

The Hoosier Responder

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this issue

- 2 New Albany Fire Investigator
- 5 ISU Drone Degree
- 6 EMAs Monitor Dams
- 7 New EMS Tool

A Few Words on the Weather for Summer 2015

The Wabash River overflowed its banks on July 2 northeast of Lafayette, Indiana. The North Ninth Street bridge in the photo connects Lafayette, at left, to Battle Ground. (Purdue Agricultural Communication photo/Tom Campbell)

Volatile

That's what summer weather of 2015 has been like in Indiana. Heavy rains and thunderstorms seemed to become the norm, not the exception.

Relentless

July of 2015 was the wettest on record in Indianapolis, according to the National Weather Service, with some communities pounded by 5 inches of rain in one day. The last time Indianapolis had close to this much rain was 140 years ago, when the U.S. president was Ulysses S. Grant. According to Purdue University, 2015 had the second-wettest June and July on record for the entire state of Indiana.

Trapped

In July, about 50 people in Madison were trapped in their homes by high water. Madison firefighters and police officers rescued them.

Heroic

First responders in many Hoosier communities braved flood waters to help imperiled citizens. For example, the Bartholomew County Sheriff's Department performed at least 15 water rescues overnight on July 13 and 14.

Sandy

Emergency response managers led volunteers in flood-threatened communities in preparing thousands of sandbags. The number of sandbags distributed throughout the state by the Indiana Department of Homeland Security: about 376,000.

(Continued on page 3)

Putnam County CERT Assists in Storm Cleanup

At 11:15 p.m. on July 13, Putnam County's Community Emergency Response Team (CERT) lent assistance to the cleanup effort after a potential F-1 tornado touched down in the northeastern part of the county. Following storms that brought golf ball-sized hail, Putnam County's CERT saw 20 of its members prepare to respond, which

(Continued on page 5)

House Enrolled Act 1080 Provides Special Death Benefit Coverage for EMS Workers

Special death benefit coverage for emergency medical services workers has now been established under House Enrolled Act 1080. The bill, which was signed into law on April 27, 2015, provides a safety officer special death benefit to an emergency medical services provider who, after June 30, 2015, dies as a direct result of personal injury or illness on the job. The bill also provides that the

cost of the coverage is \$100 per year, payable by the provider.

This bill came about partly as a result of the death of two Indianapolis EMS workers in February 2013. Private Timothy McCormick and Specialist Cody Medley died from injuries sustained in an ambulance crash while on duty. Neither was provided death benefit coverage.

(Continued on page 5)

UAS on Standby for Henry County EMA

It doesn't quite weigh three pounds.

But first responders in Henry County are counting on it to speed up rescue operations, lost-child searches and overall emergency responses.

"It" is an unmanned aerial system (UAS), also known as a drone.

It's only a bit wider than a ruler in any direction, but it can carry a small video camera capable of transmitting live images. Its four white arms each have a tiny helicopter-like rotor on top, and rows of red and green lights on the bottom.

Henry County EMA Director Ronald Huffman said the UAS can quickly provide a bird's-eye view of the path of a tornado, or a person or vehicle trapped in flood waters. It can also provide location details of hazardous materials spills so response teams can be directed faster and with more precise directions.

"It can travel across a field quicker than we can to look for someone hurt in a storm," Huffman said. "We can use it to follow the path of someone being swept away by flowing flood waters."

Real-time images are transmitted to a smart phone or tablet, with Henry

County having both capabilities for mobile tracking and observation.

The UAS cost about \$1,300. A donation from a business paid for the UAS.

The use of a UAS is regulated by the Federal Aviation Administration. The FAA issued the Henry County EMA a Certificate of Authorization on Nov. 21, 2014.

"It can travel across a field quicker than we can to look for someone in a storm."

Ronald Huffman, Henry County EMA

According to FAA rules, the UAS is not allowed to be flown higher than 400 feet. Its daytime-only flight patterns fall under the jurisdiction of Indianapolis air traffic control.

