



US Army Corps
of Engineers®
Far East District

EAST GATE EDITION

JUNE 2020 VOL. 29, NO. 06

FED completes construction of 3rd generation hardened aircraft shelters at Kunsan Air Base

By FED Public Affairs

With the joint effort of the U.S. Army Corps of Engineers of the Far East District and the Republic of Korea, 20 newly constructed third generation hardened aircraft shelters (HAS) will be ready for use by the summer of 2020 at Kunsan Air Base, Republic of Korea.

The U.S. Army Corps of Engineers accomplished the joint final inspection of the new aircraft shelters on May 15. The Far East District is currently in the process of transferring the facilities to the installation. To mark the completion of the new shelters, a ribbon cutting ceremony is scheduled for July 2020.

“The completion of the third generation hardened aircraft shelters provides the Wolf Pack with additional capability,” said Col. Tad “Wolf” Clark,

8th Fighter Wing commander. “Thanks to the continuous efforts of everyone involved, our team will be better equipped to conduct our mission for years to come.”

The completion of the 20 HAS is the first three of nine phases for a ROK funded construction program at Kunsan AB, located on the west coast of Korea. The first three phases involved the construction of 20 HAS while also demolishing 20 existing aircraft shelters in need of renovation. The construction of two latrine facilities, storm drainage, connecting taxiways, and on-site vegetation was also part of this initial effort.

The next section of this project, phases four through six, began in the Spring of 2019 and will construct 18

additional aircraft shelters. Design for the project began in April 2013 and the construction contract was awarded in March 2016 with a performance period of 51 months.

“On-time delivery of projects of this size are almost unheard of,” said Karey Park, USACE Resident Engineer. “Timely delivery of this project would not have been possible were it not for the close teamwork and collective efforts of the Far East District, U.S. Forces Korea, 7th Air Force, the 8th Fighter Wing including 8th Civil Engineer Squadron, host nation representatives and the construction contractor, Hanhwa Engineering & Construction Co., Ltd.”

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Twenty new hardened aircraft shelters will soon be ready for use at Kunsan Air Base thanks to the work of the U.S. Army Corps of Engineers and their partners. (Photo by Karey Park)



Col. Lee Woo-sig (left), Chief, Program Management Team, MURO, and Col. Garrett Cottrell (right), Deputy Commanding Officer - Transformation, United States Army Corps of Engineers Far East District, signed the Acceptance and Release Letter for the soon to be completed HQ050A Airfield Parking Apron at Desiderios Army Airfield, Camp Humphreys on May 8. The parking apron will be the fourth Yongsan Relocation Plan facility to be completed during the COVID19 restrictions, demonstrating the continued resolve and teamwork in a difficult and challenging environment. (Photo by Son SeukHwan)



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Like all projects of this size, teamwork is crucial to success, and the project delivery team employed diligent coordination to overcome challenges that surfaced during construction.

“This project could not have been completed on time without the full support of the Far East District,” said Park Seung-san, Quality Control Manager for Hanhwa E&C. “This project was a challenge for myself and for my company, and we put in our best effort to achieve our goals. We hope to have a chance to construct future facilities for the Far East District.”

Also, the FED’s strong working relationship with the ROK was key to the completion of construction. The construction contract was awarded by the Korean Ministry of National Defense, in accordance with international agreements. Along with the FED, USFK Engineers worked toward the ultimate goal of providing the on-time delivery of high-quality facilities built to U.S. standards and design criteria. The 8th CES and the Air Force Installation and Mission Support Center was integral to the project, who were involved with the systems acceptance testing.

Dan Novotny, FED project manager, said the COVID-19 travel restrictions currently imposed throughout the globe provided a challenge to completing the project on time.

“There was also close coordination with Kunsan Resident Office and Pacific Air Forces’ Fire Protection Engineer (FPE) to test and approve Fire Protection systems in the newly built shelters. This became challenging during travel restrictions for COVID-19 and the PACAF FPE could not come to Korea to view and approve the final



Kim U-kon, U.S. Army Corps of Engineers, Far East District engineer was instrumental in the completion of the hardened aircraft shelters project. (Photo by Jennifer Moore)

tests,” said Novotny. “Through dedicated coordination between FED, 7th Air Force, and PACAF, it was approved for FED’s own FPE to supervise the tests and have the PACAF approval done remotely.”

