U.S. ARMY YUMA PROVING GROUND, YUMA, ARIZONA 85365 VOLUME 71 NO. 24 DECEMBER 05, 2022

Happy Holidays and Best Wishes for the New Dear



YPG employee writes sci-fi novel /Page 3



Drone project will capture YPG digitally /Page 4



YPG's look back at 2022 /Page 7





Local Federal Retirement Consultant Helping all Government employees retire with confidence.

Adrian Elder FRC[™], AIF[®], PPC[®]

Managing Partner & Wealth Advisor

YUMA INVESTMENT GROUP

182 East 16th St. Suite D Yuma, AZ 85364 928.329.1700

Investment advisory services offered through CWM, LLC, an SEC Registered Investment Advisor. Carson Partners, a division of CWM, LLC, is a nationwide partnership of advisors.

YTC Commander thanks longtime employee



Yuma Test Center Commander Lt. Col. Shane Dering presented long-time employee Veronica Montana with a Commander's Coin. Montana is being recognized for her work as a senior technician who processes ballistic data. Her nominating supervisor wrote, "Her effort directly results in improved data quality and the education of junior employees. She recently volunteered to visit test sites each morning to provide hands-on setup advice and troubleshoot issues in person. Continually puts mission first and is always willing to help others." (Photo by Ana Henderson)

The Outpost

This Department of Defense newspaper is an authorized publication for members of the Department of Defense. Contents of The Outpost are not necessarily the official views, or endorsed by, the U.S. Government, the DoD, or the Department of the Army.

Published by RISN Inc., a private firm in no way connected with the U.S. Army, under exclusive written contract. The editorial content of this publication is the responsibility of the U.S. Army Yuma Proving Ground Public Affairs Office.

This newspaper uses material credited to ATEC and ARNEWS. While contributions are solicited, U.S. Army Yuma Proving Ground Public Affairs Office reserves the right to edit all submitted materials and corrections, changes, or deletions to conform with the policy of this newspaper.



News may be submitted to: The Editor, Outpost, Yuma Proving Ground, Yuma, AZ, 85365 Phone: (928) 328–6149 or DSN 899 Visit our website at: www.yuma.army.mil or email to: ana.c.henderson.civ@army.mil



Commander: Col. Patrick McFall Public Affairs Officer: Mark Schauer Public Affairs Specialist/Outpost Editor: Ana Henderson Public Affairs Specialist: Brandon Mejia Visual Information Manager: Eugene Garcia Technical Editor, Cold Regions Test Center: Clara Zachgo

To advertise in **TheOutpost** call (928) 539-5800 or go to advertising@yumasun.com



BUILD IT. TEST IT. FLY IT.



THE DEFENSE CONTRACTOR COMPLEX

AT YUMA INTERNATIONAL AIRPORT • Support Hangars / Infrastructure • Million Air FBO with DESC fueling contract (928) 726-5882 | www.defensetesting.com



Come And Join Us... Your Friends At Red's Bird Cage Saloon Located in the heart of Historic Downtown Yuma 231 Main St. 928-783-1050 Mon-Fri 10:00am - 2:30am • Sat & Sun 8:00am - 2:30am

YPG employee writes sci-fi novel

By Ana Henderson

Richard Gillmor served in the U.S. Marines and currently works at Yuma Proving Ground as an information technology specialist, a position he's held for 18 years.

His team provides live operational video coverage of testing and data so leaders can make real-time decisions. Now, Gillmor can add author to his list of achievements.

In late October he published a book now being sold on Amazon, titled "Almost Immortal" which centers around vampires living in the future.

"I thought, why were all vampire movies always set in Victorian era or current time? It would be kind of cool if you threw it into the future, Apocalypse or Terminator style."

80's movies like The Terminator, Alien, and vampire movies he watched as a kid were his inspiration when writing his book. Gillmor started introducing the movies to his teenage son and they played a game called, "what about this" where he would bounce his ideas off his son to get his thoughts. Finally, with his wife Mandie's encouragement he put those ideas on paper. "She said just stop talking about it and write a book."

He wrote a few pages and after his wife's positive feedback he kept going.

"Most of the time it was after everyone was asleep," recalls Gillmor. "It ended up being almost like a second job, where whenever I had the opportunity, I was writing." Now the ideas just keep coming,

especially while doing mindless tasks like mowing the lawn or

cleaning, so Gillmor plans to continue writing.

