



Coronavirus Changing Face of DPG

By Becki Bryant

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Dugway Proving Ground continues critical operations in support of military readiness, while implementing several mitigation measures to protect the health and safety of its Soldiers, families and employees during the current coronavirus pandemic.

DPG started operating under a level Health Protection Condition Bravo (HPCON-B) on March 16, and moved to HPCON Charlie (HPCON C) March 25, 2020.

Under HPCON C, the installation is only open to: Dugway residents, mission-and emergency-essential employees, contract employees, and other personnel who have authorized business at Dugway Proving Ground.

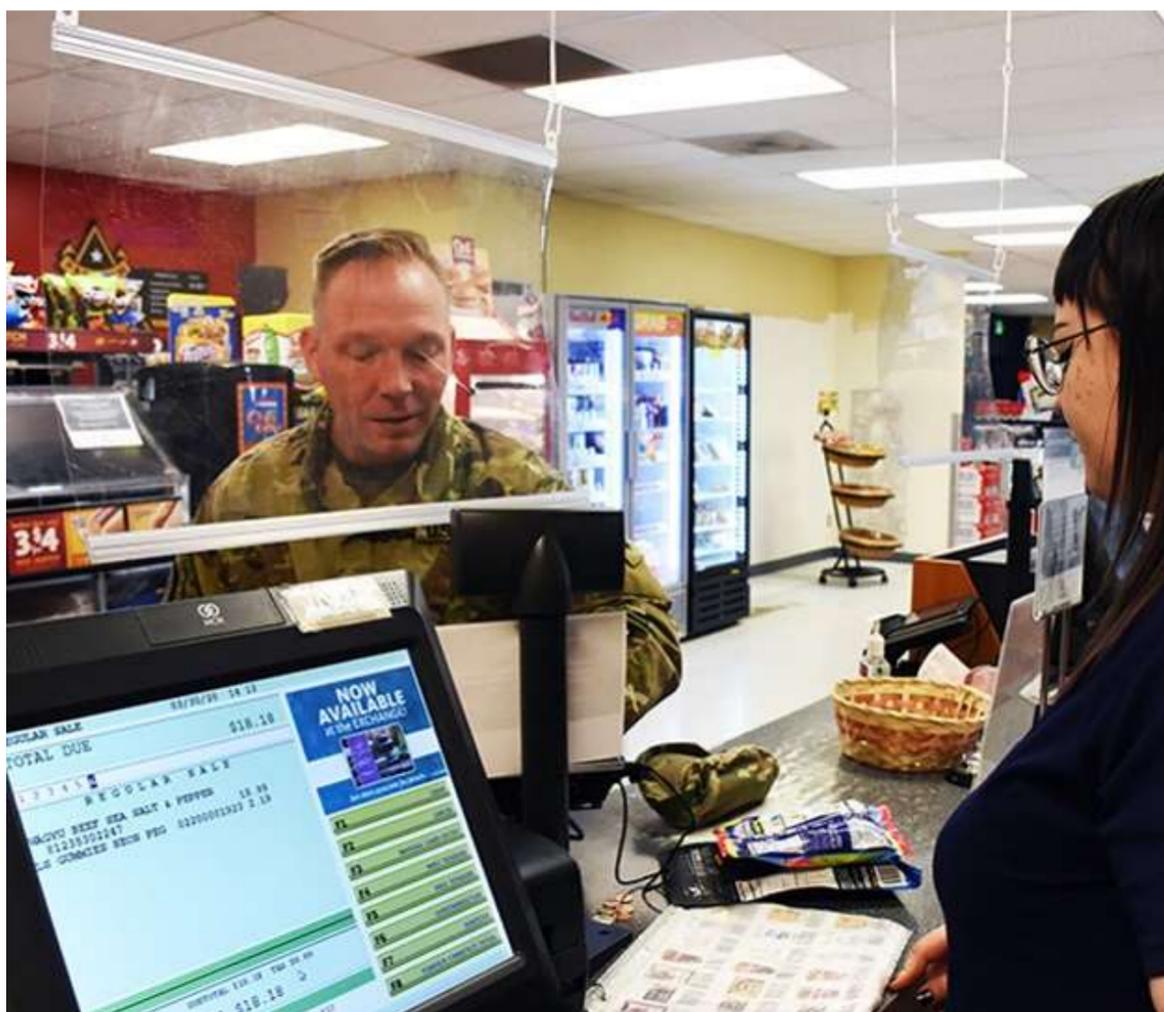
Approximately 45 percent of Dugway employees are working from home.

