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Pages: 14
Distribution: F

AFI 11-230, 1 August 2001, is supplemented as follows

It applies to flying activities at all Air Force Materiel Command (AFMC) airfields where AFMC conducts or supports instrument flight. It also applies when AFMC has development, management, and maintenance responsibility for Terminal Instrument Procedures (TERPS). This supplement establishes guidance for HQ AFMC Terminal Instrument Procedure (TERPS) Cell Specialists to initiate actions essential to the fulfillment of TERPS program objectives. This supplement is not applicable to Air National Guard (ANG) or Air Force Reserve Command (AFRC) units or members. Send comments and suggested improvements to this supplement on AF Form 847, **Recommendation for Change of Publication**, through channels, to HQ AFMC/DOB, Area A, Bldg 262, Room S143, 4375 Chidlaw Road, Wright-Patterson AFB, OH 45433-5006. Forward field activity supplements to HQ AFMC/DOB for approval before publication.

1.3.3.2. AFMC/DOB shall import DVOF data into the applicable location file and forward the complete location file to the unit.

1.3.5. (Added) **TERPS Cell.**

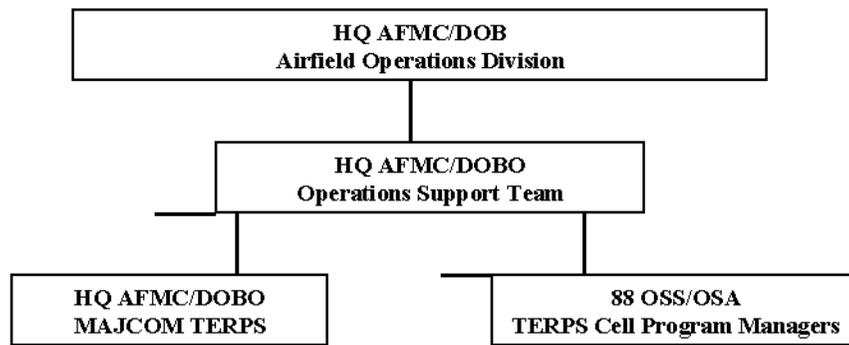
1.3.5.1. (Added) **General Overview.** HQ AFMC TERPS Cell Program Managers develop, maintain, revise and/or delete instrument procedures for all command programs managed by the cell. HQ AFMC TERPS Cell Program Managers are assigned to the HQ AFMC/DOB staff under the direction of the Operations Support Division. The Cell Program Managers are administratively attached to the 88 Operations Support Squadron; Wright-Patterson AFB, OH by a Memorandum of Understanding (MOU) dated 2 July 1999.

1.3.5.2. (Added) **Cell Operations.** The TERPS Cell operates independently from the MAJCOM TERPS office. TERPS Cell Program Managers perform unit level TERPS program management and may request technical and procedural development assistance from the MAJCOM TERPS office IAW AFI 11-230. AFMC/DOB may assume the responsibility for unit TERPS development for AFMC units. In these cases

the following will be adhered to when managing TERPS programs and developing instrument procedures within the TERPS Cell:

- 1.3.5.2.1. (Added) Assume unit TERPS responsibilities as outlined in paragraph 1.5.
- 1.3.5.2.2. (Added) Advise the AOF/CC of any changes or proposed changes to instrument procedures or other TERPS related products.
- 1.3.5.2.3. (Added) Promptly notify the AOF/CC of any item requiring NOTAM action.
- 1.3.5.2.4. (Added) Evaluates for TERPS effect of any FAA Form 7460-1, *FAA Notices of Proposed Construction or Alteration*. Provide findings and recommendations to the AOF/CC to assist them in responding to the AFREP.
- 1.3.5.2.5. (Added) Attend at least two Airfield Operations Board (AOB) meetings per year. Additional meetings may be attended when deemed necessary.

Figure 1.1. (Added) Organizational Structure



1.4.5. Eglin AFB and Hurlburt AFB TERPS specialists will provide AFMC/DOB with a copy of their base CE Map (to include contour lines) in MicroStation format, if available.

1.5.3.1. Advise HQ AFMC/DOB within 24 hours via e-mail or faxed letter of any Notice to Airmen (NOTAM) issued that revises or cancels any published instrument procedure. E-mail and telephone numbers are <mailto:AFMC.TERPS@wpafb.af.mil>, FAX DSN 674-1064, commercial (937) 674-1064. Send a courtesy copy of the e-mail directly to the appropriate HQ AFMC/DOB point of contact (POC).