These facilities are outfitted with fire suppression systems, which required witness by AFIMSC. The shelters also provide the ventilation and engine exhaust systems to safely allow engine start-up to be performed inside the shelters with the hangar doors closed.

Constructing these facilities in a flood-prone area was another challenge as it typically requires some degree of ground improvement, to ensure the facilities will not gradually settle over time. This project required a staggering 474,000 cubic meters of fill material, which is enough to cover 300 football fields in a one foot deep layer of dirt.

Additionally, some improvements were made to the storm drainage system during construction, in order to prevent rainwater from draining into unapproved drainage features outside the installation.

Kunsan Air Base is home to the 8th Fighter Wing, known as the “Wolf Pack,” comprised of over 2,700 active-duty personnel, four groups and 13 squadrons, including two F-16 fighter squadrons. Adequate hardened aircraft shelters are necessary to protect combat fighter aircraft, air crews, and sortie-generation maintenance personnel.

Together, these projects will continue to improve Kunsan Air Base’s ability to execute the mission, providing much-needed protection for the Wolf Pack’s fighter jets, and most importantly provide a safe working environment for Airmen.

Southern Resident Office foresees on-time completion for \$54 million warehouse construction project

By Antwaun J. Parrish
FED Public Affairs

The U.S. Army Corps of Engineers, Far East District southern resident office, has been at the forefront of a PH-1 Defense Logistics Agency (DLA) warehouse construction project which began construction in Sept. of 2017.

This \$54 million project is currently scheduled for an on time completion of Feb. 2021. Tony Hambrick, resident engineer, southern resident office, provided details on the warehouse.

“The project includes a 250,000 square feet (SF) general purpose warehouse and a stand-alone 20,000 SF hazardous material (HAZMAT) and Petroleum, Oil, and Lubricants (POL) storage facility isolated from the main warehouse,” said Hambrick. “The general purpose warehouse will be two-

story reinforced concrete with EIFS finish for first floor level and 2nd floor construction and a PEB system for the 2nd floor level and roof construction.”

Hambrick went on to state that the warehouse will be climate controlled with floor to floor clearances up to 30 feet and floor load capacities up to 500 pounds per square foot. The roofing system is stand seam metal roofing with insulation and vapor barrier on steel purlins.

The demolition of other structures within the area, along with site improvements, had to take place in order for the warehouse construction to be completed.

“The project included demolition of several existing buildings to include 300-milimeter concrete pavement,

concrete aprons, roadway pavement, fuel oil tanks, and various utility lines,” said Hambrick. “All demolition work is completed. New site improvements include a new concrete retaining wall due to limited site area, new paved access roads, perimeter security fencing, trucking yard, open storage yard, loading docks, parking areas, site electrical, various utilities and all features required for a fully functional warehouse. In addition, approximately 50,000 square feet of covered Pre-Engineered Building (PEB) swing spaces is required. The swing spaces were turned over to DLA in Dec. 2018.”

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The Defense Logistics Agency (DLA) warehouse construction project, Camp Carroll, South Korea. (FED file photo)



Southern Resident Office foresees on-time completion for \$54 million warehouse construction

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The project is programmed to be LEED Silver Certifiable. LEED certification is an official recognition that a project complies with the requirements prescribed within the LEED rating systems as created and maintained by the U.S. Green Building Council. The LEED certification program is administered by Green Business Certification Inc.

As construction on the site has progressed, the FED SRO team had to overcome some trials to ensure the project stayed on track. According to Pak Ki-hong, a southern resident office project engineer, there were two significant challenges associated with this project. However, the team was able to find solutions to aid in developing a quality warehouse.

