



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ORDER
8260.15E

Effective Date:
02/02/07

SUBJ: UNITED STATES ARMY TERMINAL INSTRUMENT PROCEDURES SERVICE

1. PURPOSE. This order contains criteria and guidance regarding terminal instrument procedures service provided to the United States (U.S.) Army, hereinafter referred to as Army, by the Federal Aviation Administration (FAA).

2. DISTRIBUTION. This order is distributed in Washington Headquarters to the division level in the Air Traffic, Airway Facilities, and Flight Standards Services; to the group level of the Air Traffic Organization (Safety; System Operations; and Technical Operations Services); to the National Flight Procedures Group (NFPG), AJW-32; the Flight Inspection Operations Group (FIOG), AJW-33; to the National Aeronautical Charting Group (NACG), AJW-35; to the Regulatory Standards Division at the Mike Monroney Aeronautical Center, AMA-200; to the U.S. NOTAM Office (USNOF), AJR-11; to the Notices to Airmen (NOTAMs) Programs Group, AJR-46; to the National Flight Data Center (NFDC), AJR-321; to the branch level in the Flight Standards, Airway Facilities, and Air Traffic Divisions in the regions, and the Headquarters, U.S. Army Aeronautical Services Agency (HQ, USAASA). This information is also available on the FAA's Web site at "<http://fsims.avr.faa.gov/fsims/fsims.nsf>."

3. CANCELLATION. Order 8260.15D, U.S. Army Terminal Instrument Procedures Service, dated August 5, 1998, is canceled.

4. EFFECTIVE DATE. The effective date of this order is February 2, 2007.

5. BACKGROUND. Under National Agreement 127 (NAT-127), the FAA provides worldwide terminal instrument procedures service for the Army. This service includes original procedure development and procedure amendments as necessary (including procedures for contingency/exercise operations), facility and procedure flight inspection service, site evaluation of proposed navigation aids (NAVAIDs), and procedure processing and publication. The development, maintenance, flight inspection, and handling policies of the Army and civilian procedures are similar, except as noted in this order. Charting is accomplished by the Army through the National Geospatial-Intelligence Agency (NGA), St. Louis, Missouri.

a. FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS), contains the basic criteria for designing instrument approach procedures. Other 8260-series orders provide specific criteria for approaches using navigation systems not yet incorporated into Order 8260.3. FAA Order 8260.19, Flight Procedures and Airspace, provides guidance for procedural development, processing, and implementation. These directives must be used except as stated in this order and when the Army and FAA agree on other written instructions. Foreign terminal instrument procedures will be processed in accordance with paragraph 18 of this order.

Distribution: A-W(AT/FS)-2; AJW-32 (100 cys); AJW-33 (10 cys); AJW-35 (15 cys);
AMA-200 (12 cys); AJR-321 (5 cys); AJR-11 (5 cys); AJR-46 (5 cys);
A-X(FS/AF/AT)-3; HQ USAASA

Initiated By: AFS-420

b. FAA/Army coordination on matters regarding instrument procedures service is directly between NFPG and HQ, USAASA or USAASD-E. Coordination on matters regarding flight inspection services must be in accordance with NAT-127. Questions regarding policy will be referred to the Flight Procedure Standards Branch, AFS-420, for resolution.

6. EXPLANATION OF CHANGES.

- a. Paragraph 2.** Functional area distribution codes and responsibilities are updated to reflect organizational changes.
- b. Paragraph 7c.** Army Special Procedures added and defined.
- c. Paragraph 7e.** Department of the Army Representative (DAR) to the FAA revised to align with the Air Traffic Organization (ATO) Service Areas.
- d. Paragraph 7g.** Digital Aeronautical Flight Information Files (DAFIF) added and defined.
- e. Paragraph 7h.** Digital Terrain Elevation Data (DTED) added and defined.
- f. Paragraph 7i.** Digital Vertical Obstruction Files (DVOF) added and defined.
- g. Paragraph 7j.** Expanded Service Volume (ESV) added and defined.
- h. Paragraph 7n.** Joint-Use Airport added and defined.
- i. Paragraphs 7o, 7p, and 7q.** Military NOTAM definitions expanded and defined by series.
- j. Paragraph 10.** Waiver responsibilities expanded and clarified. Note added to clarify waiver procedures for procedures processed under Title 14 of the Code of Federal Regulations (14 CFR Part 97).
- k. Paragraph 11.** Airspace coordination actions changed to the DAR vice Air Traffic Regional Office.
- l. Paragraph 13.** Minimum vectoring altitude chart (MVAC) requirement revised to specify annual submission of two original maps and associated forms.
- m. Paragraph 14.** Submission month changed to September to agree with NAT-127.
- n. Paragraph 18a(1).** Directs the Army to provide information in appendix 1 when requesting procedure development.
- o. Paragraph 18a(1)(a)5.** Requires HQ, USAASA to provide the NFPG a current listing of Army airfields/heliports classified as "joint-use."
- p. Paragraph 18a(1)(a)8.** Requires HQ, USAASA to provide the NFPG a signed copy of procedure packages prior to publication.
- q. Paragraph 18a(1)(b)5.** Requires USAASD-E to provide the NFPG a signed copy of procedure packages prior to publication.