Huffman has recruited four local pilots for operations: three who fly planes and one who flies a helicopter.

Huffman is aware that UAS use can be controversial, with some citizens concerned about safety and privacy, but specialized training and adherence to FAA rules are required for operations. To increase transparency, all images taken by the Henry County EMA drone will be



Bird's-eye view: First responders training for a school bus rescue in Henry County can get detailed images on mobile devices while en route to the scene.

considered public records, viewable by citizens and journalists.

Training times and demonstration flights are posted at least 24 hours in advance on the [Henry County EMA Facebook page](#). Members of the public who wish to watch practice flights will be provided a safe viewing location.

Huffman said that in the future he would like Henry County to have a drone system with thermal imaging to monitor various hazardous incidents, such as trouble with a hazardous materials container before the contents get hot enough to detonate.

Henry County is in East Central Indiana. New Castle is the county seat.

New Albany Fire Investigator Completes Prestigious FEMA Program

George Squier, a fire investigator with the New Albany Fire Department, recently completed the Executive Fire Officer Program through the Federal Emergency Management Agency (FEMA).

Squier, who has been with the New Albany department since 2007, completed courses in executive development, analysis of community risk reduction, fire service operations in emergency management, and executive leadership. Each course also

required an applied research project based on real-life scenarios in students' communities.

"The perseverance required to finish this course speaks to Investigator Squier's focus and dedication to his field," said Jim Greeson, State Fire Marshal. "I congratulate him on this impressive accomplishment."

FEMA's executive fire training is offered through the U.S. Fire Administration's National Fire Academy.

"The intensive (program) is designed to provide senior fire officers with a broad perspective on various facets of fire administration," said U.S. Fire Administrator Ernest Mitchell Jr. in a news release announcing Squier's accomplishment. "This program provides fire services officers with the expertise they need to succeed in today's challenging environment."

Since the program's inception, 58 individuals have graduated from the program in Indiana, and 12 other Hoosiers are currently participating.

Summer 2015 (continued from page 1)

Sheltered

In response to June flooding, the Red Cross briefly operated shelters in Adams, Huntington, Jasper and White counties. The Red Cross was at it again in July, opening shelters in Clark, Hendricks, Jay, Jefferson, Marion, Noble, Wayne and Wells counties.

A flooded house on the north side of the Wabash River, south of West Lafayette, Indiana. (Purdue Agricultural Communication photo/Tom Campbell)



Prudent

Voluntary evacuations took place as Hoosiers wisely got out of harm's way before rising and raging waters became life-threatening. Among those acting quickly: 20 people evacuating from a mobile home park in Rensselaer (Jasper County); 20 families self-evacuating from their homes in Roanoke (Huntington County).



(Photo courtesy of David Kane, IDHS)

Capable

“Over the last two months first responders and emergency management professionals proved, again and again, how important dedication, training and preparedness has been toward preparing for record-breaking events like these summer rainfalls,” said David Kane, Executive Director of the Indiana Department of Homeland Security. “The cooperation and communication between local, state and federal partners has been vital to protecting Hoosiers.”



The Tippecanoe River in northwestern Indiana swelled over its banks in mid-June, flooding dozens of homes in and near Buffalo in White County, including this one. (Purdue Agricultural Communication photo/Steve Cain)

Emergency Response, EMS Conferences in August

The Indiana Emergency Response Conference (IERC) will run Aug. 19-22 at the Sheraton at Keystone Crossing in Indianapolis.

The conference is for firefighters, emergency medical services, law enforcement, hazardous materials professionals, special operations and those who are part of Local Emergency Planning Committees.

A variety of training classes will be available to attendees covering topics including operations, training techniques and social media. There will also be an awards ceremony honoring outstanding responders throughout the state.

Registration and conference information can be found at www.indianaerc.com.

The IERC is planned annually by the Indiana Fire Chiefs Association, the Indiana Department of Homeland Security and Public Safety Medical.

