

Blowing smoke: new screening smoke module shows its stuff at YPG

By Mark Schauer

Usually, where there is smoke, there is fire, but not in the case of the XM75 Screening Obscuring Module (SOM), recently tested at YPG.

Seen as an interim solution to bridge current capability gaps between sustained localized screening obscuration provided by smoke pots and sustained large-area screening obscuration provided by the M56 Coyote Smoke Generator System (SGS), the XM75 provides the Soldier a variety of features to tailor employment based on the tactical situation. This includes the use of a universal mounting provision that enables components to be placed in a mounted configuration on a host of manned platforms; a dismounted configuration option for ground emplacement; and a wireless remote operation capability that removes the Soldier from the high-risk task of initiating operation.

"It provides obscuration to prevent the enemy from being able to visually see your vehicle, to give you an opportunity to escape if you are in a precarious situation," said Steve Wilson, team lead.

"It can put out a good-sized plume



The XM75 Screening Obscuring Module recently tested at Yuma Proving Ground protects Warfighters by obscuring their vehicle from the enemy's vision. (Photo by Bob Filinger)

in a short amount of time," added Michael Shine, test officer.

A recent test of the item at YPG involved as many as four modules mounted to a Stryker Combat Vehicle.

"Usually around here a test is measured in miles," explained Shine. "For this test, it was measured in trials or iterations of the module." Across hundreds of iterations

over the course of weeks, the team monitored the modules for possible

failures and potential leaks, and to ensure that high heat wouldn't negatively impact the modules' performance. They documented issues encountered during mounting and dismounting of system components to and from numerous locations on the test vehicle, as well as any issues encountered during replenishment of system consumables while mounted. The mounting provision that secure

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Record breaking attendance at YPG 2020 Celebration



Nearly 23,000 people flocked to YPG for the YPG 2020 open house and community celebration on Cox Field, Feb. 15. The legendary Grand Funk Railroad band headlined the event. Original founding member Don Brewer is pictured rocking at the concert. Turn to page 8 for more photographs. (Photo by Mark Schauer)

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YTC Employees of the Quarter





Yuma Test Center's (YTC) Employees of the Quarter on the mission support and testing side, Emma Alemdarez and Israel Miranda. YTC Commander Lt. Col. Alicia Johnson presented the awards and bronze medals during the YTC Staff Call on Feb. 12. Miranda, a test officer in the Munitions and Weapons Division, was recognized for his work on the C-RAM project. Johnson spoke about Miranda taking on the job of two people and working long hours. Almendarez, the **Executive Assistant** to Johnson, also stepped up to do the job of two people and learned new tasks to be able to fulfill the duties of both positions. Both employees were very surprised and appreciated the recognition. (Photos by Ana Henderson)

Congratulations to

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Garrison earns Safety Streamer award



U.S. Army Garrison Yuma Proving Ground Garrison Manager Gordon Rogers, Installation Director of Safety Ronald Van Why, and Deputy Garrison Manager Ronny James recently accepted the U.S. Army Safety Excellence Streamer Award. This award recognizes the extraordinary efforts and dedication to duty of the Garrison staff in creating a positive safety culture. In addition they accomplished 147 months without experiencing an at fault accident and a 100% completion rate of the Civilian Composite Risk Management Training which demonstrates safety excellence. (Loaned photo)

ATF Safety week at YPG





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Senator Sinema's advisors visit YPG



Graham Markiewicz, Defense Policy Advisor and Dustin Vesey, Legislative Correspondent for US Senator Kyrsten Sinema visited YPG on Feb. 20. Subject matter experts brief them on YPG's testing capabilities from munition testing to aviation systems and electronic warfare. Markiewicz and Manny Elizarraras, Combat Automotive Division Chief are pictured taking an up close look at the Armored Multi-Purpose Vehicle. (Photo by Ana Henderson)

