



U.S. Army Corps
of Engineers®
Far East District

Year-In Review

Fiscal Year 2008



From the Far East District Commander

TO OUR VALUED SUPPORTED COMMANDERS, PARTNERS AND STAKEHOLDERS:



Col. Clarence D. Turner

Fiscal year 2008 was an extremely successful and exciting year for the Far East District, our partners and stakeholders. We completed numerous major construction projects as well as maintenance and repair projects throughout the Korean peninsula; and many more projects are under design. Over \$184.7 million was awarded for construction contracts for MILCON, Host Nation, NAF, and O&M projects. In addition, about \$23.9 million was awarded for design and professional services. The awards and the completed construction represent significant improvements in the war fighting capability and quality of life for our Soldiers, Sailors, Airmen, Marines, and all members of the U.S. Forces Korea family.

A few highlights are: In Area I the road widening project at Camp Red Cloud was completed, along with barracks, latrines and various range support facilities at Warrior Base were completed. The Area IV enclave opened a new swimming pool at Camp Carroll and multipurpose fields at Camp Henry and Carroll. At Camp George, the Daegu American School replacement and addition project was completed. Kunsan and Kwangju continued to see quality of life improvements with on-going construction of the FY06 tower dormitory and a consolidate personnel process/theater facility. In the greater Seoul area K-16 Air Base opened the doors of the first ever Build-to-Lease housing complex while at Yongsan the 121 Hospital Renewal Program continued to provide new clinics for USFK personnel and their families. At Osan Air Base, Phases II & III of the Family Housing Replacement Program continued on schedule and the first of two 5-unit senior officer's quarters were completed. U.S. Army Garrison Humphreys saw many projects completed to include a new child development center, unaccompanied officer's quarters and the whole barracks renewal project, and extensive landfill work at Parcel 1 and K continued. Elsewhere on the peninsula upgrading of aircraft parking ramps and shelters are nearing completion at Suwon Air Base.

We also broke ground on essential projects such as the Digital Multipurpose Training Range at Yongpyong, an administration headquarters at Chinhae, and middle school building, high school addition and community activity center at Osan Air Base. Two barracks projects, to be constructed at Parcel 1 at USAG-Humphreys, were also awarded.

The Yongsan Relocation Plan and Land Partnership Plan are moving forward with land development to expand USAG-Humphreys and design of US and ROK funded projects. The \$30M 205-acre Parcel 1 contract progressed to 60 percent completion with the sites for the FY07 and FY08 MCA barracks projects completed in time for a late spring construction start. MND's \$18M 110-acre Parcel K contract is being expanded by 24 acres in order to expedite the site preparation for the new High School currently under design. The completion of senior-level negotiations for the 11M cubic meters of compacted fill and signing of the Agreed Recommendation in early October 2007 allowed the continued development of the 2000 plus acre Parcel 2. FED began developing a US funded Design-Build package for a 480 acre Parcel 2A and utility improvements for the existing Humphreys and Parcels 1, 2A and K. MURO began developing two turn key packages for land and infrastructure development of the remaining 1510 acres as Parcel 2B. The Program Management Consortium continues to assist FED and MURO with Program Management and other Project, Design, and Construction Management services. The PMC continued to work on the initial 11 task orders and received \$23M for 3 additional joint task orders and 3 US task orders. Key tasks completed by the PMC during the year were the development of SOPs, Master Plan, Unit Move, and Baseline Cost and Schedule reviews and revisions.

This has been a busy year for the design of relocation projects with 13 YRP and 15 US projects in various stages of design. FED awarded a design-build contract for the \$12M Education Center in April and at the end of September had completed the design of a FY09 AFHC project for a three tower housing complex for 216 families. The Humphreys Housing Opportunity Project to obtain 2,400 family quarters through private development has progressed to the selected developers providing proposals in mid October 2008. There is much, much more to come as the YRP/LPP is a multi-billion dollar program over the next several years.

FED is also designing two Brigade Headquarters for the 35th Air Defense Brigade and the 501st Military Intelligence Brigade. We are also designing a second runway at Osan Air Base; this is a two-phased design and construction project.

In September, the District executed 222 contract actions worth \$78 million. These actions included Job Order Contract delivery orders, Indefinite Delivery Indefinite Quantity task orders, basic construction contracts, supply and service orders and Architect-Engineer design task orders.

FED continues to support the Global War on Terror, deploying District employees to Iraq and Afghanistan for reconstruction and economic recovery efforts. We also deployed to U.S. natural disaster recovery missions such as the Hurricane relief efforts. The FED also participated in the annual joint and combined forces exercises Key Resolve and Ulchi Freedom Guardian.

Without exception, we will continue to strive for excellence and be accountable. We remain committed to supporting USFK through the coming challenges and future opportunities. We look forward to yet a more rewarding 2009.

Essayons!

"Quality Counts!"
BUILDING STRONG SM

Clarence D. Turner
COL, EN
Commanding

Area I Projects

The Uijongbu Project Office is the Far East District's construction field office for U.S. Forces Korea Area I, extending north from Seoul to the demilitarized zone. Though most of the installations in Area I are preparing to move south, there are still some facility sustainment operations to be done and many of Eighth U.S. Army's live fire and simulation training facilities are located in this area and are being upgraded to keep up with force transformation goals. During Fiscal Year 2008, the Uijongbu Project Office conducted supervision and administration for construction projects at Warrior Base, Rodriguez Range – Yongpyong Digital Multipurpose Training Range, Detachment "K" Site and Detachment "L" Site.

Warrior Base Projects

The construction work for this \$5.4 million Range Support Facilities, Phase II project started in Sept. 2007 and finished in Oct. 2008 except the fuel issue point and dining facility which are scheduled to be finished in Dec. 2008 and March 2009 respectively. These facilities include an upgrade and expansion of the dining facility, a new laundry facility, a new soldier support facility, a new battalion aid station, a new helipad, a new multipurpose court, a new fuel issue point, a new wheeled vehicle wash station and associated site work and utilities, a new access control point and access road at Story Range.



