Description of Proposed Construction and Modification of Facilities for the Air Force Special Operations Command AC-130J Formal Training Unit Relocation at Kirtland Air Force Base, New Mexico

U.S. Air Force photos by Tommie Horton

Description of Proposed Construction and Modification of Facilities

B.1 TEMPORARY NEW SQUADRON OPERATIONS FACILITY

The temporary squadron operations facility is required to support the AC-130J aircraft training function until the permanent solution military construction (MILCON) project is completed in fiscal year (FY) 2028. This project would include five temporary 5,000-square foot (SF) modular trailers (four for the AC-130J squadron personnel and one for the 58th Training Squadron [58 TRS] personnel) that would be used for administrative offices that comprise a squadron command section, aircrew flight equipment (AFE) work center, AFE storage, restrooms, kitchen area, and rooms for briefing, mission planning, and conferences. In addition, utilities, additional parking (if required), and walkways would be added to support these trailers. The utility connections would include electricity, stormwater, potable water, natural gas, telephone, Non-Secure Internet Protocol Router (NIPR), and Wi-Fi. Additional gravel parking would be needed unless the parking area at Building 926 can be used. The maximum number of parking spaces required is 119 (approximately 48,000 SF with 3 handicap spaces and 116 standard spaces and driving aisles) assuming all personnel (62 AC-130J personnel and 57 58 TRS personnel) were working at the same time and every 58 TRS classroom was at capacity (Kirtland AFB, 2021a). (Note: Location of the additional parking is yet to be determined. Potential location depicted in **Figure 2-2a in the EA**) There would also be paved pedestrian walkways as needed between the trailers and from the parking area. The temporary squadron operations facility would be sited east of Building 926 in an area that is currently an open field (see **Figure 2-2a in the EA**) until the permanent MILCON project is complete in FY 2028/2029 (see **Section B.2**) (Kirtland AFB, 2021b, 2021c, 2021d). The total estimated area of ground disturbance would be 75,900 SF.

B.2 PERMANENT NEW SQUADRON OPERATIONS FACILITY AND PARKING

This MILCON project is required to provide a permanent solution for AC-130J squadron operations. This project would involve the construction of administrative offices that would include a squadron command section, AFE work center, AFE storage, restrooms, kitchen area, and rooms for briefing, mission planning, and conferences. The new facility would be 20,000 SF and sited on the current Air Force Research Laboratory (AFRL) storage yard, west of Building 994 (see **Figure 2-2b in the EA**). The yard space will be replaced with a new paved storage area (20,000 SF) on the north side of Randolph Avenue in an undeveloped area as part of the MILCON project to meet the needs of the AFRL. The utility connections to the new facility would include electricity, stormwater, potable water, natural gas, telephone, fire protection system, NIPR, Secure Internet Protocol Router (SIPR), and Wi-Fi. A paved entrance/egress (4,500 SF) from the existing parking lot, east of the water tank, onto Randolph Avenue would also be constructed. An additional 46 paved parking spaces with driving aisles and landscaping (9,300 SF) would need to be constructed on the open lot on the east side of Building 995 across from the west side of the water tank (Building 1004) and Plumhoff Way (Kirtland AFB, 2021b, 2021c). The total estimated area of ground disturbance would be 53,800 SF.

B.3 ADDITION TO BUILDING 957 FOR CLASSROOM AND ADMINISTRATION

The project is required to provide additional space for course instructor and other training support offices. This project would involve the construction of a 5,000 SF addition to the east side of Building 957 on an undeveloped area (see **Figure 2-2c in the EA**). The addition would include

four classrooms with a 12-student capacity, office/administrative space for 5 personnel, and 800 SF of storage. The height of the addition would match the existing building (Building 957). The utilities would be connected through Building 957 existing services and the communication infrastructure would include, NIPR, Wi-Fi, and the Learning Management System. No additional parking would be required (Kirtland AFB, 2021c, 2021e). The total estimated area of ground disturbance would be 5,000 SF.

