

JOURNAL OF AEROSPACE, DEFENSE INDUSTRY AND VETERANS NEWS

AVC's D-558-II Skyrocket to get makeover

by KC Rawley

Aerotech News

The D-558-II Skyrocket that stood on the Antelope Valley College campus in Lancaster, Calif., as a proud symbol of the college's connection with aerospace and Edwards Air Force Base is no longer on display.

July 19, 2024, after 61 years, the plane was disconnected from its base, and by July 21 had been moved to an indoor storage location 600 feet away from its original site on AVC's campus.

The plane has been on campus since it was unveiled on May 19, 1963, with a display plaque reading in part: "The men and women of NASA (NACA), the U.S. Navy, the U.S. Air Force Flight Test Center and Douglas Aircraft dedicate this Skyrocket to the youth of Antelope Valley."

The Skyrocket was moved to facilitate building of the Student Commons, a result of Measure AV construction, expected to break ground in August, and to protect the artifact during that work, according to AVC. The

plan is to restore the Skyrocket to its former glory and then put it somewhere on campus, preferably sheltered.

"Step One is movement, and that has been achieved," said Steve Buffalo, longtime AVC Board of Trustees member and current board clerk. The next step, he said, is for the college and board of trustees to identify a team that has the talent base for refurbishing the aircraft, which has been exposed to the extremes of desert elements for many years.

Ryan Cobb, senior vice presi-

dent of Coast Machinery Movers, the project's contractor, said that the Skyrocket is in fairly good shape for enduring heat, wind, and snow for 61 years.

Coast Machinery's licensed engineers did ultrasonic testing on the rocket plane as part of the initial research phase of the project. "UT tests the thickness and condition of the metal, and the integrity of the metal is actually pretty good, all things considered," said Cobb.

The Skyrocket Serial #37975 NACA-145 is a rocket and jet-



NASA photogr

A. Scott Crossfield with the Douglas D-558-2 Skyrocket NACA 144 after his record-breaking Mach 2 flight, Nov. 20, 1953. This plane is a sister ship to the Skyrocket NACA 145 at Antelope Valley College. In 1993, NASA awarded him the Distinguished Public Service Medal for his contributions to aeronautics and aviation for 50 years.

powered research supersonic aircraft built by Douglas Aircraft Company for the U.S. Navy, but they never took possession of it. The National Advisory Committee for Aeronautics (the precursor to NASA) was a U.S. federal agency created in 1915, to "undertake, promote, and institutionalize aeronautical reseserch." NACA became NASA in 1958.

AVC's Skyrocket flew a total of 87 times, 21 of them contractor research flights out of Edwards Air Force Base in November of 1950. The Douglas Aircraft Company test pilots were Eugene F. May and William Bridgeman.

One of only three ever built, the other two D-558-II Skyrockets built still exist, according to *Aerotech News* files. NACA 143 is currently in storage at Planes of Fame Museum in Chino, Calif., and the most famous, NACA 144, is in the Smithsonian National Air and Space Museum in Washington, D.C.

See **SKYROCKET**, on Page 2



Photograph by Lisa Kinison

The Douglas D-558-II Skyrocket at Antelope Valley College on July 19, with the specialty lifting fixture attached. The brown metal fixture was custom fabricated by Coast Machinery Movers to allow the Versalift to move the airplane. Steel plates were laid at the rear of the Versalift to protect the grass from the heavy equipment. The plane will be refurbished and reinstalled in a new location after campus construction is finished.

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SKYROCKET, from Page 1 —

The Smithsonian's D-558-II Skyrocket NACA 144, piloted by A. Scott Crossfield, made aviation history by becoming the first airplane to fly at 1,291 mph, (2,078 kph, Mach 2.005) more than twice the speed of sound on Nov. 20, 1953, a fact that Buffalo said would be noted in the new display.

Also accompanying the restored NACA 145 aircraft will be a photo of Crossfield from the college files. Crossfield flew nearly all the experimental aircraft at Edwards AFB, including the X-1, XF-92, X-4, X-5, and the Douglas D-558-I Skystreak.

AV College is paying Coast Machinery Movers \$44,000 for the work, which included designing and shop fabricating a lifting fixture, field installation, rigging, cutting existing support pipe, and lifting and traveling to the staging area.

"We understand that our Douglas Skyrocket represents the rich legacy of aircraft testing and development in the Antelope Valley," said AV College Superintendent/President Jennifer Zellet, PhD. "That's why we decided to work with one of the best in the industry."

The Coast Machinery Movers, from South El Monte, previously moved Air Force One in 2003 from San Bernardino to the Ronald Reagan Library in Simi Valley, a six-hour, 100-mile trip that began at 11 p.m. and ended at 5 a.m., according to the company's website. Dollies at the nose had built-in hydraulics to allow the fuselage to be lowered and raised to go under overpasses.

The company also fabricated and installed the Orbiter Lifting Facility at Air Force Plant 42 in Palmdale, Calif., which placed the space shuttle on top of the modified Boeing 747 that flew it back to the Kennedy Space Center from the hangar where it was built in Palmdale.

Cobb is an Antelope Valley native who said the project was

"an honor" and had special significance for him. A member of Highland High School's 1993 first graduating class, Cobb said he and his sister remember the Douglas Skyrocket from their student days at AVC. "I was always running between AVC, Edwards AFB, the Air Force Research Lab, Northrop and Lockheed," Cobb said.

"On behalf of Coast I'd like to thank AVC for restoring the Skyrocket and keeping this part of AV history alive," said Cobb.

Many in the Aerospace Valley share Cobb's affection for the Douglas D-558-II Skyrocket, with generations of AVC students fondly recalling walking by the "plane on a stick." Some aviation





Photographs by Lisa Kinison Workers prepare the historic Douglas

D-558-II Skyrocket aircraft to be moved into storage to protect it during ongoing construction projects at Antelope Valley College. After the brown specialty lifting fixture created by Coast Machinery Movers was on, the workers cut the bottom of the black post to free the aircraft. The plane will be restored until it can be refurbished and replaced.

LEFT: Here is the Douglas D-558-II Skyrocket in its original display location at Antelope Valley College, with the dedication plaque surrounded by hedges. The black pole is the original display, and the brown metal is a specialty lifting fixture created by Coast Machinery Movers to allow the forklift to move the plane without touching it.

enthusiasts have worried over the years about the condition of the historic plane after being exposed to the elements and questioned the college's commitment to the care and upkeep of the historic artifact.

Now, after years of speculation, it seems clear that the Skyrocket is here to stay, and AVC plans to make the restored plane a focus point for its expanded aviation

and STEM study paths, especially if it is installed near the Career Technical Center.

"Our Airframe Manufacturing Technology students take great pride and inspiration from the Skyrocket, so we're going to make sure this historical artifact is cared for as it deserves," said Zellet

AVC offers an Aerospace, Industrial Arts and Applied Technologies field of study, and in 2016 added a bachelor's program in Airframe Manufacturing Technology, specifically designed for the needs of local aerospace industry employees. A Bachelor of Science degree in computer science is in the planning stages through the California State University Bakersfield AV Campus.

When refurbishing is achieved, Buffalo said the third step will be deciding on a future display location, which could be indoors in a campus building or outdoors with a structure built around it.

"We will want the plane in a position where people can see it,"said Buffalo.

He added that AVC President Zellet "understands the board is committed to this."

Editor's note: Dennis Anderson contributed to this report.

AEROTECHNEWS

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Have STRAINger Things:

Trilateral partnership results in new Test Instrumentation capabilities

by Chase Kohler

Edwards AFB, Calif.

The U.S. Air Force Test Pilot School's research division, in partnership with the 586th Flight Test Squadron at Holloman Air Force Base, N.M., and NASA's Armstrong Flight Research Center recently conducted a flight test campaign verifying the use of the new AgilePod.