EMS Director's Conference

The 2nd Annual Indiana Emergency Medical Services Medical Directors Conference is scheduled for 8 a.m.-3

p.m. August 19 at the Sheraton Hotel, 8787 Keystone Crossing in Indianapolis.

Registration will open at 7:30 a.m.

The keynote speeches will be "Imagine a world without backboards and collars," by Dr. Marvin Wayne, Medical Director, Bellingham Fire Department, State of Washington; and "Future Direction in EMS and Out-of-Hospital Care: the New York City Experience," Dr. John Freese, Director of EMS Research, New York EMS System.

Other presentations will include:

- Public Policy updates from Art Logsdon, Indiana State Department of Health and Mike Garvey, Indiana Department of Homeland Security.
- Regional Medical Direction Panel: Dr. Michael Olinger, State EMS Medical Director, Indianapolis EMS, Indiana EMS Commissioner; Dr. David Cummins, Porter Health; Dr. Sara Brown, Professional

Emergency Physicians, Inc. (PEP).

- Pediatric Updates, Dr. Elizabeth Weinstein, IU School of Medicine.
- Tactical EMS, Dr. Michael Smith, Reid Hospital & Health Care Services
- EMS Coordinators Breakout Session/The Role of the EMS Coordinator: Ryan Williams, Reid Hospital and Health Care Services; William Gossett, IU Health – Ball Memorial Hospital; and Beverly Hilbert, St. Vincent Anderson Hospital.
- Traumatic Exposure: The Importance of Trauma-Informed Care, Michelle Hoersch, Women's Health, Public Health Advisor, The Office of Women's Health, U.S. Department of Health and Human Services – Region V.

For more information, go to <http://www.state.in.us/isdh/26674.htm>.

Registration Open for Water Rescue Conference in South Bend

The 2015 Surface Water Rescue Conference, which includes training in both the classroom and the St. Joseph River, is set for Sept. 30 to Oct. 3 in downtown South Bend.

Activities will take place in the Century Center conference building and in the East Race Waterway, a controlled-flow, whitewater rapids section of the Saint Joseph River. Anyone who may be involved in surface water rescues – from beginners to seasoned veterans – is welcome to attend.

The annual conference is hosted by the International Association of Water Rescue Professionals

(IAWRP). The \$245 registration fee covers class sessions, admission to vendor exhibits, a reception and "hot" training sessions on the river. Hotel costs are extra; a conference-designated hotel is a five-minute walk from the river.

"The IAWRP was established in 2012 to create a voice for the surface water rescue community, to share best practices and to bring manufacturers, distributors, trainers and users together," said Dave Abt, president of the association. Abt said non-technicians may attend the conference, excluding the on-water "hot" sessions, for a registration fee of \$125.



2014 IAWRP Conference attendees practice a submerged vehicle rescue in South Bend, Indiana (Photo: IAWRP).

Conference information, registration forms and training video clips are available at the IAWRP website at www.iawrp.com/2015-conference.

Fire Investigator Conference Starts August 17

The Indiana Chapter of the International Association of Arson Investigators will hold its 16th annual Fire Investigation Conference Aug. 17-19 at The Palms Banquet and Conference Center in Plainfield.

Topics to be covered over the three days will include fire scene reconstruction, laser scanning technology and identifying



methamphetamine at a scene. The Lawrence William Tuck Investigator of the Year and Terry T. Fleming Lifetime Achievement awards will also be presented.

For an agenda and registration information, visit www.iniaai.com.

HEA 1080 (continued from page 1)

Mike Garvey, EMS director for the Indiana Department of Homeland Security, said that diversity of employment is part of the problem with this type of coverage. “If EMS folks work for a municipal agency, they are probably covered. But for EMS workers who are employed by a hospital, a private entity or any non-fire department provider, they’re probably not. And we have many EMS professionals who work for more than one provider. That means one day they may have coverage and the next day, doing the same job with the same risk, they don’t.”

