

APPENDIX D

TAB H

AIRFIELD COORDINATION OFFICER ARRIVAL AND ASSEMBLY AIRFIELD SITE SURVEY CHECKLIST

D.H.1 General

The checklists contained in this tab is used by the airfield coordination officer (ACO) as a member of the SLRP. Much of the information required to complete the airfield survey can be obtained from the appropriate host nation airfield officials. This information should be used in conjunction with analysis provided by U.S. Air Force personnel. The checklist has two sections.

Part I: The Airfield Suitability Checklist is used to determine what types of aircraft (C-141, C-5, 747, C-17, KC-135, KC-10, DC-9, L-1011) can utilize the airfield, and identifies information useful to the MAGTF's aviation combat element (ACE).

Part II: The Airfield Support Checklist is used to determine whether the airfield possesses the facilities to support arrival airfield operations.

D.H.2 Part 1: Airfield Suitability Checklist

D.H.2.1 Airfield Information

- a. Name of the airfield
- b. Location of the airfield
- c. Elevation and terrain features
- d. Date on which the survey was completed
- e. Who conducted the survey
- f. Host nation airfield representatives

D.H.2.2 Arrival Airfield Operations

- a. Arrival airfield operating hours
- b. Will U.S. controllers be required to operate arrival airfield
- c. Determination and balance of airflow restrictions against anticipated dates and timing of anticipated airflow
- d. Airspace management procedures for tactical operations within the AOR
- e. Special air traffic control procedures
- f. Total numbers and types of aircraft involved in the operation

- g. All obstructions within 25 nautical miles
- h. Fuel requirements

D.H.2.3 Runways

The runway description provides relevant information on the limitations and features of the airfield's runways. In addition to filling out the checklist, the ACO should also prepare an airfield diagram. To prepare data for runways, taxiways, and parking areas, list the published runway, taxiway or apron strength with the following designators:

- T :** Twin gear rating
- ST:** Single tandem gear rating
- TT:** Twin tandem gear rating
- TDT:** Twin delta tandem gear rating
- ESWL:** Equivalent single wheel loading
- LCN:** Load classification number

D.H.2.4 Runway Data

- a. Designation
- b. Length, width, and gradient
- c. Surface/composition/capability
- d. Condition
- e. Slope
- f. Published strength
- g. Weight limits imposed by host nation or other agency
- h. Centerline marked
- i. Distance markers
- j. Approach lights
- k. Threshold lights
- l. Visual approach slope indicator lights
- m. Shoulders (surface/width/condition)
- n. Overrun area (length/surface/condition)
- o. Obstructions (location/type/height)

p. Approach illusions (describe)

D.H.2.5 Taxiways

- a. Designation
- b. Length and width
- c. Surface type
- d. Condition
- e. Published strength
- f. Weight limit
- g. Marked centerline
- h. Edge limits
- i. Stabilized shoulder
- j. Stabilizing surface
- k. Stabilizing width
- l. Obstructions
- m. Traffic density
- n. Maximum taxi time from parking area to ready hold line

D.H.2.6 Parking Areas

- a. Designation
- b. Dimensions
- c. Type of surface
- d. Condition
- e. Published strength
- f. Weight limit
- g. Taxi stripes
- h. Tie-down rings
- i. Grounding points
- j. Stabilized shoulders
- k. Stabilizing surface

- l. Stabilizing width
- m. Flood lighting
- n. Obstructions
- o. Remote (explosive) parking space availability
- p. Fixed/rotary wing parking areas
- q. Total parking space available
- r. Slope of parking apron
- s. Maximum (normal/emergency) parking capability:
 - Distance between aircraft
 - Aircraft type (wing span/length)
 - Load bearing capacity (USAF responsibility)
 - Landing gear by plane type
- t. Aircraft rescue and firefighting plan

D.H.2.7 Engine Blast

Consider the following:

- a. Can engines be run-up to maximum power in parking position without damage to ground surfaces or structures?
- b. What is the engine trim pad availability for maximum power run-up?
- c. Is a blast fence installed or planned for engine trim pads?
- d. Will other aircraft, structures, or surfaces be damaged by engine blasts from the application of breakaway power when moving from parking spots or from taxi power application as the aircraft follows designated taxi routes to and from parking areas?
- e. What are the conditions of surfaces regarding possible repair, foreign object damage, and engine blast damage.

