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LOUISVILLE DISTRICT



**Olmsted team welcomes
win-win wetsuit work**
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On the cover: Staff Sgt. Kyle Broughton (left) goes through the pre-dive safety check and final instructions with primary divers, backup and support staff on the Olmsted middle lock wall. The wet-suited divers are: Sgt. (P) Patrick Morales, Spc. Jacob Feyers and Spc. Thomas Dougherty.



Please conserve:

Think before you print.

Commander's Comments

Team,

In mid-May, Secretary of Defense Chuck Hagel announced his decision to move forward with directed furloughs for most of the Department's civilian personnel. He announced that furloughs will be imposed in every military department (with only limited exceptions) for 11 workdays prior to the end of the Fiscal Year 2013 at a rate of 1 furlough day per week. The U.S. Army Corps of Engineers (USACE) Civil Works funded positions remain an exception to the furlough.

Employees subject to furlough will begin receiving furlough proposal notices now if they have not already. The furlough period will begin no earlier than July 8, 2013. The Department of Defense will continue to monitor the budget situation to determine if the furlough could be further reduced or ended earlier than the 11 days. No action can be taken to issue any notice of proposed furlough, without prior approval of the Secretary of the Army.

June is National Safety Month, and the U.S. Army is implementing its Summer Safety Campaign: "Know the Signs. Know what's right. Do what's right." One area I'd like to call special attention to is recreation safety. As the leading federal provider of outdoor recreation, USACE has a decided interest in keeping visitors to its lake and river projects safe. USACE statistics indicate that 89 percent of water-related fatalities involve those not wearing a life jacket. The most at risk group is males between the ages of 18-35 not wearing a life jacket and who swim in non-designated areas. Wear your life



Col. Luke T. Leonard
Commander and District Engineer
Louisville District
U.S. Army Corps of Engineers

jacket when you swim or boat this summer, and encourage those you love to wear one, too. It only takes about 20 seconds for a child to drown and 60 seconds for an adult. Never let your children swim alone.

Building Strong!

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Sedimental journey

Olmsted team welcomes win-win wetsuit work



Spc. Jacob Feyers (seated right), 19, from Detroit, Mich., and a veteran of Hurricane Sandy recovery diving, peers into his superlight 37 Kirby Morgan helmet as he is assisted in suiting up for his descent into the Olmsted lock culvert.

Jon Fleshman, Olmsted Division

Army divers feeling their way through the murky Ohio River waters of an Olmsted lock culvert April 8 were on a recon mission with great potential.

For the first time in the project's history Army divers were being used, and at a fraction of the cost for contract divers. At the same time, the divers were gaining useful experience and ensuring their qualifications remain current.

"The Army divers were able to provide us valuable information regarding the amount of material that has accumulated in the filling and emptying culverts of the lock," explained Mark Wise, the lead dive-safety administrator for the Corps of Engineers' Olmsted Division. "The divers learned a lot about us and us about them. The plan is to have them back to assist us over the low-water season and possibly with the cleaning of the culverts."

The Olmsted Locks and Dam construction project is about 17 miles upriver from the confluence of the Ohio and Mississippi rivers in the busiest stretch of inland waterway used by commercial navigation in the country. The construction of the 1,200-foot locks is already complete, and the locks must be maintained in working order even while the dam component of

the project is still under construction.

During their week at Olmsted the wet-suited Soldiers with military occupational specialty 12 Delta were submerging in about 35 feet of 44-degree water and penetrating the 18-by-14-foot culverts as far as 255 feet.

"It was all by feel with no visibility. It was cold, dark and muddy," said salvage diver Sgt. Brian Adams, who made the first Olmsted dive for the 511th Dive Detachment stationed at Joint Base Langley-Eustis in Virginia. The detachment is part of the 30th Engineer Battalion, 20th Engineer Brigade, 18th Airborne Corps, U.S. Army. Adams, 25, has six years of Army diving experience in places like Kuwait, Bahrain, Iraq, Qatar and Oman, as well as on locks and dams in New Mexico and Colorado and has cross-trained with the Swedes and Germans.

For Louisiana native Pfc. Jace Dilmore, his dive with Adams was his very first job after training that included six months at the Naval Diving and Salvage Training Center in Panama City, Fla.

