ORDER

8240.36K

INSTRUCTIONS FOR FLIGHT INSPECTION REPORTING

October 1, 2005

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Distribution: Special Addressees

Initiated By: Aviation System Standards
Flight Inspection Policy

RECORD OF CHANGES

DIRECTIVE NO. **8240.36K**

CHANGE TO BASIC	SUPPLEMENTS			OPTIONAL	CHANGE TO BASIC	SUPPLEMENTS			OPTIONAL

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ORDER
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10/01/05

SUBJ: Instructions for Flight Inspection Reporting

This order provides policy, guidance, and distribution requirements for flight inspection reports and records.

The report must accurately reflect the operating parameters of the air navigation facility. It will be the means to certify the operational status of the facility, the quality of signal-in-space, and the instrument flight procedures it supports.

Flight inspection files (e.g., flight inspection reports, data sheets, oscillographic recordings, photographs, correspondence) are federal records. Unless classified by specific authority, they are available, on request, to the public by the authority of the Freedom of Information Act, Title 5, United States Code, Section 552. The policy and legal requirements for records management are contained in other Federal Aviation Administration (FAA) orders.

Guidelines for record disposition are contained in FAA Order 1350.15, Records Organization, Transfer, and Destruction Standards.

/s/

Thomas C. Accardi
Director of Aviation System Standards

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CHAPTER 1. INTRODUCTION

1. PURPOSE. This order provides policy, guidance, and distribution requirements for flight inspection reports and records.

2. DISTRIBUTION. This order is distributed to the branch level in the Flight Inspection Operations Division in Aviation System Standards, Washington headquarters; the branch level in the regional Airway Facilities Divisions and NAS Implementation Centers; all Flight Inspection Field Offices; and special military addressees.

3. EFFECTIVE DATE. This order is effective October 15, 2005.

4. CANCELLATIONS

a. FAA Order 8240.36J, Instructions for Flight Inspection Reporting, dated January 2, 2003; Change 1 dated July 1, 2004; and Change 2 dated November 15, 2004, are canceled.

b. Notices

(1) N 8200.78, FAA Order 8240.36J, Instructions for Flight Inspection Reporting, Appendix 5, dated December 1, 2004.

(2) N 8200.79, FAA Order 8240.36J, Instructions for Flight Inspection Reporting, Appendixes 8 and 9, dated January 12, 2005.

5. EXPLANATION OF CHANGES

a. Chapter 2, Paragraph 12b. Provides improved method for describing location of a point-in-space fix.

b. Chapter 2, Page 12c(2). Provides improved method of identifying a point-in-space fix.

c. Chapter 2, Paragraph 12g. Updated owner code list.

d. Chapter 2, Paragraph 12g(4). Clarified requirement to report actual owning interest of a facility owned by the Federal government other than the FAA.

e. Chapter 2, Paragraph 16c. Clarified ILS/ MLS Maintenance Alert distribution requirements.

f. Chapter 2, Paragraph 16d. Deleted requirement to distribute Loran-C reports. Clarified RNAV report distribution.

g. Chapter 2, Paragraph 16e. Added obstacle evaluation form distribution requirements.

h. Chapter 2, Paragraph 16f. Added requirement to send a copy of Radio Frequency Interference (RFI) report to the Flight Inspection Records and Reports Team.

i. Chapter 2, Paragraph 16h(4)(b). Clarified distribution requirement for the General Characteristics form.

j. Chapter 2, Paragraph 16h(5). Added requirement for FI Records and Reports Team to send a copy of RFI report to Spectrum Engineering Services.

k. Chapter 3, Paragraph 21e. Deleted requirement to carry forward the NOTAM/ restriction remark once the NOTAM/ restriction information has been included in the appropriate publication.

l. Chapter 3, Paragraph 21j. Added requirement to include fix displacement information if flown.

m. Flight Inspection Reporting forms updated to reflect "Mission Specialist's Signature."

n. Appendix 2:

(1) Paragraph 3b. Added radial use "Hold" to list.