Garvey says that while HEA 1080 does not make it mandatory for providers to secure coverage for their employees, it is an inexpensive way to extend this benefit to their workers.

Putnam County CERT (continued from page 1)

represents 30 percent of the group’s total membership.

Upon arrival at the scene, CERT members staffed a communications center, which allowed for effective dissemination of information among members on the scene. Members relied heavily on texting as their primary method of communication, as radio reception was unreliable in the area.

Two-person teams were then dispatched to various roadways in the area that were believed to have debris or downed power lines obstructing the flow of traffic. Members on-scene helped direct traffic away from the affected areas as cleanup took place.

CERT members ended their work near 7 a.m. the next day.

IDHS Voices Support for New Indiana State University Degree in Unmanned Systems

Unmanned aircraft systems, more commonly called drones, are playing increasing roles in emergency management – photographing disaster areas and searching for victims – and now students can earn a drone-focused college degree in the Hoosier state.

Indiana State University was recently cleared to launch a 120-credit-hour bachelor’s degree in unmanned aviation systems.

One of the agencies lending a voice of support to the program, which had to be approved by the Indiana Commission for Higher Education, was the Indiana Department of Homeland Security.

“Indiana State aviation students and faculty members are working at the cutting edge of an industry that’s becoming ever more crucial to emergency management,” said IDHS Director David Kane. “We commend them for fostering home-grown, Indiana expertise in this emerging high-tech profession.”

Indiana State is the first Hoosier college or university to offer a bachelor’s degree in unmanned systems, according to an Indiana State news release.

About 80 students are expected to enroll in the new program over the next five years. Indiana State already had offered a minor in unmanned



systems, with approximately 60 students earning that degree since 2011.

The university said nearly 300 of its students currently study aviation flight technology or aviation management.

EMAs Keep Close Watch on Dam Releases

In March, Lindsie Goss and her staff from the Huntington County Emergency Management Agency toured the Roush Lake dam with the U.S. Army Corps of Engineers to learn as much as possible about how the dam operates. Just in case.

Three months later, relentless rains caused Roush Lake to rise too high, forcing the Corps to release water from the dam. At the same time, Salamonie Lake, 15 miles away, also rose.

“People were fearful,” Goss said. “If those two dams failed it would be catastrophic.”

However, the planned, controlled releases by the Corps did the trick.

“We went through an incident that had never happened before, with both Roush and Salamonie so high at the same time,” Goss said. “And both dams performed as designed.”

According to the National Weather Service, Indiana was pummeled by more than 21 inches of rain from June 1 to July 26. There hadn’t been that much rain falling from Hoosier skies since 1875, a decade after the Civil War.

When the water level at a dam gets too high, it can threaten the integrity of the dam or create conditions ripe for uncontrolled overflows from the lakes and reservoirs holding dammed water. Sometimes, carefully managed releases of water need to occur.

The catch? Water released from a dammed lake could, in extreme circumstances, flood areas downstream from the release. But everything has worked out well so far this summer for Huntington County with regard to public safety.

“We had no residential flooding (caused by the releases),” Goss said, “no loss of life or limb.”



The dam at Roush Lake (Photo: U.S. Army Corps of Engineers)

Dam Data

Record rainfalls this summer in Indiana have brought heightened awareness of dams throughout the state – dams that prevent flooding, provide electric power, create recreational lakes, and store drinking water.

Perhaps contrary to popular understanding, most dams in Indiana (about 70 percent) and in the United States (67 percent) are privately owned, often by property developers and, to a lesser extent, utility companies.

According to the Indiana Department of Natural Resources, the state has about 1,100 regulated dams, of which 250 are high-hazard dams.

Dams fall into three categories: high hazard, significant hazard and low hazard. The categories reflect the potential consequences of a dam’s failure, not a dam’s condition, according to the Association of State Dam Safety Officials. Failure of a high-hazard dam could result in the loss of human life.