"It definitely was an eye-opener to what we're going to be doing. It makes us appreciate when we do have visibility," Dilmore said. "It was good to know you've got somebody experienced with you. It's a little bit of a nerve tester, but

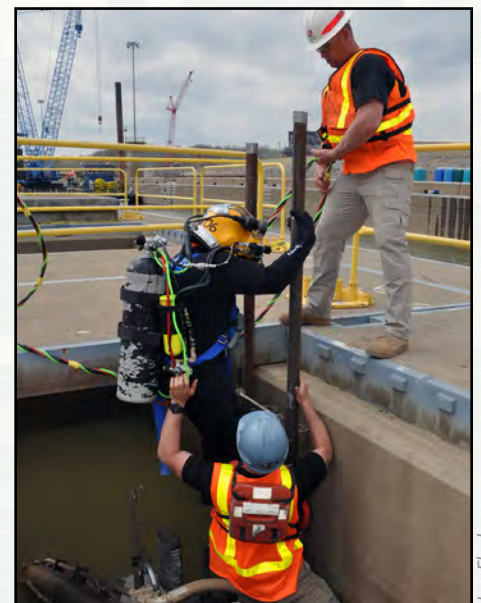
that's what I'm in for, to get a little bit of a thrill."

His divers used a depth-finder called a pneumofathometer and simple arithmetic to measure the thickness of the sediment, explained the noncommissioned officer in charge of the operation, Staff Sgt. Kyle Broughton. They calculated the thickest sediment was about 10 feet deep in the culvert, and they brought up buckets of samples for Corps of Engineers technicians to assess. Broughton's eight-Soldier team convoyed from Virginia with their equipment that included a mobile recompression chamber called a hyperbaric stretcher. The eight-year diving veteran from Spring, Texas, said his mission on the first Olmsted visit was to develop a scope of work for future operations to remove all sediment from the culverts.

"One way this mission is unique is the penetration into the culvert," Broughton said. "It is a strange feeling when I cannot see my divers' bubbles. But our standard operating procedures never change. We have set verbiage and actions that ensure our divers' safety."

Broughton said if the 511th Diving Detachment returns at the beginning of summer to remove the sediment, the team would use a large submersible pump.

"There's a lot of mud in there," he noted.



Teamwork is key. 1st Sgt. Milton Prather (above right) and Pfc. Jace Dilmore (below right) help Sgt. Patrick Morales keep his umbilical lines from tangling as he descends to the culvert.

Improving water quality

Corps biologist fights algae blooms at Salamonie

Katie Newton, public affairs

Harmful Algal Blooms (HABs) have been plaguing the Salamonie Watershed in Northern Indiana since 2009, and U.S. Army Corps of Engineers (USACE) Louisville District Water Quality Biologist Jade Young has been working for more than three years to combat the problem.

Due to the concerns raised by HABs in the Salamonie Reservoir, the Louisville District Water Quality Team, which monitors water quality in the district's reservoirs, decided that an intensive study of the Salamonie Reservoir was needed to help determine the potential causes of these HABs.

The samples taken in 2009 at the reservoir determined that the main inflow to the Salamonie Reservoir—the Salamonie River—was contributing high levels of nutrients and pollutants to the lake.

"We know that algae growth is fueled by nutrients, just like when you fertilize your yard," said Young. "It's the same concept."

To better understand the sources of these pollutants and the Salamonie Reservoir Watershed itself, Young organized and led field work to collect samples from the entire stretch of the Salamonie River in 2010 and continued in 2011 and 2012. She printed maps, scoped out the best sampling sites and collected samples at more than 20 sites along the river three times a year for analysis. "I hoped to figure out the cause of the algae blooms," said Young, "It seemed like an interesting puzzle."

Ultimately the data showed high levels

of nutrients through Salamonie River and a significant amount of run-off in the watershed.