Helipad and Multipurpose



Battalion Aid Station, Soldier Support & Laundry Facility

Yongpyong Projects

The construction work for this \$6.3 million Digital Multipurpose Training Range and Live Fire Shoot house projects started in March 2007 and finished in April 2008. These facilities include the range itself, a vehicle instrumentation dock, a Moving Armor Target Emplacement, the shoot house, the range operations and control building and after action review building, an ammunition breakdown building, an operations and storage building, and site work and exterior utilities and road and sidewalk graveling. In April 2007, an electrical upgrade project to include underground power and switch gear station was awarded by Ministry of National Defense, Defense Installations Agency and scheduled to be completed in April 2009. Also, a new Noise Abatement Project which consists of 5-meter high noise barriers at five different locations within Rodriguez Live Fire Center was awarded in May 2008 and scheduled to be completed in March 2009.



Live Fire Shoot house, AAR & Range Control Office



Digital Multipurpose Training Range



Switch Gear Station



Form and rebar work for Noise Abatement Wall Foundation



Rodriguez Live Fire Range

Area II Projects

K-16 Air Base: JP-8 to Natural Gas Conversion

The construction work for this \$2.8 million JP-8 to Natural Gas Conversion project started in Sept. 2006 and finished in May 2008. The project involved conversion of the existing fuel oil supply system to the city gas system for the existing oil burning equipment. This project included: the installation of a new underground gas distribution system from the point of connection at the property line to the existing buildings and a pressure governor station which reduces the gas pressure for the installation, gas consumption meters, heating equipment and hot water boilers, and the installation/removal of heating equipment, boilers and above-ground fuel tanks for conversion from JP-8 to natural gas.



Installing Gas line, K-16

Yongsan: JOC and IDIQ Projects

The Seoul Project Office had the task of supervising various JOC and IDIQ projects which include the Gate 17 Upgrade, Replace Piping System, Swimming Pool #2, Renovate South Post Chapel, Replace Electrical Poles and Street Lights, Replace Water Lines, and Renovate Barracks at various locations and etc.



Gate 17, South Post, Yongsan

Yongsan: 121st Hospital Renewal Program

The purpose for this construction program is to correct life safety deficiencies, comply with Joint Commission on Accreditation of Healthcare Organizations standards, improve the functional layout, provide for Antiterrorism/Force Protection and provide a state of the art facility for beneficiary population throughout the peninsula. Phase 2, awarded in June 2005, is a \$27.5 million dollar OMD renovation of the existing hospital in two sub-phases.

The first sub-phase of the renovation includes renovation of the Emergency Department, Pathology Department, Radiology Department, Pharmacy Department, Patient Records Department and Women-Infant Care Unit and new facilities such as an Orthopedic Clinic and Physical Therapy Clinic. All of these areas were completed within FY07. The second sub-phase consists of a complete renovation of the North Patient Wing to include an Inpatient Psychiatric Unit and a Multi-Care Unit on the first floor and a Respiratory Therapy and a Multi-Care Unit on the second floor. This work was started in Oct. 2007 and completed in July 2008. In addition some transition space projects were completed to provide transition space for the Outpatient Surgical Clinic, Obstetrics and Gynecology Clinic and In-patient Psychiatry Unit to provide the departments space to vacate the north patient wing.

The Inpatient Psychiatric Unit of first floor have four Semi-Private rooms, two Private rooms, Patient dayroom, two Interview rooms, Nurse station and Clean room. Also, Multi-Care Units of first and second floors have twenty-four Semi-Private rooms, four Isolation rooms, two Treatment rooms, two Patient dayrooms, two staff Lounges, Clean/Linen storage, three Staff Locker, Working/Charting, and two Soiled Utility rooms. The outside of North Patient Wing was finished with EIFS and Face Brick Wall including two mechanical Penthouses.



New Exterior of North Patient Wing of the 121st Hospital

USAG Humphreys Projects

Community Physical Fitness Center

The Community Fitness Center “Super Gym” is the most exciting sports facility on the peninsula, with a unique design including spacious basketball courts capable of three regulation games at one time, indoor overhead running track, an advanced climbing wall, saunas, exercise centers, indoor competition pool, hot tub, racquetball courts, deli/juice bar, community ballrooms, TV Lounge and a multi-story, 221 car parking structure connected via a sky bridge. Contract amount was \$18.9 million with a completion date of June 2008. Facility was designed by Thomas J. Davis INC/ Jung IL Associates.



Community Physical Fitness Center: Outside



Community Physical Fitness Center: Inside

Physical Readiness Centers

The Physical Readiness Centers at MP Hill and Zoeckler Station are identical facilities, except for the selected interior color themes. Each facility has a main competition basketball court with two transverse courts, a rock climbing wall, two racquetball courts, aerobic room, combative room, free-weight and circuit training areas, cardio exercise area and two saunas. Construction costs were approximately \$7.5 million each. The MP Hill facility was turned over in Feb. 2008, the Zoeckler facility in Sept. 2008. These were an FED in-house design.



Transient Lodging Wellness

The Transient Lodging Wellness project was completed on June 2008 for Army Lodging, with the customer moving furniture in immediately afterwards. The facility is providing outstanding service to members of the USAG Humphreys community, with quality being compared to brand name 5-star hotels. The 5-story addition to the existing lodge is 55,639 square-foot in size, with 43 guest rooms, 40 guest suites, and two Americans with Disabilities Act guest rooms. Also included in the reconfigured part of the existing lodge are a new breakfast area, a digital business center and expanded guest and service laundry areas. Contract amount was \$13.3 million dollars, designer - Thomas J. Davis INC/ Jung IL Associated.

FY06 MCA Whole Barracks Renewal Projects

Two new 8-story barracks, a 1300 PN dining facility, mailroom and duplex company operations building are nearing completion on what is known as MP Hill at USAG Humphreys. This \$33.6 million project also includes an exercise field and track at the Zoeckler Station area of USAG Humphreys. Each eight story barracks has 232 rooms to house up to 464 soldiers and includes a laundry room and a recreation area on every floor, storage areas, and six elevators. The Dining Facility can serve 1300 soldiers in three 90 minute seatings.



MP Hill Dining Facility & Barracks



Exercise Field

FY06 MCA Whole Barracks Renewal Projects

A \$24.4 million dollar project at Zoeckler Station on USAG Humphreys is nearly complete. Two six-story barracks will house up to 348 soldiers each. The contract also includes a company operations building for two military intelligence companies and a headquarters for a military intelligence battalion.



