

CHAPTER 8

TACTICAL AIR TRAFFIC SERVICES

This chapter provides administrative and operational standards, policies, and procedures peculiar to tactical ATS. It also establishes guidelines for US Army ATS units engaged in planning and conducting tactical/combat operations. However, this chapter does not waive the applicable requirements in other chapters of this manual. The influence of political, military, and geographical considerations is such that procedures must be tailored to each area and special situation. FMs 1-103, 100-28, 100-42, and 100-103; TMs 95-225 and 95-226; and FAA Handbook 7110.65 contain further guidance on tactical ATS.

8-1. PLANNING

a. When planning a tactical exercise, facilities must apply many host-nation rules and procedures. The DARR, USAASD-E commander, or Eighth Army ATC Office must be involved early to coordinate airspace requirements with the host nation's airspace planners. ATS personnel will assist in developing an effective A²C² plan that will provide safe and effective use of airspace across the operational continuum.

b. The ATS unit must coordinate with the aviation unit responsible for aircraft participating in the operation. During the initial planning stage, these units must--

- (1) Coordinate airspace use.
- (2) Determine what LOA must be established.
- (3) Select the equipment site.
- (4) Perform initial TERPS of the airspace.
- (5) Determine what additional services are available/required; for example, crash and POL.

c. During the exercise planning stage, a risk assessment must be conducted to accomplish risk management. This is a systematic process that helps leaders make informed decisions. The five major areas for risk assessment are fiscal, threat,

tactical doctrine, physical security, and safety. The leaders must complete the five steps given below to accomplish risk management.

(1) **Identify risks.**

(a) Make an operations analysis. This is simply a description, normally in time sequence, of the events that are expected to occur during the operation.

(b) Make a preliminary hazard analysis. This is a list of the various hazards that could occur and could result in accidents. It is developed using experience, the data base, and scenario thinking or similar techniques.

(c) If necessary, use a more in-depth hazard analysis. This analysis is normally used when time permits or when certain risks require more careful consideration to be fully understood.

(2) **Assess risks.** Assess the various risks to determine their relative probability and severity and their potential impact on the mission.

(3) **Make decisions and develop controls.**

(a) Develop risk control options, starting with the most serious risks.

(b) Complete a training realism assessment to assure the suitability of risk controls.

(c) Make risk decisions. Select risk controls that will reduce the risk to a practical minimum consistent with the mission objectives.

(4) **Implement controls.** Implement the risk control procedures. Implementation is best accomplished by integrating the procedures as standards in unit SOPs, orders, and training operations.

(5) **Supervise.** Maintain the effectiveness of risk controls by ensuring that risk control standards are as effective as expected and are kept at high levels.

8-2. RESPONSIBILITIES

a. **Flight Operations Center.** The FOC is responsible for en route control and coordination of Army and joint/combined air traffic operations. It also interfaces with USAF TACS on matters

concerning coordination of USAF flights below the coordinating altitude and Army flights above the coordinating altitude. The FOC is normally collocated with or electronically connected to the USAF CRC. The FOC responsibilities include--

- (1) Search and rescue assistance to aircraft performing a SAR operation.
- (2) Flight-following and navigational assistance.
- (3) En route control on designated flight routes.
- (4) Dissemination of critical A²C² data.
- (5) On-call or on-demand activation of en route NAVAIDS.
- (6) Dissemination of current weather information.
- (7) Dissemination of terminal airfield status.

b. Flight Coordination Center. The FCC is responsible for providing a communications extension for the FOC and for supporting the FOC in its coordination activities. The FCC receives and passes en route air traffic from the FOC or adjacent FCCS and issues weather reports.

c. Terminal Control Tower. The tower provides services similar to those in a fixed-base environment.

d. Ground-Controlled Approach. The GCA provides precision and nonprecision approaches. It also provides surveillance simultaneous vectoring and approach guidance for arrival and departure aircraft operating within the terminal area.

e. Tactical Aviation Control Team. The TACT is responsible for operations at forward support and austere landing locations. The TACT can be organized in several configurations, using from two to four soldiers equipped with a manpack data/secure voice communications package.

f. ATS A²C² Liaison. Liaison personnel are responsible for assisting the ACA in establishing and maintaining the Army airspace command and control system. This A²C² system is linked with the ACA by communications, standardized procedures, acquisition systems, and liaison. The A²C² element in the area of operations--

- (1) Coordinates and integrates airspace use.
- (2) Coordinates airspace with other users.