“During test pile operation, the required design pile capacity was not obtained at the designed depth. It was

revealed through a PDA test that the lack of pile capacity was the result from unpredictable high toe quake,” said Pak. Over 20 piles were broken or damaged during the test pile operation due to slippage occurring at the boundary of the overburden soil. Weathered rock and fatigue strength resulted from excessive pile driving over 300-400 blows.”

Pak stated that one of the solutions included conducting ten additional soil borings to better define the subsurface conditions. He went on to state that based on the soil boring data, the team tried to find the adequate pre-drilling depths to avoid pile damage and to meet pile design capacity.

Other solutions included, changing the pile installation method to pile socketing and to provide stable end bearing conditions at pile toe. Also test piles were performed under the

conditions of deeper-predrilling and socketing, so finally no pile damages were observed and the required pile capacity was obtained.

“MND [Ministry of National Defense], CM [Construction Management], the contractor, and FED gave all efforts to reduce construction delay due to test pile installation,” said Pak. “FED came up with a technical solution, MND and CM gave all the administrative support on contract changes immediately, and the contractor immediately brought all equipment for additional testing so that we could minimize the loss of construction time and cost for this critical path activity. We didn't spend unnecessary time, and this quick decision would be impossible without the cooperation of the decision makers of each parties,” said Pak.

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The Defense Logistics Agency (DLA) warehouse construction project, Camp Carroll, South Korea. (FED File photo)



Southern Resident Office foresees on-time completion for \$54 million warehouse construction

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The second challenge was converting gravel pavement to AC pavement for the swing space areas.

“In the contractor design, swing space was supposed to have gravel roads, but the gravel road was deemed inappropriate for the operation of a forklift because forklift,” said Pak. “So, there was a concern from the user that the designed gravel roads may cause the load to fail or the forklift to overturn.”

The solutions included conducting onsite forklift operation testing right after the issue was raised. The contractor provided a temporary gravel road and the user brought in forklifts for operation testing.

According to Pak, the testing revealed that the gravel road failed to meet its required operation use. Through meetings and discussions between parties, it was decided to change from the gravel road to AC pavement, which was considered to be the most economical and easy to construct.

“This was also the critical path activity,” said Pak. “The DLA commander actively intervened in this case

and decided to expedite this change. Also, MND and CM made an effort to expedite the contract change and tried not to spend time for unnecessary process,” said Pak.

Fabio Vallejo, a district quality assurance representative, highlighted two other challenges associated with this construction project.

Vallejo stated that coordination with the signal unit for higher access permissions to enable power outages at the start of the warehouse construction site was needed. Also, fire department coordination was needed due to the unknown ability of the adjacent hydrant water pressure capacity.

“To overcome these challenges, we needed the correct timing coordination with SATCOM to switch over to other systems so no interruption of services occurred,” said Vallejo. “Water pressure testing and calculations for needed capacities for the warehouse and connecting office building was conducted.”

Vallejo highlighted a lesson he learned during the warehouse construc-

tion that he can take with him on future large structure projects.

“The method used to build the large structure allowed an efficient use of crews and time to move the project forward even when issues pop up,” said Vallejo. “The area was divided into four zones and four major crews followed each activity phase from one to the other non-stop.”

According to Vallejo, partnerships between the various agencies aided in the completion of this warehouse.

“Good coordination with the Garrison agencies (Fire department, DPW, Signal, DES, PMO) and DLA has been achieved throughout the project at every monthly meeting,” said Vallejo.

Lee Hung-sub, a MND Defense Installation Agency project manager, stated that whenever there is an issue, the various agencies are able to resolve them during the monthly coordination meeting. He went on to mention that this coordination has aided in the overall success and on-time construction of this \$54 million project.



Col. Garrett Cottrell (right), Deputy Commanding Officer - Transformation, U.S. Army Corps of Engineers Far East District presents Col. Lee Woosig (left), Chief, Program Management Team, MURO, a framed article of OS030 phase 1 ARL Ceremony to commemorate ROK-US combined efforts to 'Fight Tonight', May 19. (Photo by Son SeukHwan)

Customer service, morale; driving forces for FED mailroom operations during COVID 19

By Antwaun J. Parrish
FED Public Affairs

Receiving mail and packages can often be a morale booster for U.S. Army Corps of Engineers(USACE), Far East District (FED) employees while serving overseas. The COVID 19 pandemic continues to change operations almost daily, however, the district consolidated mailroom has continued its mission throughout this challenging period.

