safely for the American people, and these engineers help make USACE a strong organization.

Anna Scoggins, an environmental engineer, focuses primarily on remediation and cleanup of potentially contaminated

sites and often applies historical knowledge to the projects she works on.

"Environmental engineering combines all of the fundamental aspects of engineering with soil sciences, water, and biology. I work on a lot of soil and groundwater contamination. We're cleaning up soil and groundwater that could potentially be a hazard to human health or the environment," said Scoggins. "I think environmental engineering is really cool because we are, in one way or another, protecting human health and the ecosystem and keeping health and safety for everyone for this and future generations."

When she is not working, Scoggins actively participates in strong woman competitions.

"I've been really into strength sports for the past five or so years enjoying that. So, being a strong woman is really cool. I really like that. Outside of the gym, I like to bake and sew and read. Getting my creative mind going is fun. I also play viola," said Scoggins.

Brandon Steele, is also an environmental engineer but with a focus in chemistry. For USACE, Steele specializes in the chemical

engineering aspects of remediation. One of the biggest responsibilities for his job as an environmental engineer is holding the safety, health and welfare of the public in high regard.

"That's what it's all about. We make decisions that impact the public and are for their benefit and to improve their lives," said Steele. "My job is to inform, as a project chemist, is to inform our technical managers of how to make informed decisions based on the data."

Steele enjoys the challenges that come along with the engineering field, but he also enjoys spending time teaching himself guitar to play in his church band, spending time with his wife, and advancing his golf skills.

Gary Grunwald is a structural engineer in the district's navigation design section where he plays an integral role on the design of the New Soo Lock Chamber in Sault Ste. Marie, Mich.

"You don't learn about navigation projects in school. So, when you come here and find out that this is such a unique

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project, it really gives you a sense of fulfillment,” said Grunwald.

Grunwald was drawn to the engineering profession because of his interest in math and his childhood fascination with drawing house plans and playing with Legos.

“Structural engineering is a subgenre of civil engineering, and civil engineering is anything engineering with the world including buildings, bridges, roads, and the environment,” Grunwald said. “Basically, we make sure stuff doesn’t fall down.”

When Grunwald isn’t working, his interests primarily consist of being president of the Louisville Rowing Club, educating people about the sport, and “creating a place where people feel like they belong.”

Senior project engineer Steve Skaggs negotiates contracts and designs and coordinates with in-house engineers and architects to check compliance with contracts, design codes and criteria. Skaggs was drawn to the field of engineering after a four-week program hosted by the University of Louisville’s J.B. Speed School of Engineering introduced students to engineering and his affinity for math and science made the field a good fit.

“Engineers make a difference in how we all live by solving problems and making life easier,” said Skaggs. It is making a difference and the ability to work on unique projects that excites Skaggs about his job. In his spare time, Skaggs enjoys traveling with his wife, reading and playing golf.

Andrew McCauley, project engineer for the engineering management branch, has a degree in mechanical engineering.

“My position involves managing the

design of Army Reserve Centers, aircraft hangers and other vertical construction needs that our customers request. We work mainly with Architect/Engineering Firms, but also with in-house designers for this work,” said McCauley.

McCauley joined USACE because he feels the work is fulfilling and because he believes we are helping provide the best facilities possible for our troops. What really excites him about his position, however, is getting to see a plan come together.

“We work through the development of the design all the way through the construction and commissioning of the new building. It’s exciting getting to see that finished project that everyone worked hard as a team to achieve,” said McCauley.

His interests outside of work include playing soccer, spending time with family, traveling, and enjoying Louisville’s food and drink scene with friends.

Bill Dorsch, a civil engineer, graduated from Purdue University and focuses on designing both Civil Works and Military facility projects to include airfield design, barracks site design, dam design and repairs, levee design and much more.

“The interesting part of my career is the varied projects that I have been able to design from runway reconstruction projects at Ft. Campbell and Ft. Knox to Army Reserve Centers around the country, levees, and dam rehabilitation at Rough River. Being a civil engineer for the Louisville District is never boring,” said Dorsch.

Outside of work, Dorsch’s interests consist of ATV/UTV off-road trail riding, taking road trips, vacationing in the Caribbean, and raising a family with his wife.

Neal Ralston, graduate of University of Kentucky, studied civil engineering and works now as a cost engineer.

“I work to determine the ‘fair and reasonable’ cost that the government should pay on our construction projects,” said Ralston. “We will typically be setting budgets for projects years in advance, making sure designs are staying within budget, or developing the Independent Government Estimate, which is used in part to award contracts.”

He has many engineers in his family and took an interest in the field at an early age, but what excited Ralston about his position is the constant opportunity to learn.

“I work with a group of very smart people and am always learning something from them. Every project no matter how similar it seems in the beginning, ends up being a learning opportunity,” said Ralston.

These engineers, like so many others, comprise a massive team that reimagines the future for communities across the nation, and they had plenty advice for the engineers of tomorrow.

“When you find the thing you really like, it clicks. Just get out there and try it,” said Scoggins. “Experience all you can experience and try to find that thing that lights a fire in your heart.”

“If you’re considering engineering,” said Steele, “dive into your curiosity and the scientific process. Get your hands dirty. Try stuff out.”

“Don’t get discouraged,” Grunwald added. “You’ll be surprised how far you can really go just by trying and being friendly and respectful. Just be the best person you can be and don’t worry if something bad happens. Just get back on the horse and get back at it.”