B.4 RENOVATE HANGAR 1002 (ISLAND B) FOR AC-130J AMU

This project is required to provide space for the beddown of the AC-130J Aircraft Maintenance Unit (AMU) and associated equipment. The project would involve complete renovation of Hangar 1002, Island B and would include administrative offices, storage area, classified storage area, consolidated tool kit area, restrooms, and a break room (see **Figure 2-2d in the EA**). In addition, there would be the removal of existing asbestos containing material (ACM), lead paint, and polychlorinated biphenyl (PCB); replacement of the HVAC and passenger/freight elevator; upgrades to the fire protection and electrical systems; construction of a fire protected egress from the Island to exterior of hangar; and installation of telephone connection; NIPR and Wi-Fi (Kirtland AFB, 2021f). There would be no ground disturbance with this project.

B.5 TEMPORARY ADDITION TO BUILDING 949 FOR WST

This project is required to provide space for the Weapons Systems Trainer (WST) simulator and renovation of two adjacent rooms to accommodate the aircraft cabin trainer (ACT) and the gun trainer (GTR). All three trainers are required to provide AC-130J formal training. The project involves installing an approximately 3,600 SF temporary structure on the east side of Building 949 where there is an existing concrete hardstand to house a full motion WST (see **Figure 2-2e in the EA**). The project shall include trenching from Building 949 to the temporary simulator location. The two existing adjacent rooms would be renovated for the ACT and GTR simulators and would require HVAC and electrical upgrades. In addition, the room housing the GTR would require sound proofing the walls. The three existing 10-ft exterior doors would be replaced with steel roll-up doors (Kirtland AFB, 2021c, 2021g, 2022a). In addition, a 144 SF electrical equipment room (12 x 12 ft) would be constructed on the north side of Building 949 to house electrical transformer(s) and switching in support of the simulators and training devices. The total estimated area of ground disturbance would be approximately 3,800 SF.

B.6 NEW SIMULATOR COMPLEX

This project is required to provide space for the AC-130J simulator facility to house two full motion AC-130J WSTs, two ACTs, a fuselage trainer (FuT), and a GTR. The project would involve constructing a 120-ft long x 60-ft wide x 60-ft high bay (7,200 SF) with a 2.5-ton overhead crane to house the WSTs. Each ACT requires construction of a 28 x 32 ft (896 SF) room. The FuT trainer room would be 140 x 40 ft (5,600 SF) and the GTR room would be 31 x 25 ft (775 SF). The facility would include an image generation room, classrooms, mission planning rooms, administrative area, restrooms, break area, and all necessary facility features to fully support the operations of the various trainers. The new facility would be 45,000 SF and sited to the west of Building 950 (see **Figure 2-2f in the EA**) (Kirtland AFB 2021c, 2021h). In addition, the project would involve installing all supporting utilities and constructing a covered paved walkway to Building 950 and additional parking (185 parking spaces, driving aisles, landscaping, motorcycle parking for a total of 58,500 SF, location to be determined). The maximum square footage of the covered walkway would be approximately 900 SF. The total estimated area of ground disturbance would be 104,400 SF.

B.7 ADDITION TO ZIA PARK DORMITORY

This project is required to provide space for the additional personnel to support the AC-130J relocation. The project would involve the construction of 80 additional rooms in the joint use pipeline dormitory already proposed to be built in Zia Park, increasing the total number of rooms to 432 (separate EA in process) (178,089 SF or approximately 412 SF per room). The floor plan layout would comply with the Unaccompanied Housing Design Guide, and would be single occupancy with desks, visitor space, private bathrooms, and kitchenette areas (Kirtland AFB, 2021c). The proposed location of the project is west of Pennsylvania Street within the Zia Park Area Development Plan boundary (see **Figure 2-2g in the EA**). There would be no ground disturbance with this addition.