(2) Paragraph 3g. Added requirement to report Bend/ CMA.

(3) Paragraph 3h. Changed polarization reporting requirement to "S" if Satisfactory or "U" if unsatisfactory.

(4) Paragraph 6e. Added reporting requirements for VOR or Ground Receiver Checkpoint using a portable ILS/ VOR receiver.

(5) FAA Form 8240-2. Added reporting block, Bend/ CMA.

o. Appendix 4:

(1) Paragraph 9. Changed reporting values for Roughness/ Scalloping.

(2) FAA Form 8240-4, Field 9. Changed reporting values for Roughness/ Scalloping.

p. Appendix 5:

(1) Introduction Paragraph. Added note to clarify when lights are associated with a SIAP.

(2) Revised and clarified requirements for entering identifiers.

(3) Paragraph 10c(1). Deleted VGSI reporting guidance because it is no longer applicable.

q. Appendix 6, Paragraph 1i(3). Clarified lighting system requirement.

r. Appendix 7, Paragraphs 1i and j. Changed presentation of data entries into a list format for clarification.

s. Appendix 8:

(1) Paragraph 3. Added "State or Country" code field. It is required by Flight Inspection Data and Report Specialists for reference, distribution, and filing purposes.

(2) Paragraph 8, Field 9. Clarified "SIAP(s)" requirement entry.

(3) Paragraph 9c. Clarified Inspection Criteria requirement.

(4) Paragraph 9n. Changed Vertical polarization reporting requirement to "S" for Satisfactory and "U" for Unsatisfactory results.

(5) Paragraphs 10o, p, and n. Reflects reporting requirements due to flight inspection limitations of the Sierra AFIS system.

(6) Paragraph 11b. Clarified lighting system reporting requirement.

(7) Paragraph 12c. Clarified NDB reporting requirements.

(9) Paragraph 13d. Added requirement to document localizer course width/ comparability check results.

t. Appendix 9. The state or country code (Field 3 added) is required by the Data and Report Specialists for reference, distribution, and filing purposes.

u. Appendix 11. Added requirement to use this form when a CAT III ILS facility is found operating beyond the "adjust and maintain" limits.

v. Appendix 13, Paragraph 5. Added requirement to report name of "SID" or the words "Departure Procedure" for unnamed instrument departure procedures.

w. Appendix 14, Paragraph 3. Clarified special report review requirements.

x. **Appendix 15.** Deleted Loran-C (FAA Form 8240-15) form and completion guidance.

y. **Appendix 16, Paragraph 9b.** Clarified lighting system reporting requirement.

z. **Appendix 17:**

(1) Deleted requirement for reports on periodic unless a discrepancy is found.

(2) **Paragraph 2**. Clarified guidance for a point-in-space fix.

(3) **Paragraph 20d.** Clarified lighting system requirement.

(4) **Paragraph 21.** Added reporting guidance for GPS Overlay Procedures when the primary facility (e.g., VOR, NDB) is out of service or decommissioned. Added reporting requirement for RNAV SIAP with LPV minima.

aa. **Appendix 18.** Deleted GFIS Worksheet (FAA Form 8240-18) and completion guidance.

bb. **Appendix 20.** Incorporated new guidance requested by the Flight Inspection Technical Support Team and clarified reporting responsibilities. Field 4 of FAA Form 8240-20 revised to include “A/ FD Change” and “Upgrade Number”.

cc. **Appendix 21.** Added reporting guidance and new form for controlling obstacle evaluations during **Periodic** and **Special** inspections.

dd. **Appendix 23.** Military Facility addresses updated.