FY06 MCA Whole Barracks



Company Operation Building

FY07-08 MCA Barracks Complexes

The FY07 and FY08 barracks are identical new designs, located on Parcel 1, the first vertical construction projects on the new land. The FY07 program consists of four barracks, the FY08 consists of two barracks. The 8-story barracks

are new to Korea, 302 PN, 1+1E design providing each soldier with a private, spacious 157 square foot living area with large walk-in closet, and shared a kitchen and bathroom with one other soldier. The buildings' usage is facilitated by laundry rooms, vending and ice machine areas, three passenger elevators with one service elevator. The barracks are designed to obtain a LEED "Silver" rating. Construction cost for each barracks is approximately \$15 million. Completion is expected in late June 2010. These are an in-house standard design for the barracks with Thomas J. Davis INC/ Jung IL Associates doing some site adaptation work.



Piles for FY07-08 MCA Barracks Complexes

CY07 ROKFC Education Center

This Design-Build Project consists of construction of a 2-story, 3800 square-meter Education Center, 120+ Parking Spaces, and the Overflow Module for the Interim Elementary School at USAG-Humphreys. This project is one of the first true Design-Build projects for FED, which involves \$11 million+ in construction and \$400,000 in design. There are 18 classrooms, 14 offices, one science lab, and other various rooms in the Education Center. Beside construction of new Education Center, this project included removal of contaminated soils, removal of asbestos and demolition of existing buildings. The Pre-Engineered Building and Overflow Module consists of three classrooms, and a few admin offices for Humphreys Elementary School, which will be expanded to K-8. Site Work for the Education Center started in July 2008, and the Overflow Module will be started in Jan. 2009. Both buildings are scheduled to be complete by mid July 2009. This project was awarded to Hanjin/Krma/AMKOR Consortium in April 2008.



Parcel K

This is the very first YRP project awarded by the Korean Government. FED is providing construction surveillance and the Program Management Consortium is providing the quality assurance services. Parcel K consists of 110 acres and 895,000 cubic meter of fill material. The contract amount is approximately \$18million. In addition to the compacted fill, after consolidation occurs, the contractor will construct paved roads, sidewalks, curbs, gutters and drainage structures. Parcel K is the location for the many key facilities, including Build to Lease Senior Leaders Quarters, several Family Housing complexes, Elementary School. An additional 24 acre plot of land was added to Parcel K as design-build to accommodate the High School site, bringing the total acreage to 134 acres. Parcel K land



development plan is scheduled to be complete in Oct. 2009. The contract was awarded to Hanjin Heavy Industries and Construction Co., Ltd. on Sep. 27, 2007 and the designer was MM International.

Parcel 1 Site Work

The Parcel 1 Site Work Project is the first of the USFK Land Expansion construction efforts. The \$29 million contract provides for the initial land filling to raise a 209-acre site to the 50 year flood level and to complete site work to the finished elevation in preparation for future building construction. The effort will require over 3.1 million cubic meters of fill involving millions of truck miles to haul in the fill. It is broken into three distinct work efforts: 1) earthwork to raise the ground level, 2) monitoring the fill for consolidation, 3) site work which includes roads, sidewalks and drainage features. Efforts in FY08 included soil fill and compaction in Phases 1 and 2, consolidation monitoring (approximately 30 cm in some areas), as well as construction of a temporary drainage system to tie into the existing drainage plan of USAG Humphreys. New construction of future barracks has begun in the first phase of the project.



Picture of new construction on Parcel I

Osan Air Base Projects

FY08 was another year full of activity for the Central Resident Office, with \$49.5 million in total placement, including \$16 million in Host Nation work administered by the staff of 25 dedicated professionals at CRO. CRO administered a total of 38 US-funded contracts amounting \$161.1 million and \$24.8 million worth of two host-nation funded projects.

Family Housing – Replacement Program

Construction of Air Force family housing three-phased replacement program was completed in FY08. The program consisted of three high-rise apartment towers (nine, ten, and 13 stories), three General Officers' Quarters, ten Senior Officers' Quarters, a four-level parking garage, an indoor swimming pool, and a housing warehouse addition, at a current cost of \$92 million. When fully completed, 341 quarters were added to the inventory, replacing the Mustang Valley Village leased quarters.

The program was completed on schedule and within budget despite one of the contracts being terminated for default. Success continued in FY08 with the completion of the Phase II and Phase III Towers and the remaining two levels of the parking garage. The Air Force accepted the Phase II Tower in May, and the Phase III Tower and Parking Structure in Feb. 2008, respectively.

The High-Rise Family Housing Towers, Phases II & III

The towers are 10 and 13 stories and contain 104 and 112 dwelling units, respectively. These Housing Towers offer modern and efficient housing for the Osan military community. The housing provides a safe, comfortable and appealing living environment. The design provides for a modern kitchen with all appliances, living and family rooms, three and four bedroom configurations, two bathrooms, balconies, and ample interior and exterior storage. Many of the units offer outstanding panoramas of the Osan Air Base and flight line.



Phase II tower – Jirisan Tower



Phase III tower – Hallasan Tower

The Senior Officers' Quarters

The Senior Officers' Quarters consist of two 5-unit townhouse buildings. The four-level floor plan (1,991 square-foot) consists of foyer, modern kitchen, dining room, living room, family room, and a half-bath on the first two levels and four

bedrooms and two bathrooms on the upper two levels. In addition each unit has a one-car attached garage. First five townhouse units were completed in 2006. The remaining five units are scheduled for completion in March 2009.



SOQ (under construction) with Family Housing Phase II tower in background

The Parking Structure for Family Housing units

The parking garage is a four level parking structure that will provide for 433 vehicles. The remaining two levels were turned over in Feb. 2008.



Parking Structure for Family Housing Towers

FY08 DeCA Commissary, Roof Structure Repair

The project was awarded on Sept. 2008 for \$1.71 million. The CCD is scheduled for May 2009. The pre-con is scheduled for Oct. 2008. The project consists of primarily building structural repairs and minor maintenance repairs to an approximately 100,000 square-foot Commissary and co-located Centralized Distribution Center facility consisting of retail sales, nonperishable and refrigerated food storage, food processing and other commissary operations areas, and administrative areas, and chilled and frozen food product storage with staging and receiving vestibule for the CDC area. Structural and associated architectural repairs are primarily directed to relieve the existing roof structure of excessive dead loads imposed upon it from existing suspended ceiling panels/equipment piping/soffits/etc. Minor maintenance repairs and/or repair by replacement work are directed to provide and furnish roof drainage and roof gutter/downspout systems of sufficient drainage capacity for the entire roof area.