“Limiting access to the installation is key to preventing the spread of the coronavirus,” said Matthew Adams, who leads Dugway’s Crisis Action Team (CAT), a dedicated working group comprised of representatives from every organization on the installation that oversees proactive COVID-19 planning efforts.

Mitigation measures recommended by the CAT and approved by the DPG Commander include the closure of many installation facilities, including eating establishments, fitness centers, the visitor center, library, and Dugway Hope Chapel. Children and Youth Services is providing care for children of mission essential employees and service members only. The health clinic has limited its services and the fuel station is open but has reduced its hours. The Commissary has not reduced its hours but continues to experience, like almost all grocery stores across the country, supply shortages of high demand items such as toilet



The Dugway Commissary meat department was hard-hit March 25 because of panic-buying, but it has been restocked since. Most shelves are filled, and have a good variety of goods. Photos by Al Vogel, Dugway Public Affairs



A plastic barrier hangs between a clerk and customer at the AAFES Shopette at Dugway Proving Ground. It was installed to reduce the chance of infection by the coronavirus.

INSIDE YOUR DISPATCH

HPCON C



Effort to stop the spread forces many changes at DPG.

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COMMAND PERSPECTIVE



Control the things you can, not the things you can't.

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BIG BANG



Powerful new rocket fuel detonating at Dugway.

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FLY AWAY



Battle tested Hunter UAS takes its farewell flight.

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6 MORE YEARS



A good initial experience has one test coming back for more.

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A SCRAP OF DUGWAY



Long lost scrapbook brings early Dugway to life.

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AND MUCH MORE

Command Perspective



By Kenneth S. Gritton, PhD
Technical Director, West Desert Test Center

The world-wide COVID-19 situation affects every one of us. There is so much going on that is important, and yet out of our control. Recently, DoD published an article (see link below) that may help us manage our own stress by looking to those things that we can control.

Of the many helpful suggested actions in the above-referenced article, I choose to focus on this one.

“Don't Mentally Suffocate; Stay Positive. Control your reactions to restrictive measures required to prevent and battle this pandemic. Positive, productive

mental health is a huge component needed to fight this illness and will directly improve **community response.**”

Every person with whom we interact every day is feeling the same stresses we are. Uncertainty takes a toll on everyone. But we can push back on our collective stress by controlling our interactions with each other. If we approach every interpersonal interaction throughout our day with the attitude of trying to make the **other person's day better or less-stressful** in some way, well, that is something that certainly is in our control.

So how do we do this? High-fives are not the way for present

circumstances, but a genuine smile goes a long way. Answering the phone with the **attitude, “How can I help you? How can I make your day better?”**

As we offer our best selves in very interaction we will uplift and relieve the stress of our families, colleagues and customers. And the result will be a more-positive outlook for own selves as well.

And yes – we are human and stress will take its toll. There will be times when we temporarily lose track of our best selves, but **that doesn't mean we need that** part of us to stay hidden. Simply apologize for our errors, extend

