FED Southern Resident Office facilitates site decontamination

Story on page 3
COVID-19 has become a pandemic that has affected almost every corner of the world. The U.S. Army Corps of Engineers (USACE), Far East District (FED) has been faced with challenges due to the pandemic, however, the district has remained resilient in its efforts.

A construction project at Camp Walker, South Korea, and managed by the Southern Resident Office (SRO) was subject to a decontamination operation due to two contractor employees testing positive for the virus. One contractor self-quarantined after feeling sick and did not access the base while feeling symptomatic. However, one contractor employee had been feeling sick for several days and continued accessing the installation for a week. The contractor employee had been to the work site, working along with the construction management team and as the safety chief, he accessed items all over the site.

By Anthony Hambrick, SRO resident engineer, they were fortunate that the contractor wore personal protective equipment (PPE) and only moved from the gate to the work site each day. Once informed of the results and once the contractor informed the project manager, he was sent home. “That same day SRO was informed and initiated tracking of all SRO personnel that had been in contact with that employee, said Hambrick. “Also the contractor was instructed to have all individuals he came in contact with tested and quarantined for 14 days. Five of SRO employees did the same thing.”

The SRO team moved diligently to stop the spread of the virus and to take precautionary measures to protect personnel. “However, this resulted in uncertainty regarding contamination of the job site, other areas on post, the camp walker community, and the health of other project staff to include FED employees who had interacted with the positive case during the week,” said Hambrick. Hambrick stated that this construction site was the only one that had been affected by a positive COVID 19 case and decontamination of the site was necessary.

“A certified decon team was brought in by the contractor to clean the site, offices and construction area,” said Hambrick. The site cleanup consisted of a three-hour block for spraying, a 48-hour block with windows and doors closed, and a 6-8-hour block with the windows and doors open.

The results of this incident initiated a 48-hour stand down for all of Daegu Area IV projects.

“During which the current mitigation agreement form was produced by USFK [U.S. Forces Korea] as all contractors had to sign acknowledgment and contractors are now reporting health status of all employees daily,” said Hambrick. The Far East District continues to operate within the current guidelines in an effort to protect personnel and to stop the spread of the virus.

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The U.S. Army Corps of Engineers, Far East District Southern Resident Office facilitated site decontamination.
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. Tal “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 Air Base. 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 without the full support of the Far East District,” said Park. “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 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.

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)

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)
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 capacitaces 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.”

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 over-consolidated, 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.

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 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 the gravel road to AC pavement, which was considered to be the most economical and easy to construct.

“The method used to build the large structure allowed an efficient use of crews and time to move the project forward without 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.
Far East District continues to provide engineering solutions during COVID-19

By Antwaun J. Parrish
FED Public Affairs

South Korea was one of the first countries affected by COVID-19. Although the novel virus has drastically altered operations within the Republic of Korea, the U.S. Army Corps of Engineers (USACE), Far East District (FED) has continued to diligently find ways to provide engineering solutions in support of United States Forces Korea (USFK).

Last year, Jung C. Young, a USACE FED structural engineer, worked to assess and certify the Ajou University Medical Center’s helipad for USFK helicopters to use during a MEDEVAC.

Since that time Jung has continually worked to certify other helipads for USFK operational use throughout South Korea. There are a total of nine hospitals which have been selected to be assessed to support these efforts.

“The assessment includes ensuring that the helipads are in regulation with U.S. helicopter specifications and U.S. helicopter code,” said Jung. “I have recently visited five hospitals with Eighth Army, and I am only working with Samsung Changwon Hospital as there helipad meets our specifications,” said Jung.

It’s important for USFK to have several MEDEVAC destinations throughout the country based on the helicopter flight time and the logistics of the current method.

“The issue is that the helicopters have a 30-minute flight radius,” said Jung. “The hospital has been using ground transportation [ambulance],” said Jung. “The issue with ground transportation that if there is a traffic jam, they cannot get a patient to treatment in sufficient time.”

Recently, Jung has deemed two helipads qualified to be used and one is currently being reviewed. Jung also stated that one of the easiest certifications was with Dongnak Ilsan Medical Center, where the helipad is located on the ground level.

“I hope to have the review for Samsung Changwon Hospital done soon and approved for use,” said Jung. “Upon completion there will be three helipads certified by the U.S. government.”

An important aspect Jung wanted to highlight is, this process encompasses building of continuity so that in the future USFK and Eighth Army will have a developed system and fully operational helipads.