6. **COMPUTER GENERATED FORMS**. This paragraph provides information on the automation of the flight inspection forms.

a. **Implementation**. The implementation of this system will reduce the errors and tedium of filling in flight inspection forms either by hand or the typewriter. This system also allows information to be extracted from sources such as text files and other databases.

b. **Use of Automated Forms.** The software package will provide an automated method for completing flight inspection forms. This automated process allows each user to fill in forms completely, accurately, and to print the forms.

c. **Equipment Requirements.** Each user office must have access to the appropriate hardware/software package. The required software, as well as a user’s guide for the current form software package, may be obtained from the Information Technology Staff.

d. **System Description.** This electronic form processor has a visual interface and allows each user to work with forms using windows, pictures, and menus on a screen. The completed screen data and form may be printed on bond paper.

e. Some Features of the System. This program allows the user to:

(1) Bring a copy of the form into the work area on a screen.

(2) Tab or select particular fields on the forms with a mouse and type in required data.

(3) Automatically fill in areas on the form by the computer using many designated fields which contain relatively constant facility data.

(4) Fill in forms completely and accurately with many automatic checks and entries.

(5) Fill forms with information from central databases.

(6) Print forms efficiently.

f. Appendix 1, Flight Inspection Forms, contains a listing of forms used in reporting various facilities and types of inspections.

7. DEFINITIONS, ACRONYMS, AND ABBREVIATIONS. (Refer to Order 8200.1, United States Standard Flight Inspection Manual, for definitions, acronyms, and abbreviations.) This order contains instructions and guidance material. Directive verbs are used. In this order, the words:

a. **Must** in the second or third person means that an action is mandatory - a "must." "Must not" means that an action is prohibited.

b. **Will** indicates it is understood that an action is to be taken. Do not use "will" when you mean "must."

c. **Should** means that an action is desirable but not mandatory or, "We would like you to do it, but you don't have to."

d. **May** means an action is permissive - or "If you want to, go ahead."

8. INFORMATION CURRENCY. Any deficiencies found, clarifications needed, or suggested improvements regarding the content of this order should be forwarded to the Flight Inspection Policy (formerly AVN-230) for consideration. Your assistance is welcome. If an interpretation is urgently needed, you may call Flight Inspection Policy, FTS 405 954-4526, for guidance, but you should also use FAA Form 1320-19 as a follow-up to verbal conversation.

9 - 10. RESERVED.

CHAPTER 2 - GENERAL INFORMATION

11. GENERAL FORMS COMPLETION

a. Reports. The flight inspector is responsible for initiating reports for all flight inspections.

b. Reporting Numeric Data. Unless otherwise stated, report numerical data to the following accuracy:

(1) Microamperes - To the nearest whole microampere.

(2) Altitude - To the nearest foot, mean sea level (MSL).

(3) Azimuth - To the nearest tenth of a degree.

(4) Percent - To the nearest tenth of a percent.

(5) Mileage - To the nearest tenth of a nautical mile.

(6) Angles - To the nearest hundredth of a degree.

(7) Widths - To the nearest hundredth of a degree.

(8) Latitude – Degrees, minutes, seconds, and hundredths of a second (north/south).

(9) Longitude – Degrees, minutes, seconds, and hundredths of a second (east/west).

NOTE: In accordance with FAA Order 8200.1, Paragraph A2.11b, the following guidelines must be used in rounding off computations. Measurements and calculations should be carried to one decimal place more than that required for tolerance application. Then apply the following criteria to round off a measurement.
Numerals 1 to 5, round off to zero.
Numerals 6 to 9, round off to the next higher value.
Example: Glidepath Course Width: 0.755° = 0.75°
0.756° = 0.76°

Exception: If a measurement exceeds a tolerance, it must not be rounded off to an in tolerance condition.
Example: Glidepath Course Width - 0.903° is out of tolerance.

c. Primary and Supplementary Report Forms. The current software for automated form completion must be used except when plotting azimuth clearance plots or VOR/ TACAN orbit plots which may be plotted manually. The forms may be filled out by hand only when an interim report is required. Use a medium point pen with black ink or a typewriter for data entry.

d. Non-Applicable Portions of Report Forms. If any part of a report form does not apply to the facility inspected or the type inspection conducted, leave it blank.