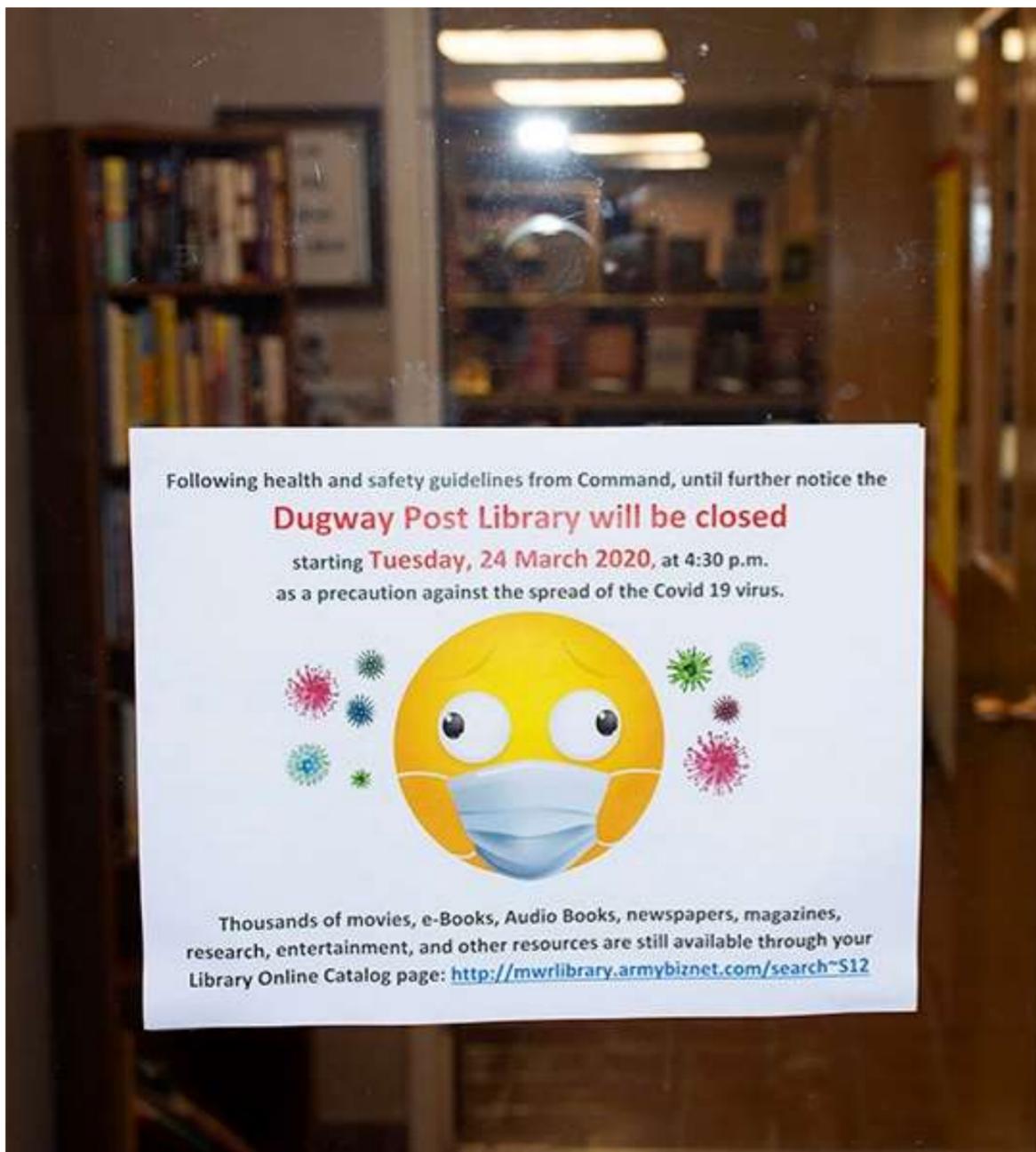
courtesy and forgiveness to those who may temporarily lose their best selves with us, and press on with a determination to stay positive.

The forces of nature and geopolitical economics will march on, but through it all, we can control our attitude. Former First Lady Eleanor Roosevelt **observed, “You can often change your circumstances by changing your attitude.”** And sometimes our attitude may be the only thing within our control. But it is in our control.

Look for What we Can Control – Even if it's Just Our Attitude

We are experiencing something, “unprecedented,” never seen in our lifetimes, disruptive, disconcerting, and disturbing; pick your adjective.

<https://www.defense.gov/Explore/Features/Story/Article/2114814/covid-19-exploit-what-you-can-control/>



The sign on the Dugway Post Library uses a little humor to take the sting out of its closure notice. How long the library will be closed remains unknown. Photos by Al Vogel, Dugway Public Affairs.

Coronavirus . . .

Continued from page 1.

paper, cleaning supplies, and meat. Those items are being strictly rationed.

“Even though we are limiting the number of high-demand items, I strongly encourage shoppers to take only what they need,” said Col. Scott Gould, Commander of Dugway Proving Ground.