Dubbed "Have STRAINger Things," the tests verified the AgilePod's utility for rapid airborne experimentation, aimed at reducing lead times and costs that traditionally hinder flight-testing

NASA's Armstrong Flight Research Center at Edwards, Calif., developed a unique Fiber Optic Sensing System, known as FOSS. While legacy copper straining has been used for flight test instrumentation since the 1930's, it requires extensive time and effort to modify the aircraft with resistive strain sensors. With FOSS, dedicated fiber optic strain sensors are utilized to report back critical data points.

With Air Force Test Pilot School and NASA AFRC located only minutes away at Edwards, the idea of testing the FOSS system airborne quickly became daily conversation. In conjunction, 586th FLTS, part of the Arnold Engineering and Development Complex in Tennessee, had recently made strides in their Agile-Pod Lab, which allows for quick-turn capability of carrying special payloads for data evaluation. A trilateral agreement quickly became the primary course of action that would benefit all sides of test.

'The 586th FLTS is unique among flight test squadrons in that we don't exist to just support one platform like the F-35 or B-2," noted Capt. Nathaniel Raquet. "Our primary goal within AFTC is to support rapid experimentation and prototyping. Taking on this project also gave us an opportunity to test and utilize the new AgilePod Lab, which will ultimately pave the way for serving a variety of future customers".

Strain sensors are typically applied in connection to loads, buffet, and fatigue testing of new aircraft, or in new store certification on existing aircraft. Stress and strain at critical aircraft and pylon/ wing-mount structure points are measured to analyze the response of both the structure and responses to control deflections from either the pilot or the flight control system itself.

The first test articles of a new aircraft design are specially modified during the manufacturing process and commonly include thousands of resistive strain gauges, each requiring two electrical connections, signal conditioning, and



Courtesy photographs A T-38C with an attached

AgilePod flown by Steven Ross, Air Force Test Pilot School Flight Sciences Technical Expert and Instructor Test Pilot, conducts a flight test in the skies over Southern California.

LEFT: Allen Parker, NASA's Armstrong Flight Research Center Fiber Optic Sensing System engineer, explains the AgilePod's capabilities to 2nd Lt. Andrew Dever, Air Force Test Pilot School staff, while David Brown, 586th Flight Test Squadron, makes modifications to the pod.

data recording. The added weight of this test setup means other aircraft components, often mission systems components, are not installed which limits the utility of these test aircraft for other types of flight test.

In contrast, fiber optic strain sensors have previously demonstrated increased sensing bandwidth with the ability to provide electromagnetic interference compatibility, while providing capacity to have multiple sensors applied onto a single fiber.

Utilizing the AgilePod strapped onto the centerline of a T-38C, the campaign consisted of six test flights combining engineering flight test techniques with two primary experiments. The first was a direct comparison of the fiber optic strain sensors to legacy resistive strain sensors. Both types were

installed a simple cantilever beam that was weighted on one end. By pulling G in the aircraft, the test team was able to induce a controlled amount of deflection/strain to the beam. Higher frequency vibrations were also introduced through slow flight in buffet as well as at the upper end of the airspeed range where high dynamic pressure also caused vibrations.

Not wanting to miss out on an opportunity to collect more data, the test team added additional loops of fiber optic sensors to the structure of the AgilePod and induced forces in the X, Y, and Z directions. Though there were no reference sensors to compare to, this experiment showed the utility of FOSS for future aeroacoustics and environmental tests for aircraft stores.

Upon successful execution of the Test Pilot School.

campaign, the data processed will allow a path forward for further instrumentation using fiber optic strain sensors for both flight test and other applications.

"Without the partnership between NASA with FOSS and the 586th FLTS with their AgilePod, we would have had to devote a large portion of budget and physically rip open a T-38 aircraft to install the wiring and sensors required" says Wei Lee, Director of Research for the Air Force Test Pilot School. "This unique partnership is a live testament to how we are using technology to rapidly improve flight test execution, ultimately providing both the warfighter and commercial customers new capabilities faster."

Editor's note: This story co-written by Wei Lee, director of research, Air Force

B-2 Spirit: Evolving with agility

by Northrop Grumman

The B-2 Spirit introduced a new era of stealth technology and strategic deterrence 35 years ago when it completed its maiden flight on July 17, 1989.

More than three decades later, in partnership with the U.S. Air Force, Northrop Grumman continues to integrate groundbreaking technology into the B-2 that equip it for tomorrow's fight, today.

The B-2 program recently achieved a major milestone by providing the bomber with its first fieldable, agile integrated functional capability called Spirit Realm 1 (SR 1). SR 1 provides mission critical capability upgrades to the communications and weapons systems via an open mission systems architecture, directly enhancing combat capability and allowing the fleet to



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initiate a new phase of agile software releases.

'We are rapidly fielding capabilities with zero software defects through the software factory development ecosystem and further enhancing the B-2 fleet's mission effectiveness," said Jerry McBrearty, director and B-2 acting program manager, Northrop Grumman. "The agile framework methodology

within SR 1 directly supports the Air Force's initiative to adapt new capabilities in the aircraft, executing the mission today."

SR 1 features new displays and flight hardware and updates enhancing the B-2's survivability. SR 1 was fully developed inside the B-2 Spirit Realm software factory that was established through a partnership with Air Force Global Strike Command and the B-2 Systems Program Office. The successful integration of the Spirit Realm software factory led the B-2 to become the first legacy nuclear platform to utilize the Department of Defense's DevSecOps processes and digital toolsets.

"Our implementation of software factory is opening new doors for the B-2 to carry future weapons and advanced capabilities that will further strengthen our country's strategic deterrence," said Colonel Frank Marino, senior materiel leader, B-2 systems program manager, U.S. Air Force.

Spirit Realm leverages integrated digital tools to design, manage, build and test B-2 software more efficiently than ever before. The tools can also link with other legacy systems to enable more rapid testing and fielding and help identify and fix potential risks earlier in the software development process. The program successfully demonstrated its agile software development capabilities in both flight and lab software by rapidly deploying a software update to the integrated test facility where the software could be verified and ultimately loaded onto the

As the battlespace evolves, Northrop Grumman continues to outpace the threat by delivering new capabilities in partnership with the U.S. Air Force.









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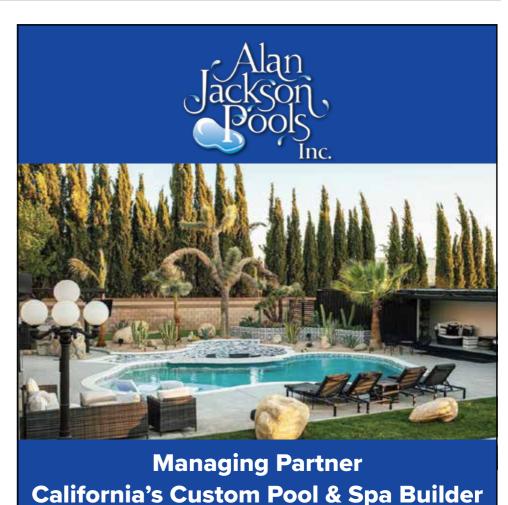
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Linda Johnson is child care provider of the year

by 412th Test Wing Community Child Care Program *Edwards AFB, Calif.*

Edwards Air Force Base, Calif., Family Child Care panel has selected Linda Johnson as the 2024 Edwards AFB Family Child Care Provider of the Year.

The panel, chaired by Col. Jarod Blecher, 412th Mission Support Group commander, evaluated numerous nominations and letters of support from parents describing the reasons the nominee should be recognized as Provider of the Year.

"I am grateful to our leadership for recognizing our hardworking FCC providers who juggle so many roles and responsibilities as a parent, teacher, nurturer, meal planner, chef, activity planner, custodian, and even business manager," said Candace Lang, Community Child Care Coordinator. "I would like to thank the parents of our FCC providers who submitted very thoughtful and endearing nomination letters. It's inspiring to know how much our valued providers are truly appreciated by the families they serve," Lang added.

FCC providers are an important source of childcare for our community. They support the mission and are held to high standards to ensure quality childcare for our military and civilian families

These providers open their hearts and home to care for children. The Air Force has established the FCC Provider of the Year program to recognize their hard work and dedication.