r. Paragraph 18a(3). Requires the Flight Inspection Operations Group (FIOG) to provide HQ, USAASA the Flight Inspection Daily Flight Log (DFL) and or Flight Inspection Procedure Control (PC) Sheet upon completion of a satisfactory flight inspection.

s. Paragraph 18b. Adds AFS-420 as a point of contact for policy/criteria clarification.

t. Paragraph 18b(2). Adds requirement for HQ, USAASA approval for copter precision approach radar (PAR) procedures to less than 200 ft height above touchdown/height above landing area elevation (HAT/HAL).

u. Paragraph 18b(3). Adds reference to Army Regulation 95-1.

v. Paragraph 18b(6). Specifies the departure obstacle clearance surface (OCS) originates at departure end of runway (DER) at DER elevation. Adds requirement to annotate DER crossing height when OCS origin is raised. Clarifies documentation requirements.

w. Paragraph 18b(7). Requires development of alternate missed approach procedures for area navigation (global positioning system) RNAV (GPS) procedures when requested.

x. Paragraph 18b(8). Specifies the maximum descent gradient for Army COPTER procedures without waiver is limited to 4.5 degrees.

y. Paragraph 18b(9). Specifies the maximum climb gradient for missed approach (MA) and departure procedures (DP) without waiver is limited to 800 ft/nautical mile (NM).

z. Paragraph 18b(10). Adds 90 knots indicated airspeed (KIAS) note requirement.

aa. Paragraph 18c. Adds policy and criteria for Special Army Procedures.

bb. Paragraph 18c(5). Adds policy for Army Emergency Use Procedures and requirement for USAASA to provide written non-standard criteria for these procedures when necessary.

cc. Paragraph 18d(2)(b). Requires requests for standard instrument departures to be processed through HQ, USAASA.

dd. Paragraph 18d(2)(c). Requires HQ, USAASA/USAASD-E to provide a narrative description and sketch of requested standard instrument departures (SIDs).

ee. Paragraph 18d(2)(d). Requires Army to provide appendix 1 data to the Flight Inspection Operations Data Branch and specifies use of FAA Form 8260-7, Special Instrument Approach Procedure, to document procedures to support contingency/exercise operations.

ff. Paragraph 18d(3)(b)5. Adds requirement for English translation of foreign terminal instrument procedure (FTIP).

gg. Paragraph 18d(3)(d). Adds requirement for HQ, USAASA/USAASD-E to forward FTIP amendments to NGA for publication or the NFPG for review.

hh. Paragraph 18e. NOTAM procedures updated.

ii. **Paragraph 18e(4).** Procedures added for charting discrepancy NOTAMs and table 1 added for clarification.

jj. **Appendix 1.** Editorial updates made and assigned magnetic variation requirement added.