"This book was the first in the series that might be three or four books long. Playing the 'what about this' game I got a few ideas, so maybe after a few books in this

> series I am going to do a few other ones," said Gillmor. "I've got six or seven in my head and on paper."

Yuma Proving Ground Information Technology Specialist Richard Gillmor is a budding author. He published his first book titled, "Almost Immortal" in late October of 2022. (Photos courtesy Amazon.com)

YPG meteorologist assists during annual balloon fest



Yuma Proving Ground (YPG) continued its longstanding support of the annual Colorado River Crossing Balloon Festival held the weekend of Nov. 19. YPG Chief Meteorologist Nickolas McColl supported the event by providing weather data to determine if it was safe for participants to . launch the hot air balloons. This is McColl's fifteenth vear supporting the event and his family has enjoyed being by his side for the last 10. Unfortunately, the surface and aloft winds were outside of the safe launching criteria this year. (Loaned photo)







R. J. GILLMOR

Bighorn roundup helps boost population



In late November, Arizona Game and Fish Department in cooperation with Yuma Proving Ground (YPG) and the U.S. Fish and Wildlife Service spent the weekend capturing 30 desert bighorn sheep from YPG and surrounding areas for release in the Harcuvar Mountains north of Wenden, Ariz. Translocations such as these allow wildlife officials to boost isolated bighorn sheep populations to ensure healthy numbers across the range. The animals were also equipped with telemetry collars to monitor their movements and well-being as they adjust to their new home. (Photos by George Andrejko/Arizona Game and Fish Department)







Drone project will capture YPG digitally

By Reinhard Brenneis

U.S. Army Yuma Proving Ground's Directorate of Public Works (DPW) has three major projects to begin digitizing the installation's physical inventory and ensuring digital records are up to date and accurate.

DPW has established a project order with U.S. Army Engineering and Support Center Huntsville to conduct seven drone flight missions to update the installations aerial photography within the Geographic Information System (GIS).

The first drone flight is slated for mid-December and expected to take one week. Additional missions are tentatively scheduled for the last week of each month until all inventory is accounted for.



The GIS Drone Project's first mission/flights will take place at Walker, Howard, and Kofa cantonments as well as Laguna Airfield. The flights will provide DPW with critical insight into the proving ground's real property inventory and give the Real Property and Master Planning Division a clear picture of facilities that require further review.

Digitizing the installation and its assets is an important tool in ensuring mission readiness and sustaining building infrastructure investment. With information about condition, functionality, and remaining service life, shortand long-range work plans can be developed based on sound investment strategies, prioritization

criteria and budget constraints.

U.S. Army Yuma Proving Ground employees and Garrison residents may see one of these drones flying overhead. The drones are capturing digital images of the installation. The first drone flight is slated for mid-December and expected to take one week. Additional missions are tentatively scheduled for the last week of each month until all the installation's physical inventory is photographed. (Photo courtesy of U.S. Army Engineering and Support Center Huntsville)



YPG engineers talk careers with local students



Engineers from across U.S. Army Yuma Proving Ground (YPG) spent the morning of Nov. 22 in San Luis, Ariz. at Southwest Junior High School's Career Exploration Expo, talking with more than 600 students about YPG's important mission testing virtually every piece of equipment a Soldier is likely to shoot, drive, or wear. Engineers Carlos Anaya, Edgar Hurtado, and Jorge Amaya shared the facets of their job testing military equipment and talked about their first experiences hearing about YPG at career day events when they were the students' age. (Loaned photos)



Stay on post & on budget.



Conveniently located on post, we welcome military personnel, all contractors, families and retirees.

SAT 9AM-1PM

812 S AVE

- Complimentary hot daily breakfast Pet-friendly accommodations Free guest laundry IHG[®] Rewards One points for

- members
- **Free WiFi**
- And more!

J HOTELS www. ihgarmyhotels.com

Candlewood Suites[®] on Yuma Proving Ground

928-388-6200

U.S. Army Yuma Proving Ground has long history of testing for space program

By Mark Schauer

This week's much- anticipated landing of NASA's Orion Space Capsule highlights U.S. Army Yuma Proving Ground's (YPG) support of the space program since the beginning of the space program.

Three major tests in the post's history were of the lunar rover, GPS, and the Capsule Parachute Assembly System (CPAS) of the Orion spacecraft, among other technologies.

This testing has required the presence of numerous astronauts over the years, including a very special one.