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- (3) Maintains ATS overlays within the command post.
- (4) Assists in developing and maintaining the airspace utilization map.
- (5) Staffs requests for special-use airspace.
- (6) Identifies and resolves conflicts between airspace users.
- (7) Develops plans, procedures, and SOPs and disseminates them to appropriate agencies.
- (8) Advises higher headquarters and subordinate units of significant airspace activities and the impact that airspace C² will have on operations.
- (9) Disseminates information concerning enemy air defense.
- (10) Coordinates selected identification requirements and IFF procedures for Army aircraft.
- (11) Coordinates and disseminates information about and changes in coordinating altitude.
- (12) Coordinates requirements for flight plans, air defense, and airspace control measures.
- (13) Maintains and disseminates the location and status of airfields, NAVAIDs, LZs, and PZs in the area of operations.
- (14) Coordinates requirements for airfield terminal control zones and other A²C² elements.
- (15) Coordinates and disseminates ATS and AD procedures to be used by aviation units.
- (16) Maintains and disseminates ACM information.

8-3. PROCEDURES

a. **NAVAIDs.** The procedures contained in TM 95-226 shall be used to construct a precision or nonprecision approach that will service the terminal area. The en route criteria shall be as established by the ACA. Critical information about tactical approach procedures at instrumented heliports and airfields must be developed by the sector responsible for the approach. This information must then be disseminated to the aviation units, FCC/FOC, and appropriate A²C² elements for inclusion in the ACO.

The Tactical Approach Publications System form, explained in paragraph 8-9c, is the primary method of accomplishing this.

b. Flight Check. All NAVAIDs must pass an FAA flight check inspection before IFR operations are conducted. The only personnel authorized to perform IFR certifications are graduates of the FAA Flight Inspection Course. The following actions are recommended to prepare for a flight check:

- (1) Assign the best-qualified controller available.
- (2) Complete a TERPS package and formulate dial divisions for the radar and provide them to flight check personnel.
- (3) Establish communications on a single dedicated frequency.
- (4) Note that the usable distance for radar cover capable of detecting an aircraft is a minimum of 7.5 NM from touchdown within the azimuth and elevation sector portrayed on the radar scope. Record only "on glide path" calls. Do not record calls taken inside of the decision height.
- (5) For repeatability, have three approaches for each runway/landing area.
- (6) Give the range at least every mile so that range mark accuracy can be evaluated.
- (7) Develop an LOA concerning the airspace used for the approach procedure.
- (8) Have personnel who are trained/experienced in theodolite operations (see Appendix D).
- (9) Ensure that ground personnel are familiar with TM 95-225.

8-4. TACTICAL AIR TRAFFIC CONTROLLERS' QUALIFICATION AND RATING PROGRAM

The TATC qualification and rating program explains and standardizes the training of personnel for tactical qualification and certification as outlined in AR 95-2 and this manual. Tactical ATCS examiners will be appointed by USAATCA per AR 95-2. This training shall be in two phases--qualification training and rating.

a. Phase 1 - Qualification Training. This phase consists of individual and team training on the installation, operation, and maintenance of all equipment associated with the ATC system to which the controller will be assigned; for example, AN/TSW-7A or AN/TSQ-61B.

(1) Tasks, conditions, and standards for equipment training shall be taken from the battle drills for ATC teams in ARTEP 1-227-10-Drill.

(2) The unit shall determine the amount and type of A²C² training.

(3) Controllers will be trained in ATC procedures, rules, and standard phraseology.

(4) Controllers shall begin this training within 60 days of assignment or within 60 days of completion of a fixed-base program. Active-duty controllers shall complete the training within four calendar months from the date they enter the program and reserve component controllers, within two annual training periods. (A controller shall not be entered into a fixed-base training program and a tactical program at the same time).

b. Phase II - Rating. This phase covers the ability of trainees to control air traffic in a tactical environment.

(1) A tactical examiner shall give the rating in each facility. The examiner shall administer a written or an oral examination that covers the applicable chapters of the FTM.

(2) The examiner shall give an over-the-shoulder evaluation using DA Form 3479-1-R.

(3) The examiner shall annotate the initial rating of tactically certified on the back of the controller's air traffic controller specialist card and on page 1 of DA Form 3479-1-R.

(4) Each time the controller is deployed to provide air traffic services after the initial rating, he must be given a written or an oral proficiency check for the applicable portions of the tactical FTM. The rating shall be recorded in Section III of DA Form 3479-1-R. When reassigned to a new unit or a different type of facility, the controller must complete the rating program for that unit or facility.

8-5. EQUIPMENT CHECKS

The ATC chief/ATC facility chief will ensure that appropriate checks are performed per the applicable technical manuals and Chapter 3 of this manual.