CY07 DeCA (DBOF), Refrigerated Receiving/Staging Vestibule

This project was awarded Dec. 2008 for \$2.1million. Notice to Proceed was issued April 2008 with a contract completion date of June 2009. The project consists primarily of refrigeration equipment and related refrigerated panel-system cooler room work. The refrigerated Receiving/Staging Vestibule will require demolition and demolition barriers, refrigeration and HVAC systems equipment and controls, electrical power systems and controls, complete refrigeration cooler panel room systems, existing concrete slab removal and replacement, concrete footings and structural steel framing system, bollards, service doors, lighting fixtures, concrete slab joint repairs, additions and deletions to fire protection systems/devices and controls, interior surfaces finishes, repairs and painting, insulation and sealing of new and repair work. All work is required to be phased and coordinated with the Central Distribution Center so as not to impact their daily operations.



Commissary Receiving Area

The Communications Site Dormitory

This \$10.5 million construction project provides a new five-story dormitory for housing of 156 unaccompanied enlisted personnel assigned to Osan Air Base. The construction consists of thirty-nine quad modules, laundry areas, lounges, and storage areas. The project also includes construction of a 345 square-meter replacement building for the communications facility that formerly occupied the footprint of this future dorm (thus the name Comm Site Dorm). Work started on the dorm in May 2007 and was originally scheduled to be complete by Sept. 2008. Due to the bankruptcy of the contractor, the project was terminated at about 50% completion. The project was re-procured with a new NTP on July 2008 and a new completion date of May 2009. The Comm Site dorm incorporates a Collective Protection System capable of resisting chemical, biological, and radiological agents. The system provides a toxic-free area where personnel can function without individual protective equipment such as masks and protective garments. These quarters are state-of-the-art facilities for the airmen of Osan Air Base.



New Middle School & High School Addition

This \$20.7 million construction project combines funds from Host Nation and MILCON into one contract. The project includes construction of a new 3-story middle school, parking structure, music facility and 2-story high school addition. Work started in June 2007 and is scheduled to be complete in several phases for the Sept. 2008 and Oct. 2009 school years.

The middle school facilities will consist of three separate structures. A three-story middle school building to include classrooms, administrative offices, a cafeteria, and a gymnasium/student assembly wing; a music building to be a shared-use facility with the high school; and a three-level parking garage with rooftop athletic facilities connected by

a skywalk to the main school facility.

The new \$2.5 million two-story high school addition (MILCON) includes eight general purpose classrooms and teacher workroom. The parking garage is four story structures. On the top of the garage, there are four tennis courts and one basketball court with 250-meter-length running track.



Middle School under Construction



Parking Structure

War Gaming Center (3rd Floor Addition to Bldg 946)

This \$3.6 million project will add a 3rd floor to an existing building. It was awarded on Oct. 2008 with 400 day duration. The new 3rd floor will be tied structurally to the 2nd story at existing columns that were originally prepared for future addition of the 3rd floor. The floor area is approx. 14,000 gross square-foot and consists of mostly open area with operable partitions. Most areas will have raised flooring. Construction started in early Feb. and is ahead of schedule.

BCE Admin building

This \$8 million project provides for new BCE admin building. The project was awarded and NTP issued on Oct. 2007. One 2-story building consists of a reinforced concrete foundation and floor slabs, masonry walls and pitched metal roofing system including all utilities/HVAC system, fire sprinkler/detection, pre-wiring of telecommunications and TV/computer cables, heating fuel oil storage tanks, and standby electric power generator with Air Force standard, construct pavements, site improvement/retaining wall/landscaping, and special foundation. Also repair/restore all areas affected by this project, and install chemical/biological and radiological protection system. Demolition of buildings and environmental clean up will also be included. Project completion is scheduled for July 2009.



BCE Admin Building under Construction

Distributed Common Ground Station and Intel Squadron Operations Facility

This unusual project will provide a new 2-story secure facility constructed completely within the existing operations facility. This \$1.9 million project includes open offices and a server room on an upper floor, and enclosed offices and storage room on the underground floor for a total of approx. 2300 square-foot. Construction includes concrete footings, walls, floor slabs, stairways and roof, all constructed within the existing facility. The project also includes a raised floor system, fire detection/alarm and sprinkling system, and all mechanical, electrical and communication systems for the new space.



Distributed Common Ground Station and Intel Squadron Operations Facility

7th Air Force Headquarters, Bldg 933 Renovation

The 7th Air Force Headquarters Building Renovation project was awarded in April 2004 for \$4.6 million. The original contract duration was 170 days, but the project was just completed in July of this year. The original scope of work was for renovation of the existing building including mechanical and electrical systems, architectural finishes, and addition of a new Collective Protective System. Several revisions were made for a variety of reasons (engineering, hidden site condition, customer request) which included a new roof, new doors and windows, major mechanical changes and mold-mildew remediation.

The ultimate success of this project was the result of a cooperative contractor and a dedicated project management staffs all working as a team to push through the many challenges and complete the project to the satisfaction of the 7th Air Force command.



Add/Alter 25th Fighter Squadron Operation/Aircraft Maintenance Unit Facility

This \$17.2 million project involves construction of a two story, semi-hardened building addition and selective alterations to an existing squadron operations/Aircraft Maintenance Unit facility. The construction includes special reinforced concrete foundation and floor slab, one meter thick concrete walls and roof, fire detection and suppression system, standby generator and Uninterrupted Power Supply, fuel storage, communications and supporting utilities, pavements, and contaminated soil remediation. Additionally, the facility includes a collective protection shelter to resist chemical,

biological, and radiological agents. Work which was started in April 2006 was completed on schedule in Feb. 2008.

Upgrade Electrical Distribution System, Phase I

This \$7.5 million construction project replaces an archaic electric power substation and upgrades another to meet current code requirements. The work consists of construction of a new electric power substation, demolition of an old substation, and repair of an existing substation. Installation of new cut-out fuses and switches, pad mounted transformers, interrupters, concrete-encased duct banks, and electrical manholes are included. This is the initial phase to improve the power distribution system at Osan Air Base. The first substation was completed in August 2007 with the second scheduled for an April 2008 completion. Subsequent phases will replace an aged overhead primary and secondary electrical distribution system with an underground system.