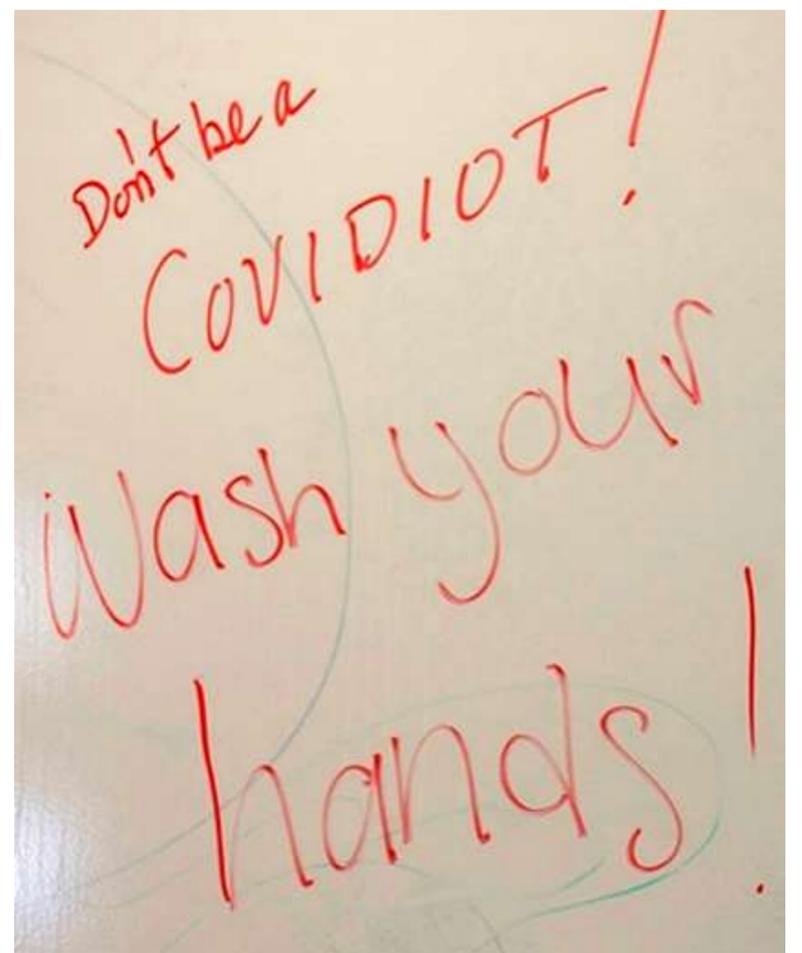
Since 1942, Dugway Proving Ground has tested the nation's chemical and biological defense capabilities, including agent detectors, protective equipment and decontamination systems. Some testing activities at the West Desert Test Center (WDTC) have been postponed, mainly because of travel restrictions, but many continue to be carried out,

including testing of the new Chemical Agent Vapor point detector test fixture to ensure its accuracy when challenging prototype detectors later.

“It certainly is not business as usual,” admitted Ryan Harris, WDTC Director, “but despite the impacts of COVID-19, we continue critical operations in support of our warfighters.”

For now, Dugway Proving Ground will continue that balance of executing its mission and taking measures to protect its workforce against coronavirus.

“Dugway exists because of its mission, but we can't accomplish that mission without people,” said Col. Gould. “We need everyone to stay focused, stay positive, and most importantly, stay safe.”



The opportunity of a blank whiteboard at the ACS Building prompted someone to write a reminder of the need for basic prevention measures. Washing hands frequently in hot water with a bubbly soap for at least 20 seconds is suggested by health experts.

For
COVID-19
CORONAVIRUS
INFORMATION

Visit: dugway.army.mil/Coronavirus/index.html

Rocket fuel test finds Dugway ideal

By Al Vogel

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Two years ago Mike Bangham, owner of Bangham Engineering of Huntsville, Alabama, visited Dugway Proving Ground in the remote Utah desert. He sought a remote area for a new type of rocket fuel, made of liquid natural gas and liquid oxygen that reportedly cost one tenth of other liquid rocket fuels.

The test, begun two years ago and expected to go into 2022, is called COMET, for Cryogenic Oxygen-Methane Explosion Test. Subcontracted to the U.S. Air Force and commercial United Launch Alliance (ULA), Bangham Engineering is learning the explosive properties of the new LNG/LOX propellant.

"We are creating explosions generated by LNG/LOX to establish TNT equivalency," Bangham said. "We're trying to get data on the explosive properties, to understand the risk to facility personnel on the ground and what could happen to the astronauts on board."

