



THE DISPATCH

U.S. ARMY DUGWAY PROVING GROUND

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INSIDE YOUR DISPATCH



SAY HELLO TO Q



Advanced, complex C/B detection system tests at Dugway.

pages 1&2

COMMAND PERSPECTIVE



Find hope. This is an endurance race not a sprint.

page 1

STILL CHARLIE



HPCON Charlie remains, but a few things on post have changed.

page 2

CHAPLAIN'S CORNER



Sobering and timely information about suicide prevention.

page 3

TINY DUGWAY



3-D maps of key Dugway locations will aid future planning and response.

page 3

SPITFIRE PERFORMS



Can contaminated clothing be reused with time?

page 4

QUIZ TOMORROW



Dugway students head back to school with precautions in place.

page 5

AND MUCH MORE

Array of Chem/bio Detectors Tested at DPG Bolsters Critical Decisions

By Al Vogel

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An advanced, complex chemical and biological detection system is under testing at Dugway Proving Ground, and will continue well into September. Capabilities to Enhance Threat Awareness, Understanding and Response (CENTAUR) consolidates its instruments within or around a postal box-sized enclosure.

This allows posting the Point Sensor Enclosure (PSE) rapidly when needed.

Much of the testing at DPG is done to build analytics within CENTAUR—data that leads to the most likely outcome, based on previous test scenarios.

Instruments within or supported by the PSE include communication software for chemical and biological detectors, day and night vision cameras that also see movement, and meteorological sensors. The standard PSE is powered by a generator or electrical line, but the Expeditionary Point Sensor Enclosure (EPSE) is solar powered and runs off charged batteries. Aside from this

distinction, they carry much of the same instrumentation.

The PSEs communicate with a large, portable viewing screen, called the "Q" (named after the armorer that supplies James Bond with all his amazing gadgets). The screen, typically housed in the command and control center, displays a map or aerial photo of the area monitored by the PSEs. The touch screen's information may be easily sorted through or marked with critical information.

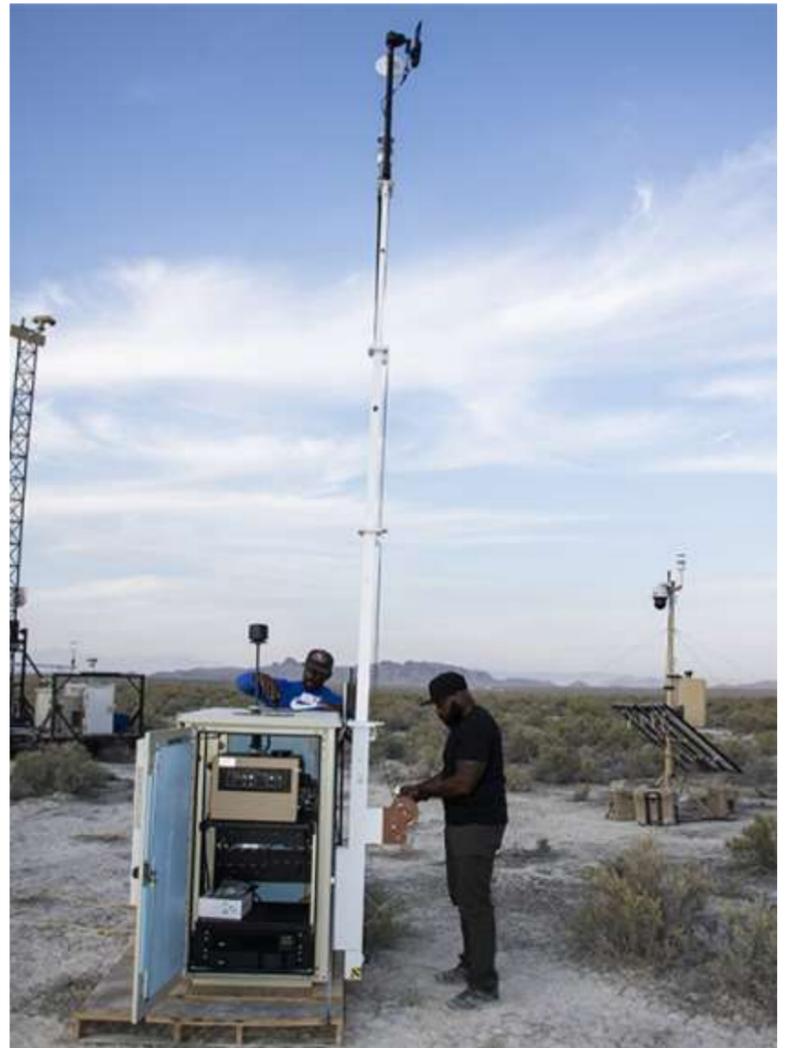
"If the fire department calls in contaminating diesel fuel, it can be marked onscreen," Marcus Thermos, DPG Test Lead said. "Nowadays, I can even mark it that we have COVID-19 in a dorm, building or community."