7. DEFINITIONS. As used in this Order, *shall* or *must* mean compliance is mandatory. All reference to other Orders applies to the current editions.

a. **Army Installation.** A military location under the jurisdiction of the Army, the Army National Guard, or the Army Reserve (including an airfield, heliport, strip, or other landing areas).

b. **Army Procedures.** Instrument flight procedures developed for the U.S. military at locations in the U.S. and its territories, or at overseas Army installations.

c. **Army Special Procedures.** Instrument flight procedures developed for and annotated "FOR ARMY USE ONLY."

d. **Contingency/Exercise Operations.** Instrument procedures required for troop training/deployments.

e. **Department of the Army Representative (DAR) to the FAA.** Army representatives are located in the FAA's three Air Traffic Organization (ATO) Service Areas for coordinating all matters with the FAA on Army matters. The DAR for the Eastern Service Area also serves the Caribbean where FAA has jurisdiction. The DAR for the Western Service Area serves Hawaii and Pacific areas where FAA has jurisdiction. HQ, USAASA serves other overseas areas.

f. **Digital Aeronautical Flight Information Files (DAFIF).** An unclassified flight information database incorporating U.S. Military-selected aeronautical data similar to that published in the Department of Defense (DOD) Flight Information Publications (FLIP).

g. **Digital Terrain Elevation Data (DTED).** An evenly spaced grid of points on the Earth's surface illustrating three-dimensional coordinates, latitude, longitude and elevation. Data density depends on the level produced. DTED at level 1 post spacing is three arc seconds (approximately 100 meters) and DTED at level 2 post spacing is one arc second (approximately 30 meters).

h. **Digital Vertical Obstruction Files (DVOF).** A file produced by NGA consisting of man-made point features on the earth's surface which could pose a potential hazard to flight.

i. **Expanded Service Volume (ESV).** Certification that a navigational aid has frequency protection and operational capability beyond the facility's normal operating limitations.

j. **Flight Data Center (FDC) Notice to Airmen (NOTAM).** A NOTAM issued by the U.S. NOTAM Office (USNOF) with input from the NFDC and the NFPG. It is primarily used to disseminate safety of flight information relating to regulatory material, and to provide system-wide dissemination for all aeronautical information, instrument flight procedures data, and other time-critical aviation information.

k. Flight Procedures Field Office (FPFO). An office within the NFBG that serves as the Air Traffic Organization Service Area focal point for matters relating to instrument procedures.

l. Foreign Terminal Instrument Procedures (FTIP). Instrument approach and departure procedures developed and published by foreign countries.

m. Headquarters, U.S. Army Aeronautical Services Agency (HQ, USAASA). Organization tasked by the U.S. Army with primary responsibility for matters concerning terminal instrument procedures.

n. Joint-use Airport. An Army installation where written agreement between the Army and a local government agency authorizes the use of the military airport as a public airport.

o. Military Flight Safety NOTAM (M series). M-NOTAMs are related to aeronautical information that could affect a pilot's decision to make a flight; e.g., airport or runway closures, changes in navigational aid (NAVAID) status, radar service availability, and other information essential to enroute or terminal operations.

p. Military Procedural NOTAM (V series). V-NOTAMs are used by TERPS procedure specialists to promulgate information pertaining to a location's published instrument flight procedures.

q. Military Digital Aeronautical Flight Information File (DAFIF)/NGA NOTAM (W series). W NOTAMs are used to provide information relating to changes/corrections to DOD flight information products.

r. National Aeronautical Charting Group (NACG). The FAA office responsible for publishing civil U.S. government aeronautical charts and associated databases.

s. National Flight Data Center (NFDC). The FAA office responsible for collecting, validating, and disseminating aeronautical data.

t. National Flight Procedures Group (NFBG). The FAA office responsible for developing/maintaining instrument flight procedures.

u. National Geospatial-Intelligence Agency (NGA). Charting agency responsible for military cartographic matters.

v. Precise Positioning Service (PPS). A highly accurate military positioning, velocity, and timing service that is available on a continuous worldwide basis to users authorized by the U.S.

w. Public Use Procedures. Instrument approach departure procedures developed for use at civil airports and Army installations designated as joint-use in the U.S. and its territories.

x. Title 14 of the Code of Federal Regulations (14 CFR). A codification of the general and permanent rules published in the Federal Register for Aeronautics and Space, Parts 60 through 139.

y. U.S. Army Aeronautical Services Detachment, Europe (USAASD-E). Tasked by HQ, USAASA with primary responsibility concerning Terminal Instrument Procedures (TERPS) in Europe, Eastern Europe, Africa, and the Middle East.