Future Soldiers spend a day at YPG



YPG Technical Director educates community



It's a wrap! Yuma Proving Ground's (YPG) Technical Director Larry Bracamonte gave the final presentation of the 2019-2020 season's YPG Distinguished Speakers series hosted by the Yuma County Library. The topics ranged from a comprehensive YPG overview to historical topics. Thank you to YPG Commander Col. Ross Poppenberger, YPG Command Sgt. Maj. Jamathon Nelson, YPG Technical Director Larry Bracamonte, and YPG Public Affairs Officer Mark Schauer for your participation. (Photo by Mark Schauer)

New City of Yuma Administrator visits YPG



YPG welcomed the City of Yuma's new City Administrator, Philip Rodriguez, for a comprehensive visit in mid-February. YPG Commander Col. Ross Poppenberger gave Rodriguez an overview of YPG's mission and testing conducted, then they toured the testing sites. Here Poppenberger is pictured talking to Rodriguez about YPG's decades long history of testing the M1 Abrams main battle tank. (Photo by Mark Schauer)



— Chaplain's Corner _____ Do not be afraid of letting go

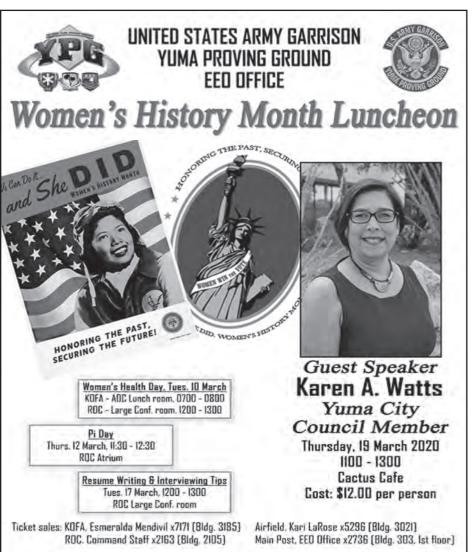
By Chaplain Maj. Ronald Beltz

Some of you baseball fans remember former major league catcher and TV personality Joe Garagiola. Garagiola is a great story-teller.

He tells a story about baseball legend Stan Musial. Musial came to the plate in a critical game. The opposing pitcher in the game was young and nervous. Garagiola was catching, and he called for a fastball to be pitched to Musial. The pitcher shook his head. He didn't want to throw that pitch. Joe signaled for a curve, and again the pitcher shook him off. Then he signaled for a change-up. Still the pitcher hesitated. Garagiola went out to the mound to talk to his young pitcher. He said, "I've called for every pitch in the book; what do you want to throw?"

"Nothing," was the pitcher's reply. "I just want to hold on to the ball as long as I can."

Well, who can blame him? Musial was a legendary hitter. And that's the way many of us are living. Holding on as long as we can to our grudges, holding on to our resentments, holding on to our fears. Why? Because we're afraid to let go. Listen, Deuteronomy 31:8 tells us, "God will never leave you nor forsake you. Do not be afraid; do not be discouraged.



Domestic violence awareness event at YPG

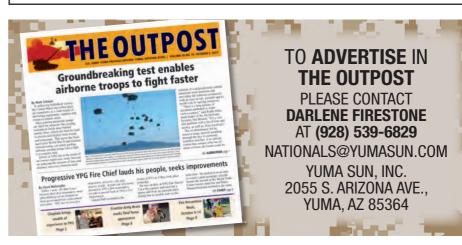


The Family Advocacy Program at YPG hosted a five-day Domestic Violence Intervention Training course in late January. Adam Wells, instructor/trainer from the U.S. Army Military Police School at Fort Leonard Wood spoke to nearly 30 first responders including, victim advocates from the Army, Marines and surrounding civilian agencies, behavioral Health therapists, military police, and criminal investigation command agents from the Yuma area about domestic violence. (Loaned photo)

Teen dating violence awareness



Statistics show one in 10 high school students has been purposefully hit, slapped or physically hurt by a boyfriend or girlfriend. YPG's Family Advocacy Program is working to stop dating abuse before it begins. Youth Advocate, April Henderson, author of A Letter to You spoke with teens at YPG on Feb. 20 spreading the message that everyone deserves a healthy relationship. (Photo by Casey Garcia)



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system components to a vehicle were an important focus of observation testers wanted to ensure that the mounting provision could handle the shock and vibration of traversing some of the world's most punishing road courses across many miles. The sum of these efforts was critical to development of component mounting procedures documented in system training materials and technical documentation.