1.5.3.2. Unit TERPS personnel will notify HQ AFMC/DOB whenever the location/obstacle database has been modified to ensure date of unit LOC/NAV data file match MAJCOM's.

1.5.5.1.3. Procedures Listing (AFFSA annual spreadsheet required). A copy can be obtained from HQ AFMC/DOB.

1.5.5.1.5. Include HQ AFMC/DOB guidance such as policy letters or interim changes.

1.5.5.1.11. (Added) Networking Information. AFMC TERPS specialist e-mail addresses and telephone numbers.

1.5.5.1.12. (Added) Current Procedural Data. In this section, compile the following source documentation (originals, copies, or a statement identifying their location):

- 1.5.5.1.12.1. (Added) AF Form 3628, **TERPS Automation Data Summary**.
- 1.5.5.1.12.2. (Added) AF Form 3629, **Obstruction Data**.
- 1.5.5.1.12.3. (Added) Current flight inspection reports for base ATCALs.
- 1.5.5.1.12.4. (Added) Diverse Departure Data (computer data generated by AFTERPS).
- 1.5.5.1.12.5. (Added) Diverse Vector Area (DVA) documentation.
- 1.5.5.1.12.6. (Added) FAA Form 8240-22, **Facility Data** for all base NAVAIDS.
- 1.5.5.1.12.7. (Added) Source Documentation (airfield surveys, ATCALs reports, vegetation growth information).
- 1.5.5.1.13. (Added) HQ AFMC TERPS Evaluation Checklists (hard copy or electronic copies are acceptable).
- 1.5.5.2. Notify HQ AFMC/DOB when required maps are not available and/or suitable substitutes are used.
 - 1.5.5.2.1. (Added) Each unit will supply a copy of updated CE Maps to HQ AFMC/DOB annually. This may be either on paper or Compact Disk (CD) with read/write CD being the preferred method. If provided on CD, ensure the CE Map is saved in MicroStation format.
- 1.5.6. Submit a copy of all supporting documents used to complete the review, including any applicable FAA spreadsheets, to HQ AFMC/DOB for review and processing.
 - 1.5.6.1. (Added) TERPS annual review shall consist of the following:
 - 1.5.6.1.1. (Added) Using automation, rebuild each instrument approach procedure. Verify controlling obstacles, segment lengths, intercept angles, and descent gradients, etc. Be particularly alert for any warning messages generated by AFTERPS. Highlight and annotate all warning messages. Show manual computations and corrective actions.
 - 1.5.6.2. (Added) Review the following items (as applicable) for all procedure packages, ensuring each is current, and has all required signatures (if necessary):
 - 1.5.6.2.1. (Added) Plots (acetate overlays) of each segment.
 - 1.5.6.2.2. (Added) FAA Form 6050-4, **Expanded Service Volume Request**.
 - 1.5.6.2.3. (Added) AF Form 813, **Request for Environmental Impact Analysis**.
 - 1.5.6.2.4. (Added) FAA Form 8260-2, **Radio Fix and Holding Data Record Request**.
 - 1.5.6.2.5. (Added) AF Form 3980, **Instrument Procedure Waiver** for all non-standard procedures.
 - 1.5.7. Facility Data Sheets will be processed through the MAJCOM TERPS office. Maintain a separate Facility Data Sheet file in the file plan with all source documentation i.e. surveys, documentation showing assigned MAGVAR and Epoch year for field and NAVAIDS, computation/spreadsheets etc. Refer to FAAO 8260.36 for Facility Data Sheet completion. Only use information derived from ATCALs baseline surveys, NIMA validated airfield surveys, flight inspection reports and other FAA Spec 405 survey data. Survey data and completed FAA National Flight Procedures Office, AVN 210 ILS-83 Excel spreadsheet will accompany ILS Facility Data Sheets when forwarded to the MAJCOM office. Rapidly Dropping Terrain (RDT) criteria will be applied unless glideslope installation siting data indicates otherwise. Coordinate and verify all compiled data with the unit TERPS Liaison and unit NAVAIDS maintenance personnel.

Note: Verify approved Facility Data Sheet information against DAFIF for accuracy and report discrepancies per paragraph 1.3.2.