Substation No. 2

Airfield Repair Work

Unending repairs to the Osan airfield continued throughout 2006 and 2007. During a twelve day closure period of the main runway in July 2007 intense repair work was conducted and completed (\$1.5 million). Repair of Portland Cement Concrete pavement on the airfield entailed full-depth removal and replacement of approximately 60 slabs on the main runway and 40 slabs on the taxiways, and other associated repairs included partial-depth spall repair, new dowelled construction joints, routing and sealing of joints and cracks, and painting of airfield markings. Similar repairs continue through the year in phases on various taxiways, and parking areas without interruption of flying operations. Repairs are necessary to extend the useful life of the field's pavements for flight operations while a second runway is being planned and designed for construction in the coming years. During the year, five delivery orders, with a total value of \$3.1 million, were completed.



Airfield Paving Work

Community Activity Center

This \$3.4 million project provides for a new Community Activity Center. The 13,772 square-foot, one-story facility consists of a reinforced concrete foundation and floor slabs, masonry walls, and a standing seam metal roof. Interior

features include two sub-dividable classrooms, three karaoke music rooms, a computer room, a game room, a Nintendo/playstation game room, and a lounge. A small administrative office area is also included. Additionally, the project includes demolition of the old base exchange. The project was completed in June 2008.



Community Activity Center

Consolidated Deployment Processing Center and Air Passenger Terminal Facility

This \$14.6 million project consists of constructing a consolidated deployment processing center with combined air passenger terminal facility for the U.S. Air Force. The contract was awarded in Dec. 2007 with a CCD of April 2010. The air terminal facility is over 84,000 square-foot space. There is also a small facility dedicated to the ROK Air Force. The facility is located along the southwest side of Cargo Apron "C". The work also consists of reinforced concrete foundations, concrete floor slabs/walls, SSMR roof system, fire protection, splinter protection and a collective protection system. The facility will have a 1000 person reception area, a 550 person reception room, a processing line area to include space for personal counseling and individual issues, logistics office space and reception control center. Also, the project is required to provide a passenger check in area, baggage check in, flight information, terminal administration area, traffic management office, new passenger service center and sterile departure lounge. The site improvements include 18,900 square-foot of new PCC pavement 18" thick, new road, underground utilities and storm drainage system.



CDPC and Air PAX Terminal Facility under construction

Area IV Projects

Bowling Center/Club, Camp Carroll

The construction work for this FY05 Non-Appropriated Funds project started in Feb. 2006 and finished in Feb. 2008 at a cost of \$5.5 million. This project is to construct a two-story 12-lane bowling center and dining/club area. The dining/club area is to provide a casual atmosphere to accommodate 65 individuals and a bar with 20 bar stools, covered outdoor dining area for 20 individuals, gaming area, storage room, club managers office, administrative area, full food service kitchen, walk in freezer and refrigerator, dry food storage room, and beverage storage room. The bowling center is to provide bowling concourse, bowling lanes and settee area, control desk, snack bar area, gaming area, locker area, bowling manager office, pro-shop, and storage area. Also this bowling center has restrooms, janitor closet, loading dock, mechanical/electrical room. Additional exterior utility systems (electrical, water, sewer), paving, walks, storm drainage system, site improvements, information systems and antiterrorism/force protection vehicle barriers are provided.



Completed Bowling Center: Outside



Completed Bowling Center: Inside

Vehicle Maintenance Facility, Camp Carroll

The construction work for this CY05 ROKFC project started in May 2006 and finished in Feb. 2008 at a cost of \$11 million. This project is to construct an Army Pre-positioned Set, 4 maintenance facility that includes the following features for Organizational Level Maintenance, Care of Supplies in Storage, Surveillance Inspection, Cyclic Maintenance, and Exercising.

- 14 maintenance work bays, able to accommodate M1A1/M1A2 main battle tank during turret rotation, M88A1 Medium Recovery Vehicle WI host boom assembly extended, and M1074/M1075 Truck Tractor Palletized Load System (E'LS) wheel vehicle w/flat track and ISO container.
- Ten bays to be equipped with steam cleaner/with oil water separator drain systems for use during power-pack removal, cyclic maintenance, or after major training exercises.
- Portable hydraulic lift ramp capable of 5-10 ton are required.
- Dual track, overhead lift/crane system consisting of two 30 ton primary cranes and two 15 ton secondary cranes.
- 175-200 psi air compressor system with connection hoses in all work bays.
- Overhead system providing oil, grease, water, air, and lights for all bays.
- Tire facility able to accommodate up to M621B-scraper tractor tire.

- Welding facility to be wired for 110 volt and 220 volt.
- Intercom system throughout the facility.
- Admin area to include classroom/briefing room able to accommodate 30 personnel; employee break-room to accommodate 50 personnel; toilet facilities to accommodate 50 personnel.
- Employee shower-room/locker-room.
- Office space for 42 personnel for administrative functions in addition to Maintenance Branch Chief.
- LAN outlets throughout facility.



Completed VMP Exterior



Completed VMP Interior

Renovate Kelly Outdoor Sports Field, Camp Walker

The construction work for this FY07 Non-Appropriated Funds project started in Nov. 2007 and finished in June 2008 at a cost of \$4.7 million. This project is to renovate the existing Kelly outdoor sports field by installing durable artificial turf material that allows for quick drainage on the entire field complex. Supporting facilities include replacing backstop with incorporated 2-story announcer's stand, storage and concession stand at its center; replacing benches and screen on dugout; replacing scoreboard capable of supporting soccer, football and softball venues; replacing two vinyl covered structures with two new tiled roof structures; constructing new latrines; replacing flag poles; constructing new picnic/beach volley ball area; replacing field lighting and netting systems; installing new public address system; replacing rubberized track system. Additional installations include exterior utility systems (electrical, water, and sewer), paving, walks, storm drainage, site improvements, and antiterrorism/force protection vehicle barriers.



Renovated Kelly Outdoor Sports Field



Announcer stand/storage: Press center, 2nd floor

Kunsan Projects

FY06 MILCON, Dormitory (384 Rooms)

This FY06 MILCON project constructed 8-story Enlisted Personnel dormitory to provide 96 Air Force standard modules. Each module consists of four bed rooms and one share space. Each bed room has a separate latrine and closet. The project also provides lounges, break rooms, and laundries. HVAC system, CPS system, fire alarm and suppression system, and other support system including a gazebo and trash enclosure. The project commenced in Jun 06, and the main building was turned over to the Government on July 2008. The remaining support facilities (gazebo, trash enclosure and bicycle rack) will be completed in Nov. 2008. Total contract amount was \$24.4 million.