"We ran the vehicle with the smoke generating over a number of different terrain types," said Wilson. "We wanted to test the endurance of the system and determine its ability to perform as designed across multiple terrains."

Safety is always paramount when testing at YPG, and the unique item under test required additional measures to those typically seen by the proving ground's Combat Automotive Systems Division.

"Because of the potential impact of visual smoke in the local area, in vicinity of, and in the downwind direction from the driving course in use, we had to do a lot of coordination with other tests, ranges, and driving courses," said Shine. "To ensure that all other tests were aware of the hazard, we had to close down each of the courses we were running." "Mike went so far as to notify our

"The fog oil is never burnt: it just becomes atomized," said Michael Shine, test officer. "Then it gets injected out and coalesces into fog. The fog oil used to generate the smoke is purchased in accordance with tight specification and is as harmless as vegetable oil." (Photos by Bob Filinger)

airfield personnel to give a notice to airmen that there could be thick smoke above our test course," added Wilson.

From a distance, some folks not involved with the test wondered if the smoke was caused by fire. It wasn't the smoke is generated by injecting fog oil from the obscurant reservoir into a turbine inside the obscuration generator unit that created and dispersed the obscurant into the atmosphere.

"The fog oil is never burnt: it just becomes atomized," said Shine. "Then it gets injected out and



"We ran the vehicle with the smoke generating over a number of different terrain types," said Steve Wilson, test team lead. "We wanted to test the endurance of the system and determine its ability to perform as designed across multiple terrains."

coalesces into fog. The fog oil used to generate the smoke is purchased in accordance with tight specification and is as harmless as vegetable oil." The XM75 will likely return to YPG for additional testing prior to being ultimately fielded within the next three years.



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MARCH 2, 2020 Major cultural sites protected at proving ground

By Mark Schauer

As a military installation, U.S. Army Yuma Proving Ground has a proud history dating back to the 1940s.

Part of Gen. George S. Patton's Desert Training Center/California-Arizona Maneuver Area during World War II, 20 divisions of men trained here for combat, and ten of these liberated Nazi concentration camps in Europe.

From the 1950s forward, the proving ground has tested virtually every piece of equipment in the ground combat arsenal for the most impressive military in world history. Technologies like the global positioning satellite (GPS) system were pioneered here, and today cutting edge Army modernization priorities like long-range precision artillery fire capabilities are tested here.

But the installation larger in land area than the state of Rhode Island is also home to history that is far more ancient. A crossroads for native people for at least seven thousand years, there are hundreds of culturally significant sites within the modern boundaries of YPG, and the stewardship of these irreplaceable treasures is a high YPG priority. Some of the sites are isolated: vestigial remnants of ancient trails with the occasional arrowhead or potshard strewn on the ground. Others are awe inducing, such as White Tanks in the Tank Mountains.

"White Tanks is an area of significant cultural and spiritual importance to multiple tribes," said Erin Goslin, YPG archaeologist. "Because of that and the federal statues in place for preserving and protecting archaeological sites, we have to do our due diligence. Besides being good archaeology, it is being good stewards."

White Tanks is a canyon studded with natural tenaja or rock sinks that retain rainwater year-round. Some crevices within the undulating volcanic rock have impressive stone



Along the top of the canyon are small caves, some of which have ancient pot sherds and other artifacts, all suggesting human habitation. There are small areas of naturally-occurring obsidian, which is exceptionally rare in this region. (Photos by Mark Schauer)

formations rising from the center of the ponds.