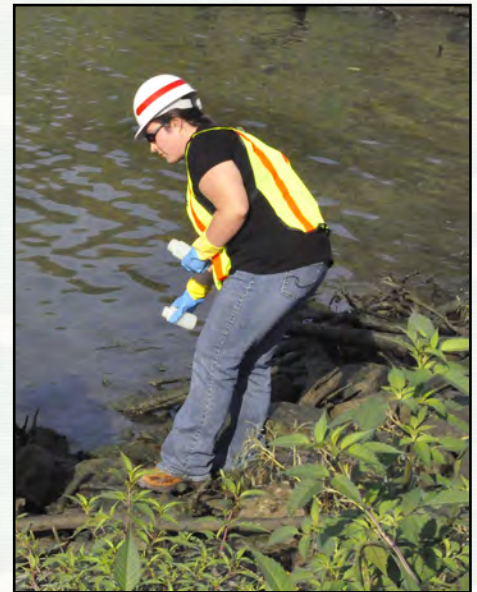
"Jade's research has been presented to several Indiana state and county agencies as well as various watershed stakeholders," said Chris Karem, Louisville District environmental branch chief. "The samples and data collected under her guidance and management have aided Huntington County in attaining a 319 grant that will hopefully be utilized to improve water quality conditions in the Salamonie River and Reservoir."

In February, Young attended a meeting of the Lower Salamonie River Watershed Steering Committee to present the Corps' data from the past three years.

The meeting gathered partners from USACE, Indiana Department Environmental Management (IDEM), Indiana Department of Natural Resources (IDNR), The Nature Conservancy, Natural Resource Conservation Service, Salamonie Watershed Soil and Water Conservation Districts (SWCD), Huntington board of tourism, Taylor University and the Huntington County Department of Health to discuss a 319 grant that was awarded to Huntington County.

The grant provides money to the county for research and implementation of best management practices and has already helped to hire a watershed coordinator for the project.

IDEM explained the basics of the 319 grant and the processes the committee would have to follow. "We have a diverse number of agencies working together and any issues we run into will be quickly ad-



Jack Sweeney

Jade Young, lead of Louisville District water quality team, draws water samples to check for Harmful Algal Blooms.

dressed," said Young, who is fulfilling an advisory role to the committee.

"This is the start of a long journey to improve water quality at Salamonie," she said.

As of early May, no harmful algae blooms were currently present at Salamonie. Water samples collected from the lake, by John Scheiber, Salamonie project manager, indicated that the lake was not experiencing a blue-green algae bloom, which can take on various appearances and look like scum or green paint. "Last year because of the drought and such warm weather we had significant algae blooms," said Young.

In case the HABs return, there is a response plan in place requiring notification to the public. USACE, IDEM and IDNR are collaborating to post warning signs at the beaches, boat ramps and park entrance. "We have to notify the public of the risk they are taking by recreating in the reservoir when algae blooms are present," said Young.

Young, who has worked with the Louisville District for almost 4 years, received both of her degrees in biology from Tennessee Technological University. In addition to leading the water quality team for the Louisville District, Young is also researching water quality issues at William H. Harsha Lake in Ohio.



Jack Sweeney

Harmful Algal Blooms at Harsha Lake in Ohio in summer 2012.

Air quality concerns call for Corps' quick action in the Golden State

Katie Newton, public affairs

The U.S. Army Corps of Engineers (USACE) was called on for quick action in the San Francisco Bay Area to conduct an on-site investigation for trichloroethylene (TCE) vapor intrusion that had raised concerns in the area. In short time, the Corps' Louisville District engineering team mobilized more than 2,000 miles away to Moffett Federal Airfield to perform the investigation.

"Work plans were developed in three weeks, and within six weeks we were onsite for the pre-sampling survey," said Josh Van Bogaert, Louisville District environmental engineer.

The investigation was expedited due to air quality concerns in facilities at Moffett Field, including a Navy Lodge, Reserve's military entrance processing building and an office building. The buildings sit above a groundwater TCE plume originating off-site from historical Silicon Valley manufacturing.

"Because of these vapor intrusion concerns about the facilities and residential areas, the Environmental Protection Agency (EPA) made an urgent request for indoor air, outdoor air, and sub-slab vapor sampling at the three buildings," said



Outdoor air samples were collected at the rooftop air intake of the office building.



Murray Woodard, concrete technician, drills the hole for a sub-slab soil gas monitoring probe.

Louisville District Environmental Branch Chief Chris Kareem.

The Louisville District was tasked by the South Pacific Division to conduct this work for the Army Environmental Command (AEC). The Louisville District environmental team members Josh Van Bogaert and Kari Meier, Louisville District project manager headed to California in mid-January for a site survey. Jerry Simms, Louisville District industrial hygienist, conducted sampling with Van Bogaert February 26-27.