For more information on the Family Child Care program or pathway to become a child care provider, contact Candace Lang at 661-277-1595.



Air Force photograph by Blaine Torre

The Edwards Family Child Care panel selected Linda Johnson as the 2024 Edwards Air Force Base, Calif., Family Child Care Provider of the Year.

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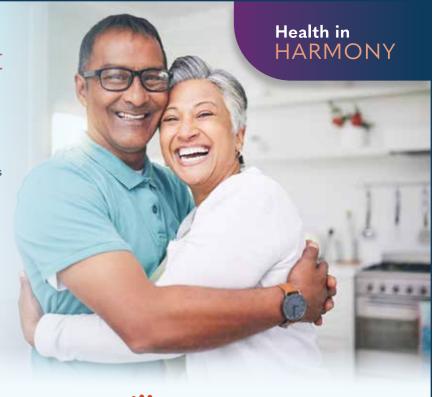
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A look back ... Muroc Bombing and Gunnery Range (East Camp)

by James Tucker

Edwards AFB, Calif.

In 1933, the skies above Rogers Dry Lakebed were quiet except for the ever-present wind.

In September of that year, everything changed.

A small contingent of Army personnel arrived to begin building the first military presence at the installation that would become synonymous with advancements in aeronautics and airspeed.

Lt. Col. Henry "Hap" Arnold, acting as the interim commander of March Army Airfield in Riverside, Calif., needed a location to train his aircrews in bombing and gunnery.

Having heard about the large, flat surface of the dry lake, he figured he had found the ideal location for those efforts and sent a team of five soldiers into the Mojave Desert to lay out a bombing and gunnery range. They set it up in an area on the eastern shore of the dry lakebed.

Called "Camp I" in early records, it consisted of tents and circular bombing targets in the desert. Though the aircrews would fly in and out from the lakebed, a small detachment was assigned to the semi-permanent camp on the eastern edge of the lakebed. Originally called "the Muroc Lake site," the official name of that little station became the Muroc Bombing and Gunnery Range in 1940.

The installation consisted of tents for more than a year. The first building constructed was the combination barracks/mess hall. A permanent headquarters was built by 1936. They also added a water tower for both drinking and firefighting. In 1937, Congress set aside funds for purchasing private lands around the lakebed to allow for bigger Army Air Corps operations at the Muroc site, which became more important as an increasing number of Air Corps units took advantage of the lakebed and training facilities at Muroc.

It took until 1940 for the sales to take effect. Shortly after the outbreak of the Second World War, the Army built a new training base named Muroc Army Airfield (presentday South Base) and the Bombing and Gunnery Range became known as East Camp until it was shut down after the war.

The initial establishment consisted of only a handful of men.

Master Sgt. Harley J. "Fogie" Fogleman commanded the 20 men who built the first structures. The tents they erected relied on coal-fired stoves for heat and an old, frequently out-of-service generator for electricity. Some local residents took to



Air Force photograph

The camp at the edge of Muroc Dry Lake in March 1936. Originally called "the Muroc Lake site," the official name of that little camp became the Muroc Bombing and Gunnery Range in 1940.

LEFT: A large concrete bomb-shape is loaded onto a B-12 for training use.

Over the course of the Muroc Bombing and Gunnery Range's life, the

Air Force photograph

calling the Range "The Foreign Legion of the Air Corps." In fact, Fogleman noted that they "couldn't get a commanding officer. Commissioned officers would come up from Los Angeles, take one look at the place, and take off for LA again without even shutting off the motors of their planes." Fogleman remained the non-commissioned officer in charge of the range until 1942.

Due to its location, all supplies "had to be brought in from March Field." When Arnold petitioned Congress for funds "to make this site fully effective," he listed the needs: "Railroad siding, storage facilities for gasoline and oil, quarters for caretaking detachment (including water supply and sewage disposal), improvements to land[ing] field, [and] triangulation stations for the recording of bombs." Crucially,

he requested these items in October of 1935, more than two full years after Fogleman established the site.

That petition to Congress spelled out the costs as follows: land owned by Southern Pacific Railroad and private citizens would add up to roughly \$130,000 and the physical improvements would total roughly \$50,000. Though Arnold wanted roughly 81,000 acres of land for the installation, the government already owned 38,720 of those acres. He described the land as "desert country, covered with scrub, mesquite, & sage, and totally unfit for cultivation or habitation." Arnold told Congress each acre would cost about three dollars. When the War Department pursued the purchases in 1940, they brought in surveyors from the Bakersfield area (whom the locals felt undervalued the land)

and bought up much of the land through eminent domain.

detachment used bombs up to 2,000 pounds.

The most famous event at the gunnery camp occurred in 1937.

In May of that year, the Muroc Lake site played host to a large-scale war game exercise for a large portion of the Army Air Corps in order to "test the full strength organization of the different type of units" in the Air Corps.

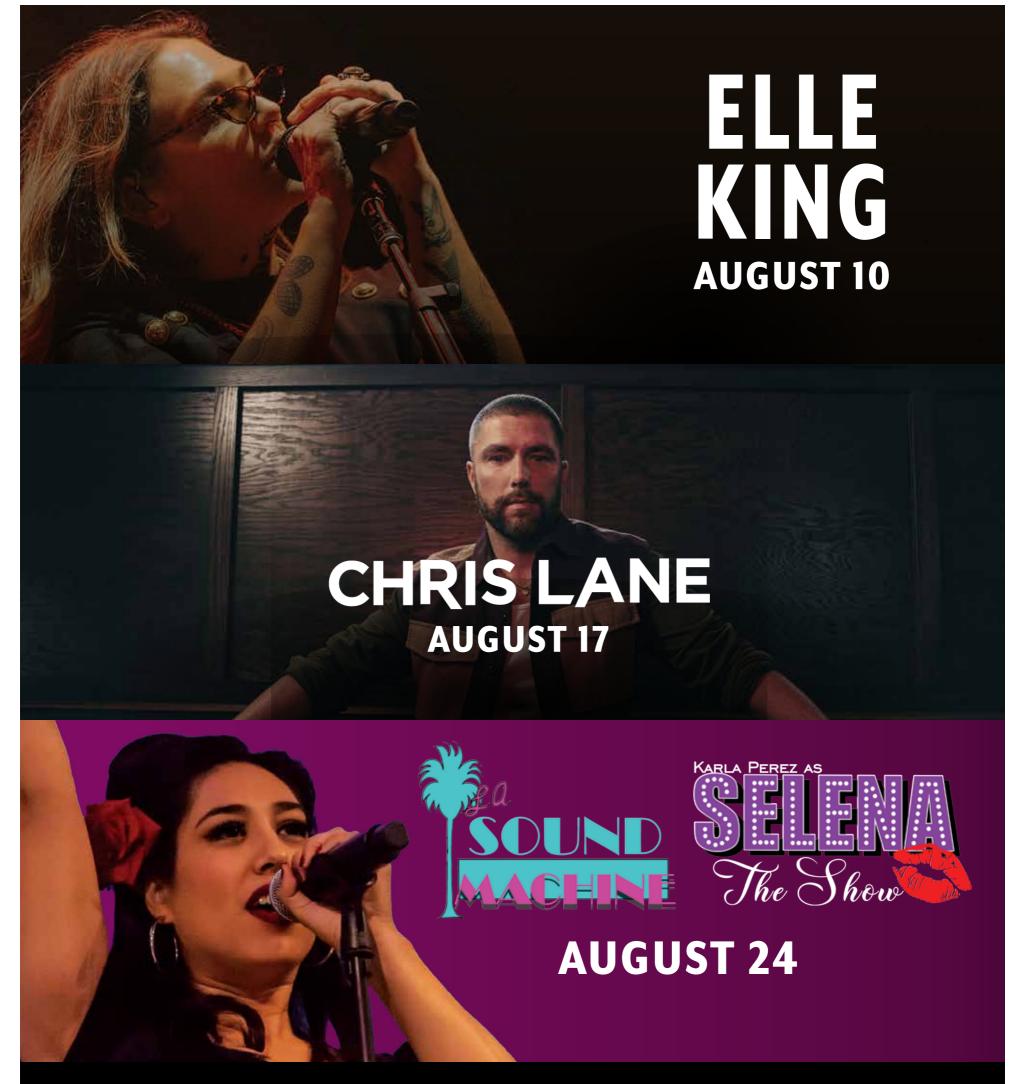
The initial plan called for the participation of more than 2,000 active duty personnel and 13 squadrons of bomber and pursuit aircraft. It also required the 63rd Coast Artillery Anti-Aircraft Division from San Pedro, Calif., to defend the lakebed from the bombers. The Muroc portions of the exercise ended up involving more than 300 aircraft, which was "virtually the entire United States Army Air Corps."