"In hunter-gatherer societies, anywhere in the desert where you have natural collections of



White Tanks is an area of significant cultural and spiritual importance to multiple tribes," said Erin Goslin, YPG archaeologist. "White Tanks is a really important water source for bighorn sheep, deer, and other wildlife," said Daniel Steward, YPG wildlife biologist. "It's good to have a place like White Tanks that is preserved and undisturbed."

water were going to draw human habitation," said Goslin. "Humans will settle at least part-time near water, and given the scarcity of water in this environment, the land will have a higher level of sacred importance."

The water itself may not be palatable by modern civilization's standards: to a parched desert traveler of hunter-gatherer times, the water was life-saving. Across the millennia, passers-through decorated the canyon walls with hundreds of intricate petroglyphs that remain to this day, a faded but stirring testimony to the importance of this natural wonder to unknown numbers of travelers.

Along the top of the canyon are small caves, some of which have ancient pot sherds and other artifacts, all suggesting human habitation. There are small areas of naturally-occurring obsidian, which is exceptionally rare in this region.

White Tanks is a precious cultural resource, but also vitally important as part of the range's natural





ecology. A wide variety of wildlife still relies on White Tanks' natural cisterns for water in the desert. White Tanks was the location of one of the few documented sightings of Gila Monsters at YPG, for example.

"White Tanks is a really important water source for bighorn sheep, deer, and other wildlife," said Daniel Steward, YPG wildlife biologist. "It's good to have a place like White Tanks that is preserved and undisturbed."

Though site surveys over the past two decades show the site is relatively unchanged, YPG personnel remain vigilant in preserving the site for generations to come. Sites like White Tanks are high-profile law enforcement areas, and access points to the area are surrounded by fortified gates and fencing with pickets, all marked by multiple no trespassing signs. Hunters who have proper permissions from YPG are allowed to walk through the area, but motorized vehicles and camping are prohibited.

"It's in one of our hunting areas," said Steward. "As long as hunters are hiking in, not driving, and not camping in the area, we can manage to accommodate that."

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Free YPG GEMS Camp

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Info Page: https://www.usaeop.com/program/yuma/



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YPG 2020 thrills thousands







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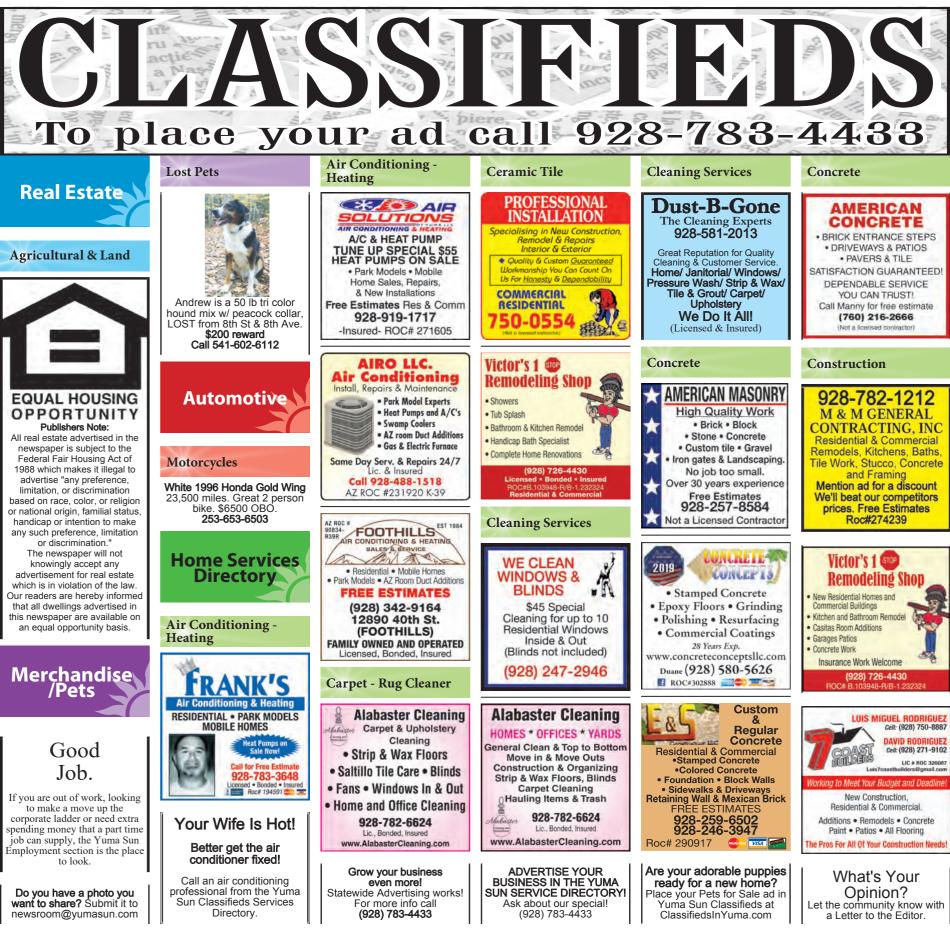