In 1966, the Mobility Test Article, an early version of the lunar rover, went through developmental testing on YPG's vast ranges. The final product traversed the moon in 1971 and 1972.

Nineteen months after taking his giant leap for mankind, in February 1971 Apollo 11 commander Neil Armstrong visited YPG to witness testing of the AH-56 Cheyenne attack helicopter. Though the AH-56 was cancelled by the Army the following year, the program was a boon to aviation testing at YPG, as it brought about the construction of a substantial amount of infrastructure like laser and optical tracking sites.

YPG was the home of GPS testing from 1974 through 1990. YPG testers attracted the program by demonstrating their ability to collect more data at a lower price than other test ranges. Whereas other test ranges of the period gathered position, acceleration, and trajectory data of test items with electro-optical trackers called Cinetheodolites. recently completed testing of the AH-56 Chevenne attack helicopter had given YPG an edge: The proving ground owned and used a then-state-of-the-art laser tracker that had a far greater range and comparable accuracy to a battery of Cinetheodolites. Further, engineers at the proving ground had adapted room-sized 1960s vintage IBM computers with specialized software that allowed them to collect test data from range instruments and onboard telemetry devices in real time, a groundbreaking advancement that dramatically reduced the time and cost of testing.

When the evaluations began in March 1977, the launch of the first GPS satellite was more than a year away, and, like today, a GPS user needs coordinates from four satellites to get an accurate location reading. YPG testers coped with this by creating an 'inverted range' made up of satellite simulators located in ground-based shelters at four different places. Ground tests of the infant technology were conducted from modified two-and-a-half ton trucks, and aircraft used for testing were outfitted with antennas on the bottom of aircraft to pick up simulated signals from the ground receivers. The earliest GPS systems were so large that a UH-1 helicopter, which carried as many as 14 troops at a time when used in Vietnam, could only accommodate a pilot and two passengers when carrying a GPS device. By September 1977 testers had conducted over 70 test flights with UH-1 helicopters and F-4, P-3, and C-141 airplanes.

By the early 1980s, GPS technology had been miniaturized to the point that a man portable backpack weighing a mere 25 pounds began testing with Soldiers at the proving ground. This testing was conducted in addition to that involving aircraft, all at a fast pace that lasted into the early 1990s.

In more recent years, YPG tested the CPAS that astronauts using the Orion space capsule will count on to land them safely back on Earth. Each of the system's three main parachutes have canopies made with 10,000 square feet of broadcloth nylon, and the rope that makes up the parachutes' cord is made of Kevlar, the strong synthetic fiber used in



Three major tests in the post's history were of the lunar rover, GPS, and the Capsule Parachute Assembly System of the Orion spacecraft aboard the Artemis (pictured), among other technologies.

body armor. The CPAS system is designed to deploy sequentially and pass through two stages prior to being fully open: after hurtling back into Earth's atmosphere, two drogue parachutes deploy to slow the 10-ton capsule prior to main parachutes decelerating the capsule to less than 20 miles per hour. The system is designed with redundancies meant to protect the safe landing of astronauts even if two parachutes fail.



In 1966, the Mobility Test Article, an early version of the lunar rover, went through developmental testing on Yuma Proving Ground's vast ranges. The final product traversed the moon in 1971 and 1972. (U.S. Army photos)



Nineteen months after taking his giant leap for mankind, in February 1971 Apollo 11 commander Neil Armstrong visited YPG to witness testing of the AH-56 Cheyenne attack helicopter. Though the AH-56 was cancelled by the Army the following year, the program was a boon to aviation testing at YPG, as it brought about the construction of a substantial amount of infrastructure like laser and optical tracking sites.

Yuma Proving Ground looks back at 2022

By Ana Henderson

The year 2022 brought new leaders, new infrastructure, and new technology to U.S. Army Yuma Proving Ground (YPG) and its test centers. Here's a look back at the year.