e. Page Numbering. When a report consists of more than one page, number the first page of the report "Page 1 of __ Pages" in the upper right hand margin of the report. Number succeeding pages consecutively. If not preprinted on the report form, write or type page number information in the upper right hand margin of the form e.g., Page ___ of ___.

f. Type Inspection. Except for the special checks which meet periodic requirements, IAW Chapter 3, Paragraph 21o, report only one type of inspection per report form (i.e., if a periodic inspecti8on is conducted on one component of a facility concurrently with a commissioning check of another component of the same facility, submit a separate report on each).

g. Facilities Supporting Other NAVAID(s). When a facility's primary purpose is to support a procedure on another NAVAID (e.g., 75 MHz marker beacon, DME), the supporting facility must be reported on the "NAVAID's" report form, unless otherwise directed in the appropriate appendix. If the facility component is a compass locator and supports a separate NDB approach procedure, refer to Appendix 5.

h. Surveillance Inspection Discrepancies. Report discrepancies of services and airport conditions on FAA Form 8240-13, Flight Inspection Report--General Characteristics. Report facility discrepancies found during a surveillance inspection on the appropriate facility report form (e.g., ILS, VOR).

i. Facility Performance. The report must reflect the facility "as left," unless specified otherwise by reporting instructions for a given facility type.

j. Satisfactory/Unsatisfactory Report Entries. Unless otherwise stated in this order, enter an "S" if satisfactory; enter a "U" if unsatisfactory and refer to Chapter 3, Paragraph 21a.

12. COMMON REPORT DATA. Any additional information or exceptions to the following instructions are specified in the reporting instructions for each type facility. Instructions for reporting common information are as follows:

a. Common Data on Each Report Page. Page Number, Location, Ident, and Date must be included on all pages of a flight inspection report.

b. Location Field. Facility location information will be obtained from the Aviation System Standards (AVN) Integrated Services (AVNIS) Facility Data Sheet. Enter the location and country code for facilities located outside the United States and the location and state code for facilities within the United States (do not enter the airport name for locations within or outside the United States). For shipboard tactical air navigation (TACAN), enter the name of the ship and the hull number (e.g., USS Nimitz - CVN68). For point in space procedures, enter the airport name (if specified), city, and state as identified on the PC form. For a stand-alone point in space fix, enter the waypoint name and state as identified on FAA Form 8260-2 (e.g., ZELAK, WA). For routes, leave blank. For a departure procedure (DP) or standard terminal arrival route (STAR), enter the primary airport name and state code.

c. Identifier (Ident) Field. Enter the facility IDENT listed on the AVNIS Facility Data Sheet, except:

(1) If the procedure is to a point in space, not a designated airport, enter the airport identifier assigned by the National Flight Data Center (NFDC). If no ident is assigned, leave blank.

(2) For a stand-alone point in space fix, enter the ARTCC identifier without a "K" prefix (e.g., ZSE).

(3) For routes, enter route name (e.g., Q501)

(4) For a DP or STAR, enter the computer code listed on the PC form, (e.g., computer code IDALE2.IDALE, enter "IDALE2".

(5) If the facility identifier is changed, refer to Chapter 3, Paragraph 21.

(6) If mobile/ tactical facilities are installed for extended periods of time and utilized for instrument flight rules (IFR), the identification (ID) will be assigned the same as a permanent facility. If the facility is installed in support of a specific temporary (normally not to exceed 90 days) requirement, enter the four-letter ID as indicated in Chapter 3, Paragraph 21m.

d. Date(s) of Inspection Field. Record the UTC date(s) of flight inspection as follows: (1) Inspection started and completed in one day: 2/1/88; (2) Inspection conducted over consecutive days: 1/12-15/89; (3) Inspection conducted over several nonconsecutive days: 8/6, 8, 10/89; and (4) Combined inspections: 10/16, 19-21/89.

e. Type of Inspection Field. Enter an "X" in the block to the left of the word signifying the type of inspection completed.