D.H.2.8 Aircraft Movement

- a. Diagram to illustrate movement to and from:
 - Refueling area
 - On-load and off-load area
 - Maintenance area
- b. Difficulties of ground movement

- c. Areas not accessible to aircraft
- d. Official aircraft taxi routes

D.H.2.9 Nav aids

- a. Very high frequency omnidirectional range
- b. Tactical air navigation (TACAN)
- c. Radar beacon
- d. Instrument landing system
- e. Precision approach radar (PAR)
- f. Airport surveillance radar (ASR)
- g. Instrument approach procedure
- h. Can standard instrument departure be used in lieu of radar vectors
- i. Are procedural changes, equipment replacements, or additions to existing facilities expected

D.H.2.10 Preparing Data

If the preliminary data source is the current Flight Information Publication (FLIP), confirm data with appropriate airport officials/civil engineers. Confirm any obstacle data listed in the current FLIP.

D.H.3 Part II. Airfield Support Checklist

D.H.3.1 Airfield Operations

- a. Operations facility:
 - Adequate rooms or buildings for all ACE areas
 - Other agencies working at airfield
 - Methods and means for control of classified material
 - Capability to run ADPE/communication data links
 - Will facility hamper MAGTF security plan
- b. Control tower:
 - Is view of all areas unobstructed
 - Equipment limitations for guarding and transmitting on landing group frequencies
 - Are maps, crash grid maps, charts, and diagrams up to date
 - Tower facility operator

- Does control tower require MAGTF augment
- Control tower frequency:
 - Determine who controls frequency
 - Identify language spoken on frequency
- Pilot forecaster service frequency
- Ground control approach, including:
 - Radar call signs
 - Frequency
- Aircraft reporting procedures
- Identify information concerning the long-range aid to navigation (LORAN) system, communications security (COMSEC), and navigational aids (NAVAIDS)

c. Weather detachment facilities and capabilities:

- Agency responsible for observations
- Points of contact and phone numbers
- Observation hours
- Observation site location
- Upper air observations available
- Radio sound instrument/scheduled time
- Upper-level wind measurements

d. Weather forecast support:

- Domestic or foreign
- Agency responsible for forecasts
- Forecasting hours
- Weather warnings/advisories provided
- How observations/forecasts are transmitted
- Pilot to forecaster service available
- Weather data/communications equipment linked with U.S. equipment

e. Host nation/base weather detachment equipment availability:

- Radar type
- Wind equipment type
- Visibility equipment type
- Equipment maintenance performed locally

f. Weather briefs:

- In English
- Flight folders (headwind, temperature, etc.)
- Computer flight plan
- Alternate sources of weather information
- Service contracts required
- Future plans to increase/improve service
- Unique weather problems or hazards

g. Climatology:

- Type of information available
- Period of record
- How climatological information is obtained

D.H.3.2 Communications Support

a. Determine whether there is a communications unit or whether we rely on the host nation

b. Identify the point of contact for host nation communications

c. Obtain a copy of the airfield map/phone directory

d. Identify flight line communications:

- Fixed station support availability
- Vehicle mounted support available
- Additional support available through host nation:
 - Ultra high frequency (UHF)/Very high frequency (VHF)
 - Type and nomenclature
 - Quantity
 - Frequencies available

e. Evaluate telephone system:

- Is airfield linked to a telephone exchange
- Commercial telephones available
- With whom the direct circuit is linked
- What type of equipment, switchboard, console is available

f. Identify DSN support available:

- Quantity and types of lines
- Highest precedence for DSN support(flash/priority)
- Maximum call area
- Local DSN number and prefix

g. Identify source for secure voice (STU III):

- Type
- Number/listing

h. Types of recorded communications:

- Teletype
- TELEX/FAX:
 - Highest security classification
 - AUTODIN terminal
 - Digital subscriber terminal equipment type assault echelon (AE), afterburner
 - Mode V, IG
- Distance between airfield and communications center

D.H.3.3 Communications Suitability

a. Is area available for full communications layout

b. Power available (voltage/frequency)

c. Are facilities dispersed

d. Geographical and topographical conditions:

- Site elevation

- Soil type
 - Soil load-bearing capabilities
 - Leveling restrictions
 - Vegetation
 - Surrounding terrain
- e. Obtain a map showing a 300-mile radius from radar element
- f. Are signal cable length requirements adequate
- g. Electromagnetic capability:
- Adjacent channel
 - Co-channel
 - Intermodulation
 - Interference with power lines and highways
- h. Antenna radiation pattern clearance zones
- i. Commercial base power supply (voltage/frequency)
- j. Are hardstands available for mobile communication vans
- k. Do access roads allow for easy egress/ingress
- l. Hazards of electromagnetic radiation to ordnance (HERO) restrictive areas within the airfield

D.H.3.4 Adjacent Radar Element

- a. Type/equipment
- b. Coverage
- c. Unit operating, call signs, and frequencies
- d. Connectivity
- e. Circuit availability
- f. Radar coverage chart with call sign direction finding fixer frequencies

D.H.3.5 Air Traffic Control

- a. Approach control
- b. Published let-down information

c. Type of operations:

- Visual flight rules
- Instrument flight rules

d. Control towers (guidance control approach frequency information including primary, secondary, UHF and VHF airway frequencies):

- Remarks/reliability - hours of operation
- Types:
 - High frequency (HF) radio
 - VHF radio
 - UHF radio
 - VHF DF
 - UHF DF

e. Availability of the following NAVAIDS:

- VOR
- TACAN
- Radar approach control (ASR/PAR) 24-hour control
- Instrument landing system (localizer/glide slope/middle marker)
- Low frequency (LF), Medium frequency (MF) radio beacon automatic direction finding (ADF)
- UHF radio beacon
- Radar beacon

f. Visible navigational facilities availability:

- Remarks
- Degree of reliability
- Hours of operation
- Types:
 - IVALA
 - VASI
 - Strobe

- Fresnel lens

- Other

D.H.3.6 Support Facilities

- a. U. S. Federal Aviation Administration (FAA)
- b. U.S. Joint Force Air Component Commander (JFACC)/Area Air Defense Commander (AADC)
- c. Military Affiliate Radio System (MARS)
- d. Host nation civil/military aeronautics agency/air traffic control service

D.H.3.7 Search and Rescue Support

- a. U.S. Armed Forces
- b. Multinational/Host nation support
- c. Communication net requirements

D.H.3.8 Airfield Security Support

- a. Overall security measures at airfield
- b. Controlled access to flight line
- c. Temporary weapons storage available for passengers
- d. Passenger security checks
- e. Guards provided (U.S./Host nation civilian/Host nation military)

D.H.3.9 Airfield Firefighting Support

- a. Number of personnel required by local regulations
- b. Rescue crew billeting and dining support
- c. Protective clothing for crash crews locally available
- e. Crash truck foam resupply available locally
- f. Acceptability of host nation firefighting vehicles for use by MAGTF personnel
- g. Ambulance availability
- h. Crash net communication requirements

D.H.3.10 Airfield Logistics Support

- a. De-icing equipment availability
- b. Aviation ground support equipment (AGSE) availability:

- Power units by type
- Air carts
- Hydraulic test stands
- Air compressors (low/high pressure)
- Heaters
- Light carts
- Jacks
- Maintenance stands

c. Maintenance and supply facilities:

- Repair capabilities in existence
- Facilities available for specialist dispatch tools
- Airfield source of supplies compatible with MAGTF supply system
- Availability of runway clearance vehicles (sweepers, snow removal, etc)

d. Petroleum, oil, and lubricants services:

- Type of aviation fuels available
- Liquids stored in drums in the storage area (not aviation fuels) determined and marked
- Turnaround time (minutes) to service equipment and to leave the service area
- Are POL storage areas being closed or phased out?
- Is aviation fuel the only product available?
- Inspection/inventory of bulk storage facilities
- Maximum fuel storage capacity by grade of fuel
- Quality control procedures established
- Source of POL products/maximum receipt and storage capability at airfield
- Can water from heating plants be used in lieu of demineralized water (distillate), and is liquid oxygen available
- Fuel supplied year round
- Receiving capacity by grade of product
- Fuel servicing by truck or pipeline