"We installed permanent sub-slab soil gas sample probes and used Summa canisters equipped with flow controllers to collect three outdoor air, 10 indoor air and nine sub-slab soil gas samples over a period of two days," said Van Bogaert. "Sample locations ranged from office space, medical exam rooms, and hotel rooms to rooftop air intakes. We wanted to ensure we were collecting samples representative of the various building uses."

The sampling, which looked for site-related volatile organic compounds (VOCs), found no exceedances of EPA risk-based screening levels in indoor air for trichloroethylene (TCE). The results also showed that sub-slab soil gas TCE levels do not

pose a risk for vapor intrusion.

The Bay Area Air Quality Monitoring District data and local wind patterns were used to demonstrate that the presence of benzene, which exceeded screening levels in 12 of 13 ambient air samples, is related to regional air quality and not site-related. "We used outdoor air data obtained from the regional air monitoring district to avoid a costly and ineffective response action," said Van Bogaert.

The Louisville team prepared a report to document the results and supported AEC by presenting the results at the Restoration Advisory Board meeting.

"Most importantly, we demonstrated that the buildings are safe and highlighted the Army's commitment to environmental responsibility and maintaining a safe working environment for its staff," said Van Bogaert. "The Louisville environmental team provided a quick, efficient, and cost-effective solution to the customer by using in-house staff to perform all elements of this time-critical project."

The Louisville District will continue to support the project as coordinated through the South Pacific Division, and requested by AEC.

Environmental Branch hosts Earth Day contest

The Louisville District's Engineering Division, Environmental Branch, hosted an Earth Day contest in April. There were 18 entries submitted in the fields of visual art or poetry.

The winning work of visual art was by Bernice Amburgey, Upper Kentucky River Corps Office, for a photo of activities at Buckhorn Lake and local community members doing trail work on National Public Lands Day.



Bernice Amburgey

In the field of poetry, Doug Meadors, environmental branch, won for his pledge on reusing and recycling:

*A reusable bottle holds today's water for walking
Actions done mindfully do more than talking
I will support more transportation options
Community meetings need more voices
It's not that far
I will leave the car
That faucet that has been leaking a drip
New faucet valve seats will fix it
With more thinking about recycling each day
I will reduce the amount that I throw away
A yard side garden built up with compost
Produces fresh food without the truck cost
Thrift and thought go hand in hand
Living in harmony with the land
I live on this earth under the sun
My choices make a difference, one by one.*

Military Construction

Wind tunnel gets facelift at Wright-Patt

Katie Newton, public affairs

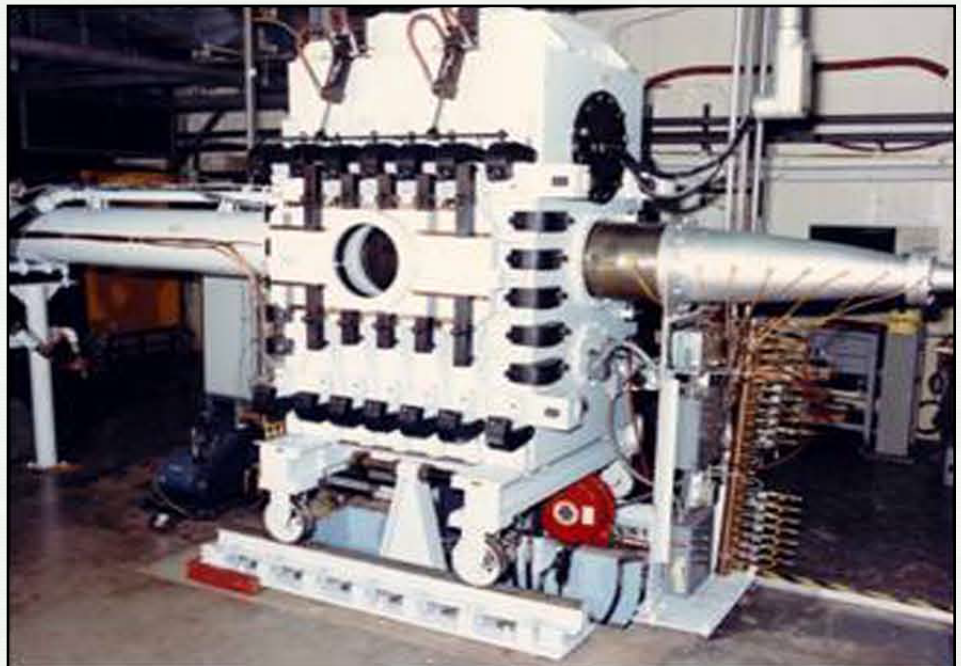
The U.S. Army Corps of Engineers (USACE) Louisville District has helped to revitalize the Mach 6 Wind Tunnel at Wright-Patterson Air Force Base, Ohio, which ensures a bright future for aerospace research and development.