In addition to its strategic and training value, the exercise caught the attention of the local community.

As early as March 1937, stories ran in the Antelope Valley Ledger-Gazette describing the upcoming event. The exercise began on May 11 after several

days of transporting personnel and materiel in preparation. Maj. Gen. Frank M. Andrews, the Chief of the Air Corps, designated May 14 as a day for "the public to visit Muroc Bombing Range. The defending forces there will repel an air attack between the hours of 1 p.m. and 3 p.m. on that date."

This effort differed from the normal exercise attacks that normally occurred in the early hours of the morning. Though not used in the public display, the simulated attacks included actual drops of tear gas to train both the attacking crews and the defending ground crews in using and responding to the gas. They also tried using smoke screens to interfere with the gunners' ability to shoot down attacking aircraft. This turned out to be a doubleedged sword since it not only proved capable of blocking the defenders' aim but also kept the attacking bombers from achieving "a high degree of accuracy, stated observers." May 22 marked the official end of the large-scale exercise when the Anti-Aircraft Division began packing up for its return to San Pedro.





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Boneyard airplane sees new life as a NASA X-66 simulator

by Sarah Mann

NASA Armstrong

NASA's X-66 aircraft, the centerpiece of its Sustainable Flight Demonstrator project, is taking the term "sustainable" to heart by reusing an old MD-90 cockpit as a base for its new X-66 simulator.

When airplanes are retired, they often wind up in "boneyards" — storage fields where they spend years being picked over for parts by manufacturers, researchers, engineers, and designers. That's where the X-66 team found their new X-66 simulator cockpit, before sending it to NASA's Armstrong Flight Research Center at Edwards,

The project will catalog, clean, and disassemble the MD-90 cockpit to use for the simulator. This is where the Simulation Engineering Branch at NASA Armstrong steps in. The team develops high-fidelity engineering simulators that allow pilots and engineers to run real-life scenarios in a safe environment.

As with any X-plane, a simulator allows researchers to test unknowns without risking the pilot's safety or the aircraft's structural integrity. A simulator also affords the team the ability to work out design challenges during the build of the aircraft, ensuring that the final product is as efficient as possible.

To assemble the X-66, the project team will use the airframe from another MD-90, shortening it, installing new engines, and replacing the wing assemblies with a truss-braced wing design.

The Sustainable Flight Demonstrator project is NASA's effort to develop more efficient airframes as the nation moves toward sustainable aviation. In addition to the X-66's revolutionary wing design, the project team will work with industry, academia, and other government organizations to identify, select, and mature sustainable airframe technologies.

The project seeks to inform the next generation of single-aisle airliner, the workhorse of commercial aviation fleets around the world. Boeing and NASA are partnering to develop the experimental demonstrator aircraft.



NASA photographs by Steve Freeman The cockpit of an old MD-90 aircraft arrived at NASA's Armstrong Flight Research Center in Edwards, Calif., in March 2024. Parts will be used to build a simulator for NASA's X-66, the demonstration aircraft for the Sustainable Flight Demonstrator project.



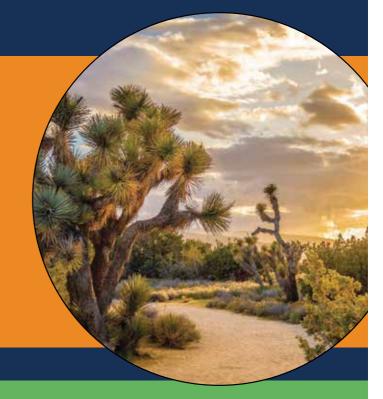


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FLASHBACK:

Dyna-Soar, Little Joe II: Paths to the present suborbital flight test program

by Tony R. Landis

Wright-Patterson AFB, Ohio

The X-20 Dyna-Soar program is often remembered as one of the biggest lost opportunities in the history of manned space flight.

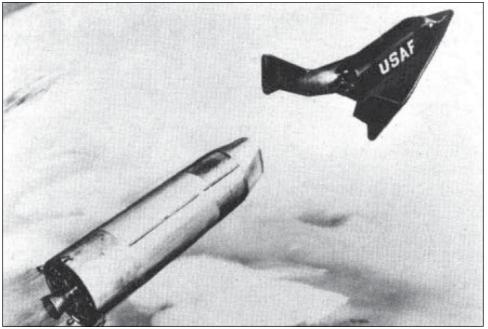
Evolving from the WS-464L Program, Dyna-Soar had great potential for use as a military space platform as well as civilian science laboratory.

Unlike the earlier Mercury, Gemini and Apollo capsules that were singleuse vehicles returning to earth under a parachute system, the X-20 was a winged vehicle, capable of landing on select runways, then refurbished and utilized again.

The initial phase of the X-20 flight test program had the vehicle dropped from high altitudes from a B-52C mothership to test atmospheric aerodynamic handing of the vehicle, as well as develop landing techniques at Edwards Air Force Base, Calif.

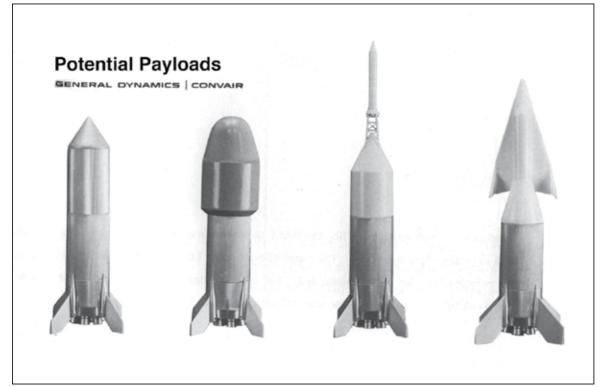
The second phase of testing involved sending the X-20 on unmanned and manned orbital spaceflight test missions powered by a Titan III rocket booster which left a large gap in the standard progression of flight testing. The Convair Division of General Dynamics proposed making suborbital test flights using a Little Joe II booster.

The Little Joe II was a clustered, solidpropellant rocket booster designed as unguided and controllable versions. The vehicle could accommodate one to seven, 40-inch diameter, 100,000-pounds thrust, Aerojet Algol 1D solid rocket motors. With minor modifications the improved launch vehicle (IPLV) could accommodate the more advanced 44-inch diameter Algol IIA motors.



Defense Department photograph

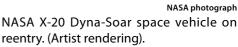
An artist's conception showing the U.S. Air Force Boeing X-20 Dyna-Soar space glider after separation from booster.



The Convair Division of General Dynamics proposed many used for their Little Joe II booster. Shown are a standard Cylindrical version, a hammerhead shape for Lunar Module (LEM) testing, the Apollo payload and Dyna-Soar vehicle.

Little Joe II had the reputation as a reliable workhorse of the early manned space program, testing Mercury and Apollo escape and recovery systems from various launch locations. The Little Joe II booster was a versatile rocket with capabilities not found on many systems of the day and could be adapted and configured for several different flight profiles.

Convair proposed making test flights of the Dyna-Soar/Little Joe II combination on an overland range between Edwards and the White Sands Missile Range in New Mexico. Launching from Edwards provided a lakebed in case of an aborted launch and emergency land-



U.S. AIR FORC

reentry. (Artist rendering).