FY06 Dormitory: Outside



FY06 Dormitory Main Lobby

FY06 MILCON, Consolidated Personnel Processing/Theater Facility

The project is to construct a consolidated personnel processing and theater facility with a seating capacity for 500 personnel. The facility will consist of pile foundation, reinforced concrete floor slab, concrete wall and SSMR (Standing Seam Roofing System) on the concrete roof slab. HVAC (Heating, Air Conditioning, and Ventilation) system, fire alarm and suppression system, sprinter and CPS (Collective Protective System) and other supporting facilities including emergency power generator will be provided under this contract. The project commenced in Dec. 2006 and the building was turned over to the Government on Feb. 2008. Total contract amount was \$4.1 million.



Consolidated Personnel Processing/Theater Facility

CY07 ROKFC, Dormitory (528 Rooms)

This ROKFC project will construct a 7-story Enlisted Personnel dormitory to provide 132 Air Force standard modules. Each module consists of four bed rooms and one share space. Each bed room has a separate latrine and closet. The project also provides lounges, break rooms, and laundries. HVAC system, CPS system, fire alarm and suppression system, and other support system including a gazebo and trash enclosure will be provided under this contract. Relocation

of the existing AFN transmitter building was also included in this project. The project commenced in March 2008, and will be completed in Oct. 2010 at a cost of \$31.3 million. The AFN transmitter building has been completed and turned over to the Government in May 2008. The construction for the main building started in May 2008.



Rendering of Dormitory Building Exterior



AFN Transmitter Building

Repair Taxiway “C”(Airfield Paving IDIQ Contract)

This project was to replace the existing AC and PCC pavements of Taxiway “C” with new PCC slabs. The work included relocation of the airfield lights around the taxiway and runway. The project commenced in March, and completed in July at a cost of \$1.8 million.

Digital Microwave Upgrade, Phase VI (DMUPVI), JOC

This project provided a supporting work for new microwave tower including the foundations of the tower and communications shelter. The installation of the GFM equipment such as emergency power generator, auto transfer switch (ATS), and power disconnect switch was also included in the project. The work commenced in Nov. 2007, and will be turned over to the Government in October at a cost of \$400,000.



Tower and Communication Shelter



Generator and Fuel Storage Tank

Engineering Division

ENGINEERING SERVICES BRANCH

The branch continued to improve and excel in providing effective engineering services to all customers within and without the district with quality cost estimates, responsive Architect-Engineer contract services, comprehensive Value Engineering studies and meticulous accounting management. The main focus of the branch mission was successful execution of the year-end projects and support to Yongsan Relocation Plan/Land Partnership Plan. With teamwork and hard work, the branch was able to award all scheduled A-E contract awards and performed all necessary cost estimating actions. Also, the branch continued to actively engage itself with the Korea Relocation Program by providing all necessary manpower and information to the Korea Relocation Technical Support Branch and Korean Relocation Program Office as well as other stakeholders.

Cost Estimating Section

The section remained steady in providing top-notch Government Estimating services to all its customers. The section completed total 32 Independent Government Estimates for various programs including MILCON, ROKFC, Defense Commissary Agency and others. The high performance by the section staff was instrumental in fulfilling fast turnaround review of 1391s and validates cost estimates for the critical Special projects for the Korea Relocation Program. Some of the YRP/LPP projects included Communication Center, Phase III, 8th Army Headquarters, Hospital & Ambulatory Care Center, Dental Clinic & Brigade Headquarters, High School and Elementary School with combined PA of \$652.6 million. All cost validation was submitted on schedule with minimum rework.

A-E Contract Section

The Section continued to drive hard in providing invaluable services to project managers and other stakeholders with over 105 A-E contract actions that were completed on time and within budget for the total amount over \$65 million in negotiation actions completed in this FY. This FY was an exceptional year in that some of the major command sensitive projects for the Korea Relocation Programs got started. Some of his section's work included negotiating pre-concept submittal for Communication Center, Phase III, 121 Hospital, Dental Clinic/Medical Brigade Headquarters, KORCOM Headquarters, and EUSA Headquarters with combined PA over \$1.3 billion.

Program Team

The team continued to provide fast and dependable budget services for the Engineering Division. and managed over \$21 million worth of the division budget this FY.

DESIGN BRANCH

Design Branch, consisting of 38 architects, engineers, engineering technicians, specifications writers and administrative assistants, completed a busy and successful Fiscal Year 2008. Design Branch provides in-house design capabilities, independent technical reviews of designs prepared by SOFA Architect-Engineer firms, and final preparation of all contract solicitation packages. The past year proved to be both challenging and fulfilling as the Branch tackled many projects in support of the Military Construction program and the Korea Relocation Program.

Of particular significance are the following design projects:

CY 2008 CDIP A06L544 Parcel A/B Site Preparation and Force Protection, Kunsan Air Base

The project involves preparing the design plans and specifications for the development of additional land at Kunsan Air Base. The project will prepare the existing ground (currently used as rice fields) and provide fill to raise the area above flood level making it available for future development. Also included in the project are force protection features such as new security fencing, perimeter and access roads, defensive positions, and an Access Control Point. The new access control point will meet the latest standards and have features such as a combined Commercial and Personal Vehicle Inspection facility, and a Visitors Control Center. The project has a Program Amount of \$10.9 million.

CY 2008 YRP A08Y902 / 903 Elementary School, USAG Humphreys

Design Branch's task was to prepare a Criteria Package to be used by the ROK Ministry of National Defense to award a contract for a local Architect-Engineer firm to complete the final design and then solicit a construction contract. The project is design a state-of-art Elementary School for the Department of Defense Education Activity. The school can handle 875 students ranging from pre-school (Sure Start program) and Kindergarten through 5th grades. The school has a unique layout including 3 multi-story wings of classrooms with a central core. Rows of windows will allow natural lighting into the classrooms, and other energy saving elements will help the design meet the U.S. Army's goal for Leadership in Energy and Environmental Design ratings. The central core will contain a Gymnasium, Cafeteria/Kitchen, Information Center, Computer Laboratory, Music and Multi-purpose Rooms. The surrounding campus will include playgrounds, sports fields, and outdoor courts. The structure will be reinforced concrete with brick veneer, and a gabled roof with standing seam metal roofing. The new Elementary School is sure to become the focal point for the new Family Housing community area. The project has an Estimated Construction Cost of \$43.3 million.