The explosive properties of traditional liquid rocket fuels have been known for years, but the new LNG/LOX fuel is an enigma.

"We're trying to get as close as we can to understanding the physics of what happens when LNG/LOX explodes," Bangham said. "It's not like your typical weapon. There is actually more energy stored in these chemicals

than the equivalent in TNT, but it doesn't release energy as quickly."

In COMET tests, a rocket body is replicated from stainless steel and placed upright to duplicate a launch. Within the rocket body are two large chambers, each containing liquid oxygen and liquid natural gas. They are kept from mixing by a thick pane of glass.

Upon "launch" the glass is remotely shattered and the volatile liquids mix. The explosion can be immediate when autoignition occurs. If autoignition does not occur, a secondary ignitor starts the explosion after a programmed delay. Instrumentation near the rocket body records the pressures and heat generated by the blast in high speed, along with high speed video.

Dugway provides meteorological conditions (wind, humidity, dew point and temperature) and the time of ignition.

The last COMET test, with large amounts of LNG/LOX, produced an especially strong blast, creating a large crater and damaging critical test equipment. The curved lid of the tank shot straight up like a flying saucer, and landed 800 feet away.

Though other test facilities in California and Nevada were considered for COMET, Dugway was selected two years ago partly



An engineer prepares the mock rocket body and its glass separator that keeps the liquid natural gas from the liquid oxygen. This body is about one meter in diameter; other larger tests have used 7-foot diameter bodies. Photo by Brittani Yale, Dugway Scientific Technical Photographer

for its size and remoteness. It has 1,248 square miles without encroachment, and abuts the Air Force's Utah Test and Training

Range of 2,675 square miles.

"Dugway has a combination of people that can support the test, and enough area that we didn't

have to share the space with others," Bangham said.

"There are so many things that Dugway personnel excel at. Often, they are very tolerant and understanding of the complexity and difficulty conducting such tests. Environmental personnel are pragmatic. Support contractors have been great and responsive to our needs."

Bangham singled out Ted (T.R.) Fields of the Range Support Division for his wide-ranging heavy-equipment operator abilities.

"He can run cranes, earth movers, backhoes, trucks, dump trucks, rollers, graders – consequently, you don't need a whole bunch of people (on site). If he's out there, and one piece of equipment isn't doing the job, he gets another piece of equipment that will."

Dugway is flexible and more amenable to sudden schedule changes, according to Tracy Lunt, a test officer for Dugway's West Desert Test Center. **"We have been very flexible to accommodate the COMET schedule changes and program delays."**

"Team Dugway has really stepped up, to give (COMET testers) a lot of great support: Meteorology, weapons handlers at Carr Facility who handle some of the energetics, Range Control, and Optics," Lunt said.



Just above the flame is seen a shock wave created from a prior test using 2,000 pounds of propellants. High speed video capture from Test Referee Branch.

Hunter Takes Last Flight Over DPG

By **Gabriel Archer**
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In March, the Hunter unmanned aerial system (UAS) took its last flight over Dugway Proving Ground (DPG).

The Hunter platform arrived at DPG in 2009 to be tested in support of the warfighter, and went on to prove its versatility and technology for years to come.

The Hunter is capable of

carrying out real-time imagery intelligence, artillery adjustment, battle damage assessment, reconnaissance and surveillance, target acquisition and battlefield observation. Most, if not all of these capabilities were proven on the battlefield.

Approximately 30 Northrop Grumman employees work at DPG supporting Hunter. Their jobs at DPG will be discontinued

on or before the company's US Army contract with the Hunter program ends May 10, 2020. In a statement, the company said "We are working closely with affected employees for possible redeployment and will provide them with outplacement services and support."

The DPG Hunter employees will be missed and will always remain a part of Team Dugway.