Significant test events

Technology Gateway



YPG was the first home of Project Convergence (PC), so it only made sense to kick off the inaugural PC Technology Gateway here, too. The U.S. Army Combat Capabilities Development Command (DEVCOM) held the demonstration over the course of five weeks in September and October. "Tech Gateway is a portal for non-traditional partners and any novel innovations they have for Army needs," said Rick Deoliveira, Technology Gateway chief of operation. "We saw about 260 different industry solutions that were technically reviewed by our DEVCOM engineers. The industry partners here are the cream of the crop." (U.S. Army photo)

K9A1 Thunder Self-Propelled Howitzer



YPG hosted a demonstration showcasing the use of the United States' most cutting edge 155mm artillery munitions with the South Korean K9A1 Thunder Self-Propelled Howitzer and K10 Ammunition Resupply Vehicle in mid-September. (Photo by Mark Schauer)

C-sUAS Demo returns to YPG

The Joint C-sUAS Office hosted two Counter-small Unmanned Aircraft System (C-sUAS) demonstrations at YPG in 2021 with the Army's Rapid Capabilities and Critical Technologies Office, to give industry the opportunity to show their latest technology. The first two demonstrations were so successful that YPG was tapped again to host a third multi-week event in April 2022. During the first week of the demonstration, testers evaluated systems that utilized high powered microwaves to defeat threat systems. In weeks two and three, the demonstration was open to any C-sUAS system that demonstrated how Contractor Owned Government Operated capabilities could detect, track, identify, and defeat sUAS threats. AMPV tested in three extreme environments



The Armored Multi-Purpose Vehicle (AMPV) underwent extensive testing at all three of YPG's natural environment test centers—Yuma Test Center (YTC) outside Yuma, Ariz.; Cold Regions Test Center (CRTC) at Fort Greely, Alaska; and, at Tropic Regions Test Center in the jungle of Panama. (Photo by Carlos Mora)

Breaking ground

Next phase of Highway 95 lane expansion begins



YPG Commander Col. Patrick McFall, Command Sgt. Maj. Herbert Gill, YPG personnel and community leaders attended a Yuma Metropolitan Planning Organization ceremony Nov. 3, celebrating the beginning of the next phase of the U.S. Highway 95 Iane expansion project, which will widen the highway from Rifle Range Road to the Wellton-Mohawk Canal Bridge. (Photo by Ana Henderson)

Special Operation Forces hanger near completion



The Military Freefall School (MFFS), part of the United States Army John F. Kennedy Special Warfare Center and School, has utilized the proving ground's vast ranges to train thousands of the military's most elite paratroopers. On the morning of Dec. 7, 2021, ground was broken for the construction of a two-bay hangar for the Special Operations Aviation Command flight detachment that has supported training operations of the MFFS. The hangar is the first of three new buildings that that will ultimately bring all the MFFS' activities into one campus. The hangar is scheduled for completion in 2023. (Photo by Ana Henderson) New leaders take over test centers

Cold Regions Test Center welcomes new commander



CRTC welcomed a new leader during a change of command ceremony held at Fort Greely on May 19. The CRTC workforce, along with family, friends, and colleagues welcomed incoming commander, Lt. Col. Jonathan Brown, and said farewell to outgoing commander, Lt. Col. Ina Jackson. Brown accepted the colors during the ceremony from YPG Commander Col. Patrick McFall. (Photo by Sebastian Saarloos)



Military Equal Opportunity (MEO) Commander's 24/7 Hotline (443) 910-1680



Coronado Motor Hotel

www.CoronadoMotorHotel.com

Yuma Test Center welcomes new commander



Lt. Col. Shane Dering took command of Yuma Test Center June 2 during a change of command ceremony in front of YPG's Heritage Center. With several distinguished guests in attendance, Lt. Col. Alicia Johnson relinquished command of YTC after the passing of the guidon to signify the transfer of authority. (Photo by Brandon Mejia)





Full Breakfast, Lunch and Dinner Menu Great Beer & Wine Selection

928-782-7247

195 S. 4th Avenue



www.yumalanding.com

Taking home the turkey!





The Yuma Proving Ground Fitness Center hosted the annual 5k Turkey Trot on the afternoon of Nov. 17. The family event brought out 11 runners and several families who walked the route. First place winners in each category, Nicolas Benziger, Capt. Ryan Pearse and Victoria Salibi each took home a frozen turkey. The second and third place runners earned a ribbon. (Loaned photos)





Inaugural YPG Turkey Bowl



Thanksgiving and football go hand and hand, so the Yuma Proving Ground (YPG) Chapel organized the Inaugural Turkey Bowl for Soldiers at YPG. The Airborne Test Force Soldiers beat the Military Free Fall School Soldiers 20-0. Despite the loss both teams were all smiles. (Loaned photos)



Thinking of a career change?

Teaching may be for you!