8. FORMS. In addition to those forms listed in Order 8260.19, the following forms must be used for Army procedures:

Number	Title
FAA Form 7210-9	Minimum IFR Altitude/Minimum Vectoring Altitude Obstruction Documentation
Local Form 8260-20	Continuation Form
Local Form 8260-21A	Department Procedures/Takeoff Minimums
Local Form 8260-21B	U.S. Army Standard Instrument Departure (SID)
Local Form 8260-21C	U.S. Army Departure (Data Record)
FAA Form 8260-11/12/13	Precision/Nonprecision Forms.

9. FEASIBILITY STUDIES. The NFPG must participate in discussions/studies as they relate to any phase of the TERPS process. These may include but are not limited to:

a. Instrument procedure development methodology.

b. Location/use of navigational aids.

c. Procedure conflict resolution.

d. Help in determining whether operational weather minimums and minimum flight altitudes are accurate.

e. Requirements or modification of U.S. airspace.

f. Obstruction evaluation for overseas locations where instrument procedures are developed by the NFPG.

g. Support for technical engineering requirements, etc.

10. WAIVERS. HQ, USAASA is the approving authority for all waivers of criteria for procedures documented on FAA Forms 8260-11/12/13/21A/B/C. The NFPG completes FAA Form 8260-1, Flight Procedures Standards Waiver, under Order 8260.19. Since survey data may be marginal or non-existent, waivers to criteria and equivalent levels of safety are the responsibility of the Army. A letter of non-compliance with criteria must be submitted for HQ, USAASA approval when required for Army Special Use Procedures. When processing the form for HQ, USAASA approval, the following exceptions apply:

a. Block 6: Leave blank

b. Block 8: Substitute "USAASD-E Action" as appropriate.

c. Block 10: Substitute "HQ, USAASA action"

NOTE: *Waivers for procedures processed under Part 97 at joint use locations must follow the procedures in Order 8260.19, chapter 2, section 12.*

11. AIRSPACE. Airspace actions within the U.S. and its territories will be processed by the NFPG through the appropriate DAR. An advance copy will be forwarded to HQ, USAASA/ USAASD-E for airspace coordination within their area of responsibility with the involved foreign countries.

12. ENVIRONMENTAL STUDIES. HQ, USAASA is responsible for all actions associated with environmental issues at Army installations. The NFPG is responsible for all actions associated with environmental issues at military/civil joint-use and civilian locations.

13. MINIMUM VECTORING ALTITUDE CHARTS (MVAC). See Order 7210.3, Facility Operation and Administration, and Order 8260.19. Army air traffic control (ATC) facilities must annually prepare and forward two signed original copies of FAA Form 7210-9, as well as two copies of the MVAC drawn on current maps through the appropriate DAR to the NFPG, DOD Flight Procedures Team, AJW-328, for review/approval. For Army installations outside U.S. territory, MVACs must be forwarded to HQ, USAASA or USAASD-E respective of the areas of responsibility.

14. PRIORITIES. HQ, USAASA shall determine the priority and timeframes of procedure development/amendment/evaluation in their respective areas of responsibilities. HQ, USAASA will provide the NFPG a list of projected annual procedures and FTIP requirements by **September 1** for the following fiscal year.

15. BIENNIAL REVIEW.

a. HQ, USAASA and USAASD-E must review all Army procedures under Order 8260.19 to verify obstacle, airfield, air navigation facility (NAVAID), etc.; data have not changed since the last review, and verify the procedures are still required. HQ, USAASA or USAASD-E is responsible for the biennial review of FTIP used by the Army. Required changes must be coordinated with the NFPG.

b. The NFPG must review all FAA developed Army procedures under Order 8260.19. FTIP must be reviewed only at the request of the Army.

16. AERONAUTICAL INFORMATION PUBLICATION (AIP). The NFPG will not maintain AIP libraries for foreign countries. AIP information will be provided by the Army through separate agreement with NGA.

17. OBSTACLE EVALUATION (OE). OE studies at CONUS locations are conducted by the FPFO/DAR. OE requests from foreign countries are forwarded to the NFPG through HQ, USAASA or USAASD-E.

18. PROCEDURE DEVELOPMENT/EVALUATION, PROCESSING, AND COORDINATION.

a. Responsibilities.

(1) The Army must provide the NFPG the data required for design of instrument flight procedures as specified in appendix 1.