(1) Identify incomplete or partial inspections by placing one of the following codes in the block preceding the word incomplete:

TYPE INSPECTION	CODE
Incomplete Periodic	P
Incomplete Commissioning	C
Incomplete Site Evaluation	E
Incomplete Special (Scheduled or Unscheduled)	S

(a) All surveillance inspections will be considered complete.

(b) Shipboard TACAN will always be a complete "Special" inspection reported by placing an "X" in the "Special" block.

(2) For special inspections, place the appropriate code following the word “Special” when the inspection is complete or following the word “Incomplete” when the inspection is incomplete. Available codes are as follows:

After Accident	AA (see note below)
Air Traffic Control and Landing Systems (ATCALS) Evaluation	TE
Antenna Change	AC
Discrepancy Found (During Surveillance Check)	DF
Frequency Change	FX
Memorandum of Agreement	MA
Maintenance Request	MR
Mobile/ Tactical Flight Inspection	MT
On Site Request	OSR
Procedures Check	PROC
Reconfiguration	RF
Shipboard TACAN	SBT
User Complaint	UC
Remove and Replace Like Equipment	RR
Radio Frequency Interference	RFI
Other (Explain in Remarks)	OTHER

NOTE: Includes RADAR inspection involving a "near mid-air collision." See Order 8200.1, Chapter 14.

f. Common System Field. This field will be left blank.

g. Owner Field. Enter the owner code listed in AVNIS. Acceptable codes are:

OWNER CODE	DESCRIPTION
A	Air Force
B	Public
C	Coast Guard
E	FAA F&E Projects
F	FAA (Other than F&E)
H	International Public
I	International (Generic)
J	International Private
K	International Air Force
L	International Army
M	International Navy
N	Navy
O	Other (Specify in Remarks)
P	Private
R	Army
S	State
X	Public Special

NOTE: If ownership should change, refer to Chapter 3, Paragraph 21.

(1) International. Facilities/approaches/procedures owned by the foreign government shown in the location field.

(2) Private. Facilities/approaches/procedures owned by non-governmental interests. This owner is not always indicated in the location field. For commissioning reports only, identify the specific owner (actual corporation or organization) in the "Remarks" section.

(3) Facilities, approaches, or procedures owned by a domestic governmental interest other than the Federal Government (such as a state, county, or municipality). For commissioning reports only, identify the specific owner in the "Remarks" section.

(4) Other. Facilities owned by the Federal Government other than FAA, such as U. S. Trust Territory, NASA, U. S. State Department. Indicate in the "Remarks" section the actual owning interest.

h. Remarks Field. See Chapter 3.

i. Facility/ Approach/ Procedure Status Field. The appropriate facility status must be entered in accordance with Chapter 5, Paragraph 5.11 of Order 8200.1.

j. Region and Flight Inspection Field Office (FIFO) Fields.

(1) The region designator must be the authorized 3-letter code for the FAA region in which the reported facility/approach/procedure is located. For military-owned facilities and foreign governments, leave blank.

(2) In the FIFO field, enter the assigned 3-letter code of the location of the Pilot-in-Command (PIC) conducting the inspection. If the inspection is accomplished by the Army, enter “Army” in the field. For other non-FAA inspections, enter “Other” and explain in Remarks.

k. Signature Fields. These fields must contain the printed name and date, in addition to the signature. Reports containing multiple pages of the same form (i.e., VOR report containing multiple copies of FAA Form 8240-2) require signature and date on the first page only. Electronic signatures using an AVN-approved computer program are authorized.

(1) Flight Inspector’s Signature Field. This field must contain the signature of the flight inspector in charge of the mission and the printed initials of the second-in-command. When a flight inspection is accomplished over multiple dates, with different flight inspectors in charge, and the data obtained is combined on one report, this field must contain the signature of the flight inspector in charge during the final date of the check and the printed initials of the second-in-command. This signature certifies the operational status of the facility and the degree to which the facility supports the approved instrument flight procedure(s) inspected. If only one signature appears on the report, it certifies the completeness and accuracy of all reported data.