The Hunter was one of the first joint tactical unmanned aerial system in service with the US Army. It arrived at DPG in 2009, and more than 10 years later recently took its last flight from the installation's Michael Army Airfield. Photo by Gabriel Archer, Dugway Visual Information Specialist

COVID-19 and Motorcycles

By **Jerry Hollenback, Garrison Safety**
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It is my estimation that there have not been too many articles on COVID-19 and motorcycles. This is what needs to be conveyed: motorcycles are inherently dangerous, as is the coronavirus. At this date we are still concerned about the virus, and that may divide our attention when we decide to undertake activities that are dangerous - even with risk mitigation. Right now in the DoD, motorcycle crashes are the number one killer of Sailors, and the number two killer of Soldiers. Combine that fact with beautiful spring days just perfect for riding, and a rider that has not been riding all winter. Usually that combination alone is hazardous because the rider has lost many of his or her riding skills

over the winter. Now combine those risks with a rider that is already carrying some stressors caused by our current COVID-19 lifestyle, and the riding hazard is significantly raised.



If you have a motorcycle, make sure it is properly maintained and ready for the road. Next, get yourself some training. This will improve your skill set, and develop some motorcycle "muscle memory." Finally, whenever you ride, make sure you are ready to ride (mentally and physically).

Garrison Safety provides free motorcycle classes. Soldiers receive first priority, and have mandatory guidelines for basic and advanced training. Civilians can still attend training, but they need permission from their supervisor for the half day advanced class.

This half day class is primarily for people that have taken the Basic class, and have been riding for a least 6 months.

Garrison Safety will take names for a future class that will be based on priority (military members first). Interested class members will be contacted in late April, depending on social distancing requirements in place at that date. Classes will only be conducted once conditions allow. To register, please call Garrison Safety at 435-831-3395.

CHAPLAIN'S CORNER

By **Chaplain (LTC) Shawn P. Gee**

Spiritual Resiliency through Staying Connected

As conditions related to COVID-19 evolve and in the face of growing uncertainty, anxiety, and stress across the military and the world, it is of the utmost importance that we be seen as calm and informed. How we face adversity serves as a source of encouragement to those around us.

Sacred Scripture reminds us that the Lord is our refuge and strength in times of trouble, and we are to cast all of our anxieties upon Him because He loves and cares for us. So let us together in prayer and in our actions be exemplars of faith and fortitude in this time of international crisis.

In times like these, it's important to stay connected. I'm available via text and cell phone at 435-830-8929. Another way to stay connected is through Sunday Protestant Services livestreamed at 1100 hours (MST) @ <https://www.facebook.com/dugwayhope.chapel>. If interested, friend request our Facebook page at Dugwayhope.chapel.

For those who are Roman Catholic, you can stay connected as well. The Catholic virtual worship opportunities are found on the Saint Marguerite Facebook page, which streams daily Mass @ https://www.facebook.com/StMarguerite1910/?ref=nearby_places.

As we approach Easter, I'd like to invite you to the Easter Sunday Service that will be live streamed at 0700 hrs. Please friend our chapel Facebook page at <https://www.facebook.com/dugwayhope.chapel>

to join us live on Easter morning. Look forward to seeing you virtually! It's my prayer that each of us would see these challenging times as an opportunity to grow and better ourselves. Take the opportunity to connect with Family and friends. Experience spiritual resiliency by practicing spiritual disciplines of worship, prayer, fasting, Sacraments and reading Scripture. Go outside for a walk or run to experience God's beautiful creation. By doing these things, we can say, "It is well with my soul."

May God bless you and may God bless the United States of America.

Easter Sunrise Service

Sunday, 12 April 2020
Live streamed at 0700 hours
Please friend our chapel Facebook page at Dugway Hope Chapel to join us live on Easter morning.

For more information call:
(435)-830-8989

CENTAUR plans 6 years of DPG tests



Some systems comprising the CENTAUR, in the field, during the 2019 test. An instrumentation tower supports the test, while a combination of CENTAUR detection, monitoring and communication equipment is challenged with simulated chemical biological or radiological (CBR) threats. The CENTAUR system was also tested by Soldiers challenged by real-world scenarios, requiring them to make real-time decisions based on what CENTAUR provided. Photos by Mario Sandoval, Dugway Scientific Technical Photographer

By Al Vogel
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After testing a prototype system last summer, the Department of Defense plans to return to Dugway Proving Ground (DPG) for the next six years to continue outdoor testing of a complex chemical and biological agent detector.

Up to 50 visiting personnel, civilian and military, will spend weeks at DPG during this summer's test, operating the Capabilities to Enhance Threat Awareness, Understanding and Response (CENTAUR) in authentic challenges. Testing is expected to be each summer through 2026.