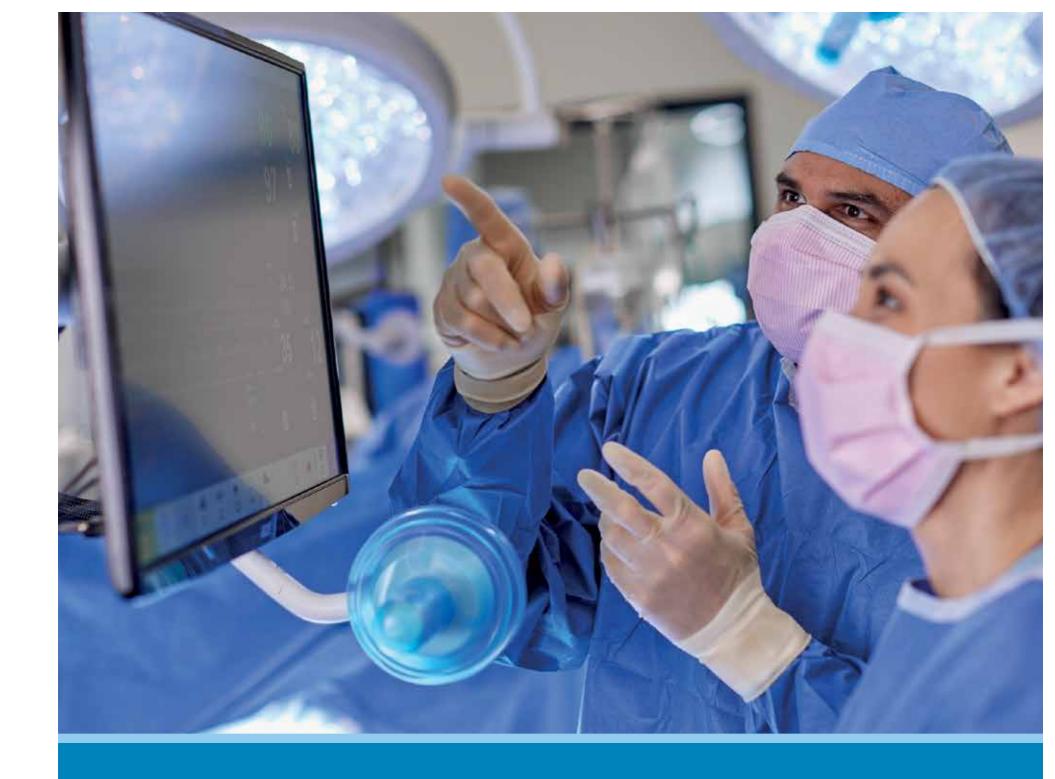
ing. Range instrumentation was already in place at both sites, keeping the range support cost to a minimum.

The Dyna-Soar test vehicle would be mounted atop the Little Joe II booster with a two-part transition fairing, gloved over the X-20 to minimize drag and would be jettisoned prior to separation. This variation of the Little Joe II booster required movable aerodynamic fins, larger than those used on standard Little Joe II launches.

Using a standard Little Joe II booster, the X-20 could be propelled to a maximum speed of 10,000 fps (approximately 6,800 mph) at an altitude near 170,000 feet. With the improved Little Joe II launch vehicle, those figures would rise to a speed of 15,000 fps (approximately 10,200 mph) and an altitude near 200,000 feet. The entire flight covered approximately 582 nautical miles, with the booster impacting the desert floor just over halfway through the flight. The Dyna-Soar test vehicle would experience considerable aerodynamic heating during the reentry phase with the final landing on the alkali flats of the White Sands Missile Range.

The Dyna-Soar suborbital program required a minimum of five test flights: two unmanned flights utilizing the existing automatic guidance, and three manned flights. Convair projected the total price of the five-flight test program at \$12.2 million, considerably less than the projected \$18 million per flight for a Titan III booster (figures are in Fiscal Year 1965 dollars).

Unfortunately, the Secretary of Defense cancelled Dyna-Soar program on Dec. 10, 1963. That same day the U.S. Air Force announced a new manned space program, the Manned Orbiting Laboratory. Had the U.S. proceeded with Dyna-Soar, it is thought the knowledge gained could have directly impacted the design of the NASA Space Shuttle program.



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Red Flag 24-3 kicks off at Nellis

By Michael Hasenauer

Nellis AFB, Nev.

Red Flag 24-3, coordinated and hosted by the 414th Combat Training Squadron at Nellis Air Force Base, Nov. from July 22 to Aug. 2, 2024, is one of the U.S. Air Force's largest combat training exercises.

Red Flag 24-3 welcomes around 30 units and approximately 2,000 participants from the U.S. Air Force, U.S. Space Force, U.S. Marine Corps, U.S. Navy and Air National Guard. The core wing will be the 1st Fighter Wing from Langley AFB, Va. as nearly 150 aircraft from across the services participate in complex mission scenarios against aggressor forces.

"Red Flag is the premier air combat exercise that pushes our pilots to their limits and prepares them for the realities of modern air warfare," said Col. Eric Winterbottom, 414th CTS commander. "As Gen. Allvin has emphasized, we are in an era of great power competition, and Red Flag is where we hone our skills and sharpen our edge."

The exercise is designed to maximize combat readiness, capability, and survivability of participating units by providing realistic, multi-domain training in a combined air, ground, space, and electronic



Air Force photographs by William R. Lewis

A B-1B Lancer assigned to the 28th Bomb Wing, Ellsworth Air Force Base, S.D., lands at Nellis Air Force Base, Nev., July 17, 2024 to participate in Red Flag-Nellis 24-3. Red Flag is an opportunity to enhance the readiness and training necessary to respond as a joint force to any potential crisis or challenge across the globe.

threat environment. This iteration focuses on training for joint force operations and command and control to make our nation's forces more lethal.

"During Red Flag we simulate a multidomain fight that tests our ability to integrate across services, platforms, and

> Staff Sqt. Nicholas Warden (Left) and Airman 1st Class Daniel Dowd, avionics specialists assigned the 480th Fighter Generation Squadron,

capabilities," said Winterbottom. "In this exercise, we learn to fight as a team, to outmaneuver and outthink our adversaries. Red Flag is not just about flying, it's about winning.'

As the Air Force develops Airmen for great power competition, it must develop warfighters with advanced training and tailored career paths with competitor-focused competencies necessary for high-end combat. Red Flag 24-3 provides the opportunity for a free exchange of ideas between forces and is a valuable training exercise for all participants.



Spangdahlem Air Base, Germany, work on an F-16CM during Red Flag-Nellis 24-3 at Nellis Air Force Base, Nevada, July 23, 2024.



An RC-135 Rivet Joint assigned to Offutt Air Force Base, Nebraska, taxis prior to take off for a night mission during Red Flag-Nellis 24-3 at Nellis AFB, Nevada, July 23, 2024. Red Flag provides participants the opportunity to plan and employ together in the air, domain (supported by space, and cyber) in a contested, degraded and operationally limited



An F-35 Lightning II waits to take off for a night mission during Red Flag-Nellis 24-3 at Nellis Air Force Base, Nevada, July 17, 2024.



An HC-130J Combat King II assigned to Davis Monthan Air Force Base (AFB), Arizona, taxis prior to take off for a night mission during Red Flag-Nellis 24-3 at Nellis AFB, Nevada, July 23, 2024.

57th Wing gets new commander



Air Force photograph by Airman 1st Class Brianna V

passes the guidon to Brig. Gen. Lawrence Sullivan, right, the incoming 57th Wing commander, in front of Chief Master Sgt. Jason Trickey, center, the 57th Wing command chief, during a change of command ceremony at Nellis Air Force Base, Nev., July 1, 2024. The 57th Wing is responsible for developing and testing tactics, training, and technologies to ensure air superiority and combat readiness. Prior to his arrival at Nellis, Cunningham was Principal Military Assistant to the Secretary of Defense, at the Pentagon, a position he served in from June 22. This is not however, his first time at Nellis. Cunningham was a student at the Air Force Weapons School

from July-December 2006; and following a tour in Japan, he served as an F-16

instructor with the USAFWS.