The tests at DPG largely emphasize evaluating the system that handles the analytics from the data, and the communication between Q in the command center and the PSEs in the field.

What makes the CENTAUR formidable is its analytics. Creating a number of scenarios for the CENTAUR to record is one of the goals of testing at

◆ Array of Detectors.

Page 2.



Technicians make adjustments to a Point Sensor Enclosure (PSE) in the field. The tan box inside is a biological agent detector. Photos by Al Vogel, Dugway Public Affairs

Command Perspective

By Vincent M. Liddiard
Chief of Staff, Dugway, Utah



discussing our fears and conflicts even harder. DPG is remote and we may individually feel further isolated when all our connections are virtual. What should we do?

I believe hope is the gift still found in Pandora's Box after everything else escapes. So, never give up, and let's collectively work on a better future.

Will Rogers once purportedly said "Don't let yesterday use up too much of today." Focusing on our actions to improve the future makes a difference. I believe our brightest days lie ahead. Preparing for a brighter future

starts with what we do today. Take a moment to recognize the goodness in our work and lives. Individuals have taken action to increase hope through their own diligence. Our recent DPG-ATEC awards ceremony highlighted impacts individuals have made to ensure testing and training success.

Simple acts of compassion, dedication and loyalty have been in rich supply at Dugway. We can make our own part of the world a better place.

While I am shocked by the sea of conflict that envelops our nation, we can individually make a positive impact. Each of us can be the change we hope to see in the world by the way we interact

with our co-workers, friends, family and neighbors. It may not be easy but I am continually inspired by the goodness I see in those around me. The efforts of others to treat each other with respect, create new test fixtures, ensure materials are acquired and resources managed to meet the needs of the warfighter demonstrated unity in people, mission and moving forward.

Please continue to do one act each day to make where we work and live a little better. Today has been my best day so far, tomorrow looks even better. The individual qualities and strengths of each of us make Dugway a better place.

Array of Detectors ...

Continued from page 1.

DPG. Testing also gives the Q managers experience.

The layout of the PSEs at DPG duplicates the PSE placement on another (unnamed) Army post that may someday face a chemical or biological threat. An overhead view of the unnamed post is laid over the DPG view on the Q's screen. Doing so builds analyticals here in Utah for the unnamed post elsewhere.

"We've worked with individual components—bio detectors,

chem detectors—but this test we get to see them all working together in an integrated system," noted Jeff Poor, Test Officer and Microbiologist at DPG.