- Type of POL hydrant
- Number of lateral lines leading from hydrant
- Number of outlets or refueling points located on hardstands
- Type(s) of aircraft that can be refueled
- Receiving capability for flow rate from bulk storage to hydrants
- Type(s) of aircraft that can taxi on and off hydrant outlets
- Outlets spaced far enough apart to permit simultaneous parking of more than one aircraft
- Will aircraft parked on outlet block taxiway?
- Availability of jet engine oil
- Low pressure gaseous oxygen availability
- Fuel service vehicles by grade of product, capacity, and discharge rate
- Availability of hydraulic fluid, gear box oil, and transmission oil

D.H.3.11 Airfield Maintenance Support

- a. Hangars, storage, and maintenance buildings
- b. Docks
- c. Availability of portable shelters
- d. Washracks
- e. Facilities to repair instruments and controls
- f. Facilities for maintenance administration
- g. Aviation repair parts storage areas
- h. Facilities to store and protect special tools
- i. Technical libraries
- j. Avionics maintenance functions:
 - Communications-navigation
 - Electronic countermeasures
 - Automatic flight control instruments
 - Calibration control labs

- Mission systems
- Weapons systems

k. Location of communication maintenance facilities:

- Air communications equipment
- Field radar equipment
- Ground communications equipment
- Mock-ups

l. Supply support at airfield:

- Resources (station/housekeeping sets)
- Base coordinated general supply support:
 - Supporting air logistics coordinators
 - Defense shipping authority activities
 - Stock levels at the activities
 - Open purchase procurement
 - Class V(A)
 - Aircraft engines
 - Photographic equipment and film
 - Communications equipment and spares
 - POL stock (all types and grades)

m. Emergency mobile electric power for airfield facilities and communications

D.H.3.12 Class V(A) Ammunition Support

- Map of munitions maintenance and storage areas
- Availability of ammunition storage areas
- Availability of munitions maintenance structures
- Availability of host nation munitions maintenance support:
 - Trained and qualified personnel
 - Munitions test and assembly equipment
 - Munitions handling and delivery equipment

- Availability of technical library
- Availability of munitions preload facility
- e. Host nation EOD support available and regulations concerning their employment
- f. Host nation/base security availability

D.H.3.13 Ammunition Service Capabilities

a. Ammunition loading facilities and equipment:

- Storage space available in square feet
- AGSE equipment availability
- Warehouse tractors
- Crane trucks
- Straddle trucks

b. Bomb service trucks

D.H.3.14 Parking Aircraft Loaded with Munitions

- a. Parking satisfies explosive safety, quantity and distance criteria
- b. Prohibited zones for explosive-laden aircraft
- c. Facilities within the safety clear zones
- d. Any additional remarks

D.H.3.15 Evaluation of Airfield Facilities

a. Services at the cargo terminal:

- Space available
- Aircraft loaders
- Pallet/containers
- Pallet/cargo scales
- Truck loading ramps
- MHE lot and maintenance facility location

b. Airfield cargo storage areas:

- On airfield

- Overflow away from the airfield
- Outside storage (sq. ft.) (fenced/lights)
- Availability of nose docks
- Covered storage (sq. ft.)
- Vehicle parking capabilities (dimensions, wheeled/tracked)
- Hazardous cargo build-up area
- Distance to remote parking area
- Type of surface in cargo storage areas
- Bermed areas (height/uses/type)
- Special instructions for cargo areas

c. Passenger facilities:

- Location/maximum capacity
- Boarding ladders (type/height/capability)
- Billeting availability
- Messing availability

d. Airfield throughput capabilities:

- Capability to receive, off-load, process, and clear MAGTF/NSE cargo and passengers
- Method of transportation for moving arriving personnel, cargo, and equipment to staging areas
- Distance between nearest railhead(s) with the capacity to load wheeled and tracked vehicles
- Number(s) and type(s) of major roads servicing the airfield. Identify any movement restrictions that may exist

e. Airfield fleet services:

- Latrine service truck (type/capacity)
- Trash disposal trucks
- Shuttle buses
- Flight line transportation
- Dispatch procedures
- Fleet maintenance facilities