1.5.8. Process through the MAJCOM TERPS office. Additionally, attach a graphical depiction of how the NAVAID will be used. Refer to FAAO 8260.19 for form completion. Retain a copy of submitted form until completed and signed form is received.

1.5.12.1. (Added) Advise HQ AFMC/DOB within 24 hours of any NOTAM issued that revises, cancels, or affects any published TERPS procedure. Time permitting, this coordination should be accomplished prior to NOTAM issuance.

1.5.15. (Added) At locations where AFMC/DOB has assumed the unit TERPS function, the AOF/CC serves as the primary POC for TERPS Cell Program Managers. Unit responsibilities are:

1.5.15.1. (Added) AOF/CC assigns additional duty TERPS liaison as necessary and forwards appointment letter to AFMC/DOB. **Note:** The TERPS liaison does not need to be a qualified TERPS specialist or graduate of TERPS course E3AZR1C171.

1.5.15.2. (Added) Assist AFMC/DOB to coordinate new and revised procedures with appropriate agencies.

1.5.15.3. (Added) Assist AFMC/DOB in obtaining data from base agencies when required for TERPS development. Data required by AFMC/DOB may include items such as source data for NAVAIDS, survey data, building heights, vegetation information, etc.

1.5.15.4. (Added) Forward copies of FAA Form 7460-1, **FAA Notices of Proposed Construction or Alteration** to AFMC/DOB for review and analysis.

1.5.15.5. (Added) Ensures unit flying organization's concerns are forwarded to AFMC/DOB for resolution.

1.5.15.6. (Added) Attend AOB meetings.

1.6. (Added) **TERPS Program Managers Responsibilities** : TERPS Cell Program Managers are closely involved with the unit AOF/CC on issues concerning instrument procedures. Program Managers will:

1.6.1. (Added) Coordinate with AOF/CC and BCE to maintain and update master CE obstruction charts/maps (MOC)

1.6.2. (Added) Prepare and forward copies of approved automated (manual when applicable) instrument procedure packages for instrument approaches, departures, and Standard Terminal Arrival Routes, Diverse Departure computations, Minimum Vectoring Altitude Charts (MVAC), Minimum IFR Altitude Charts (MIFRAC) and Diverse Vector Areas (DVA) information to unit AOF/CC for inclusion into unit TERPS files.

1.6.3. (Added) Maintain a continuity folder IAW AFI 11-230. Additionally include as a minimum:

1.6.3.1. (Added) Unit Point of Contact Listing.

1.6.3.2. (Added) Status of TERPS Cell Program Manager's projects in progress.

1.6.3.3. (Added) Any Unit Operating Instructions, MOUs or regulations that affect instrument procedures at that airport.

1.6.4. (Added) Attend a minimum of two Airfield Operations Board (AOB) Meetings per year, normally every other quarter. Provide for a comprehensive briefing of proposed changes and upcoming issues that effect instrument procedures for inclusion in the AOB as necessary.

1.6.5. (Added) Ensure all required instrument procedure documents requiring signatures are forwarded to the AOF/CC for coordination.

1.6.6. (Added) Ensure the AOF/CC, civil engineering, airspace management and Unit TERPS Liaisons are advised of any changes or proposed changes to instrument procedures.

1.6.7. (Added) Advise AOF/CC and Unit TERPS Liaisons of any instrument procedure changes requiring NOTAM action.

1.6.8. (Added) Assist AOF/CC and Unit TERPS Liaisons in completion of the Annual Review of Instrument Procedures. Ensure Annual review is completed IAW AFI 11-230.

1.6.9. (Added) FAA Form 7460-1, **Ensure Notices of Proposed Construction or Alteration** received by the HQ AFMC TERPS Cell are evaluated against existing instrument procedures and forwarded to the unit AOF/CC, Airfield Management, Civil Engineering and Unit TERPS Liaisons for further evaluation of effects on VFR traffic as necessary. Provide the AOF/CC with any necessary data for objections and recommendations to the AFREP. The AOF/CC remains the focal point for FAA Form 7460-1 responses to the AFREP.

1.6.10. (Added) Check NOTAMS for accuracy on a daily basis.

2.1.3. All holding patterns must be documented on FAA Form 8260-2. Inform ATC facility management responsible for approach control services of all limitations by memorandum and include a copy of FAA Form 8260-2 as an attachment.