As the Health Protection Condition (HPCON) continued to rise due to more confirmed cases of COVID 19, the postal operations within the district had to take a short halt and developed a plan to place new mitigation efforts into effect, in an effort to ensure the safety of mail clerks and employees receiving mail.

Edward Stayton, district postal officer, admits that when the HPCON level rose from C to C+ that it was challenging as there was no precedence to fall back on as a reference.

“Initially we were told that only mission essential personnel could come on base, which meant that neither of our primary mail clerks could be used to pick up mail,” said Stayton. “Additionally, we were unsure that the Camp Humphreys main post office was safe for our personnel to access. With this in mind we made the decision to limit trips to the post office to pick up mail and to open the mail room to distribute mail to three times a week.”

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Gaya Gamage (left), and Samantha Schwoerer, U.S. Army Corps of Engineers, Far East District mail clerks, working in mailroom at the district headquarters, Camp Humphreys, South Korea, May 12. (Photo by Antwaun J. Parrish)

Customer service, morale; driving forces for FED mailroom operations during COVID 19

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Stayton stated that in order to continue mail operations during this heightened period, mission essential personnel who were designated as alternate mail clerks continued mail distribution until he later discovered that the primary mail clerks could still conduct postal operations.

As of recent the HPCON level has been reduced to C, and the mail clerks have resumed daily pickups. Stayton stated that through this pandemic, safety of personnel has a new meaning. Previously, training centered on manmade threats, such as package bombs, threatening letters and biological contaminants like anthrax. However, now the safety plans and training include lessons learned from COVID 19.

“If we go back to C+ or even to D, we will be better prepared due to our experience this time,” said Stayton. “We now have processes in place for picking up mail and for manning the mail room that we hadn’t anticipated previously.”

Stayton also stated that the mail clerks, Gaya Gamage and Samantha Schwoerer, really stepped up to the plate during the crisis. He went on to mention that they did not want to limit mail room hours and they never hesitated to pick up mail from the post office or to interact with customers.

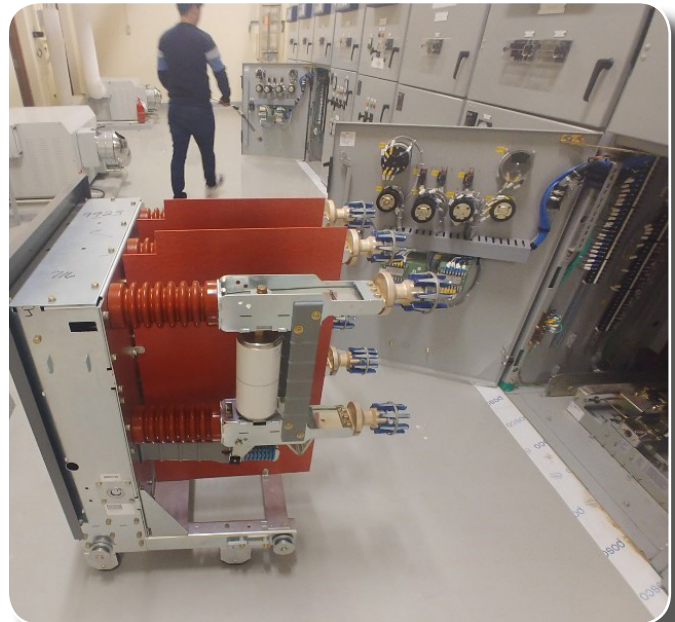
Gamage explained the measures the mail clerks have

put into place to protect themselves while dealing with mail distribution.

“We make sure to wear facemask and protective gloves when handling mail at the Mail Distribution Center and at the unit mailroom,” said Gamage. “We ask that everyone who visits the mailroom wears a facemask as well. We also ask our customers to bring their own pen to complete forms in order to avoid cross contamination.”