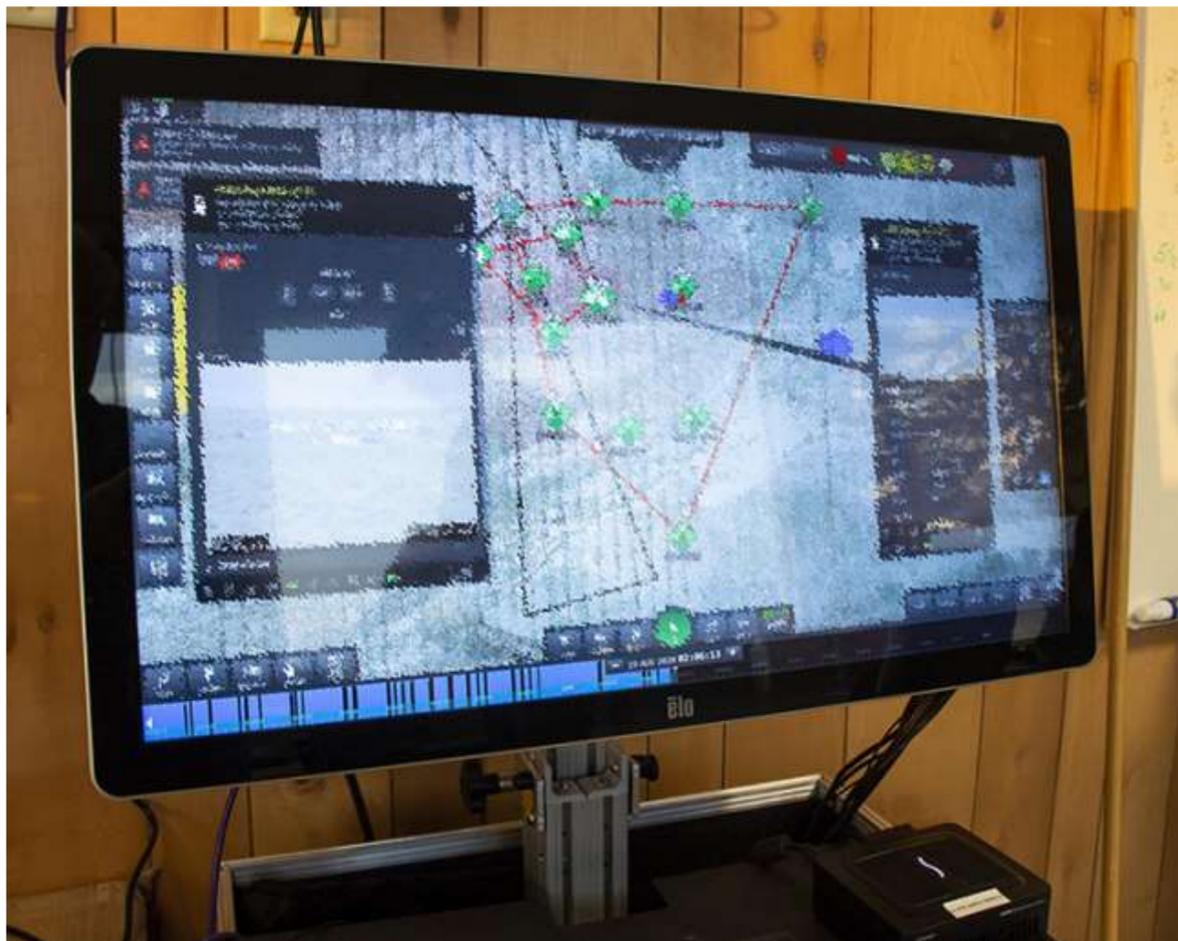
The Department of Defense plans to return to DPG each summer up through 2026, to continue outdoor testing of CENTAUR. As features are added, they will be tested to ensure they work before military personnel depend upon them for their lives or evacuation to safety.



Two technicians on the Capabilities to Enhance Threat Awareness, Understanding and Response (CENTAUR) test adjust a Point Sensor Enclosure containing a biological detector.



The Joint Services Lightweight Chemical Agent Detector mounted to a Point Sensor Enclosure during 2020 testing of CENTAUR at Dugway Proving Ground. DPG began testing the JSLSCAD in the early 2000s. The Next Generation Chemical Detector, which will eventually replace the JSLSCAD, is currently undergoing testing at DPG



Field sensors communicate with "Q", a large, portable viewing screen like this one. The screen, typically housed in the command and control center, displays a map or aerial photo of the area monitored by the sensors. (Editor's note: the photo of the screen has been purposely blurred.)

HPCON CHARLIE Endures

By Becki Bryant

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Dugway Proving Ground has been at Health Protection Condition (HPCON) CHARLIE since March 26, 2020, and will remain at that level for the near future—even though COVID conditions have improved.

The state's capacity to treat, test, and monitor for COVID-19 are favorable, and case counts in DPG's areas of interest (Tooele, Utah, Davis and Salt Lake counties) have decreased and remained lower over a 14-day average. However, with the recent start of school and an increasingly busy operational environment at the West Desert Test Center, DPG Commander Scott D. Gould has decided to hold steady at HPCON CHARLIE.