The association’s website points out that “overtopping of a dam is often a precursor of dam failure.” Water leaves dams in several ways, a common way being via primary and emergency spillways. But if reservoir levels get extremely high, even spillways might not be able to handle the excess water, resulting in the dangerous overtopping that can erode a dam.

This summer, water kept rising and rising in reservoirs collectively called the Upper Wabash Valley Lakes – Mississinewa in Miami County, Roush in Huntington County, Salamonie in Wabash County. Some of the water dammed up in those lakes had to be released, threatening already high levels of the Wabash River and connected streams and tributaries.

Ready to Go

County EMA directors and their first responder colleagues prepared for worst-case scenarios that may be caused by dam releases.

“We were ready to go,” said Kris Marks, EMA director of Miami County, home to Mississinewa Lake and its dam.

(Continued on page 7)

Dam Releases (continued from page 6)

Marks and colleagues in Miami County identified specific potential flooding areas – such as roads, fields and parking lots – that might be affected by significant and prolonged dam releases. Plans for sandbagging, communication to residents and businesses, and the allocation of responder assets were in place. Fortunately, before such plans had to be implemented, the rain stopped.

However, Marks said the challenging aspect of being concerned about the dam waters this summer was that Miami County, like other parts of the state, already had serious issues with standing water and flash flooding. He said a key asset that has helped Indiana communities prepare for potential dam-related flooding this

summer has been strong communication among county EMAs, fire departments, mayors and others concerned with public safety.

In Wabash County, Keith Walters, just two years into his job as director of the county's EMA, was facing a situation he hadn't experienced before, even in his previous seven years as assistant director.

"This was the first time we had all three (Mississinewa, Roush, Salamonie) so full at the same time," Walters said.

Dangers caused by existing flooding, coupled with concerns about the unknown results of the dam releases, caused Wabash County to activate its

emergency operations center in the county courthouse for the first time in Walters' memory. The Wabash EOC was activated for two days, June 29 and 30.

For Walters and his first responder colleagues in Wabash County, the silver lining of dealing with the rainy summer of 2015 was the knowledge gained for managing similar emergencies in the future.

"We learned a lot," said Walters, whose water woes have been slow to subside. As of the end of July, Wabash County still had five roads closed because of bridges covered by water.

New Tool for Paramedics: Smaller, Portable Ultrasound Units

Paramedics now have a new tool in their toolbox – a field ultrasound machine that's small enough to take on emergency runs. These new units are more compact, portable and durable than older models, which makes them better for use in the field.

Portable ultrasound units will help paramedics detect internal injuries right at the accident scene or emergency run so that vital information can be collected before transport. The ability to quickly relay this information to hospitals means medical staffs can be better prepared to specifically treat patients on arrival.

"These small ultrasound units are a great addition and another great tool for paramedics to really see what's going on with a patient," said Indiana Department of Homeland Security EMS Section Chief Robin Stump. "Right now, though, it is a matter of who can afford these machines."

The Carmel Fire Department is the state's first EMS provider to have two of these units, but it could be a while

before other areas get them due to their high price tag. The units cost about \$17,000, but Dr. Michael Kaufmann, Emergency Medical Services Director at St. Vincent Hospitals and the Carmel Fire Department, says this technology will soon be considered essential.

"This is really the first time in history that we've been able to use technology to take a look inside our patients to help give us a better idea of what critical condition they're experiencing or problem they're having at the time they call 911," said Dr. Kaufmann.

The ultrasound machine can help advanced life support personnel quickly detect conditions like pneumothorax, aortic dissection, abdominal bleeds, collapsed lungs and puncture wounds; it can even help paramedics with finding quick IV access. Kaufmann says studies already show the use of these units in the field is changing outcomes.

"There's no question these machines can improve outcomes," said IDHS State Emergency Medical Services



Portable ultrasound units, like the one shown here, can give paramedics valuable patient information about injury or illness so that the information can be relayed to the hospital before transport.