8-6. TOWER, RADAR, NAVAID, AND FOC/FCC SERVICES

a. Tower. Tower services will be provided as required. Primary weather information will be provided by the USAF weather detachment serving that facility. USAF weather support is normally located at corps or division level. If no USAF weather detachment is available, direct readings from wind and altimeter instruments will be issued as "estimated."

b. Radar. Before authorizing the use of a tactical GCA to control traffic at a landing site or an area airfield, commanders shall establish specific procedures. The radar set must be operational, properly sited per the appropriate technical manual, and flight checked if used for IFR operations. Commanders also are responsible for flight checks when a particular procedure must be used during IMC. The required coordination and approval must be obtained from the appropriate authority for airspace usage.

c. Navigational Aids. The SS shall ensure that periodic checks of NAVAIDs are performed and the results are recorded on DA Form 3502-R.

d. FOC/FCC. FOC/FCC services are provided as required. At the beginning of each shift, the FOC/FCC shall obtain a time check from the appropriate CRC/CRP and each facility shall ensure that all means of communication are operational. If the FOC becomes inoperable, its functions and responsibilities shall be assumed by a designated FCC.

8-7. DEPLOYMENT AND EMPLOYMENT

Each ATS commander shall designate qualified movement control teams to plan and execute air and ground movements. Vehicle loading plans and convoy procedures must be developed for each deployable element. The appropriate ARTEP manual contains additional information on deployment.

8-8. REFERENCE MATERIAL

a. Charts and Maps. Each facility shall have an up-to-date map of its area of responsibility (as applicable). Each map shall depict the--

- Impact areas.
- Firing points.
- Navigational aids.
- ADIZ and no-fly areas.
- IFR recovery airfields.
- Prominent obstructions.
- NOE, NVS, and RPV routes.
- EOD/hazardous cargo route.
- Mandatory reporting points.
- Radio and radar blind spots.
- Restricted/prohibited areas.
- Aircraft entry, exit, and changeover points.
- Corridors, transition areas, training areas, and ranges.
- The same grid system as other area ATC and search and rescue facilities.

b. Reference File. The section chief/platoon sergeant is responsible for maintaining a facility/platoon reference file per Chapter 4 and Appendix B.

8-9. TACTICAL APPROACH PUBLICATIONS SYSTEM

a. Critical information about tactical approach procedures at instrumented heliports and airfields must be distributed to aviators. The ATS LO shall ensure that TERPS and any other critical information are included in the ACO as a complement to the ATO.

b. The platoon sergeant or designated ATC chief/ATC facility chief will develop T/SIPs and apply the TERPS in TM 95-226 to obstacle clearance criteria. He also is responsible for preparing TAPS messages and distributing them to the ATS battalion TOC. The messages must be prepared accurately and sent by the most expeditious means. Some information in the TAPS message may be classified and shall be transmitted and handled as such. A copy of each message shall be forwarded to the ATS LO of the airspace management element to be further disseminated to participating aviation units.

c. DA Form 3479-8-R shall be completed as explained below. A blank copy of this reproducible form is at the back of this manual.

- (1) **Line 1.** Enter the airfield coordinates.
- (2) **Line 2.** Self-explanatory.
- (3) **Line 3.** Enter the SOI version or item number.
- (4) **Line 4.** Self-explanatory.
- (5) **Line 5.** Enter the final approach course to the NDB.
- (6) **Line 6.** Self-explanatory.
- (7) **Line 7.** See TM 95-226.
- (8) **Lines 7A and 7B.** Self-explanatory.
- (9) **Lines 8 and 9.** See TM 95-226.
- (10) **Line 10.** Enter the height or MDA above the landing area (visibility requirement).
- (11) **Line 11.** Enter the geographic location of the landing area; for example, north or southwest.
- (12) **Line 12.** Enter the landing area distance from the NDB in feet. (If the distance is off the airport, use miles and fractions of miles.)
- (13) **Line 13.** Enter the SOI version or item number.
- (14) **Line 14.** Self-explanatory.
- (15) **Line 15.** Enter the final approach no-wind heading.
- (16) **Line 16.** Self-explanatory.

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(17) Line 17. Enter the decision height above TDZE (visibility requirement).

(18) Line 18. Enter the type of airport lighting.

(19) Line 19. Enter the missed approach point (as needed). This line may be used--

- To prescribe factors for standard NDB approaches.
- To report the status of flight checks.
- To issue special warnings such as obstructions in the airport area.

(20) Line 20. Self-explanatory.