(2) Mission Specialist’s Signature Field. This field must contain the signature of the mission specialist, as well as the typewritten initials of any additional mission specialist, and certifies the reported technical data is complete, accurate, and conforms to national standards and specifications. Enter “NA” if the mission specialist participation was not required for facility certification.

l. Aircraft Number. Enter the aircraft registration number (e.g., N99).

13. REPORTS REVIEW FIELD. Each Flight Inspection Field Office (FIFO) is responsible for the quality and accuracy of its flight inspection reports. The appointed designee must review all flight inspection reports and must initial and date in the upper right hand corner, "Review Initials" block. These initials indicate a quality review was performed on the report.

14. CORRECTED COPIES OF REPORTS. If a report must be changed, the originator must complete an amended version of the report. Each amended report must include the number of the amendment (e.g., Report Amended #1 or Report Amended #2) to identify reports that are amended more than once. If the report has been previously distributed, the annotation " Report Amended #2:" must be entered in the top margin of page 1 and the amended report forwarded to the Flight Inspection Records and Reports Team for redistribution. After accident (AA) reports, if amended, must have the annotation "Report Amended" (this date must be the date the report was amended) entered in the top margin of page 1 and the amended report forwarded to the Flight Inspection Records and Reports Team for redistribution. The "AA" report with the latest amendment date is the final report. All after accident reports, including amendments, must be retained by the Flight Inspection Records and Reports Team. Any reports that cannot be interpreted will be returned to the originating organization for clarification.

15. SECURITY CLASSIFICATION OF FLIGHT INSPECTION REPORTS.

a. Guidance. The military organization requiring classification of flight inspection reports must provide classification guidance. The military organization must be requested to provide this guidance in writing, either by letter or message, and the guidance must be maintained on file so it can be traced to a classification authority who can justify the initial classification determination (DOD 5200.1-R, Department of Defense Information Security Program Regulation).

b. Classification Markings. Flight inspection reports containing classified information must be marked in accordance with FAA Order 1600.2, National Security Information, to show: degree of classification; name and routing symbol of the FAA employee applying the classification; authority for classification (reference to the military element's letter or message); safeguarding instructions and/or exemption category; and, if an exemption category is provided, date the report can be declassified (if it can be determined). Specific marking instructions can be obtained from the servicing FAA security office.

c. Control of Reports. Control, handling, storage, and transmission of classified flight inspection reports must be accomplished in accordance with FAA Order 1600.2.

d. Files. Flight Inspection Field Offices (FIFO(s)) must not maintain classified flight inspection facility report files. The Flight Inspection Records Team, and Reports Team must contact the Civil Aviation Security Division, AMC-700, and obtain a security control number for all classified reports.

16. DISTRIBUTION OF REPORTS AND RECORDINGS.

a. General. The Flight Inspection Records and Reports Team (formerly AVN-210A) must make the required distribution of all flight inspection reports (except those reports discussed in subparagraph 16c). Flight inspection units must forward all recordings, worksheets, and flight inspection reports within 60 days after finishing the flight inspection or portions of inspection (progressive periodics, incomplete inspections, etc.). Results of Radio Frequency Interference (RFI) investigations will be included with the form designated for the type facility (i.e., RFI found on ILS facility will be reported on FAA Form 8240-8, Flight Inspection Report – Instrument Landing System).

(1) The cover page of each recording should be annotated with the following information:

- Facility Identification and Type of Facility
- Special Remarks, as appropriate (PA, PMA, POA, etc.)
- Date(s) of Inspection
- Type of Inspection, e.g., Periodic, Special, etc.
- Aircraft Tail Number
- Names of Crew Members

This requirement may be satisfied by securely taping a draft copy of the first page of the flight inspection report to the top of the recordings.

(2) Securely tape the recordings (all 4 sides), or for a large stack of recordings, an envelope may be used.

(3) Attach the original flight inspection report (reviewed and signed) to the front of the recording packet with a large paperclip. A data sheet applicable to the inspection should be included with the original report.