Director Dr. Michael Olinger. "Our responders in the field can make earlier diagnoses and provide hospitals with more information en route. Most of the injuries or conditions the ultrasound machine can detect are not treatable in the field. But by knowing, for example, a patient has an aortic dissection or an abdominal bleed, not only can the correct hospital be chosen but also the right doctors and equipment be set up and ready to go."

Pieces of Retired Purdue Cargo Jet to Become Aircraft Disaster Training Field

Large sections of a disassembled cargo jet will be strewn about a mock debris field to provide a new aircraft disaster training ground in southern Indiana.

This summer, the Indiana Department of Homeland Security (IDHS) helped facilitate a transfer agreement between Purdue University and the Indiana National Guard for a retired Boeing 727, which the National Guard will take possession of and move the pieces to Muscatatuck Urban Training Center.

"This is a great example of inter-agency coordination and it's something we're looking to build upon," said Joe Romero, IDHS director of planning and assessment.

Purdue University's flight program no longer needed the aircraft, and prior to the transfer agreement had planned to dispose of it this summer. However, IDHS Executive Director David Kane thought that the 727 could still be of use at Muscatatuck and worked to put both parties in communication about a possible transfer.

"The core of everything we do is about relationships and recognizing the interdependencies that we rely on for our success," Kane said.



Purdue and the National Guard agreed to the transfer on July 27. The 10-day process of disassembling and transporting the aircraft to Muscatatuck began on Aug. 4.

Due to the prohibitively high cost of re-assembling the plane, the National Guard plans to use the plane's pieces for a crash debris site, where training can occur for mass-casualty incidents and search and rescue operations.

Manufactured in 1966, the 727 has three engines but is not flight worthy. FedEx donated the cargo plane to Purdue in 2006. Students used it to practice taxiing.

In addition to Romero and Kane, other leaders of the the transfer process were Purdue University Airport Director Betty Stansbury, Camp Atterbury and Muscatuck Sr.



The process of dismantling the plane takes 10 days to complete. Crews began uncoupling the plane's three engines on August 4, the first day of disassembly. The pieces of the cargo jet will be used to create a mock debris field at Muscatatuck Urban Training Center. The Indiana Department of Homeland Security helped facilitate a transfer agreement for the plane between Purdue and the National Guard. FedEx donated the 727 to Purdue in 2006 where students used it to practice taxiing (Photos courtesy of Sharon Gerlach, IDHS).

Mission Commander Barry Hon, Director of Military Support Lt. Col. Dan Gilbert, National Guard Liaison to the State Emergency Operations Center Col. Joe Luckett and IDHS Exercise Program Manager Jon Snell.

District 1 Task Force Aids in Search for Gary Residents

The Indiana Department of Homeland Security's District 1 Search and Rescue Team assisted northwestern Indiana public safety agencies searching in July for a missing 21-year-old Gary woman and her 2-year-old nephew.

The pair had not been found by the Responder's publication deadline.

The woman, Diamond Bynum, described in news reports as having a developmental disability, and her nephew, King Walker, were reported missing on July 25.

In addition to search and rescue work by District 1 task force members, the district's mobile command truck was deployed. District 1 also provided tents and

cooling shelters, and helped with volunteer management.

Other organizations taking part in the search included the FBI and the National Center for Missing and Exploited Children.

Anyone with information about the missing Gary residents should call Gary police at 219-881-1209.

Mission

The Indiana Department of Homeland Security will provide statewide leadership, exemplary customer service, and subject matter expertise for the enhancement of public and private partnerships and the assurance of local, state and federal collaboration to continually develop Indiana's public safety capabilities for the wellbeing and protection of our citizens, property and economy.

Contact

The Hoosier Responder is a publication of The Indiana Department of Homeland Security. Please direct any questions or comments to the IDHS Public Information Office at (317) 234-6713 or pio@dhs.in.gov.

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