According to Gamage, mail is an essential service and they want to continue to provide this morale boosting service to the district.

“Because of the restrictions in place, our team members can’t go to the local stores to buy what they need as they used to,” said Gamage. “Now, they can order something online and have that available to pick up at our mailroom. It could be essential items like masks, hand sanitizer, a new device or exercise equipment, or books and supplies for kids stuck at home. Most importantly, we make sure that all letter mail we get, like a greeting card from family back in the stateside or tax refund or the economic relief assistance checks are available as soon as we pick it up. Hopefully what we do makes a difference and makes people happy.”



Far East District southern resident office engineers, U.S. Army Garrison Daegu Directorate of Public Works (DPW) team, and Yojin, a contractor, work together to transport a spare vacuum switch to use as replacement for the breaker that blew out at a family housing tower at Camp Humphreys. This effort was made to help alleviate the emergency situation at Camp Humphreys. (Photos by Dennis Ward)



The U.S. Army Corps of Engineers, Far East District oversees a concrete placement for the AFH090 Tower 2 project at Camp Humphreys, South Korea on May 4. The towers will house senior non-commissioned officers and family members and include 144 three-bedroom units, 54 four-bedroom units, and 18 five-bedroom units. This project is scheduled to be completed by the end of 2022. (FED file photos)





Fusion cell members, comprised of Far East District, MND-DIA and PMC personnel, track PMC and MND-DIA construction contractor gate arrival and site arrival times for FED and MND-DIA managed construction sites on May 19, 2020. The tracking and escorting of contractors was a necessary step during HPCON Charlie conditions. (Photos by Capt. Sean Neky)



Far East District picked up its Army Combat Fitness Test Kit on May 28. The kit is for the upcoming Army physical test in Oct. 2020. The physical test is taken every six months to improve soldier and unit readiness. (FED file photo)

FED Safety Gram



June 2020



Safety Tips for Summer Weather

As we progress through the summer season, we should be reviewing Outdoor Safety Activities!

Sun Safety:

- ◆ Avoid sun exposure during the hottest hours of the day.
- ◆ Wear a hat and apply sunscreen with a Sun Protection Factor (SPF) of at least 15.
- ◆ Pay attention to your face, nose, ears and shoulders for sunburn.
- ◆ Wear sunglasses with Ultraviolet (UV) Protection.
- ◆ If playing golf and walking, then use an umbrella to block the sun.
- ◆ Drink plenty of water, avoid alcohol and carbonated beverages.
- ◆ People with pale skin need to watch out for and shade from the sun.



Grilling Tips:

- ◆ When in use; never leave grill unattended, a fire could break out when you least expect it.
- ◆ Always have a fire extinguisher readily available.
- ◆ If flare-ups occur, move food to a cooler part of the grill and temporarily lower gas flow.
- ◆ If using charcoal and a flare-up happens, cut off the oxygen flow to the fire.



Water Safety:

- ◆ Swim in supervised areas only.
- ◆ Obey all rules and posted signs.
- ◆ Don't mix alcohol and swimming; Alcohol impairs your judgment, balance and coordination.
- ◆ Stop swimming at the first indication of bad weather.



Driving on the Road:

- ◆ Obey all rules and posted speed limits
- ◆ There will be more people out on the road as the weather gets nicer.
- ◆ Be well rested before starting out.
- ◆ Expect the unexpected, because it will happen.
- ◆ Watch out for cars if you stop at the large Rest Areas with Services on Expressways.
- ◆ Plan your trip out using a map instead of relying on Navigation System only.
- ◆ Prepare your Automobile or SUV for a trip and ensure all fluids are full before starting out.



Walking & Running:

- ◆ Wear reflective clothing.
- ◆ Walk or run only in designated areas.
- ◆ Watch for cars and trucks on & off post.
- ◆ 8th Army Policy restricts walking or running with headphones on the installation.
- ◆ Obey traffic lights.



Review you safety habits now and create better habits for the summer.