CENTAUR is overseen by the Joint Program Executive Office – Chemical, Biological, Radiological

and Nuclear Detection. It is a collection of detection, monitoring and communication equipment, working together to warn of impending chemical, biological or radiological (CBR) threats. Some of the equipment is commercially available, some is not but all are in current use by the Department of Defense.

Test Officer Jeff Poor of the Combat Capabilities Development Command, a tenant unit on DPG headquartered in Maryland, said testing will mirror last year's. There will be two weeks of integration assessment, to ensure all systems work together properly, followed by three weeks of integration data collection and user feedback, to include simulated attacks to test the human aspect of the system.

"This is an ongoing effort to improve chemical and biological defenses," Poor said. "CENTAUR is part of a complex communication system. As features are added, if the customer wants, they can add features they want to test to ensure it works before overseas deployment."

Only simulated agent will be used during testing, adhering to international treaties that ban the release of actual agent outdoors.

Last summer, when CENTAUR was first brought to DPG for testing, visitors praised the post's 1,248 square miles because sensors could be placed miles apart in the expanse.

"This is the only place we can come and get this kind of scale to get good systems feedback," a tester said.



The Capabilities to Enhance Threat Awareness, Understanding and Response (CENTAUR) system is an array of command and control equipment, force protection cameras, and chemical and biological agent detectors.

Follow Us On:

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 **Twitter @USArmyDPG**

A Scrap of the Past

By Al Vogel
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As an archaeologist, Dugway Proving Ground's Rachel Quist is accustomed to digging history from the soil; but recently, Quist uncovered vintage gold in an internet auction.

The Cultural Resources Manager, and DPG's ad hoc historian, Quist spotted the 1940s photo scrapbook of Lucy Ann Burns offered in an estate sale. It contained about 50 photos of DPG shortly after its 1942 creation. Quist's winning bid was

modest, but priceless to DPG history buffs.

Lucy was 13 when she first visited DPG in 1942. Her father, Col. John Burns, was the post's first commander. Her mother, also named Lucy, was highly respected by the Soldiers for remaining with her husband and enduring the post's privations.

Young Lucy stayed in Salt Lake City with friends, but apparently visited Dog Area on occasion. Perhaps this unfamiliarity led her to take photos of what others

considered commonplace. She was an amateur photographer, but a good one. Thanks to her, and Rachel Quist, we have a social glimpse of DPG in World War II.

Lucy Ann Burns Kreisler, 89, died in 2018 in South Carolina. Her father died in 1980; her mother in 1993. It is unknown if they ever returned to visit DPG.

If you have any vintage souvenirs or photos of Dugway Proving Ground you'd like to loan or give, contact Rachel Quist at 435-831-3587.



Col. John Burns, Dugway Proving Ground's first commander, and the post's pet raven named Edgar Allan Crow.



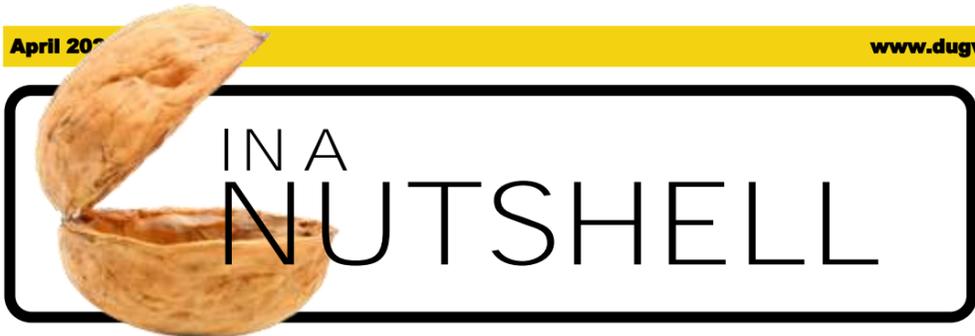
Lucy Burns, in front of the Post Operations building. She labeled this photo "Bo Peep and her jeep."



Cultural Resources Manager Rachel Quist compares a 1942 photo young Lucy Burns took of the Kensington Apartments at 178 N. Main St. in Salt Lake City.



