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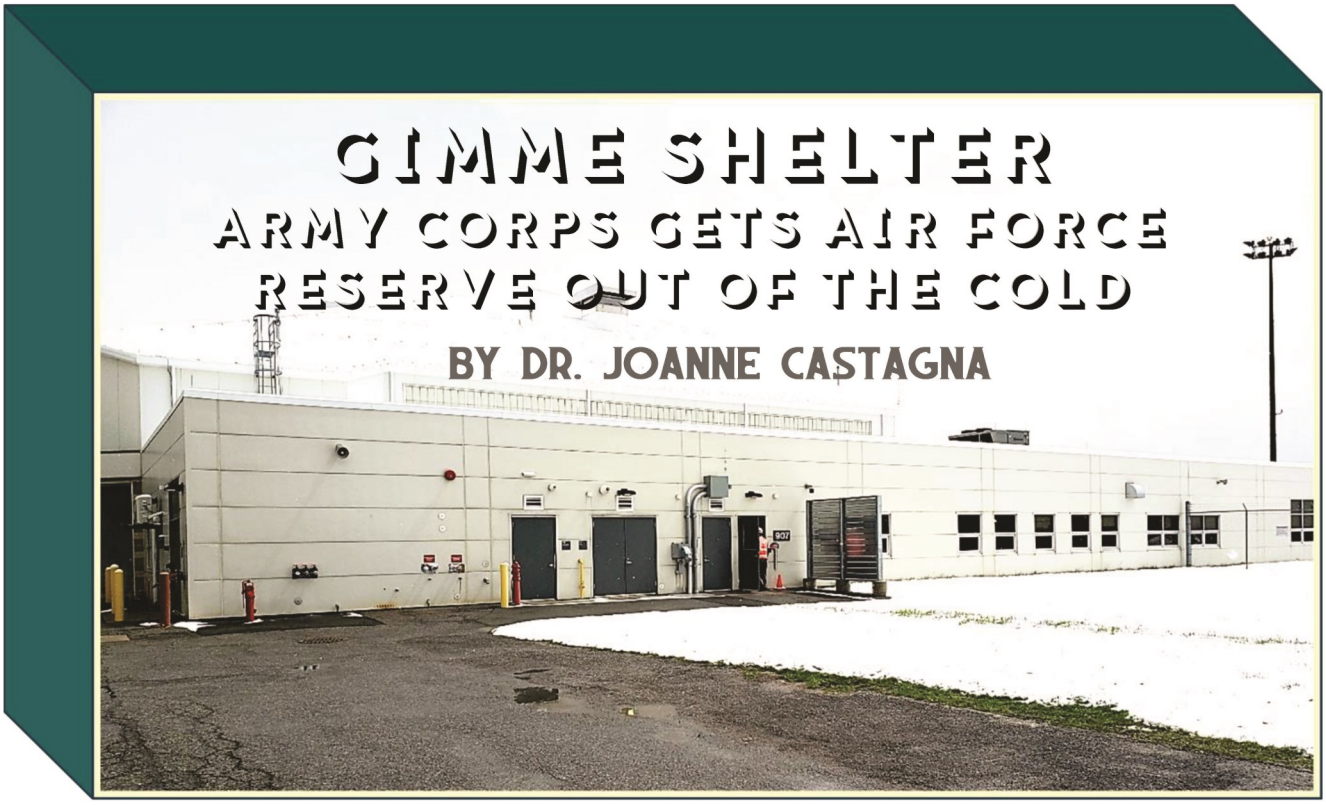
Magazine

14th LTG Robert Flowers
Best Sapper Competition Winners
CPT Patrick Richardson & CPT Darius Javan