(a) HQ, USAASA is the NFPG's primary point of contact for all Army instrument flight procedures. Responsibilities include but are not limited to:

1. Requesting the NFPG to develop an original, amendment, or cancellation of Army procedures and conducting evaluations of FTIP.
2. Providing worldwide Digital Terrain Elevation Data (DTED), Digital Vertical Obstruction Files (DVOF), and Digital Aeronautical Flight Information Files (DAFIF) for use in DOD instrument approach procedures development and review. HQ, USAASA will provide NFPG accuracy statements for use with these data, when not otherwise specified in Order 8260.19.
3. Forwarding procedures for publication as noted below.
4. Determining acceptability of approach lighting systems.
5. Ensuring the NFPG and the NFDC is provided a current listing of Army airfields/heliports that are classified as joint-use. Update as required.
6. Providing AIP information relating to FTIP publication, amendments, and NOTAMs as listed in paragraph 18c(3).
7. Providing NOTAM information as listed in paragraph 18d.
8. Forwarding signed procedure packages to the NFPG prior to publication.

(b) USAASD-E is the NFPG's primary point-of-contact for Army procedures within Europe, Africa, Middle East, and Eastern Europe. Responsibilities include but are not limited to:

1. Requesting the NFPG to develop an original, amendment, or cancellation of USA procedures, and conducting evaluations of FTIP.
2. Forwarding procedures to NGA for publication as noted below.
3. Providing AIP information relating to FTIP publication, amendments, and NOTAMs as listed in paragraph 18c(3).
4. Providing NOTAM information as listed in paragraph 18d
5. Forwarding signed procedure packages to the NFPG prior to publication.

(2) The NFPG is the FAA office responsible for procedure development in support of Army operations. Responsibilities include but are not limited to:

(a) Advising the Army when data is insufficient for procedure development/ review.

(b) Providing an original, amended, or canceled procedure and coordinating the request with other concerned FAA offices; e.g., ATC facilities, FPFOs, etc.

(c) **Using FAA 8260-series forms** as specified in Order 8260.19 and this order.

(d) **Coordinating flight inspection** requests under FAA directives.

(e) **Initiating NOTAM action** under paragraph 18e.

(f) **Forwarding completed procedure packages** to HQ, USAASA or USAASD-E for processing and publication.

(g) **Conducting evaluations of FTIP** when requested by HQ, USAASA/ USAASD-E based on their requested priority and time requirements.

(3) **The Flight Inspection Operations Group, AJW-33**, is responsible for:

(a) **Conducting flight inspection** of U. S. Army procedures and facilities as required by NAT-127 and FAA Order 8200.1, United States Standard Flight Inspection Manual.

(b) **Providing HQ, USAASA with the Flight Inspection Daily Flight Log (DFL)** and or Flight Inspection Procedure Control (PC) Sheet upon completion of a satisfactory flight inspection.

b. Procedures: The following rules apply to all Army procedures. Issues arising outside these rules will be coordinated on a case-by-case basis between the NFPG and HQ, USAASA/USAASD-E. Contact AFS-420 on matters relating to policy and criteria clarification/interpretation.

(1) **Develop procedures for aircraft categories** based on minimum runway length as follows:

Category	Length
E	As coordinated with HQ, USAASA/USAASD-E
D	4,000 ft or greater
A, B, & C	less than 4,000 ft
COPTER	Any Length

(2) **Restrict the minimum height above landing (HAL)/height above touchdown (HAT)** of COPTER precision approach radar (PAR) procedures to 200 ft. HAT/HAL values less than 200 ft require HQ, USAASA approval.

(3) **U. S. Army procedures** standard alternate minimums do not apply under Army Regulation (AR) 95-1. Leave the alternate minimums block blank. Check the alternate minimums block NA for RADAR and RNAV (GPS) procedures and for procedures annotated "RADAR REQUIRED."

(4) **On PAR procedures**, list in the "Additional Flight Data" block, the glide slope angle, threshold crossing height (TCH)/helipoint crossing height (HCH), and runway point of intercept (RPI).

(5) **Do not create fixes** requiring the use of two (2) nondirectional beacons (NDBs) for terminal instrument procedures.