The Mach 6 Wind Tunnel facility, part of the Air Force Research Laboratory at Wright-Patt, has been around since 1972 and needed a facelift.

"It's a key part of the overall Air Force Research and Development commitment to hypersonic science and technology for current and future aerospace needs," said John Hearn, construction representative, Wright-Patterson resident office.

The Mach 6 was built to simulate flight from altitudes of 30,000-130,000 feet. The heated, blow down wind tunnel enables structural testing and analysis on hypersonic material and vehicle applications, including shock/boundary layer heating phenomena.

USACE, along with Prus Contracting LLC, Cincinnati, Ohio, worked quickly to revitalize the facility by connecting two research compressor skids to new electric



Air Force Research Laboratory

The Corps recently oversaw the revitalization of the Mach 6 Wind Tunnel at Wright-Patterson Air Force Base, Ohio.

feeds. New high pressure air piping was installed, and a minor renovation of Building 456 facility and the research bottle farm also took place under the \$225,000 revitalization project.

The upgraded system will be operational in the near future and handed over to the user—Aero Validation Branch, part of the Aerospace Systems Directorate in the Air Force Research Laboratory.

Snyder is regional Regulator of the Year



Louisville District regulator Deb Snyder works during a field visit for the Indiana Interstate 69 Evansville to Indianapolis highway extension.

Carol Labashosky, public affairs

Deb Snyder, Indianapolis Regulatory Field Office for the Army Corps of Engineers, has been named the Louisville District Regulator of the Year, but even more prestige has been bestowed on this recognition because she has been selected as Great Lakes and Ohio River Division Regulator of the Year. This distinction also propels her forward to compete for the national award, the Don Lawyer Regulator of the Year.

Snyder began her career as biologist at the Pittsburgh District where she worked in the Corps' planning section from 1999-2004. She was later offered a position in the Louisville District and has served in the Indianapolis Regulatory Office for nine years.

Besides being a self-starter who takes initiative to keep projects moving, she is known for successfully managing and leading complex transportation permitting projects. One of those projects found her as lead and senior project manager for the Indiana Interstate 69 Evansville to Indianapolis highway extension. It is a contentious, complex and ongoing project fraught with litigation and public sensitivities. The National Interstate I-69 Project is needed to facilitate interstate and inter-

national movement of freight through the I-69 corridor.

The area has significant karst resources and many high quality wetlands and other "waters of the United States." Snyder investigated impacts to these waters while using the Corps' guiding principles to balance economic benefits and environmental factors.

She uses the word "complicated" to describe the process on the I-69 project, but she never lost sight of her agency's goals and completed milestone after milestone moving the permit forward. "Working with Indiana Department of Transportation and the Federal Highway Administration – through the National Environmental Policy Act (NEPA) process – I was the lead project manager and liaison for the Corps," she said. "I had to find and communicate what the least damaging practicable alternative was."

Snyder said she attributes her success on this project to the fact that she genuinely liked interacting with the stakeholders on the I-69 project. "It was good to see them, and let them know someone is ready to address their concerns," she said.

Louisville District Regulatory Chief Jim Townsend who initiated the award nominations said her work on the Indiana I-69 permit applications and decisions

were outstanding. "Of particular note were Sections 3 and 4 of I-69. We prevailed in District Court in the litigation brought against our permit decision on Section 3 and the appeal was recently heard at the U.S. Circuit Court."