2.1.3.1. (Added) Facility managers shall be notified in writing (e-mail is satisfactory as long as documentation is maintained) of any and all holding pattern restrictions and historical documentation maintained showing they were advised.

2.2.3.1. (Added) A copy of the usage agreement will be maintained in the TERPS continuity folder and a copy sent to HQ AFMC/DOB for their records.

2.3.2. (Added) Process through MAJCOM TERPS office. Validate fix position by attaching IAPA 83 spreadsheet and attach a graphic of how the fix will be used. **Note:** Factor magnetic variation when using the IAPA 83 spreadsheet and use true bearing/course. Request additional fix names through the MAJCOM office.

2.7. **VMC Procedures.** VMC procedures shall be published by NIMA in loose-leaf format to the maximum extent possible. Forward all VMC procedures to HQ AFMC/DOB for review and/or publication processing. Include distribution address and number of copies requested.

3.3.1.1.1. (Added) Forward the original and a copy of the diverse departure procedure to HQ AFMC/DOB for review. Once approved the original with MAJCOM signature will be returned to the unit.

3.3.1.2. **Note 4 (Added):** Notification shall be made in writing and documentation maintained with the diverse departure forms in the continuity book.

3.3.4. **Note 3 (Added):** Normally obstacles are within 1 NM from DER. Example: 40 to 1 penetrations, which would require a climb gradient of 850 ft/NM but to only to an elevation of 190ft above DER would not publish climb gradient but publish location of obstacle.

Table 3.1. *Note. STANDARD TAKE-OFF MINIMUMS--These can be found in FAR, Part 9, paragraphs 91.175(f) and (g).

3.3.6.1. (Added) AFMAN 11-226 (I), Volume 4, paragraph 1.6.2, 3.1: The area splays from the 500 foot point, perpendicular to the centerline at DER.

4.7.9. (Added) Units will coordinate with HQ AFMC/DOB prior to displacing, relocating, or moving the threshold and provide new threshold Lat/Long coordinates and elevation data. Forward displaced threshold procedures to HQ AFMC/DOB a minimum of 60 days prior to operations.

4.12. **AF Form 3637, Instrument Approach Procedures.** Item 31. Add the following two notes: **Note 2 (Added):** Explanatory remarks are mandatory (automated or manual form). Some examples of required information are the reasons for selected radials or courses used, segment lengths, fixes, fix crossing altitudes, step down fix use (or decision not to use), etc. Thoroughly document the decision to use a value that is non-standard or less than optimum as defined in applicable AFJMAN 11-226 criteria (for example, descent gradient, radial, segment length, etc.).

Note 3 (Added): Provide HQ AFMC/DOB with an electronic copy of the graphic when the plan or profile view depiction is drawn using a computer.

5.1.1. Forward a prioritized list of instrument procedures needing publication to AFMC/DOB. Instrument procedures will be published and maintained based upon user's priority. HQ AFMC/DOB will reconcile priority conflicts among users. Changes to the list will only be accepted from the appointed base or organization POC.

Table 5.1. **Note 4 (Added)** Forward all procedure packages in the format specified in **5.3.2.7. (Added)**.

5.3. **Unit TERPS.** This section not applicable to units where AFMC/DOB is responsible for TERPS development.

5.3.2.2. **Note :** Provide copies of all forms electronically to HQ AFMC/DOB via e-mail or on disk.

5.3.2.3.1. (Added) If scale drawings of MVACs, MIFRACs, etc., are developed using computer aided drafting programs, provide HQ AFMC/DOB with a copy of the file electronically in a format compatible with MicroStation. **Note:** CAD drawings are not a suitable substitute for instrument procedure development software overlays.

5.3.2.7. (Added) When submitting new or revised procedures for review, send the original and one copy of the package to HQ AFMC/DOB.

5.3.2.7.1. (Added) Submit all procedures in six-part classification folders (NSN 7350-00-990-8884) or suitable substitute in the following format (as applicable):

5.3.2.7.1.1. (Added) Section 1: Talking paper explaining changes to procedures or rationale for new procedure, AF Form 3992, **Instrument Procedure Flyability Check - Instrument Approach Procedure**, AF Form 3993, **Instrument Procedure Flyability Check - Departure Procedure**, FAA Form 8260-2 for fixes used in the procedure, AICUZ letter, AF Form 813, **Request for Environmental Impact Analysis**, FAA Form 8240-22 for NAVAID/VGSI facilities serving the procedure, AF Form 3980 if required, FAA 6050-4, **Expanded Service Volume Request** if required, and any other supporting/historical documentation used to develop the procedure.