"This is a decision I take seriously and reassess several times a week," Col. Gould said.

While the installation remains at HPCON CHARLIE, Command has approved the recent reopening of some facilities such as the Ditto Diner (takeout only) and the Shocklee Fitness Center

(use is limited to military and emergency personnel). In addition, ridership has increased from two to four occupants for all private vehicles and rideshare vans commuting to and from post.

Despite the re-opening of facilities and increased ridership, the Commander urges everyone to continue taking those precautions that minimize the risk of COVID-19 such as social distancing, wearing a mask, and frequently washing hands and sanitizing surfaces.

"We must continue to do those things that will keep us safe and allow us to accomplish our mission," he said. "Fighting against the coronavirus requires everyone's cooperation; we can't let up."



(Top inset photo) Social distancing signs like this one can be found throughout the Shocklee Fitness Center. Photo by Porter Hansen, Dugway Public Affairs. (Above photo) The number of riders allowed in carpools recently increased from two to four; masks still required. Photo by Al Vogel, Dugway Public Affairs

3-D Maps Underway to Help Plans, Response

By Al Vogel
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The Metal Shop at Dugway Proving Ground, has begun building a 3-D scale map of the Ditto, Carr (including the Materiel Test Facility), and Baker Lab areas. The project began three months ago, and is based on photos taken by the Dugway Test Referee Branch.

Sam Hill, shop supervisor, said the project began with the construction of four-wheeled metal tables, held together by

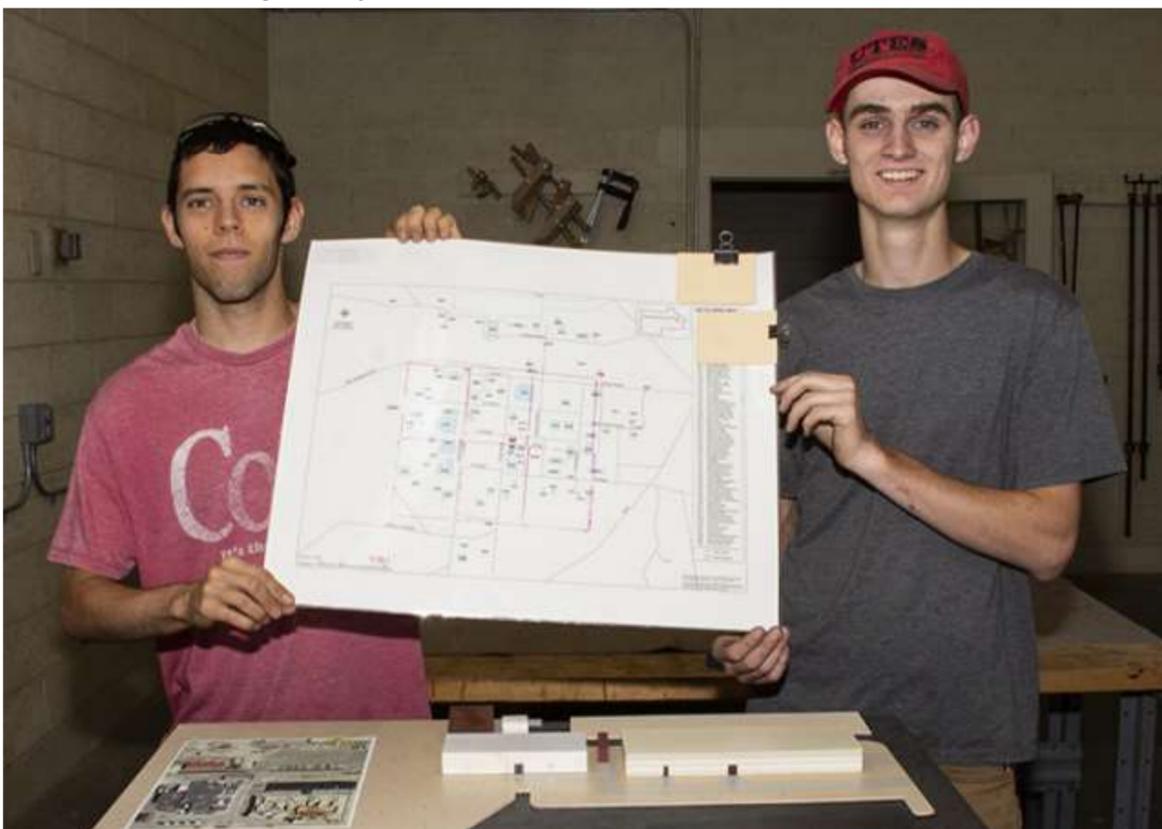
strong magnets, to support each of the three 10X12-foot maps. Scale is 1:200 (1 inch of map equals 200 inches – 16 feet, 8 inches – outdoors).