(6) Evaluate the 40:1 departure obstacle clearance surface (OCS) originating at departure end of runway (DER) at DER elevation. When the OCS origin height is raised under TERPS Volume 4, paragraph 1.3 to clear obstructions, annotate the DER crossing height up to a maximum of 35 ft as follows:

Form 8260-21A: Add a statement after instructions in Block (2) Departure Procedures: **"Cross departure end of runway at or above XX ft."** Also add a statement after the obstacle that caused the increase in Block (4) Controlling Obstacles: **"RWY 7: 2357 MSL TOWERS 631943.00/1424831.00 - OIS XX ft ABOVE DER ELEVATION."**

Form 8260-21B: Add a statement after instructions in Block (3) Procedural Data Notes: **"Cross departure end of runway at or above XX ft."** Also add a statement after the obstacle that caused the increase in Block (5) Controlling Obstacles: **"RWY 7: 2357 MSL TOWERS 631943.00/1424831.00 - OIS XX ft ABOVE DER ELEVATION."**

(7) Develop alternate missed approach for RNAV (GPS) procedures when requested.

(8) The maximum descent gradient for Army COPTER procedures without waiver is limited to 4.5 degrees.

(9) The maximum climb gradient for missed approach and departure procedures without waiver is limited to 800 ft/NM.

(10) Army copter approach procedures require the following chart note: **"LIMIT ALL SEGMENTS TO 90 KIAS."**

c. Army Special Procedures. In addition to the above, the following additional rules apply to Special Army procedures:

(1) Limit turns in initial segments and feeder routes to no greater than 60 degrees when designing Army Special COPTER RNAV (GPS) procedures.

(2) When applying TERPS paragraph 289 for Army Special COPTER approaches apply a 3.5:1 surface vice 7:1.

(3) When analyzing the visual portion of the final approach segment for Army Special COPTER procedures (TERPS paragraph 251), apply 20:1 vice 34:1 and 10:1 vice 20:1.

(4) Army Special COPTER RNAV (GPS) procedures require the following chart notes: **FOR ARMY USE ONLY; GPS PRECISE POSITIONING SERVICE (PPS) REQUIRED; LIMIT ALL SEGMENTS TO 90 KIAS; SPECIAL AIRCREW CERTIFICATION REQUIRED.**

(5) When Army Special procedures that are designated for emergency use only require development using non-standard criteria, USAASA is responsible for providing non-standard criteria, in writing, to the NFPG. These procedures must, in addition to the requirements of subparagraph (4) above be annotated **"FOR EMERGENCY USE ONLY."**

d. Processing.

(1) Procedures at Army owned joint-use facilities. The NFPG will document these procedures on FAA form(s) 8260-3/4/5/15 and follow the normal development and publication process used for civil procedures. An information copy will be forwarded to HQ, USAASA.

(2) Army Procedures. The NFPG will document these procedures on forms 8260-11/12/13/20/21a/b/c.

(a) The NFPG will develop/amend procedures and forward forms to HQ, USAASA/USAASD-E for approval.

(b) Requests for standard instrument departures (SIDs) will be processed through HQ, USAASA/USAASD-E.

(c) HQ, USAASA/USAASD-E must forward requests for SIDs at Army installations to the NFPG providing a narrative description and sketch of the proposed routing.

(d) Contingency/Exercise Operations. HQ, USAASA/USAASD-E must provide appendix 1 data requirements to the Flight Inspection Central Ops Team, AJW-335. Emergency, contingency, and exercise procedures are intended for loose-leaf publication and documented on Form 8260-7. HQ, USAASA is responsible for coordinating charting requirements.

(3) Foreign Terminal Instrument Procedures (FTIP).

(a) The NFPG will evaluate FTIP when requested by HQ, USAASA/USAASD-E. The NFPG's evaluation of FTIP will be consistent with the amount of data provided for the evaluation. The evaluation report will list deviations to criteria of Order 8260.3, to include the appropriate paragraph(s). This evaluation will be completed within the timeframe established by the requester. This evaluation must be provided in writing to HQ, USAASA/USAASD-E using the format noted in appendix 2.

(b) HQ, USAASA/USAASD-E will provide NFPG the following airport/aerodrome information (if available) for all requests for evaluations of FTIP.

1. Aerodrome chart/sketch/ALP/engineer's drawings to include survey data.
2. NAVAID data sheets as necessary.
3. Aerodrome data sheet.
4. Obstruction data in vicinity of the airport.
5. Translation of FTIP data into English.
6. DTED, DVOF, and DAFIF data as noted in paragraph 18a(1)(a)2.

(c) HQ, USAASA/USAASD-E must be responsible for the publication process of Foreign Terminal Instrument Procedures.