5.3.2.7.1.2. (Added) Section 2: AF Form 3637, **Instrument Approach Procedure** or AF Form 3634, **Departure Procedures**, Plan and Profile Data and the original graphic used for inclusion on the AF Form 3637/3634.

5.3.2.7.1.3. (Added) Section 3: The most recent automated procedure build (include Diverse Departure Evaluation for DPs). Warnings must be highlighted and explained how compliance with criteria was accomplished. Any software workarounds must be explained and manual computations/spreadsheet documents must be attached. All required segments must be built and evaluated.

5.3.2.7.1.4. (Added) Section 4: Acetate plots of all segments.

5.3.2.7.1.5. (Added) Section 5: Segments Plots overlaid (copied) on a current, CHUMed map. Latitude/Longitude grid, controlling obstructions and all NAVAIDS servicing the procedure will be displayed.

5.3.2.7.1.6. (Added) Section 6: List of current CHUMed maps used for procedure development.

5.3.2.7.1.7. (Added) The package must contain all AFTERPS generated forms and all supporting documents used in the development of the procedure.

5.3.2.7.1.8. (Added) . It is recommended that the specialist maintain a diskette with each procedure or establish a digital folder for the procedure. The diskette or digital folder contains all supporting documents.

5.5.2. Send waiver re-validations to HQ AFMC/DOB at least 20 days prior to waiver expiration.

5.5.3.2. Send hard copies with required signatures. Due to the length of time required to process a waiver, submit requests for updated waivers to HQ AFMC/DOB 60 days before the waiver expiration date.

5.7.5. (Added) Delete instrument procedures not validated or used by DoD flying units more than 6 times per year from the DoD FLIP.

5.8.3. (Added) The Director of Operations (HQ AFMC/DO) or a designated representative approves all special-use procedures.

6.1.1.1. (Added) Coordinate with local flying customers to validate and document the operational need for each procedure. Determine if all maintained approaches are necessary to meet a specific mission or training requirement. Also, verify that procedures adequately meet mission needs as published. Documentation will be published in the quarterly Airfield Operations Board meeting minutes.

6.1.2. Re-automate all procedures no later than the biennial review date, following the release of a new version of USAF TERPS automation software, or when directed by HQ AFMC/DOB. When unit does not accomplish review on time, HQ AFMC/DOB may coordinate with HQ AFMC DO to discontinue use of procedure.

6.1.2.1. HQ AFMC/DOB performs revisions to the obstacle database according to paragraph **1.5.3.2.** of this supplement.

6.1.2.2. When a waiver is required beyond its expiration date, ensure that the coordination process begins at least 3 months before the waiver expires. All waiver packages should be sent to HQ AFMC/DOB at least 70 days in advance of the waiver expiration date or the expected publishing date of the procedure.

6.1.2.3.1. (Added) . Review FAA Form 8240-22.

6.1.2.3.2. (Added) . Review the following items (as applicable) in all procedure packages, ensuring each is current and has all required signatures:

6.1.2.3.2.1. (Added) . Acetate overlays of each segment.

6.1.2.3.2.2. (Added) . FAA Form 6050-4. (*Optional: maintain in a stand-alone folder*)

6.1.2.3.2.3. (Added) . AF Form 813.

6.1.2.3.2.4. (Added) . AF Form 3992 or AF Form 3993.

6.1.2.3.2.5. (Added) . FAA Form 8260-2. (*Optional: maintain in a stand-alone folder*)

6.1.2.3.3. (Added) Using automation, rebuild each segment of all instrument procedures. Verify controlling obstacles, segment lengths, intercept angles, and descent gradients etc. Be particularly alert for any warning messages generated by AFTERPS.

6.1.2.3.4. (Added) Review the above items as applicable in all procedure packages, ensuring each is current and has all required signatures (if necessary).

6.1.2.3.5. (Added) Plots (acetate overlays of each segment) shall be updated and filed with every revised procedure build.