Already have a bachelor's degree? Become a certified middle or high school teacher by completing the Post-Baccalaureate Secondary Education Certificate at NAU. Based in Yuma, this two-semester, 30-credit program offers meaningful practicum and clinical experiences that prepare you to become a community leader and committed professional. One year—a certificate from NAU—could make the difference in meeting your career goals!



Contact NAU for more information: NAU–Yuma Education Department | nau.yuma@nau.edu | 928-317-6450 2020 S. Avenue 8E, Yuma, AZ 85365 | nau.edu/yuma/secondary-ed-ucert



OUTPOST

DECEMBER 5, 2022 9







The word of the day is "The Pepsi Challenge." In the 1970's Coke dominated cola sales. By the early 1980's Pepsi was almost neck and neck with Coke. Then Pepsi launched a marketing strategy called "The Pepsi Challenge."

Research proved that in blind taste tests the average American preferred the taste of Pepsi over Coke 60% of the time. During a more rigid "triangle test" (where two out of three glasses were one

COMING

Chaplain's Corner The Pepsi Challenge

cola or the other), the result was even more in Pepsi's favor. Coke did their own research, and even among top executives at Coke, they preferred the taste of Pepsi.

This caused Coke to completely redesign their cola, pull their old recipe off the shelves, and introduce "New Coke." There were protests around the country. The plan was a disaster, the "New Coke" never materialized, and they brought back "Classic Coke" as quick as they took it off the shelves.

What happened? Well, first the Pepsi Challenge was based on a sip test and not drinking the entire can. Since Pepsi is sweeter than Coke, it is a drink built to shine in a sip test. If you only perform a sip test, consumers will like the sweeter product. But when they must drink a whole bottle, that sweetness can be too much for most people. Even more than the differences in sweetness, Coke underestimated the power of "sensation transference."

Coke consumers didn't want the old Coke recipe and packaging to change; and they let it be known. If it isn't broke, don't fix it. If you're winning, keep that legacy/ attitude of winning. Don't quit.

1 Corinthians 15:58 teaches us to, "Be steadfast, immovable, always abounding in the work of the Lord, knowing that in the Lord your labor is not in vain."



Vacation Bible School

Who: K5-5th Grade When: Saturday, December 10 9:00 a.m. - 12:00 p.m. Where: YPG Chapel Why: To teach biblical values and foster community

RSVP using the link or QR code jotform.com/83244495051153 OUTPOST

DECEMBER 5, 2022 11

Chapel hosts variety of community events



The Yuma Proving Ground Chapel Chaplain and religious support staff have been working tirelessly to bring the community together. During the months of October and November, the chapel hosted a variety of events including the first baptism in years, the new ladies social club, date night and children's church services. (Loaned photos)





Over 20+ titles with subjects ranging from 20 Minute Networking Meeting; Get that Job! The Quick and Complete Guide to a Winning Interview; Age of Metapreneurship; Beyond the Military; Down Range: A Transitioning Veteran's Career Guide to Life's Next Phase; Finding Meaning After the Military: A Combat and Survival Manual for Every Veteran Facing the new battlefield of life when entering the 1st Civilian division, and much, much more!

Contact Ms. Connie Everly 928-328-2167/connie.f.everly.civ@army.mil for more information.



we we like the second s

your time is best spent together

We've expanded our hours to work around your morning, evening and weekend schedule.

A short trip can make the biggest difference. That's why we are adding additional locations, expanding our hours and recruiting more providers right here in Yuma County. We're closing the gap and distance to accessing high-quality care because we believe always improving means delivering better care today than yesterday, and even better care tomorrow.



Always friendly. Always clean.

A lot of things have changed but our commitment to excellence hasn't.

Your friends at Cocopah know that safety is top of mind. We hear you, we understand, and we care. We have taken necessary steps to make sure that when you visit us, you are in an environment where you feel safe and comfortable so you can worry less and have more fun. We require all guests wear masks, take no-contact temperature checks and frequently disinfect our facilities. Come visit us when you're ready. We're still just around the corner.

COCOPAH RESORT

COCOPAH CASINO & RESORT

illin

Fun is just around the corner

1.800.23.SLOTS | COCOPAHRESORT.COM 15318 SOUTH AVENUE B | SOMERTON, AZ 85350

Some amenities may not be available due to Covid-19 safety precautions. Management reserves all rights to alter or cancel without notice. For complete offer details please visit the Cocopah Reward's Club.

O)