Standard Design 302 PN Unaccompanied Enlisted Personnel Barracks, Various Locations

Design Branch continues to update and improve the Standard Design used in projects throughout Korea for critically needed troop housing. The standard design was created following the U.S. Army's 1 + 1 module, allowing each soldier to have a private bedroom, while sharing a kitchen, bathroom and living space. The standard design is for 8-stories and can accommodate 302 soldiers. It includes elevators, recreation rooms, laundry facilities, and a mud room for cleaning field gear. The high rise design is uniquely suited for Korea, where useable land on our small installations is a premium.



FY09 MCA PN 56666 Vehicle Maintenance Facility, USAG Humphreys

The project involves preparing the design plans and specifications for vehicle maintenance facility to be utilized by the

501st Military Intelligence Brigade. The project has a Program Amount of \$19 million and includes a medium sized standard design vehicle maintenance facility, organizational storage, oil storage, hazardous material storage and installation storage. Also included is a large concrete hardstand for parking and vehicle maintenance. This new facility will allow the 501st Military Intelligence Brigade to meet their future maintenance requirements.

KOREA RELOCATION TECHNICAL SUPPORT BRANCH

With continued improvement, growth and development, the Korea Relocation Technical Support Branch office has defined and met its objectives, roles and responsibilities for providing effective and excellent management of technical support and engineering services to all Yongsan Relocation Plan involved customers within and throughout the Far East District. Though KRTSB has contributed to the success of the YRP in many ways through varied channels, the primary focus has been toward quality in design achievement.

The Branch has supported Korea Relocation Programs Office and its Project Managers by fulfilling the published list of the approximately 45 duties historically assigned to the PM role as well as engineering surveillance duties. This accomplishment has been made by the Primary and Alternate back-up Design Managers and support team members, including admin assistance, Hawaii based support the Regional Technical Center and other review agents) and other in-house engineering support. The Design Managers have participated in, monitored and controlled the many design and design decision making activities for all YRP related actions. In managing the design activities, the various products for design and design documentation have been overseen through review and review management. There was the hands-on approach to conducting team meetings and coordination, regular communications with the PM, the design team and the design reviewers. KRTSB has participated in all the various activities in developing the Project Management Plan and the various incremental plans within the PMP, as well as the major project element: scope, schedule and budget. Beyond the actual design phase actions, the Design Manager has served vital roles in the planning process including project scoping and AE selection-procurement-contract award. KRTSB has participated in all project activities providing Quality Design related input and oversight, as well as sharing experience and lessons learned regarding project initiation, development and execution. As a Contract Officer Representative the DM has communicated with the contracting community and maintained working relations with KO and maintained records and contract oversight fulfilling responsibilities assigned. In providing obligated services and input requested, KRTSB was always timely accurate, and up to standard in its performance.

As a well organized and harmonious team of diligent professional as well as fun loving people enjoying what they do and working with each other, KRTSB has been successful in managing the design activities of all assigned YRP projects, as well as contributing to major programmatic activities in support of YRP and interacting with Program Management Consortium and Ministry of National Defense USFK Relocation Office providing required input and guidance on Program related matters. This includes providing reviews for Master Planning, attending and communicating on Standard Design and Criteria Package development processes, etc.

GEOTECHNICAL AND ENVIRONMENTAL ENGINEERING BRANCH

The Branch has been fully engaged during FY08 in planning, design, and construction aspects of the large-scale and technically challenging YRP/LPP. Centerpiece to the YRP/LPP is the consolidation of in-country US Army assets at an expanding US Army Garrison Humphreys, involving the development of approximately 2300 acres of former agricultural land to support the required facility construction. Branch staff members have been intimately involved in geotechnical and environmental site investigations, designs, and construction quality assurance to ensure that the land development and follow-on facility construction will achieve high quality end results. The Branch provided essential geotechnical and environmental engineering design support on a wide range of Army, Air Force, Navy, and Marine projects, with notable examples being the USAG Humphreys Family Housing Towers, USAG Humphreys Medical Complex, Osan AB 2nd Runway, Fleet and Family Town Center at Chinhae NB, and Storage Facility at Camp Mujuk. The Branch continued to assist the Department of State with due diligence engineering investigations and analyses for a new Embassy Compound in Seoul. In FY08, the Branch completed an astounding 259 geotechnical, environmental, water well, geospatial, and laboratory testing projects, with a final operating budget of \$7.9 million. Mission tasks were successfully accomplished primarily by a team of highly talented in-house professionals and skilled technicians, including 4 PhDs and 12 PEs and Registered Geologists, supplemented by multiple IDIQ contracts for various engineering, testing, exploratory drilling activities. The Branch found time to organize and participate in several community outreach programs, such as the highly successful Feb. 2008 National Engineers Week event at Seoul American High School.



2008 National Engineers Week event at Seoul American High School



Water Well Services Section

Geotechnical Section

The Geotechnical Section, consisting of the Geotechnical Design Unit, Survey Unit, Exploration Unit, and Materials Testing Laboratory, worked at full production during FY08 on the many YRP/LPP and other project site investigations, analyses, and designs. The Section's construction quality assurance responsibilities were expanded to include earthwork materials testing for the USAG Humphreys Parcel 1 Land Development project (facilitated by an on-site Quality Assurance lab), settlement monitoring to track the progress of ground settlement, and geotechnical expertise to determine when post-landfill facility construction could safely commence on Parcel 1. Comprehensive site investigations and geotechnical designs were also completed for the Osan Air Base 2nd Runway project, involving state-of-the-art in situ and laboratory materials testing to support the runway embankment stability and seepage analyses. The Materials Testing Lab maintained full accreditation with the USACE Materials Testing Center at Engineer Research and Development Center-WES. The Section implemented several technological enhancements, such as a downhole camera imaging tool to characterize bedrock and hydrogeologic conditions, and a vehicle-mounted Global Positioning Satellite system for rapid and accurate surveys of fill grades at the Parcel 1 land development site. Settlement monitoring at Parcel 1 and

drilling operations at the Osan AB 2nd Runway project site are illustrated below. The vacant Geotechnical Section Chief position is being vigorously recruited in 1st quarter FY09.