6.1.2.6. Send a letter or e-mail stating that the biennial review and obstacle evaluation was completed to HQ AFMC/DOB. Include discrepancies found and corrective actions taken, if applicable, the date the review was completed, and signature of the specialist completing the review. A copy of the letter or e-mail must be placed in the general correspondence section of the applicable airport folder. Additionally, annotate all procedure packages (instrument approach/departure procedures, minimum safe altitude warning, minimum instrument flight rules altitude chart (MIFRAC), minimum vectoring altitude chart, etc.) on the procedure log. **Example:** "Biennial Review Complete" (include date and procedure specialist's initials). **Note 3 (Added):** 2-year cycle begins after MAJCOM approval of procedure.

6.2.1.5.2. **Note:** See AFI 11-230, paragraph **1.5.12**; and AFI 11-230_AFMCSUP 1, paragraph **1.5.12.1. (Added)**

6.3.1. Notify MAJCOM electronically when FLIP review has been completed and actions taken to correct any errors found.

7.2.7. (Added) Non-DoD Instrument Procedure Review Procedures:

7.2.7.1. (Added) TERPS Cell Program Managers may be tasked to coordinate Non-DoD TERPS Reviews. When a unit requests the review and use of a non-DoD instrument procedure, ensure the AF Form 1768, Staff Summary Sheet is completed by the requesting unit and forwarded to HQ AFMC/DOB. A sample AF Form 1768 is provided in attachment 2.

7.2.7.2. (Added) Input the request for a Non-DoD Review into the AOR MAJCOM's web-based request system. Links to the MAJCOMs can be found on the HQ AFMC WEB Site:

<https://www.afmc-mil.wpafb.af.mil/HQ-AFMC/DO/dob/>

NOTE: For short-notice requests, follow-up automated requests with a phone call to ensure request is received.

7.2.7.3. (Added) Utilize the following coordination procedures to process the review request:

7.2.7.3.1. (Added) Review the request to ensure all the appropriate information is provided and conduct a internal instrument procedure review to include ensuring the procedures are not published in DoD publications and the nation/airport is not on the Special Accredited Nation List. If the nation/airport is on the Special Accredited Nation List, follow current guidance supplied by HQ AFFSA on the procedure review process.

7.2.7.3.2. (Added) Request a formal instrument procedure review from the MAJCOM responsible for the AOR where the procedure will be flown. For short notice requests, follow up each web-based request with a phone call to ensure receipt.

7.2.7.3.3. (Added) After the AOR MAJCOM review is received, notify the HQ AFMC/DOO Division Chief that a review request has been received and forward the AF Form 1768, Staff Summary Sheet (review request), AOR MAJCOM Review, and copies of the instrument procedure(s) charts to HQ AFMC/DOV for (tabletop) review. Be available as a liaison between the requesting unit and DOV to answer any questions regarding the instrument procedure review.

7.2.7.3.4. (Added) When the DOV review is complete, forward the AF Form 1768, Staff Summary Sheet (review request) to DOO for coordination.

7.2.7.3.5. (Added) Forward the completed instrument procedure review package to the HQ AFMC/DO for final approval.

7.2.7.3.6. (Added) Following AFMC/DO coordination, forward the instrument procedure review package to the requesting unit.

8.1.2. (Added) Flyability Checks shall be completed within 120 days of completion of the procedure. If the flyability check is not completed within the allotted time notify the unit requesting the procedure request is cancelled.

11.1.3. Only MAJCOM approved spreadsheets available on the TERPS web site are authorized for use.

11.2. **TERPS Development, Hardware Requirements.** Hardware requirements do not apply to units where AFMC/DOB is responsible for TERPS development.

11.3.4.1.8. (Added) The AFTERPS database shall match FAA Form 8240-22, *Facility Data*.

11.5. **AF Form 3629, Obstruction Data.** Add the following note: **Note:** AFMC TERPS Cell, Eglin AFB, and Hurlburt AFB will be provided with monthly updates (as required) to their database by HQ AFMC/DOB. Once the new database is received, any changes identified by HQ AFMC/DOB shall be validated against existing procedures by the unit. Adverse affects on instrument procedures (to include MVAC, MIFRAC, MSAW data) and required corrective actions shall be identified to HQ AFMC/DOB within 5 working days.

11.5.2. If ECHUM is used, a hard copy printout for each map series will be kept on file. Notify HQ AFMC/DOB electronically that monthly CHUM/ECHUM has been completed and list new obstacles that are added to LOC file.