B.8 NEW ADMINISTRATION BUILDING EAST OF MSA PARKING LOT

This project is required to provide an administration building to hold the additional manning to support the AC-130J mission move. The project would involve constructing a 10,000 SF facility. The utility connections would include electric, natural gas, HVAC, potable water, sanitary, fire suppression, telephone, NIPR, SIPR, and Wi-Fi. The facility would be located east of the Munitions Storage Area (MSA) parking lot and northeast of Building 737 outside of the gate to the MSA on open, undeveloped land in an unsecured area (see **Figure 2-2h in the EA**) (Kirtland AFB, 2021i, 2021j, 2021k). The total estimated area of ground disturbance would be 10,000 SF.

B.9 NEW MUNITIONS TRAILER HOLDING PAD

This project is required to provide space to hold munition trailers within the MSA awaiting loading and loaded trailers awaiting transport to the flight line. In addition, this area would be used to park government vehicles used in transporting munitions. The number of government vehicles will increase by 10 (forklifts/trucks) (350 percent increase) in order to accommodate the AC-130J mission. This increase in vehicles is due to the increase of deliveries to the flightline as well as Technical Order requirements when towing the ammunition supporting the AC-130J mission – hence the need for the bobtails and trailers (Kirtland AFB, 2022b). The project would involve the construction of a 100 x 100 ft (10,000 SF) concrete munitions trailer holding pad south of Building 733 along the perimeter road (see **Figures 2-2h** and **2-2i in the EA**). The project would also include exterior lighting and a lightning protection system (Kirtland AFB, 2021i, 2021j, 2021l, 2022b). The total estimated area of ground disturbance would be 10,000 SF.

B.10 CONSTRUCT TWO NEW EARTH COVERED MUNITION STORAGE IGLOOS

This project is required to provide earth covered igloos at the MSA to support the movement of the AC-130J FTU to Kirtland AFB. Current munition structures are at 85 percent capacity with current Kirtland AFB mission requirements and the AC-130J mission quarterly munitions requirements will increase floor space by a 65-pallet position per quarter (approximately one and a half the size of the current igloos) (Kirtland AFB, 2022c). The project would involve the construction of two 25 x 80 ft (2,000 SF) Hayman Earth Covered Munitions Storage Igloos. An additional 7,000 SF would be included for the aprons and access road. The two igloos would be located across the perimeter road to the east (see **Figure 2-2i in the EA**). The two igloos would be covered with a minimum of 24 inches of soil and would each have a paved surrounding apron to facilitate maneuvering of trailers and equipment. Utility connections would include electric, lightning protection system, an alarm system, and a fire protection system. In addition, a 3,500 SF stormwater drainage system would be constructed for each igloo. The total estimated area of ground disturbance would be 18,000 SF including the stormwater drainage systems (Kirtland AFB, 2021i, 2021j, 2021m).

B.11 NEW EXPLOSIVE OPERATIONS BUILDING

This project is required to provide an additional operating location to meet the new AC-130J Formal Training mission requirements without impeding the current missions' requirements at Kirtland AFB. The current operating location is not large enough to handle current mission requirements and new AC-130J mission requirements. The project would involve the construction of an Explosive Operations Building (approximately 6,000 SF) to house munitions builds/teardown and expenditure operations supporting the AC-130J mission. Utility connections would include electric, natural gas, HVAC, potable water, sanitary, fire suppression system, telephone, NIPR, and an alarm system. The new building would be located west of Building 748 outside of the current fence line (see **Figure 2-2i in the EA**). In addition, a 5,400 SF paved access road, a total of 3,700 SF for paved parking areas on the west and east sides of the building, and paved aprons (2,000 SF each) on the north and south sides of the building would be constructed. The total estimated area of ground disturbance would be 19,100 SF (Kirtland AFB, 2021i, 2021j, 2021m, 2022d).

B.12 CONSTRUCT SMALL ARMS STORAGE FACILITY

The project is required to provide additional small arms storage space at the MSA to support the movement of the AC-130J FTU to Kirtland AFB. The project would involve the construction of a 100 x 100 ft (10,000 SF) small arms storage facility (also called a Butler Building) (see **Figure 2-2h in the EA**). Utility connections would include electric, an alarm system, fire suppression system, and a lightning protection system. The total estimated area of ground disturbance would be 10,000 SF (Kirtland AFB, 2021i, 2021j, 2022e).