Environmental Section

The Environmental Section provided expert environmental engineering service in support of the District's design and construction mission and directly to various US Forces Korea components. Staff members organized within three specialized teams (Contract Support, Site Investigations, and Laboratory Testing) focused on solving numerous environmental issues of a complex and sensitive nature. Notable projects include the abatement of lead –containing munitions debris from Area I training ranges, the emergency response to an underground fuel release at Camp Long, the characterization of soil contamination at the proposed Medical Complex site at USAG Humphreys, and the analysis of lead-contained artificial turf at Camp Henry. Section staff provided critical support to the Korea Relocation Program by participating in the identification of applicable environmental standards and regulations. The Section also gave technical advice and performed quality assurance testing to ensure that only uncontaminated borrow fill materials were delivered to the USAG Humphreys Parcel 1 Land Development site. The Section laboratories continued to provide high quality asbestos, soil, and groundwater testing as part of asbestos surveys and abatement projects and environmental site investigations. The labs maintained full accreditation through the American Industrial Hygiene Association and the National Environmental Laboratory Accreditation Program. The Section workload truly diversified in FY08 in response to expanding customer needs, to include projects for wetlands development, recycling and solid waste management, air emissions inventories, natural and cultural resources management, and the investigation and characterization of potentially contaminated sites as identified by the US Army and Air Force installations.

Water Well Services Section

The Water Well Services Section continued in FY08 to provide highly professional and expeditious preventative and emergency maintenance on 155 production water wells located on 29 different US Army, Air Force, and Navy installations in Korea. The combined yield of the wells was approximately 6 million gallons per day, meeting daily water requirements for both large (USAG Humphreys) and small (Site Madison) military installations. Section field teams responded quickly to keep water wells fully functional at the Yongpyong Training Center to support population surges during peak training exercises. The Section drilled an additional water well at both Humphreys Garrison and the Yongpyong Training Center, and developed plans to construct a total of 12 additional wells at Warrior Base, Yongpyong Training Center, and Humphreys Garrison in early FY09. Skilled drill teams from the Section also constructed groundwater monitoring wells for use on environmental site investigations.

Data Management Section

The Data Management Section provided expertise in geospatial data and imagery technologies in support of Branch and District engineering products and services, and directly to US Army, Air Force, and Navy installation customers. As a recognized in-country leader and proponent of Geographic Information System technology, the Section was called upon by the District to give advice and guidance on geospatial database requirements for the Korea Relocation Program, and in particular, the land development and infrastructure projects at USAG Humphreys. Section staff developed the geospatial database specification requirements for AE and Design Branch CADD products and were responsible for quality assurance checks on all CADD submittals to ensure conformance with geospatial standards. The Section developed and implemented a GIS tool for the Area DPWs to track environmental, cultural, and natural resource data on US Forces Korea installations, and assisted the Navy in implementing their base-wide GIS at Chinhae NB. The Section was very proactive in sharing geospatial data and promoting common technological approaches with their counterparts at US Forces Korea and IMCOM-Korea, and delivered a number of GIS-related conference presentations to USFK and Host Nation audiences.

Safety Office

Fiscal Year 2008 was a very productive and successful year for the FED Safety office. The safety team completed over 25 site safety surveys of all resident offices throughout the Korean Peninsula. With a total exposure of contractor man hours approaching nine million, we have not had any reportable accidents or injuries.

From August 27 until Sept. 5 the U.S Army Center for Health Promotion and Preventive Medicine conducted an Ergonomic Assessment of the entire FED facility to include the Central Residence Office and the Pyongtaek Residence Office.

In January, in conjunction with 18th Medical Command, the team conducted a bi-annual survey of the Far East facility to assess personal exposures to hazardous physical and chemical stressors for all employees. Surveys were completed of all work areas to identify all potential exposures and other related safety and health risks, and establish complete worker profiles. Surveys were conducted based on the level of risks, with the main emphasis on the Geotechnical and Environmental branch labs, carpentry shop, motor pool/battery charging shops and hazmat storage. The 18th MEDCOM team conducted surveys of the ventilation hoods and the respiratory program in the asbestos lab, materials testing labs and chemistry labs. In the carpentry shop employees were tested for excessive sound levels.

Also in January, the team was tasked to support the Central Resident office and Osan Air Base during a scheduled power outage. This overnight work was considered a high risk by the Corps and the contractor due to the safety considerations, limited time frame and weather conditions versus a daytime outage scenario. CRO and the Far East safety office strongly recommended against overnight electrical work, but the Air Force and the Corps leadership decided that the outage would take place overnight. The After Action Report stated 18 splicing operations conducted within 12 hours was outstanding and more importantly, the scheduled work was successfully accomplished without incident.

In May, our annual Safety Day activities included a safety training DVD to provide the required four hours of safety training to over 200 FED personnel. For the first time, a DVD was developed so each resident office could participate in the training without having to travel to FED. The comprehensive DVD included the 101 critical days of safety, contractor safety, employee/supervisor safety, don't be a zombie at work, office ergonomics, hazard recognition and control and defensive driving. Upon completion of the training, each supervisor would document that employees had completed the training and safety incentive items were distributed. Our safety incentive items included an embroidered safety hat and shirt and/or a safety backpack. The response from the attendees was very positive.

In July, the Department of the Army Engineer Inspection Team completed their systemic inspection of the Safety Program within the Far East District. A complete overview of our safety program was conducted and confidential interviews were held with construction program/project managers. In their out brief, the EIG team rated FED Safety as excellent with "the most robust safety inspection program to date"

Based on an anticipated increase in the workload, the team increased the number of Contractor Safety Awareness training courses from four to five and over 100 contractor personnel have successfully completing the required training. Updates and changes to the EM 385-1-1 required constant improvements in the course materials to keep contractors aware of the USACE safety requirements. The course is also taught in Hangul.

In Oct. 2007 and June 2008, the team participated in the Construction Management Evaluation at Southern Resident Office and CRO respectively. The CME is part of the internal audit and uses the FED Corrective & Preventative Action Request form as a format to provide the resident offices with the findings and recommendations of the CME audit.

In conducting our site safety surveys, when the FED Safety staff identifies deficiencies in the field, we work to correct them through education in the classroom and tracking through trend analysis.

Without exception, the FED Safety staff will continue to provide quality service and be accountable.



Quality Counts!