11.5.2.1.1.5. Ensure the obstacle/terrain/contour line is measured from the closest point of the nearest runway surface.

11.5.2.4.6.1. (Added) DTED/DVOF Database Procedures:

11.5.2.4.6.1.1. (Added) Database Establishment. Construct initial airfield databases as follows:

11.5.2.4.6.1.1.1. (Added) The database must first be created in AFTERPS and all applicable airfield data (AF Form 3628) entered.

11.5.2.4.6.1.1.2. (Added) Verify and document the heights and locations of on-airfield obstructions by one of the following methods:

11.5.2.4.6.1.1.2.1. (Added) Field Survey.

11.5.2.4.6.1.1.2.2. (Added) Map or Engineering drawing study provided supporting documentation detailing location and height of obstructions is available, used and maintained by the developing unit and provided to the approving MAJCOM.

11.5.2.4.6.2. (Added) Vegetation. Study master obstacle maps to determine areas of vegetation that could affect procedures. In these areas, add the height of vegetation manually to the controlling obstacle (if the controlling obstacle is terrain). Evaluate all other terrain obstacles within the trapezoid to ensure a new obstacle does not become the controlling obstacle by adding the vegetation. Track vegetation growth and thoroughly document annually.

11.5.2.4.6.3. (Added) Controlling Obstacles. Manually plot obstacles identified as controlling obstacles from procedures on the master obstacle maps.

11.5.2.4.6.4. (Added) Enhanced Database Development Procedures. When merging existing database with the DTED and DVOF eliminate duplicate obstacles by manually comparing the old database printout to the new database printout. Eliminate the less accurate or current of the two obstacle numbers and document the deletion. Use discretion when deleting duplicate obstacles. If choosing between a manually plotted obstacle and a DTED/DVOF generated obstacle, the DTED/DVOF digital products are more accurate and current. Use the data from the digital products unless other reliable documentation (e.g., Notice of Construction) is available. Compare and validate all obstacles on CE Maps to the new database. Compare the list of controlling obstacles for all segments (to include MSAW, MIFRAC, MVAC, SIAPs and departures) to verify the controlling obstacle has not changed. Maintain a detailed list of all obstacles deleted or modified and provide source documents and justification for the change or deletion. Maintain the old database until approval and filing of all new instrument procedures is complete. **Note:** Procedures developed with the DTED/DVOF Enhanced Database will have a remark made in the REMARKS section on page 4, block 31 of the AF Form 3637. "PROCEDURE DEVELOPED UTILIZING AN AFTERPS VERSION # DEVELOPED (DATE)." Submit to HQ AFMC/DOB for approval in accordance with paragraph **1.5.16. (Added)**.

11.5.3.2.1. (Added) DTED database shall be updated when new disk arrives.

11.5.6.1. (Added) Units are provided monthly updates (as required) to their database by HQ AFMC/DOB. Once the new database is received any changes identified by HQ AFMC/DOB shall be validated against existing procedures by the unit. DVOF updates will be documented by annotating the sum_desc file with the date the location file was updated and impact (if any) on instrument procedures. This sum_desc file will be printed and filed in the AF Form 3639 file for the appropriate airport. Forward the updated location file to the MAJCOM office for updating on the HQ AFFSA FTP site. Adverse affects on instrument procedures (to include MVAC, MIFRAC, MSAW data) and required corrective actions shall be identified to HQ AFMC/DOB within 5 working days.

11.12.1. A new facility data form is required when any of the information is changed (e.g., frequency change, antenna placement, equipment change, distances, coordinates, etc.).

11.12.2. Provide supporting documentation data to HQ AFMC/DOB with the submitted FAA Form 8240-22.

12.1.1. Designate primary and alternate TERPS specialists by letter of appointment. Forward one copy of the appointment letter to HQ AFMC/DOB. **Note:** MAJCOM TERPS Cell Managers are exempt from this requirement.