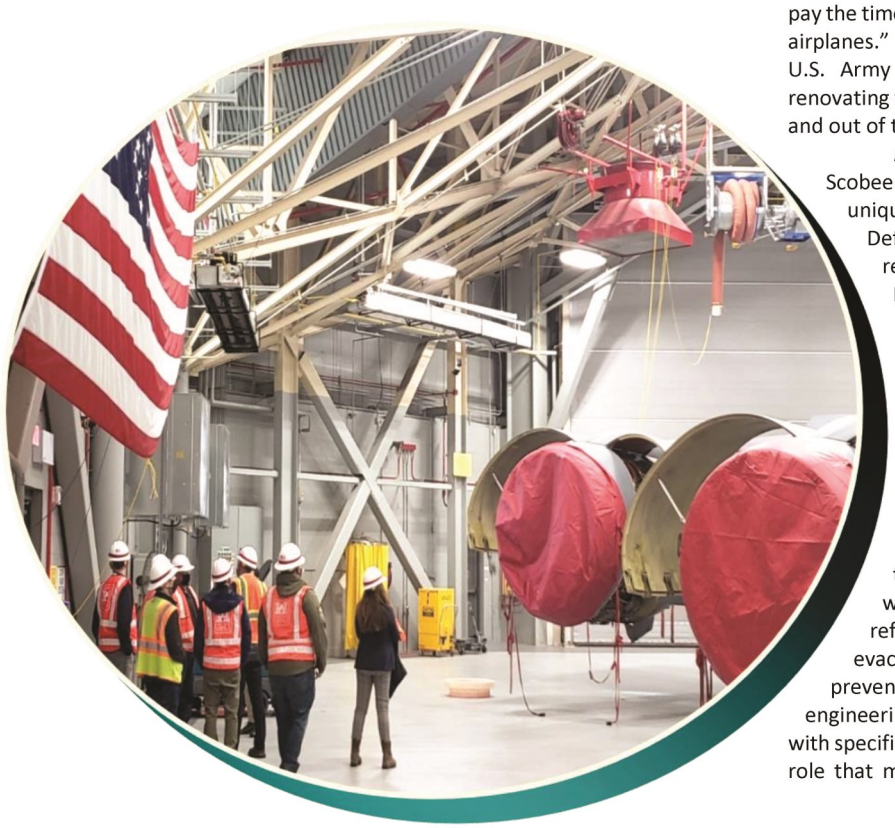
GIMME SHELTER

ARMY CORPS GETS AIR FORCE RESERVE OUT OF THE COLD

BY DR. JOANNE CASTAGNA



Up near the Canadian-New York border of the United States is the iconic Niagara Falls and the Niagara Falls Air Reserve Station. It is there that Airmen are making important decisions every day to protect the United States, even when they are repairing their aircraft in the frigid weather that can get as cold as 14 degrees Fahrenheit. "I tell them all the time; every time they're looking at the airplane, with every piece they look at, they make life and death decisions. I mean, if you can't even concentrate on what you're looking at because you're so cold—it's tough," continued LTC Al Knapp, 914th Maintenance Group Commander, Niagara Falls Air Reserve Station, "We didn't have the shelter where we could get our Airmen out of the weather, where they can pay the time and attention that is needed to work on these airplanes." Now the Airmen have this shelter because the U.S. Army Corps of Engineers, New York District is renovating two aircraft hangars so Airman can work inside and out of the cold and fulfill their mission to the Nation.



Air Force Reserve Commander, LTG Richard Scobee stated, "Our Reserve Citizen Airmen provide a unique strategic capability to the Department of Defense which allows for effective combat readiness in a reserve capacity." The Niagara Falls Air Reserve Station is a U.S. Air Force Reserve Command military installation. Presently, there are over 1,700 personnel assigned to the station that include Active Guard Reserve, Active Reserve Technician, Traditional Reserve, DoD Civilian, and contracted 914th Air Refueling Wing personnel. 2LT Lucas E. Morrow, Public Affairs Officer, 914th Air Refueling Wing, USAF added, "The 914th Air Refueling Wing has twelve squadrons assigned to the station, each with a specific responsibility including aerial refueling, global mobility, aeromedical evacuation, explosive ordinance disposal, fire prevention & security forces services, civil engineering, force support and aerial port. However, with specific objective goals, all Airmen play into a singular role that makes up our core mission, which is to train,

Photo above: Exterior of the MX Hangar that will be completed this year at the Niagara Falls Air Reserve Station. Photo below: Project team looking over the interior of the MX Hangar that will be completed this year at the Niagara Falls Air Reserve Station. Photos by James D'Ambrosio.

perfect and provide full-spectrum rapid global mobility to the joint force, whenever, wherever."