Col. Lee Woo-sig (right), Chief, Program Management Team, Ministry of National Defense USFK Base Relocation Program Office (MURO) and Col. Garrett Cottrell, Deputy Commanding Officer - Transformation, United States Army Corps of Engineers Far East District, sign the Acceptance Release Memorandum of The Multi-Purpose Athletic Field, INFRA060. (Photos by Son Seukhwan)
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)
Completion of Phase I Fuel Oil Facility, improves USFK warfighter capabilities

By Antwaun J. Parrish
FED Public Affairs

The U.S. Army Corps of Engineers (USACE), Far East District (FED) has demonstrated resolve and dedication to completing the mission during COVID19, as the district has held three Acceptance Release Letter (ARL) ceremonies during the pandemic.

The latest project to be completed was the OS030 Phase I Fuel Oil Facility located at Camp Humphreys, South Korea. The OS030 Phase I, was a $29 million project which will provide railcar offload and fuel truck upload fuel capabilities, limited JP8 fuel storage, retail MOGAS, and diesel storage distribution.

"The OS030 is the first phase of getting the completed system turned over to the government," said Eman Sundquist, a district project manager.

This is the first phase of three separate but inter-connected projects with an overall cost of $56 million, and will provide U.S. Forces Korea (USFK) and Eighth Army with the capability to store five million gallons of fuel along with enhanced offload and upload fueling capabilities.

"As Camp Humphreys has grown and the warfighters are relocated and placed on different sides of the base there was a need to have a capability to support them during armistice and contingencies," said Sundquist.

"This new fuel site will allow the warfighter enhanced capability to support Humphreys and the KTO [Korea Task Order]. The current fuel is stored and dispensed near the south end of the airfield here on Humphreys in the legacy Bulk Fuel Storage. This new system is a modern facility and belongs to the Army who has requested for DLA [Defense Logistics Agency] Energy to operate the site."

According to Sundquist, this phase of the project took a little over six years to complete. Sundquist also stated that this portion of the operating system provides Humphreys with storage, tank truck, and capability to support the warfighter.

This project overcame a few challenges through the teamwork and a combined effort of all entities involved. Eman stated that a lot of coordination took place to reach a combined schedule for the three projects since each project is dependent on the other.

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Col. Lee Woo-sig (left), Ministry of National Defense U.S. Forces Relocation Office DCA, and Col. Garrett Cottrell (right), Deputy Commanding Officer - Transformation, United States Army Corps of Engineers Far East District, sign the Acceptance Release Memorandum for the OS030 Phase I Fuel Oil Facility, Camp Humphreys, South Korea, April 16. (Photo by Son Seukhwan)
FED Programs and Project Management Division integrates new technology during COVID19

By Antwaun J. Parrish
FED Public Affairs

The COVID-19 pandemic has forced U.S. Army Corps of Engineers (USACE), Far East District (FED) employees to find new ways to approach communication and meetings.

Since the increased level of safety and social distancing, many employees are conducting telework in an effort to prevent the spread of the virus.

Telework also known as telecommuting is a work arrangement in which employees do not commute or travel to a central place of work, such as an office building, warehouse or store.

Jennifer Moore, USACE FED, Air Force Program Branch chief, recognizes the efforts of three of her team members, Dan Novotny, Larry Grant, and Will Daniels, as being at the forefront of technology and were the first on their team to test out WebEx for important meetings.

Moore also wanted to note that Richard Byrd, Deputy District Engineer, was one of the first to use FaceTime meetings, which she states has been a great way to keep the Programs and Project Management Division (PPMD) chiefs engaged and talking almost daily.

"FED Air Force Branch was one of the first branches to use the WebEx program on a regular basis for virtual meetings with internal and external stakeholders and PDTs," said Daniels.

"Prior to the Corona COVID-19 virus outbreak WebEx was not widely used within FED PPMD. To maintain projects schedules, PM’s requested alternate way to conduct meetings with PDTs."

As cases around the peninsula and within the Camp Humphreys community began to increase, the Health Protection Condition (HPCON) level increased from C to C+, resulting in maximum telework. This is when PPMD embraced the new normal and went into action.

"Larry Grant, a district project manager, was the first to request an official WebEx account," said Daniels.

"It only takes a few days to request a WebEx account. You can request an account through the IMO Customer Service Desk or the Online Service Catalog.

During this period of time, PPMD also welcomed new team members in an unconventional method.

"During HPCON C+ most FED personnel teleworked," said Daniels. "New Air Force PM Alana Acevedo and Austin Estopinal were informally introduced to the AF PM team via WebEx."

Daniels also stated that this section was also able to coordinate meetings with the resident offices in Kunsan and Daegu.

"We utilized VPN connections when teleworking," said Daniels. "To overcome slower network speeds during peak hours, PDT members turned off video cameras. Agendas and presentation materials were distributed to the team members, WebEx is a great alternative for hosting meetings with the PDT, especially when meetings cannot be conducted in person."

The district continues to provide engineering solutions during the COVID-19 pandemic. The HPCON level has since been reduced to C, however, U.S. Forces Korea is continuing with mitigation efforts for all personnel located within the peninsula.