Sat-Sun 11am-5pm

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Navy completes prize challenge for tactical resupply UAS challenge

By Kristine Wilcox, PMA-263 Lead Communications/Multimedia Specialist

THE OUTPOST

The Department of the Navy successfully completed a tactical resupply unmanned aircraft system (UAS) fly-off competition Jan. 27-31 at Yuma Proving Ground, to evaluate existing small UAS and their autonomous aerial delivery capability for the Marine Corps.

Six vendors competed for first, second and third place based on a series of criteria and operational flights. SURVICE Engineering will receive \$100,000 for first place; Chartis Federal will receive \$75,000 for second; and Autonodyne will take home \$50,000. Other participants included AirBuoyant, Bell Textron and Pacific Aerospace Consulting.

"We learned a lot about where industry is in terms of design maturity and what our requirements need to be," said Col. John Neville, Navy and Marine Corps Small Tactical UAS (PMA-263) program manager, who oversees the TRUAS small Unmanned Logistics Support – Air effort. "It was great to have Marines, our acquisition leads and industry in one place to really get a sense of where we need to be and what the next step is for the TRUAS effort."

The project is designed to seek an autonomous unmanned system that can transport at least 60 pounds of cargo in various configurations commonly found in Marine company/ platoon/squad resupply operations (examples: 5-gallon water can, ammunition can/case, meals-readyto-eat case) through a 10-kilometer radius.

The program office's next step is to complete the analysis of the companies' systems and potentially use an Other Transaction Agreement (OTA) to procure prototypes within fiscal year 2020, said TRUAS Team Lead Christina Petrow. OTAs are sometimes used within the Department of Defense to carry out prototype, research and production projects.

If the TRUAS demonstration prototypes meet the fleet's requirements, the Marine Corps could begin conducting field user evaluation on the prototypes as early as fiscal year 2021, said Petrow.

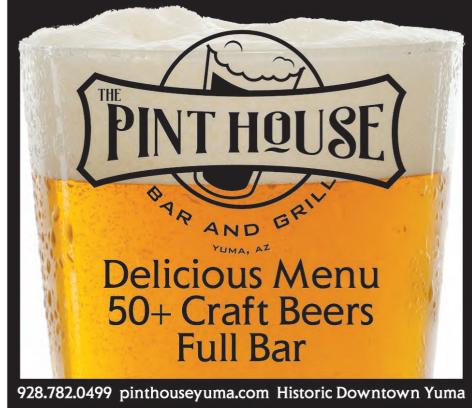
"The fly-off prize challenge has been a great rapid acquisition effort that allowed us to evaluate the existing technologies within a short time period," Petrow said. "We have a better sense of what is available, affordable and viable for the Marine Corps."

For more information on the prize challenge and the winners visit https://impax.tech/





SURVICE Engineering with their TRV-150 system took first place in the Tactical Resupply Unmanned Aircraft Systems prize challenge fly-off competition which took place on Jan. 27-31 at Yuma Proving Ground. (U.S. Navy photos by Kristine Wilcox)





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