

ART 4.5.2.5 Construct Airfield Facilities

Provide for planning military airfields; new airfield and heliport construction, expansion, and rehabilitation; and maintenance and repair of airfields and heliports in the area of operations (AO).
(FM 5-430-00-2) (USAES)

NO.	Scale	Measure
01	Yes/No	An inability to construct or expand airfield facilities within the time the construction directive specifies did not degrade or delay unit operations.
02	Yes/No	Airfield facilities supported the aircraft for which they were designed.
03	Yes/No	Unit inspected airfield or heliport projects for quality control.
04	Yes/No	Airfield or helipad project completed on time.
05	Yes/No	Environmental considerations planning and procedures were present and being followed.
06	Time	To prepare engineer construction estimate that determines the effort to meet the requirements, assign operational and construction responsibilities, and determine additional personnel and equipment requirements.
07	Time	To prepare construction directive for the airfield or heliport and issue it to the construction unit. This directive states the exact assignment, project location, and start and completion times; specifies additional personnel, equipment, and materials available; prioritizes the entire project; and specifies type and frequency of construction reports, time needed for special procurement, and coordination instructions with user agency.
08	Time	To reconnoiter and evaluate the site for suitability and conditions, integrate environmental considerations, identify construction problems and possible courses of

		action, and update or revise the engineer estimate.
09	Time	To coordinate for and receive engineer assets to perform task.
10	Time	To monitor construction and perform quality assurance inspections.
11	Time	To perform location survey to establish permanent benchmarks for vertical control and well-marked points for horizontal control.
12	Time	To perform construction layout survey.
13	Time	To perform earthwork estimation that calculates the earthwork volume or quantity, determines final grade balancing of cuts and fills, and determines most economical haul of materials.
14	Time	To design a storm-drainage system.
15	Time	To conduct clearing, grubbing, and stripping operations.
16	Time	To conduct subgrade and base-course operations.
17	Time	To stabilize soil and provide dust control if required.
18	Time	To install surface matting if required.
19	Time	To conduct airfield marking operations.
20	Time	To install airfield lighting.
21	Time	To mark all obstructions.
22	Time	To prepare and submit status, progress, or completion reports to higher headquarters.
23	Time	To establish job site security.
24	Time	That scheduled arrivals in AO are delayed on the average due to interruptions in the construction, expansion, or maintenance of airfield or heliport facilities by combat actions or natural disasters.
25	Percent	Of difference between planned and actual requirements for the construction or maintenance of airfields or heliports and their associated support facilities in the AO.
26	Percent	Of force becoming casualties due to enemy action or accidents during the construction or maintenance of airfields or heliports.
27	Percent	Of increase in the throughput capability of an airfield or heliport due to the construction

		or maintenance of aviation support facilities
28	Percent	Of planned airfield or heliport construction or maintenance capability completed.
29	Percent	Of personnel in AO required for building and maintaining airfields, heliports, and their associated aviation support facilities.
30	Percent	Of airfield or helipad construction or repair capability provided by host nation.
31	Percent	Of existing airfields or heliports and their associated aviation support facilities improved in AO.
32	Percent	Of existing airfields or heliports and their associated aviation support facilities in AO that can be used in their current condition.
33	Percent	Of unit operations degraded, delayed, or modified in AO due to an inability to use existing airfields or helipads.
34	Percent	Of airfield or heliport and aviation support facilities in the AO damaged by enemy fire or natural disaster.
35	Percent	Of existing logistic facilities with access to existing airfields or heliports.
36	Number	Of airfields constructed, expanded, or rehabilitated in the AO.
37	Number	Of heliports constructed or rehabilitated in AO.
38	Number	Of airfields or heliports and aviation support facilities in the AO requiring construction or maintenance.
39	Number	And types of airfields or heliports and associated aviation support facilities in the AO damaged by enemy fire or natural disaster.
40	Number	Of meters of airfield runway constructed, improved, or repaired in the AO within a given time.
41	Number	Of instances of delays in scheduled arrivals due to the destruction or damage of airfields and helipads in the AO by combat actions or natural disaster.
42	Number	Of instances in which troop movement or sustaining

		operations were prevented due to an inability to use airfields or helipads and associated aviation support facilities.
43	Number	Of tons per day of supplies transported by aviation platforms in the AO.
44	Number	Of passengers per day transported by aviation in the AO.
45	Number	Of inspections of aviation support infrastructure completed per month in the AO.

Supporting Collective Tasks:

Task No.	Title	Proponent	Echelon
01-4-7521	Install The AN/TRN-30 (V) 2	01 - Aviation/Aviation Logistics (Collective)	Section
05-3-5100	Place Airfield Matting on Prepared Surfaces	05 - Engineers (Collective)	Platoon
05-3-5107	Clear Airfields	05 - Engineers (Collective)	Platoon
05-3-5140	Construct Airfield Surfaces	05 - Engineers (Collective)	Platoon
05-3-5141	Conduct Runway/Taxiway Crater Repair	05 - Engineers (Collective)	Platoon
05-3-5143	Construct a Helipad	05 - Engineers (Collective)	Platoon
05-3-5210	Construct a Sewerage System	05 - Engineers (Collective)	Platoon
05-3-5211	Construct a Water Distribution System	05 - Engineers (Collective)	Platoon
05-3-5212	Construct Electrical Utilities	05 - Engineers (Collective)	Platoon
05-3-5220	Construct a Wood Frame Structure	05 - Engineers (Collective)	Platoon
05-3-5222	Construct a Steel-Frame Pre-engineered Structure	05 - Engineers (Collective)	Platoon