B.13 RENOVATE BUILDINGS 737 AND 733

The project is required to provide improved facilities to serve the 377 MXS enhanced mission requirements due to the AC-130J mission beddown, including various trailer maintenance operations and other munitions equipment with working bays plus renovate available space to accommodate additional 40 personnel inbound. The project would involve the renovation of Building 733 (Brass Storage/Catenary System) and Building 737 (Trailer Maintenance/Production Facility) (see **Figure 2-2i in the EA**) (Kirtland AFB, 2021i, 2021j). Building 733 renovations would include repairs to the concrete paving, transformer, and lightning protection. Building 737 renovations would include upgrades to electrical, removal and replacement of the oil/water separator (approximately 4,200 SF of disturbance outside on the hardstand to the southwest of the building), installation of an electric hoist system and a compressed air station, and repairs to the concrete flooring in the bays (Kirtland AFB, 2022f). The total estimated area of ground disturbance would be 4,200 SF.

B.14 REFERENCES

Kirtland AFB. 2021a. Email correspondence between Mr. Robert McDonald and Amanda Kreider and Lisa Woeber, Cardno personnel. 3 November.

Kirtland AFB. 2021b. *Base Civil Engineer Work Request, AF Form 332, Work Request No. WO-55957*, 24 June.

Kirtland AFB. 2021c. Facilities Board PowerPoint Presentation, 27 July.

Kirtland AFB. 2021d. *Request for Environmental Impact Analysis, AF 813, Report Control Symbol 35-04-297*, 01 September.

Kirtland AFB. 2021e. *Base Civil Engineer Work Request, AF Form 332, Work Request No. WO-55958*, 24 June.

Kirtland AFB. 2021f. *Base Civil Engineer Work Request, AF Form 332, Work Request No. WO-55961*, 24 June.

Kirtland AFB. 2021g. *Base Civil Engineer Work Request, AF Form 332, Work Request No. WO-55963*, 24 June.

Kirtland AFB. 2021h. *Base Civil Engineer Work Request, AF Form 332, Work Request No. WO-55964*, 24 June.

Kirtland AFB. 2021i. *Request for Environmental Impact Analysis, AF 813, Report Control Symbol 35-09-1059*, 02 September.

Kirtland AFB. 2021j. Facilities Board PowerPoint Presentation, 8 November.

Kirtland AFB. 2021k. *DD Form 1391, FY 2024 Military Construction Project Data, Munitions Administration Facility, Project Number MHMV213105*, 15 July.

Kirtland AFB. 2021l. *Base Civil Engineer Work Request, AF Form 332, Work Request No. WO-55950*, 15 June.

Kirtland AFB. 2021m. *Base Civil Engineer Work Request, AF Form 332, Work Request No. WO-55951*, 15 June.

Kirtland AFB. 2022a. Base Civil Engineer Work Request, AF Form 332, Work Request No. Not provided, 25 March.

Kirtland AFB. 2022b. *DD Form 1391, FY 2023 Project Data, Construct Trailer Pad, Project Number MHMV210014*, 01 February.

Kirtland AFB. 2022c. *DD Form 1391, FY 2023 Project Data, Construct Hayman Structure, Munitions Area, Project Number MHMV210019*, 01 February.

Kirtland AFB. 2022d. *DD Form 1391, FY 2024 Military Construction Project Data, Explosive Operations Building, Munitions Storage Area, Project Number MHMV213107*, 22 January.

Kirtland AFB. 2022e. *DD Form 1391, FY 2024 Military Construction Project Data, Small Arms Storage Facility, Project Number MHMV213104*, 07 February.

Kirtland AFB. 2022f. *DD Form 1391, FY 2023 Project Data, Renovate B737 and B733 Munitions Area for AC-130J FTU, Project Number MHMV210015*, 07 February.