Completion of Phase I Fuel Oil Facility, improves USFK warfighter capabilities project

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"The bulk fuel facility is comprised of the following three different construction contracts: OS030, OS031 and OS030 Phase 2. OS030 is an YRP/LH [Yongsan Relocation Program/ Korea Land and Housing Corporation] project whereas OS031 is a ROK [Republic of Korea] In Kind Project," said Sundquist. "In order to identify the area of responsibilities of the fuel delivered, an agreement had to be reached between five Project Managers. The signed agreement took over 1.5 years to be accomplished. A lot of coordination and agreements took place between OS030 and OS031 contractors to synchronize the construction activities that connects both projects. Examples include, connecting OS030 generators to OS031 to provide backup power to OS031; connecting the Emergency Fuel Shut-off between OS030 and OS031 and connecting the supply and return fuel pipes between OS030 tanks (two and OS031 tanks)."

According to Col. Lee Woo-sig, Ministry of National Defense U.S. Forces Relocation Office DCA, there were some questions with Phase 1 of this project.

"There is an unload system with Phase 1 but no loading system," said Lee. "The loading system to unload to outside is an element of Phase 2. Once Phase 1 and Phase 2 are all complete, we will provide complete fuel intake and outtake to USFK."

Sundquist wanted to recognize all the help and support provided by Eighth Army G4 and DLA-Korea team members.

"DLA and G4 were present during all of the fuel responsibilities agreement meetings sharing important information and suggestions that were very instrumental in reaching the agreement," said Sundquist. "They were present daily during OS030 fuel delivery for commissioner to coordinate the needed equipment and Army vehicles to test the system."

Col. Garrett Cottrell, Deputy Commanding Officer -Transformation, United States Army Corps of Engineers Far East District, took time to recognize all the US. and ROK partners involved with this project.

"I want to thank Col. Lee [ROK Design & Construction Agent, MRO], Col. Lee [ROK Design & Construction Agent, MND DIA], Mr. Hwang [USFK Base Relocation Technical Support Assistant Manager], and Peter Kim [USFK Base Relocation Assistant Program Manager for Technical Delivery]," said Cottrell. "Without their input to the program, we could not have gotten to this point of the first critical step within this three step process."

This project is a significant addition to support the warfighter mission within the Republic of Korea. The OS030 Phase I Fuel Oil Facility is the first step in securing bulk fueling capability for USFK.
**FED personnel earn certifications which helps increase district productivity**

**By Antwaun J. Parrish**

FED Public Affairs

Recently, two U.S. Army Corps of Engineers (USACE), Far East District employees completed certifications that are instrumental when dealing with users, construction personnel and commissioning, and elevator inspections.

Ho Sung and Brian Cohill, both project engineers, recently completed training to become Qualified Commissioning Process Providers (QCPs) and Qualified Elevator Inspectors (QEI).

Prior to attending the training, they were required to complete prerequisites for each certification. Commissioning training requires participants to complete a training course provided by University of Minnesota-Madison for the certification test after application approval. The QEI training requires applicants to meet certain standards:

“We must have documented training and at least one year experience performing inspections and performing or witnessing tests specified in required elevator code,” said Ho. “Verifiable evidence of training and experience shall be documented with the application for certification.”

According to Ho, since 2015 by USACE, Far East District project engineers, Sung Ho (left) and Brian Cohill (FED file photos), started attending training to become Qualified Commissioning Professionals (QCP), which helps increase district productivity, and elevator inspections.

“Commissioning engineers ensure that all aspects of a building or commissioning process successfully,” said Ho. “Our commissioning qualifications will serve as an indicator of competence when dealing with commissioning personnel throughout the total building commission process,” said Ho. “This qualification is imperative so that we are on equal footing with our commissioning peers.”

According to Ho, as per commission contract documentation, QCPs are required to perform commissioning on FED projects.

“We feel that it is important to our organization to have qualified commissioning professionals within the organization,” said Ho.

Ho and Cohill also attended training to become certified QEIs. Ho stated that there are over 400 elevators at U.S. Army Garrison Humphreys, and the number continues to increase.

Elevators typically carry two years of maintenance that include American Society of Mechanical Engineers (ASME) elevator code, which requires periodic testing and certification to ensure safe operation.

“Our certification as QEIs will allow us to act as subject matter experts when dealing with elevators from the submittal review process through acceptance by the user,” said Ho. “Again, certification indicates a high level of competence on the systems that we are qualified upon, and adds a level of credibility within our organization when dealing with elevators.”

Chad McLeod, FED Chief of Construction, stated that Ho and Cohill are doing great things for the district.

“I’m very proud of their accomplishments and how they continue to improve our mission capabilities,” said McLeod.”

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**미 육군 극동공병단 군산 공군기지 제3세대 강화 격납고 공사 완공**

미 육군 극동공병단과 대한민국의 공동 노력으로 제3세대 강화 격납고 (HAS) 20개를 군산 공군기지에 새로 건설해 여름부터 사용할 수 있게 되었다.