Maj. Gen. Case Cunningham, left, U.S. Air Force Warfare Center commander,

NTTR CoC



Air Force photograph by Airman 1st Class Elizabeth Tan

Maj. Gen. Case Cunningham left, U.S. Air Force Warfare Center commander, passes the guidon to Col. Dane Gehrmann, Nevada Test and Training Range commander, during the NTTR change of command ceremony at Nellis Air Force Base, Nev., June 13, 2024. Prior to his current position, Gehrmann was the commander of the 57th Operations Support Squadron at Nellis. As commander of the range, he oversees a 2.9 million acre range and 12,000 square miles of airspace that make up the NTTR complex as well as the Joint Integrated Test, Training Center that comprises the U.S. Air Force's most advanced synthetic battle space.



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354th Bulldogs generate final A-10C sortie

by 355th Wing Public Affairs

Davis-Monthan AFB, Ariz.

The 354th Fighter Squadron and 354th Fighter Generation Squadron generated their last A-10C Thunderbolt II sortie at Davis-Monthan Air Force Base, Ariz., June 21, 2024.

The "fini flight," which was flown by Lt. Col. Patrick Chapman, commander of the 354th Fighter Squadron, occurred ahead of the inactivation of both of squadrons which will take place in September of this year.

The inactivation of the 354th FS and 354th FGS comes as their assigned A-10s are divested as part of the Air Force's modernization efforts, and as the base makes way for the planned arrival of the 492nd Special Operations Wing.

As the final aircraft touched down, members of the 354th FS and 354th FGS reflected on the many missions and exercises the squadrons have supported. One such exercise, Cope Thunder 23-2, took place at multiple bases throughout the Philippines in preparation for the first Air Force Force Generation cycle.

"Being able to quickly generate aircraft, like deploying to the Philippines and moving assets to an area that we haven't been to, set us up for success," said Senior Airman Jacob Branson, 354th FGS dedicated crew chief.

The Bulldogs last deployment was to Al Dhafra Air Base from October 2023 to April 2024 in support of the first AFFORGEN cycle and was instrumental in developing attack leaders and deploying combat airpower.

"Our most recent deployment was an operationally challenging one," said Chapman. "I'm proud of the ops and the maintenance team for stepping up to meet those challenges, which ultimately protected coalition lives during a very turbulent time in the Middle East."

As part of the inactivation, assignment teams will work with pilots and maintainers to determine new assignments based on what is best for each member's career development, to include transitioning to different weapons systems.



Air Force photographs by Senior Airman Vaughn Weber

A U.S. Air Force A-10C Thunderbolt II aircraft sits on the flightline at Davis-Monthan Air Force Base, Ariz., June 21, 2024. The A-10 aircraft is officially being divested in September of 2024.



Lt. Col. Patrick "Meat" Chapman, 354th Fighter Squadron commander, left, talks to Senior Airman Jacob Branson, 354th Fighter Generation Squadron dedicated crew chief, at Davis-Monthan Air Force Base, Ariz., June 21, 2024. Branson sent off Chapman on the last sortie for the 354th FGS and 354th FS.



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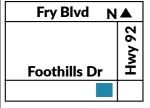
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CSAF, CMSAF highlight 'Great Power Competition' during DM visit

by 355th Wing Public Affairs

Davis-Monthan AFB, Ariz.

Air Force Chief of Staff Gen. David Allvin and Chief Master Sgt. of the Air Force David Flosi visited Davis-Monthan Air Force Base, Ariz., July 8-9, 2024.

During their visit, Allvin and Flosi engaged with 355th Wing leaders, discussed Air Force priorities with Airmen and thanked the team for their dedication to the mission.

"The team, the 355th Wing and the 11th [Air Task Force] are working together like true Airmen, wingmen, do," said Allvin, during his all call. "This team right here is leading the way, and we could not be more proud."

Allvin addressed the importance of readiness and power projection as well as developing people and capabilities during times of Great Power Competition. He also spoke about what Davis-Monthan's future brings and how it is vital to shaping high-end readiness with the new Air Task Force model.

"There are things we can do right now, update the way we present forces to the combatant commander," said Allvin.

"Train together, go through our Air Force Force Generation cycle together, prepare and be ready for the mission."

Flosi reiterated the significance of operating in an era of Great Power Competition and addressed the motivations behind Airmen who wear the uniform.

"Each and every one of you are important to our Nation's defense," Flosi told Airmen. "I wake up every morning and do everything I can to make sure we are the most lethal fighting force the world has ever seen. What you do is important work, and work worth doing. I am honored to serve alongside you."

After their address, the CSAF and CMSAF answered questions from the Airmen where they discussed military pay, compensation, and the acquisition process of new technologies. After the Q&A, the command team emphasized the capabilities the Airmen bring toward force operations.

"When I come to this place, I see the Airmen in action, and I see us leaning into change," said Allvin. "This is important work and there's no better team in America than the team I'm looking at right now."



Air Force photograph by Airman 1st Class Jhade Herrera

Gina Allvin, the spouse of the United States Air Force Chief of Staff Gen. David Allvin, engages with an Airman in the Desert-Inn dining facility at Davis-Monthan Air Force Base, Ariz., July 9, 2024. Allvin was escorted by other key spouses to various locations on base including the wing headquarters, the Military and Family Readiness Center, the Desert-Inn dining facility and the community center.



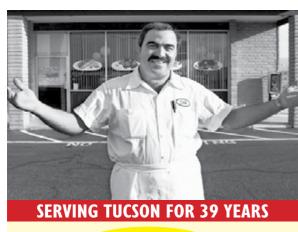
Air Force photograph by Airman 1st Class William Finn IV

Air Force Chief of Staff Gen. David Allvin and Chief Master Sergeant of the Air Force David Flosi speak with Airmen during an all-call at Davis-Monthan Air Force Base, Ariz., July 9, 2024. Allvin and Flosi spoke to Airmen about the future of Davis-Monthan, answered their questions and thanked them for their dedication to the mission.









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DM's hosts first storm spotter training

by Airman 1st Class Jhade Herrera

Davis-Monthan AFB, Ariz.

The 355th Operations Support Squadron weather operations flight partnered up with the Tucson National Weather Service for storm spotter training at Davis-Monthan Air Force Base, Ariz., June 11, 2024.

A trained storm spotter plays a pivotal role in communicating severe weather information to the 355th Wing's weather flight and the National Weather Service, which are responsible for protecting over 1.1 million Tucson residents and Davis-Monthan Airmen.

"There's a lot of things that a weather sensor can't read or see," said Senior Master Sgt. Joseph Trudel, 355th OSS WX flight chief. "Those are things that only human beings with a good understanding of what they're seeing are able to communicate."

The training is made up of foundational storm spotter information like identifying severe reportable criteria to the National Weather Service and the base weather flight when it's seen.

'Upon request, they've offered to give this training to our military community for the first time on base," said

Storm spotters serve as another set of eyes and ears across base. They can report real-time, ground-level observations of severe weather conditions to the weather flight to enhance their capabilities.

"It's something that's never been done before," said 1st Lt. Samantha Lolo, 355th OSS WX flight commander. "With such a big base population, this could make a big difference to the base."

Airmen with different AFSCs contributed to the community with this training, increasing overall situational awareness, and helping residents and emergency responders better prepare for and respond to hazardous weather



Air Force photograph by Airman 1st Class Jhade Herrera

The Tucson National Weather Service briefs Airmen of various Air Force specialty codes on how to spot severe weather at Davis-Monthan Air Force Base, Ariz., June 11, 2024. The 355th Operations Support Squadron weather operations flight partnered up with the Tucson National Weather Service to host storm spotter training.

US Geological Survey analyzes data at DM

By Tech. Sgt. Sergio A. Gamboa Davis-Monthan AFB, Ariz.