After Airmen do several flights, they are required to bring in the aircraft for scheduled maintenance checks and inspections at aircraft hangars at the station. An aircraft hangar is a closed building structure to hold aircraft. They are built of metal, wood, or concrete and are used for protection from the weather, direct sunlight and for maintenance, repair, manufacture, assembly, and storage of aircraft. Sometimes hangars are needed for unscheduled maintenance. LTC Knapp explained, "This is when for example an airplane flew last night, came down and its radio is broken. We need hangers so we can pull an aircraft inside, out of the weather, and do the needed work inside."

To do all this work, the station needed to upgrade its aircraft hangars. Mr. Joseph Salvatore, project manager, New York District, U.S. Army Corps of Engineers stated, "The reserve's hangars were outdated. They were built to provide maintenance space for C-130 Cargo Planes that the 914th Wing does not fly anymore. They now fly KC-135 Stratotanker Refueling Planes." LTC Knapp added, "When we transferred from C-130s to KC-135s, the hangars were no longer viable and due to lack of use, they atrophied a little bit. For us to assume our new mission and really be effective, we needed upgrades including new doors and fire suppression systems and the ability to support unscheduled aircraft maintenance."

The Army Corps is renovating two aircraft hangars – KC-135 Fuel Cell Hangar and the MX Hangar - at the reserve to accommodate the maintenance of this aircraft. It is doing this in collaboration with the Army Corps' Louisville District and Army Corps Contractor, Oddo Construction Services, LLC, of East Amherst, NY. The KC-135 Fuel Cell Hangar was completed by the Army Corps in 2019 and is being successfully used by the reserve. The structure is 23,600 square feet in size - about half the square footage of a Football Field - and stands almost 54 feet tall. The MX Hangar will be completed this year and it is already being used by the Air Force. The structure is approximately 25,600 square feet in size and stands almost 65 feet tall. Both hangars can hold one aircraft at a time and received renovations that included repairing the roof, redesigning, and refurnishing the interior maintenance space and administrative offices, and upgrading the plumbing, heating, electrical, communication, and fire alarm systems.

Unlike previous hangars they are also both equipped with energy efficient features including occupancy sensors in offices and Energy Recover Units to recover some of the heating and cooling energy from the heating and air condition systems to reuse it. In addition, one of the hangars received a new foam fire suppression & sprinkler system, which is critical to have in an enclosed structure where there are flammable objects and substances. Mr. Salvatore witnessed firsthand the importance of this new system. He stated, "Installing this system required a lot of coordination and once it was in place, we had to test it with all parties witnessing. This required simulating a fire in the hangar. This set off the system and dropped about 8 feet of high expansion foam in the hangar. We were all relieved and excited to see the foam falling from the foam generators mounted just below the roof deck and fill the entire hangar floor up with 8 feet of white firefighting foam. This demonstration verified that the system worked as designed."

Mr. Salvatore, who will be retiring this summer after working 41 years with the Army Corps, feels honored that the hangars are his last project. He said, "This project is one of the most technically involved projects I had the opportunity to work on. There were many mechanical systems that we had to install in the hangars to provide the Airmen with the tools and equipment needed to service the aircrafts that they maintain."

LTC Knapp shared that he and his squadron are pleased to have the proper shelter they need to maintain their aircraft, "I'll tell you moving into a nice facility with a break room, air-conditioning and heat that works most of the time—they're very happy. I, if nothing else, want to provide for these guys and provide a space where they can get out of the weather. If you have been out there in the winter, it is brutal. They just need a place to get in and do maintenance. Now we can fit an entire aircraft in the hangars and perform maintenance year-round."

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COL Matthew Luzzatto, Commander, New York District, USACE reviewing the construction of the MX Hangar. Photo by James D'Ambrosio.