(d) HQ, USAASA/USAASD-E will ensure that FTIP amendments/cancellations and NOTAMs issued by the foreign country are forwarded to NGA for publication or to the NFPG, DOD Flight Procedures Team, AJW-328, for review.

e. NOTAM Procedures.

(1) Public-Use Procedures. Procedures that have been processed and published under the rulemaking process (Part 97) will use the FDC NOTAM process as noted in Order 8260.19. The NFPG will provide HQ, USAASA an information copy of all Army public-use procedural FDC NOTAMs - see paragraph 18a(1)(a)5.

(2) Army Procedures. These procedures will use V-Series NOTAMs. HQ, USAASA or USAASD-E will be responsible for initiating, tracking, and canceling these NOTAMs. When HQ, USAASA or USAASD-E is not available, the NFPG may initiate these NOTAMs with next day notification to HQ, USAASA or USAASD-E.

(3) Foreign Terminal Instrument Procedures (FTIP): V-Series NOTAMs will be used for Army published FTIP. HQ, USAASA or USAASD-E will be responsible for initiating, tracking, and canceling these NOTAMs. The NFPG may initiate these NOTAMs with next day notification to HQ, USAASA or USAASD-E. FTIP NOTAMs that require procedural changes may be forwarded to NGA.

(4) NOTAMs for U. S. Government Charting Discrepancies. Use table 1 for appropriate action when procedures are charted incorrectly and the supporting data (8260-series forms) is correct.

Table 1. NOTAMs for U.S. Government Charting Procedures

Situations	Recommended Actions
<p>1. <u>Military</u> procedures published in the DOD Flight Information Publication (Terminal) and the FAA Terminal Procedures Publication (TPP). The DOD procedure is charted correctly; however, the FAA chart is wrong.</p> <p>This situation should only occur when NACG hand-types DOD data (Radar Minimums and Takeoff Minimums and Obstacle Departure Procedures).</p>	<p>1. FAA will send a FDC NOTAM to correct U.S. Government charts. FAA point of contact (POC) is NACG, Requirements and Technology Team (R&T) who will coordinate with the NFDC Cartographic Standards Branch to send, track, and cancel the NOTAM. Since all FDC NOTAMs crossover to the military NOTAM system, no DOD NOTAM action is required.</p> <p><u>NOTE:</u> FDC NOTAM responsibility will transfer to NACG, R&T in Order 8260.19D.</p>
<p>2. <u>Civil</u> procedures published in both the DOD Flight Information Publication (Terminal) and FAA TPP. The procedure is charted incorrectly in both products.</p> <p>This situation occurs from an incorrectly charted FAA graphic.</p>	<p>2. FAA will send a FDC NOTAM as noted above to correct the procedure graphic. Since all FDC NOTAMs crossover to the military NOTAM system, and since the subject of the NOTAM is the procedure title, no DOD NOTAM action is required. Pilots should receive the information for the civil location during pre-flight briefing regardless of whose charts they are using.</p>

<p>3. Military procedures published in the DOD Flight Information Publication (Terminal) and the FAA TPP. The procedure is charted incorrectly in both products.</p> <p>This situation should only occur on military procedures at military or civil locations when the NGA graphic was developed incorrectly from the source.</p>	<p>3. If at a military airfield, the DOD will issue a V-series NOTAM against the procedure. No FAA action is required as pilots should receive the information for the military airfield during pre-flight briefings regardless of whose charts they are using.</p> <p>If a military instrument approach procedure (IAP) at a civil location that has been developed by the FAA, the DOD will issue a V-series NOTAM against the procedure. If the appropriate military office cannot be contacted, the NFPG will issue the V-series NOTAM through the USNOF.</p>
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19. INFORMATION UPDATE. Any deficiencies found, clarifications needed, or suggested improvements regarding the contents of this order should be noted on FAA Form 1320-19, Directive Feedback Information. For your convenience, this form is included at the end of this order. If an interpretation is needed immediately, you may call the originating office for guidance. However, you should also use FAA Form 1320-19 as a follow-up to the verbal conversation.

20. QUALITY CONTROL. To ensure quality control over the development, processing, and publication of Army instrument approach procedures, both the Army and FAA agree to work jointly to ensure optimum procedure service is provided. Deficiencies must be worked at the lowest managerial level. Unresolved problems or issues requiring policy changes/interpretation must be forwarded to AFS-420 for resolution.