A U.S. Geological Survey field team conducted field work in support of NASA's ER-2 High-Altitude Science Aircraft at Davis-Monthan Air Force Base, Ariz., June 11,

The team, comprised of a geophysicist and physical scientist, analyzed hyperspectral imaging for the USGS Earth Mapping Resources Initiative and for sensors flown by the ER-2 to increase the nation's geologic knowledge of critical mineral resources.

"The main goal of the work was to make reflectance measurements of an area of ground to compare with and to improve airborne hyperspectral data," said Ray Kokaly, USGS research geophysicist.

The field team needed an optimal area for their data gathering, and after researching locations in Arizona, concluded that the Davis-Monthan parade pad was one of many sites the team would focus its research on.

"Because the pad here has such a high reflective surface, we can correlate it well with the airborne data collected," said



Air Force photograph by Tech. Sgt. Sergio A. Gamboa

Derek Ensign, U.S. Geological Survey physical scientist, conducts hyperspectral imaging at Davis-Monthan Air Force Base, Ariz., June 11, 2024. Ensign was conducting hyperspectral imaging for the USGS Earth Mapping Resources Initiative and for sensors flown by the ER-2 to increase the nation's geologic knowledge of critical mineral resources.

Evan Cox, USGS geophysicist. "Without Davis-Monthan's help we would probably not have a calibration site in the vicinity it more accurate for the ER-2."

of Tucson of equally high quality. This is definitely an optimal site for airborne data, making

In preparation for USGS's visit, the 355th Operations Support Squadron weather operations team delivered

forecast to pinpoint the exact day and time that met operational needs for the field team's

"Finding clear skies isn't exactly easy, and we even had to push their original timeline to find their ideal window," said Master Sgt. Chevenne Nelson, 355th OSS weather operations section chief.

"The representatives we worked with knew the quality of work the weather team produces -- we're easy to work with and [provide trustworthy] weather information."

It is common for the USGS to work with local, state and federal agencies to identify and measure ground calibration sites.

The teamwork of the 355th OSS weather team, 355th Wing A-Staff and Command Post was imperative in coordinating with USGS and NASA to secure the location for the research in support of the nation's economy, renewable energy development, and national security.

USGC also gathered data in Wilcox, Ariz., across California and Nevada, and plans to cover portions of Colorado, New Mexico, Texas, Utah and Wyoming.



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Operation Tidal Wave and an Airman named Russell

by Bob Alvis

special to Aerotech News

Being an old Air Force veteran and a baby boomer, pivotal and dramatic battles that surrounded our understanding of history were always the backdrop of my upbringing.

There was a time when you would be hard-pressed to find an Air Force veteran who was not schooled in the greatest air battle the Air Force was ever involved in.

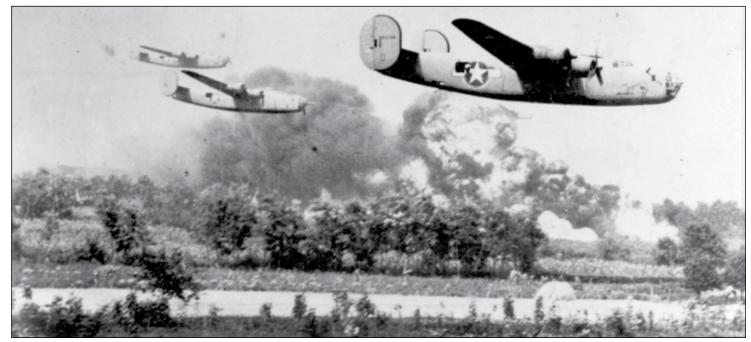
Aug. 1, 1943, would become a day where great expectations and hundreds of airmen would rise in the early morning in North Africa, hoping to deal a crippling blow to the German military machine and the Nazi high command quests.

What looked good on paper was not even close to being any good. Months of planning and bringing the forces together in the deserts of Africa had our Air Force feeling confident. At the end of the day all the planning and execution would leave very little damage to the Nazi war machine, but staggering losses of Allied planes and men.

The planned surprise attack on the oil fields of Ploiesti, Romania — code name Operation Tidal Wave — would create a wave all right, but not one with the desired outcome. In the Reader's Digest version, I will just say that launching mass numbers of B-24 Liberator bombers to fly a low-level attack with unseasoned crews and leadership with formations depending on each other, hoping they would not be noticed, led to crews floundering on the way to the targets, becoming separated and lost.

When the runs on the oil fields began, every German 88-gun emplacement and AA anti-aircraft guns were waiting and would relentlessly hammer the American formations. It would be a long day ending in the loss of 58 B-24 aircraft and more than 500 airmen.

A 1999 research report prepared for the Air War College at Maxwell Air Force Base, Ala., concluded that the bombing campaign in Ploiesti was "one of the bloodiest and most heroic missions of all time." When it was all over, five Medals of Honor and 56 Distinguished Service Crosses, went to crew



Air Force photograph

Allied forces B-24s fly at treetop level through their target area, the oil fields of Ploiesti, Romania.

members of those 150 B-24s. Numerous other awards went to Operation Tidal Wave crew members also.

So, this is where my story becomes a personal journey of one of those men. His relatives opened their family's personal and painful remembrance of that mission, via a solitary footlocker stored untouched in an attic since World War II, until a friend of the family opened up about the existence of it and wanted to know about its content from a military historian guy like me.

Russell Godde was the son of farmers who could have very easily avoided the war, as his family was a major producer of crops during that time. But Russell had hopes of becoming a pilot, and joining in the war effort was a high priority for him. Shortly after he arrived at Santa Ana, Calif., where the Army Air Corps were sorting out prospects of who was best suited for what position on a crew, Russell learned he was going to become a bombardier. He was disappointed a bit, but he pressed on, hoping someday he could turn that into a seat in a cockpit. Little did Russell know then that his new position on a crew would seal his fate and destiny.

After months of training, his bombardier wings earned and his commission awarded, the newly commissioned Lt. Russell Godde was ready for active duty, and he was off to war. Visiting home for the last time—like all good service men—he took a few cherished keepsakes to follow him where the war wanted him, away from his family and hometown. His journey began on the Gulf Coast with him flying anti-submarine missions in the Gulf that consisted of hours and hours of boredom in a place he did not really want to be.

But that all changed when he and his crew were called into the 98th Bomb Group and made the hop across the Atlantic via the southern route and flew up to Benghazi, Libya. Their new base would introduce them to the war they so wanted to be a part of —at last, a chance to make a difference. The day they arrived was at the end of July. Little did they know that a new bomber crew was not about the bomber, it was all about the men of those bombers. The newly arrived crews would be broken up to fill open positions with seasoned crews.

Everybody on the field knew something big was brewing, as 158 B-24s were being readied for a single date launch, and the men waited for whatever that big mission was.



Air Force photograph

A formation of B-24 Liberators take off from their airfield near Benghazi, Libya, July 20, 1943. The Operation Tidal Wave attack force consisted of B-24 Liberators, each with 10-man crews.

Russell was now part of the 98th — BG, the "Pyramiders", and as things were moving fast, he soon became a part of the 415th Bomb Squadron. In the early morning hours, as the briefings began Russell found out he would not be flying with any of his crew on his very first mission, but he was being assigned to a plane that needed a bombardier.

In the morning darkness of that North Africa air base, Lt. Russell was driven out to a B-24 #520 nicknamed Yen Tu, where he met his crew for the very first time. After shaking hands and exchanging pleasantries it was time for business and the crew settled into their positions. With check lists completed it was time for start-up and Russell started his target plotting from his morning briefings to a place that was called Ploesti in a country named Romania.

Back here in America, Russell's family rose early to start the daily chores of farming, not knowing by day's end, the Godde Family would have their lives changed forever. A beloved son would start a journey that would have him lost in time, and have his family seeking answers for the rest of their lives.

In the next issue we will unravel the mystery of that mission, the family's quest for answers, and the opening of Lt. Godde's footlocker that was sent home to his family. The footlocker has remained sealed since his mom put the last memories of her son's life in it after the end of World War II.