"Section 4 involved a lot of analysis to high value and sensitive resources, and to that end, she has done excellent work as the lead project manager for INDOT applications," Townsend said. "She ensures a professional and transparent relationship with INDOT and other agencies."

Greg McKay, regulatory chief of the Louisville District's north section, pointed out in the award nomination that under Snyder's leadership, processing time for permits was significantly reduced.

Snyder also received high marks from her coworkers. Laban Lindley, Indianapolis Office regulatory lead said, "Her knowledge, work ethic, and enthusiasm are all characteristics that make Deb a model regulator. Deborah is a valuable member of our Indy Regulatory Team, and we are all extremely proud of her winning this award."



Deb Snyder was named Regulator of the Year for both the Louisville District and the Great Lakes and Ohio River Division of the U.S. Army Corps of Engineers.

Army Reserve debuts new energy-efficient training center

Staff Sgt. Shawn Morris, 99th Regional Support Command, Joint Base McGuire-Dix-Lakehurst, NJ

The Army Reserve hosted a ribbon-cutting ceremony for a new energy-efficient Army Reserve Center on Fort A.P. Hill, Va., April 25.

The event was hosted by Maj. Gen. William D. Razz Waff, commanding general of the Army Reserve's 99th Regional Support Command headquartered at Joint Base McGuire-Dix-Lakehurst, N.J.

"Spending many a winter in temporary World War II buildings on the shores of Lake Michigan at Fort Sheridan, I certainly never had anything like this myself," said Waff of the new facility. "This is absolutely first-class."

Joining Waff as part of the official party were John Knapp, Virginia state director for U.S. Sen. Tim Kaine, as well as Mayor David W. Storke of Bowling Green and Mayor Nancy Long of Port Royal.

"This facility is magnificent," said Knapp, who served in the Army Reserve. "When a young soldier walks into a facility like this, he walks in feeling like, 'The Army cares about me.'"

The \$12 million complex consists of a 32,917-square-foot training center, 7,433-square-foot organizational maintenance



Staff Sgt. Shawn Morris

shop and 1,065-square-foot unheated storage building, and is certified Leadership in Energy and Environmental Design (LEED) Gold, exceeding the minimum federal LEED Silver requirement, and features a geothermal Heating, Ventilation and Air Conditioning (HVAC) system, tankless hot water heating and LED interior lighting.

nance shop and 1,065-square-foot unheated storage building, and is certified Leadership in Energy and Environmental Design (LEED) Gold, exceeding the minimum federal LEED Silver requirement.

The facility includes a geothermal Heating, Ventilation and Air Conditioning system, tankless hot water heating and

LED interior lighting.

"This is a unique facility in the 99th RSC's 13-state region, in that it is the only example of geothermal energy that we have," Waff said.

The center is part of the Grow The Army program, which supports the Army's goal of maintaining soldier readiness while meeting mission requirements through the creation of new facilities and units.

This facility will be home to the Army Reserve's 310th Multi-Role Bridge Company, whose mission it is to transport, assemble, disassemble, maintain and retrieve Army bridging systems. The unit was activated here during a ceremony held Oct. 13, 2012.

"We applaud the Grow The Army program and the goals of sustaining our force readiness and capabilities to preserve the quality of life for our soldiers and our citizens, and protect our country," Long said.

The 180 Soldiers of this unit will use this state-of-the-art facility to ensure that the Army Reserve continues to provide trained and ready troops to the nation.

"We look forward to having you here, and keep doing the good things that you do," Storke said to the soldiers in attendance.



Staff Sgt. Shawn Morris

John Knapp, Virginia state director for U.S. Senator Tim Kaine, Sheriff Tony Lipka of Caroline County, David W. Storke, mayor of Bowling Green, Maj. Gen. William D. Razz Waff, commanding general of the Army Reserve's 99th Regional Support Command, Lt. Col. Peter Dargle, Fort A.P. Hill garrison commander, Army Reserve Ambassador Anthony Reed, Nancy Long, mayor of Port Royal, Command Sgt. Maj. Keith Whitcomb, Fort A.P. Hill garrison command sergeant major, and Brig. Gen. David L. Weeks, commanding general of the Army Reserve's 411th Engineer Brigade, from left, cut the ribbon during a ceremony April 25 opening the new Army Reserve Center on Fort A.P. Hill, Va.