The project was requested by the Surety Office for training, planning during an exercise or event. When completed in six months or more, they will be stored in the Ditto Area.

Summer hires Troy Curtis and Adam Jost have been creating the buildings and features from wood, architectural foam,

Melamine and polycarbonate. Other features, such as in-scale cars in a parking lot, are purchased from commercial vendors.

The laser engraver cuts the pieces to exact scale, and engraves upon. Engraving is so tiny that the number signs on each building's corner is etched and (squintingly) readable. All buildings and features are made from scratch, one at a time, and painstakingly painted.



Troy Curtis (left) and Adam Jost, summer hires working at the Metal Fabrication Shop, have been helping to create solid, 3-D scale models of Ditto Area, Carr Area to include the Materiel Test Facility, and the Baker Lab/Life Sciences Area. Photos by Al Vogel, Dugway Public Affairs



The buildings and other features are made from wood, architectural foam, melamine or polycarbonate, cut with a laser and painted by hand. Note the building number sign above the left window.



The scale model maps rest on wheeled tables, also made for the project. A laser cutter cuts most of the material -- wood, architectural foam, Melamine or polycarbonate -- to exacting scale. Vehicles of the correct scale for the streets are purchased from model manufacturers.

CHAPLAIN'S CORNER

By Chaplain
(MAJ) Wesley A. Gornall

he would yell at me if I took his weapon because I was lower in rank."

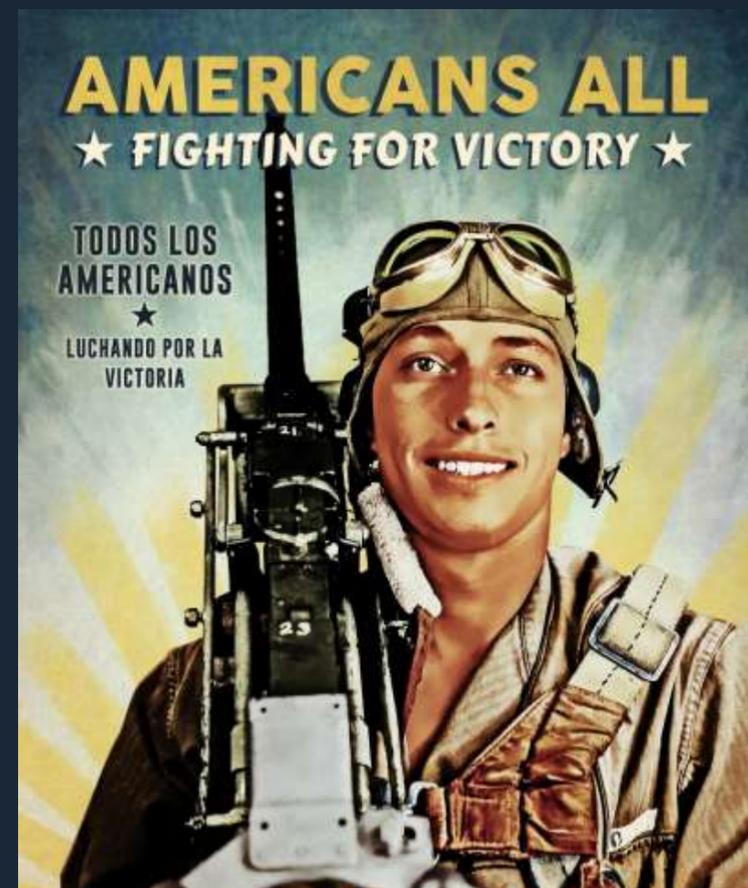
In the Kornegal Valley in Afghanistan, a young, married infantry SSG had gone quiet for two days. Fellow Soldiers were concerned because he was usually outgoing and a story teller, but now his silence was concerning his platoon. Behavioral Health and I flew out to the Combat Outpost to meet with him. The only thing he would say was, "I am not going to kill myself." But he did.