Attachment 1**GLOSSARY OF REFERENCES SUPPORTING INFORMATION*****Abbreviations And Acronyms*****AF**—Air Force**AFMAN**—Air Force Manual**AFMC**—Air Force Materiel Command**AFTERPS**—Air Force Terminal Instrument Procedures Software**AIM**—Aeronautical Information Manual**AIRAC**—Aeronautical Information Regulation and Control**AOR**—Area of Responsibility**APF**—Airspace and Procedures Flight**ARP**—Airport Reference Point**ATCAL**S—Air Traffic Control and Landing System**BCE**—Base Civil Engineer**DAFC**—Department of the Air Force Civilian**DATCAL**S—Deployable Air Traffic Control and Landing System**DRD**—Departure Route Description**DSN**—Defense Switching Network**ESA**—Emergency Safe Altitude**FAAO**—Federal Aviation Administration Order**IAP**—Instrument Approach Procedure**MOC**—Master Obstacle Chart**NAF**—Numbered Air Force**NAVDATA**—Navigational Aid Data**NOTAM**—Notice to Airmen**OPR**—Office of Primary Responsibility**OSA**—Operational Support Airlift**POC**—Point of Contact**SID**—Standard Instrument Departure**TCH**—Threshold Crossing Height**TCN**—Terminal Change Notice**TERPS**—Terminal Instrument Procedures

A3.4. AFMAN 11-226(I), Volume 1, Paragraph 142, Changes. When required, TERPS Cell personnel may process non-procedural changes. When these types of changes are made, simply send an informational copy to the MAJCOM office. Process non-procedural changes to instrument procedures IAW AFI 11-230.

Attachment 10 (Added)

DOD AND NON-DOD INSTRUMENT PROCEDURE REVIEW REQUEST

Figure A10.1. (Added) Sample AF Form 1768.

STAFF SUMMARY SHEET							
	TO	ACTION	SIGNATURE (Surname), GRADE AND DATE		TO	ACTION	SIGNATURE (Surname), GRADE AND DATE
1	DOB	Review		6			
2	DOO	Coord		7			
3	DOV	Coord		8			
4	DO	Approve		9			
5				10			
SURNAME OF ACTION OFFICER AND GRADE			SYMBOL	PHONE		TYPIST'S INITIALS	SUSPENSE DATE
Woller, 0-3			412 FLTS/DOC	DSN 527-0334		kcf	20020213
SUBJECT							DATE
DoD & Non-DoD Instrument Procedure Review Request							20030130
SUMMARY							
<p>1. Request review and approval to use the following procedure IAW current guidance and AFI 11-230.</p> <ul style="list-style-type: none"> a. Airport: Carrasco Intl, Montvideo, Uruguay (SUMU) b. Procedures: DME ILS Rwy 24 c. Mission Date: 17-28 Feb 03 d. Date/Time of Actual Use: 25 Feb, 1230Z e. Aircraft type and NAVAID Info: C135 - ILS (2), VOR (2), TACAN (2), ADF (2) Additional Equipment: Dual LTN-92 INS (GPS Updated) Dual Flight Management System (GPS Updated) GPS Navigator f. Priority and Urgency Codes: Priority 2 Urgency 4 (DV Airlift) g. Requesting Unit: 412 Flight Test Squadron, Edwards AFB, CA h. POC, DSN and Commercial telephone and FAX numbers: Capt Tim Woller DSN 527-0334 Comm (661)277-0334 FAX: 7796 <p>2. RECOMMENDATION. AFM C/DO concur with use of this procedure, based on the procedure review at (Tab 1) and staff comments (Tab 3) by signing this SSS.</p>							
KEITH K. KREJCI, GS-14, DAFC Chief, Operations Team Operations Support Division Directorate of Operations Extension 7-5834				3 Tabs 1. HQ A MC (AOS/OL-J) Review 2. Additional Airport Information 3. Staff Comments			

Attachment 11 (Added)**ASTEP PROCEDURES****A11.1. (Added) ATSEP Procedures.**

A11.1.1. (Added) The MAJCOM TERPS Office will administer the AFI 13-218 checklist on programs managed by the TERPS Cell on the scheduled dates of the ATSEP.

A11.1.1.1. (Added) The MAJCOM TERPS evaluator or designated representative responsible for the evaluation will debrief the ATSEP Team Chief daily on the status of the TERPS Cell evaluation to include:

A11.1.1.2. (Added) Checklist items completed and problem areas identified.

A11.1.1.3. (Added) Observations and rationale behind the observation.

A11.1.1.4. (Added) Special Interest Items (SII).

A11.1.1.5. (Added) Off-Checklist problems.

A11.2. (Added) The MAJCOM TERPS evaluator will travel to the unit location to attend the final ATSEP out-brief. Administer any remaining checklist items and resolve any further issues from the unit prior to the final out-brief.

PERRY L. LAMY, Brigadier General, USAF
Director of Operations