미 육군 극동공병단은 5월 15일 새로운 격납고의 최종 공정 절차를 마쳤다. 극동공병단은 현재 시설 이관 절차를 진행 중이다. 새로운 격납고의 완공식은 2020년 7월에 예정되어 있다.

공정은 제3세대 강화 격납고는 월체크("제3세대 투비행단")이 추가적인 역량을 발휘할 수 있게 해 줄 것입니다. 공사가 완료된 시점으로 비행기의 비행 및 시험 운항을 통해 하늘에서의 안전성을 확인할 수 있게 됩니다.

공급이 풍부한 HAS는 사거리에 위치한 군산 공군 기지에 한계장정 공사 사업 9단계 중 3단계이다. 3단계 공사는 제3세대 HAS건축 공사와 기계 작동 및 20개 정비 및 수리 변경을 포함한다. 하체로 2개, 전기로 8개, 모드로 업그레이드 및 기계 내 시각 및 공정 시공 단계에 진행하였다.


"이런 규모의 공사를 앞에 둔 최종 완공까지 만드는데 많은 노력과 협력이 필요했습니다. 제8전투비행단 사장이 틀림없이 지휘하였고 전사 모두가 최선을 다했습니다. (사진 캐리 박)"라고 극동 공병단 엔지니어 캐리 박이 말한다.

이번 공사 완공은 미 육군 극동공병단과 주한미군의 협력 관계의 건설을 위한 업무 협력 관계를 개선하기 위한 열쇠왔다. 공사 계약 발주는 국제 협력의 결과로 진행되었다. 주한미군에 대한국 공사는 국제 기준 및 설계에 부합하는 콘테이너를 기반으로 완공한 HAS는 서해안에 위치한 군산 공군 기지에 20개의 HAS 건설해 2019년 7월에 예정되어 있다.

정말이면 "강화 격납고 공사 완공식은 2020년 7월에 예정되어 있다. HAS는 군산 공군기지에 한계장정 공사 사업 9단계 중 3단계이다."이라고 극동 공병단 장관 태드 "월프" 클락 대령이 말했다.

"이런 규모의 모든 공사들의 성공 여부는 팀워크의 에너지와 협력에 달려있습니다. 또한 육군의 공병단과 주한미군의 협력 관계가 개선될 수 있는 론로 운영이 다가올 수 있게 됩니다. (사진 캐리 박)"라고 극동 공병단 장관 태드 "월프" 클락대령이 말했다.
미 육군 극동공병단 군산 공군기지 제3세대 강화 격납고 공사 완공

앞 페이지에서 이어 계속

미 육군 극동공병단 군사 관리자 면 노랫니는 CO-
VID-19로 인해 전 세계적으로 적용되는 여행 규제로
공사를 기한 내 완공하는데 어려움이 있었다고 했다.

사회탈 격납고에 소방 안전 시스템 승인을 위해
공병단 군산 지구사무소 그리고 태평양 공군 소방 안
전 기사(FPE)가 긴밀히 협력했습니다. COVID-19로 인
한 여행 규제로 FPE가 시설 최종 점검 및 승인을 위해
한국을 방문하지 못하게 되어 문제가 발생했습니다.

한편 극동공병단, 제7군기지 그리고 태평양 공군이 함
께 협력해 극동공병단 소방 안전기사가 태평양 공군을
대신해 최종 점검을 시행하고 태평양 공군이 원칙으
로 승인하도록 협의했습니다."라고 노랫니가 말했다.

격납고에는 화재 경보 시스템이 장착되어 있어
AFIMSC의 확인이 필요하다. 또한 격납고가 단단한 상
태로 내부에서 안전하게 안전을 시동할 수 있도록 환
기 및 엔진 배기 시스템이 설치되어 있다.

홍수가 발생하기 쉬운 지역에 시설을 건설해 시설
이 철거가 되지 않도록 지반개량을 해야 하는 상황
또한 문제였다. 시설 공사에 474,000 달러미터의
성토재를 필요로 했으며 1피트 깊이의 흙은 300계
구물이 닳기로 증가하는 경우, 또한 중력으로 인해
이상의 무게를 부담하게 된다. 또한 격납고의 비행
터미널과 같은 주요 시설의 안전성에 대한 리스크
이 증가하게 된다.

기존 시설과 더불어 새로운 격납고는 극동 공군
기지 임무 수행 능력을 향상해 제8전투비행단의 전투
기능을 보완하고, 가장 중요하게는 공군들에게 안전한 복
무 시설을 제공한다.

미 육군 극동공병단 김우곤 엔지니어는 강화 격납고 공사를 완공하는데 중요한 역할을 했다. (사진 제니퍼 모어)