In the aftermath of his suicide, I held several small groups so the Soldiers could talk about what they had experienced and how it affected them. A SSG and a SGT said that moments before, they each saw something in his eyes and body posture that told them something wasn't right. He had changed for the worse. The SSG friend said, "He had changed in those final moments of his life but I didn't think he would do it." The younger SGT said, "I felt he was going to do it, but I was afraid that

Especially in this time of racial strife and COVID-19, stress and uncertainty can overwhelm people. What you can handle, someone next to you at Dugway might not. There is an old saying, "Though one may be overpowered, two can defend themselves. A cord of three strands is not quickly broken." In other words, we need to help the person in our office, out on the test site, at home. We need to speak up. We know when someone is not well. Don't be afraid to ask the tough questions, to get help for the person in question. What we don't want is for someone to know something isn't right but regret not taking action. Don't ever think, "I should have done more." If you or someone you know needs help, call me (803-446-0786). Let's do everything we can to prevent suicide.

NATIONAL HISPANIC HERITAGE MONTH

15 SEPTEMBER to 15 OCTOBER



In the next few weeks, watch for event posters at locations around post, and enjoy weekly e-mails highlighting Hispanic life and culture including some members of our own Dugway community.



Dr. R. Aaron Rogers, Project Scientist for the SPITFiRE fixture at Dugway Proving Ground, holds an Air Force aircrew survival vest. Material from the vest, and other aircrew clothing that protects from chemical agent, will be tested to determine if it can be contaminated and then reused after sufficient off-gassing. Photos by Al Vogel, Dugway Public Affairs

Off-gas and Reuse?

By Al Vogel
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The U.S. Air Force recently submitted to Dugway Proving Ground, for testing, samples of the clothing material used to protect aircrews against vaporous chemical hazards. It wants West Desert Test Center to determine if chemical agent vapor on protective clothing can be off-gassed to a point where the clothing might safely be reused.

All testing will be with the SPITFiRE (Swatch Permeation Test Fixture, Reengineered), a test fixture created for reduced cost of operation and easier setup when challenging samples of material (called "swatches") with chemical agent.

The AVLAG (Aerosol Vapor Liquid Assessment Group), developed in the 1990s, is still used to challenge swatches, but requires laborious assembly and more personnel than SPITFiRE. The U.S. Air Force Vapor Off-gassing Re-use Test (VORT) is set to begin Sept. 8. The survival vest, undergarment layers, coveralls and flight harness will all be challenged.

Swatches cut from the garments themselves will be sealed inside stainless

steel components, then placed in a sealed glovebox. Chemical agent is disseminated across the swatch, then halted for observers to monitor the rate of chemical agent decay.

Nine components, each containing a swatch of contaminated material, will be used in each trial, with an uncontaminated tenth swatch providing a baseline for calculations.

If the contaminated clothing could be reused, it would reduce resupply and save money, time and effort.

"Reissuing is the greatest goal," said Project Scientist Dr. R. Aaron Rogers. "I think that some of this (test) information may be used in the future for contracts to manufacture suits."

The VORT will have 18 pilot trials through the end of 2020, with fake sweat, differing materials worn and unworn, and a variety of temperatures, humidity, agent type and concentration in combinations not used in the later, standard test.

"The pilot trials prove to the customer that the system works," Rogers said.

The standard test begins early next year and will take some months to complete.



The Swatch Permeation Test Fixture, Reengineered (SPITFiRE), lacking the swatch-testing components. Testing of swatches from Air Force chemical protection clothing will begin this month. The Air Force hopes the material can be allowed to off-gas to the point where it can be reused without danger, saving much time, money and effort.



SPITFiRE's test components include these rings, which hold swatches of material so they can be exposed to chemical agent. These are decontaminated, awaiting assembly.