I am looking forward to bringing you the rest of this story next month, as we go in search of a lost Airmen, halfway around the world while we stand in the presence of a footlocker that tells the story of his very short life in service to our country

Until next time, Bob out ...

Editor's note: This is part one of a two-part story. Look for part two in the next issue of Aerotech News.



Air Force photograph

Air Raid Ploesti! A B-24 flying over a burning oil refinery at Ploiesti, Romania, Aug. 1, 1943.



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NOTICE OF PUBLIC LIEN SALES Business & Professional Code Section 21700-21707

Notice is hereby given by the undersigned that a public lien sale of the following described personal property will be held at the hours of 12 noon on the 14th of August 2024 or thereafter. The auction is being held at www.selfstorageauction.com by competitive bid. The property is stored by Nova Storage located 16488 Adelanto Rd. Adelanto, CA 92301.

The items to be sold are generally described as follows: Furniture, clothing, tools and or other household items stored by the following persons.

B05 Barraza, Jaime Flores E43 Lowe, Lorrie C21 Medina, Robert D31 Perlera, Cecilia B07 Chavez, Ana A06 Perlera, Cecilia

Date: July 28th, 2024 Signed NOVA STORAGE

This notice is given in accordance with the provisions of section 21700 et seq. of Business & Professional Code of the Sate of California. The owner reserves the right to bid at the sale. All purchased goods are sold "As Is" and must be paid for and removed at the time of sale. Sales subject to prior cancellation in the event of settlement between owner & obligated party. Auctioneer: Nova Storage

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The items to be sold are generally described as follows: Furniture, clothing, tools and or other household items stored by the following persons.

0145 Mendoza, Mia 0054 Silverstein, Michael 0480 Suarez, Maria 0269 Knowland, John 0265 Crumb, Amy 0559 Crumb, Amy 0574 Siebenhoven, H. Von 0611 Crumb, Amy 0557 Crumb, Amy

0348 Williams, Precious

0282 Ratzi, John-Paul

Date: July 28th, 2024 Signed NOVA STORAGE This notice is given in accordance with the provisions of section 21700 et seq. of Business & Professional Code of the Sate of California. The owner reserves the right to bid at the sale. All purchased goods are sold "As Is" and must be paid for and removed at the time of sale. Sales subject to prior cancellation in the event of settlement between owner & obligated party. Auctioneer: Nova Storage

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The items to be sold are generally described as follows: Furniture, clothing, tools and or other household items stored by the following persons.

E398 Payton, Florence E396 Lopez, Justin D130 Trimble, Tiana B079 Sharp, Debra F541 Lawrence, Mechelle

Date: July 28th, 2024 Signed NOVA STORAGE

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The items to be sold are generally described as follows: Furniture, clothing, tools and or other household items stored by the following persons.

1135 Cervantes, Gerardo 1057 Prescott, Marlon 1060 Lomeli, Luis 4324 Castelan, Angel Notice is hereby given by the undersigned that a public lien sale of the following described personal property will be held at the hours of 12 noon on the the 14th day of August 2024 or thereafter. The auction is being held at www.selfstorageauction.com by competitive bid. The property is stored by Nova Storage located 13129 S. Figueroa Street, Los Angeles, CA 90061

The items to be sold are generally described as follows: Furniture, clothing, tools and or other household items stored by the following persons.

G15 Farfan, Eddy N21 Bates, Chalondrea N31 Randolph, Pam T27 Martinez Miguel, Marva M28 Salazar, Shiann J31 Nichols, Lamont A22 Rios, Mauricio Notice is hereby given by the undersigned that a public lien sale of the following described personal property will be held at the hours of 12 noon on the the 14th day of August 2024 or thereafter. The auction is being held at www.selfstorageauction.com by competitive bid. The property is stored by Nova Storage located 11230 Wright Road, Lynwood, CA 90262.

The items to be sold are generally described as follows: Furniture, clothing, tools and or other household items stored by the following persons.

D511 Lopez, Brian E578 Broxton, Isaiah C349 Stanton, Krystal F760 Arzate Jr., Ricardo F783 Velasquez Tejada, Sergio H256 Mickel, Shirley C359 Turner, Dina C375 Ortiz, Jorge F778 Hansack, David Dixon H240 Garcia-Perez, Leticia Notice is hereby given by the undersigned that a public lien sale of the following described personal property will be held at the hours of 12 noon on the the 14th day of August 2024 or thereafter. The auction is being held at www. selfstorageauction.com by competitive bid. The property is stored by Nova Storage located, 5951 East Firestone Blvd., South Gate, CA. 90280

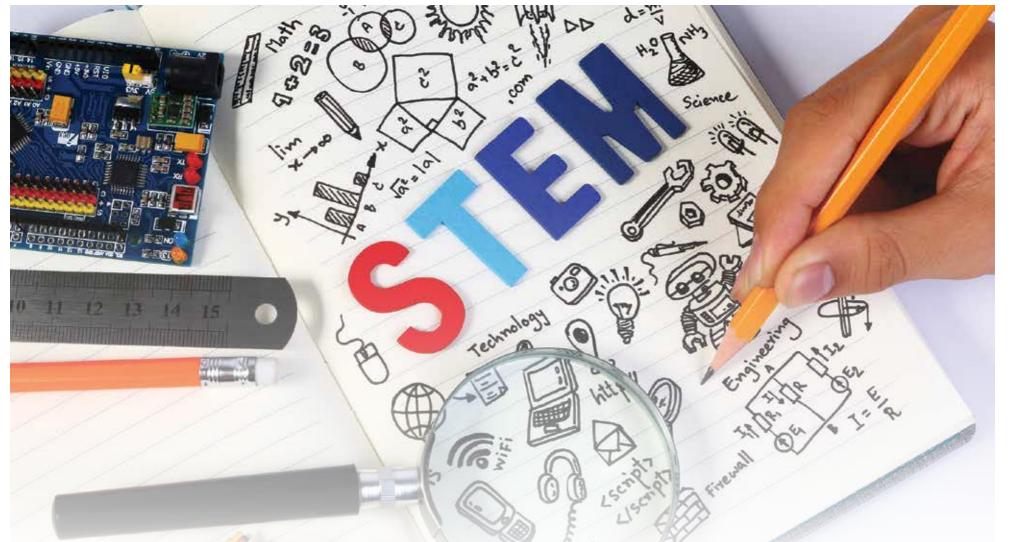
The items to be sold are generally described as follows: Furniture, clothing, tools and or other household items stored by the following persons.

3315 Perez, Natalie 0427A Izquierdo, Jesus 2261 Cortez, Debra 1402 Mendez, Ricardo 2330 Guzman, Rosa Angelica 2233 Torres, David 3541 Duran, Diana 0250 Urizar, Paula 0584 Alvarez, Juana 4011 Hernandez, Morena Gua 2447 Herrera, Jose Notice is hereby given by the undersigned that a public lien sale of the following described personal property will be held at the hours of 12 noon on the the 14th day of August 2024 or thereafter. The auction is being held at www.selfstorageauction. com by competitive bid. The property is stored by Nova Storage located 13043 Foothill Blvd Sylmar, CA 91342

The items to be sold are generally described as follows: Furniture, clothing, tools and or other household items stored by the following persons.

0234 Bocanegra, Alfredo
0289A Jaimes, Jorge
0315 Fierros, Stephanie
0296 Beltran, Amber
0087 Duran, Cairo
0554 Crowder, Matthew
0559 College, LA Mission L.A.Mission
College
0561 Crowder, Matthew
0194 Garcia, Gina
0575 Law, Orenthal J

Date: July 28th, 2024Signed NOVA STORAGE This notice is given in accordance with the provisions of section 21700 et seq. of Business & Professional Code of the Sate of California. The owner reserves the right to bid at the sale. All purchased goods are sold "As Is" and must be paid for and removed at the time of sale. Sales subject to prior cancellation in the event of settlement between owner & obligated party. Auctioneer: Nova Storage



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