Young Lucy Burns on the steps of the Kensington Apartments. Lucy and her mother, also named Lucy, lived here while Dugway Proving Ground was first built.



U.S. ARMY BUDGET FY 2021

What is it?
The U.S. Army's FY21 Budget supports the National Defense Strategy (NDS) requirements and provides detailed strategic guidance for the U.S. Defense Department. NDS outlines the force needed to win future wars with next-generation combat systems, modernized doctrine and reorganized formations by 2028, to keep the Army ready to deploy, fight and win.

What are the current and past efforts of the Army?
 The Army needs consistent funding levels and a predictable pattern of growth in all accounts and timely enactment of NDAA and appropriation bills.

The FY21 budget (\$178.0B) continues to align funding to the Army's six high-priority efforts and three other critical efforts:

- Long-range precision fires
- Next-generation combat vehicle
- Future vertical lift
- The network
- Air and Missile defense
- Soldier lethality

Efforts under the Army Rapid Capabilities and Critical Technologies Office:

- Directed-energy Maneuver Short-Range Air Defense
- High-Energy Laser, as part of the Indirect Fires Protection Capability
- High-Powered Microwave, as part of the Indirect Fires Protection Capability

The FY21 budget resources the Army's recruiting and retention missions, ensuring the current trajectory of modest end strength growth across the total force.

Quality of Life is a critical element of force readiness. This budget supports the

Secretary of the Army's and the Chief of Staff's top five Quality of Life priorities:

- Adequate investments in Family housing and barracks
- Transforming the Defense Health Agency
- Improving and adequately resourcing Child & Youth Services
- Improving spouse employment opportunities
- Minimizing the impact of PCS moves

What continued efforts does the Army have planned?
 The Army will continue efforts to modernize and reform to develop and deliver better capabilities for Soldiers now and in the future including:

- Updating the talent management paradigm
- Adjusting operational concepts, policy and training methods
- Improving business processes
- Creating efficiencies
- Realigning money and the work force to meet high priorities

Given the current strategic environment and the capabilities of the near peer competitors, it is imperative the Army increases overmatch and dominance against all potential adversaries, and be capable of fighting and winning large-scale combat operations and multi-domain operations in the future.

While strategic and operational environments are changing, the Army will continue to build and sustain readiness, both tactical and strategic, for the full spectrum of military operations.

Why is this important to the Army?
 The FY21 Budget will help the Army to transform from an Industrial age to an Information age. It will source the restoration of all linear industrial age processes to be more effective, protect the resources, and make better decisions to be the Army of tomorrow, today.

(Source - Army STAND-TO)



U.S. ARMY DUGWAY PROVING GROUND AWARDS AND RECOGNITION 1st Quarter FY2020



LENGTH OF SERVICE AWARDS

5 Years Adam Green Victoria Jorgensen	20 Years Geoffrey Marsh Boyce Thompson
10 Years Ashley Ericson Teri Street	25 Years Stephen Minor Denise Sappington
15 Years Eric Wilkins	30 Years Nevon Bake Randy Gibson Tamera Hewitt

CERTIFICATES OF ACHIEVEMENT

Travis Hullinger & Justin Newbold
 For outstanding performance, teamwork and work effort during electrical upgrade and repairs

CIVILIAN SERVICE COMMENDATION MEDALS

Jason Archibald
 For exceptional performance while serving as the Information System Security Manager

Laurence Adair
 For verification and validation efforts for chemical/biological defense capabilities

Sage Farmer
 For outstanding performance supporting DPG's Health Clinic

Sarah Austin
 For team leadership while collecting and preserving more than 1,900 surety-related records

Bradley Hunsaker & Eric Nelson
 For excellent meteorological support for multiple testing efforts

ATEC EMPLOYEES OF THE QUARTER

James Kleimeyer,
 WDTM Mission Employee of the Quarter
 For accomplishments as the lead chemist in the Special Programs Division providing subject matter expertise for a number of program events, which required three consecutive weeks of temporary duty travel

Robert Rampton,
 WDTM Mission Support Employee of the Quarter
 For providing outstanding graphic design and planning support to the Technology Experimentation & Characterization Field Trials (TECFT)

THE DISPATCH

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News, information or comments may be submitted to:
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EMPOWERING THE NATION'S DEFENDERS

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