AVCAD Sight and Sound Tested

By Al Vogel
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Soldiers and civilian test evaluators gathered to test how well the prototype Aerosol Vapor Chemical Agent Detector (AVCAD) could be seen and heard when sounding its alarm.

Evaluators sat in the post theater to determine how well they could see AVCAD's silent warning display in varying light levels and at different distances. The audio alarm was also tested at low,

medium and high volumes. Throughout, evaluators took notes on what they saw and heard, for later study.

Testers also met outdoors to determine at what distances they could reliably see or hear the alarms that warn of chemical agent. No agent was used during the evaluator testing.

Throughout, an infrared video camera recorded the temperature of each AVCAD, looking for unexpected temperature differences that may indicate a problem.



Three Soldiers from the Dugway Health Clinic were among those who assisted with testing the Aerosol Vapor Chemical Agent Detector to determine at what distances its display was no longer readable. Here, they prepare to use night vision devices to determine if it presents any difficulties.



Test Officer Tonya Ashment takes notes on her laptop while Dugway Proving Ground Soldiers and civilian test evaluators sit at varying distances from the Aerosol Vapor Chemical Agent Detector. The evaluators record at what distance they can reliably read the AVCAD's display, and hear its alarm.



Data Reduction Specialist Johnny Gallegos watches a laptop screen that displays an infrared video of the three Aerosol Vapor Chemical Agent Detectors being tested in the dark. Infrared video shows unusually cool or hot areas that may indicate a problem. Evaluators determined how the detector screens could be viewed in darkness, in the post theater.

NATIONAL HISPANIC HERITAGE MONTH

15 SEPTEMBER to 15 OCTOBER

AMERICANS ALL ★ FIGHTING FOR VICTORY ★

TODOS LOS AMERICANOS
★
LUCHANDO POR LA VICTORIA



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Dugway Awards & Recognitions 3rd Quarter FY2020



CIVILIAN ACHIEVEMENT MEDALS

- Jamie Blake
- Cori Cook
- Deacon Dunyon
- Ashley Erickson
- Brad Grgich
- Jared Hammerstrom
- Richard Holden
- Phillip Hunter
- Jon Judd
- Tony Kemp
- Vincent Prince
- Bart Sagers
- Eric Schmidt
- Derek Schumann
- Adam Spencer
- John Szillinsky
- Tyler Wieland

CIVILIAN SERVICE COMMENDATION MEDALS

- Angela Child
- Diane Kuderick
- Vincent Liddiard
- Lance McEntire

CERTIFICATES OF APPRECIATION

- Ted Fields
- Madison Gould
- Porter Hansen
- Sydney Knight
- Seth Lamb
- Norman Lian
- Wendell Williams
- Josh Worcester

ATEC EMPLOYEES OF THE QUARTER

Michael Lewis, Mission Employee of the Quarter

Becki Bryant, Mission Support Employee of the Quarter

For detailed citations, watch the [awards video](#).

BACK TO SCHOOL

A calm, warm morning met about 60 students beginning the Dugway School year Aug. 25, with most students excited to attend but a few sleepyheads shuffling to find their new classroom.

Principal Jeff Wyatt said that just over 100 students are currently registered, but usually there are 140 or so. He wondered if the reduced attendance might be attributed to students learning online. This year, the first two weeks are half days; some parents have said they are not sending their children to the school until the schedule becomes full days, Wyatt noted.

This year, each student will receive a laptop or a pad (to fit the smaller fingers of kindergarteners and first graders).

Dugway School is K-12 and operates Monday through Thursday. As scheduled it will be open for 157 days. Graduation, and the last day of school, is May 25 – totaling approximately 168 days of school.



First day of Dugway School, and a colorful array of protective masks were seen on students and adults alike.



Teachers arrive for the beginning of a new school year, at Dugway School.



Opening day of the 2020 – 2021 year at Dugway School. The last day of school, and high school graduation, is May 25, 2021.



First day of Dugway School. Left to right: Command Sgt. Maj. Kyle Brinkman; Col. Scott Gould, Commander of Dugway Proving Ground; and Principal Jeff Wyatt.