Original Signed By
Roger Forshee

James J. Ballough
Director, Flight Standards Service

**APPENDIX 1. SURVEY DATA REQUIRED FOR DESIGN OF
INSTRUMENT APPROACH PROCEDURES**

*ALL DISTANCES (IN FEET) AND ELEVATIONS (IN FEET MSL) ARE IN
HUNDREDTHS OF A FOOT; ALL LAT/LONG ARE IN HUNDREDTHS OF A
SECOND AND ASSUMED TO BE IN WGS-84/NAD-83.
DO NOT ROUND VALUES*

1. For All Runway/Airport/Helicopter Pad/Landing Zones:

a. Provide data contained in the obstruction chart (OC) survey and compilation report.

b. Airport magnetic variation and year.

c. Type of runway/pad/zone surface, condition, and coordinates if not already available.

d. Type of runway/pad/zone markings and condition.

e. Type of runway/pad/zone lights.

f. Visual glide slope indicator (VGSi) angle and TCH.

g. Type of approach lights and length. If the runway threshold is displaced, do the approach lights go to the displaced runway threshold?

h. Airport weather reporting. Identify airport weather source. Does the weather station operate 24 hours? Is weather on Service-A net? If not, then who will provide the weather and how is it reported to air traffic control facilities?

i. FAA Order 8260.3B, table 18A, wheel height group classification for runway/airport.

2. For Non-directional Beacon (NDB), Very High Frequency Omnidirectional Range (VOR), and Tactical Air Navigation (TACAN) Facilities:

a. Provide data contained in OC survey compilation report Type of facility.

b. Facility identifier - International Civil Aviation Organization (ICAO).

c. Remote monitor location (RADAR Facility, Tower, Base Ops, Police Station, etc.).

d. Facility operating hours (Time in ZULU), if less than 24 hours, what are the operating hours?

e. Facility assigned magnetic variation and year.

3. For Precision Approach Radar (PAR).

- a. **Provide data contained in Precision Approach RADAR ground control approach (GCA) data.**
- b. **Desired glide slope angle.**

4. For Airport Surveillance Radar (ASR).

- a. **Provide data contained in OC survey compilation report.**
- b. **Assigned magnetic variation and year.**
- c. **Type of Radar.**

5. For Obstacles. Provide data contained in the OC survey compilation report.

6. General TERPS Information.

- a. **Category (CAT) A/B/C/D/E** and type of aircraft/helicopter to fly the procedure.
- b. **Type of procedure required.**
- c. **Circling authorization.** If yes, any circling area restrictions?
- d. **Suggested missed approach routes and altitudes.**

e. Minimum vectoring altitude chart (MVAC) requirements. Are you using another facility's MVAC for RADAR vectoring to final approach fix (FAF)/intermediate fix (IF)? Provide other facility's MVAC data for the area in which you will be RADAR vectoring.

This will be used to determine the FAF/IF altitudes for the airport surveillance radar (ASR), PAR, and other NAVAIDs procedures.

- f. **Suggested FAF altitude.**
- g. **Identify any special use airspace (SUA)** near the airport.
- h. **Suggested final approach courses (FAC).**
- i. **Airspace for the approach control facility** and other nearby ATC facilities.
- j. **Altimeter source for the approach.**

7. Any photographs of the airport (surface, air, or satellite); maps (scale 1:24,000 through 1:500,000); airport layout plans or civil engineering master tabs must also be provided if available.

8. If required information is not provided, the NFPG will determine the best procedure design based on the information provided.

**APPENDIX 2. FOREIGN TERMINAL INSTRUMENT
PROCEDURES (FTIP) EVALUATION**

The listed FTIP have been evaluated and are forwarded for review, processing, and publication.

1. FEEDER:

2. INITIAL:

3. INTERMEDIATE:

4. FINAL:

5. CIRCLING:

6. MISSED APPROACH:

7. HOLDING:

8. MINIMUM SAFE ALTITUDE (MSA):

9. PLAN VIEW:

10. PROFILE VIEW:

11. MINIMUMS:

12. OTHER COMMENTS:

Evaluated By: _____ Date: _____

Approved By: _____ Date: _____ (Army Use Only)