(4) All other paperwork and worksheets should be placed inside the folds of the recordings.

(5) All packages must be shipped using boxes or fabric mailers. Padded envelopes must not be used. The U.S. Postal Service provides mailing boxes free of charge. U.S. Postal Form 152 must be used as a mailing label. It will provide tracking and delivery confirmation.

(6) All packages must include a list of contents. As a minimum, include a list of facility ID(s), facility type, and the date of the inspection. The Flight Inspection Field Office will retain a copy of the shipment list for their records and send a copy to the Flight Inspection Records and Reports Team via E-mail. This notification will be kept in suspense until the package arrives. The shipment notification message should be sent to the Flight Inspection Records and Reports Team at the following addresses: j.r.davis@faa.gov and rhonda.hinch@faa.gov.

(7) Do not send recordings without reports or reports without recordings (as applicable) unless an explanation is attached.

(8) Distribution should be made at least bi-weekly by the U.S. Postal Service. Ship the package to:

FAA/ MMAC/ **AVN-210A**
ARB, Room 117
P.O. Box 25082
Oklahoma City OK 73125

b. After Accident (AA) Reports. After-accident draft reports, including FAA Form 8240-14, Flight Inspection Report – After-Accident Continuation Sheet, must be forwarded to the Flight Inspection Records and Reports Team within 3 days of completion of the inspection. The Flight Inspection Records and Reports Team must forward the pending report to the Flight Inspection Technical Support Team where it will be reviewed and changes may be recommended. The final report must be forwarded to the Flight Inspection Records Team within 7 days of completion of the inspection. The Flight Inspection Records Team must send the entire final AA Report, including FAA Form 8240-14 and the complete preceding periodic flight inspection reports, to the Regional Flight Standards Accident Coordinator/ Investigation within 14 days of completion of the inspection. See Appendix 14 for review and completion requirements prior to the above distribution.

c. ILS/ MLS Maintenance Alert. Flight Inspection Central Operations must send one copy of the report to the regional maintenance engineering branch or military command. Enter in Remarks who was notified. Send the original copy to the Flight Inspection Records and Reports Team to be retained in the official facility file. No further distribution is required.

d. RNAV Report Distribution. Send the original copy to the Flight Inspection Records and Reports Team, AVN-210A. Further distribution is to be determined. The Flight Inspection Records and Reports Team will send a copy of all private special use reports to the proponent specified in the memorandum of agreement.

e. Obstacle Evaluation Form. Send the original copy to the Flight Inspection Records and Reports Team. The Flight Inspection Records and Reports Team will send a copy to the National Flight Procedures Office.

f. Radio Frequency Interference Report. Send the original copy to the Flight Inspection Records and Reports Team.

g. All Other Reports. Send the original copy to the Flight Inspection Records and Reports Team.

h. Standard Distribution.

(1) FAA

(a) Within the contiguous United States:

1 Regional Airway Facilities Office having jurisdiction over the facility inspected - one copy.

2 Airway Facilities Sector having jurisdiction over the facilities inspected - one copy.

(2) Military reports distribution must be completed as per Appendix 23.

(3) International. Distribute reports to address provided by customer.

(4) General Characteristics Reports.

(a) Send original copy to the Flight Inspection Records and Reports Team.

(b) The Flight Inspection Records and Reports Team will send one copy to the appropriate Regional Flight Procedures Branch or military command for local distribution and one copy to the Airport Authority responsible for the service.

(5) Radio Frequency Interference Reports. Send a copy to Spectrum Engineering Services Office.

17 - 20. RESERVED

CHAPTER 3. REQUIRED REPORT REMARKS

21. REMARKS FIELD. Briefly note any additional information required to indicate ground-based facility performance or space-based procedural inadequacies.

For ground-based facilities, do not go into detail about the adjustments made to obtain final results unless the inspection was made especially to ascertain the effect of the adjustments or facility configurations (e.g., engineering projects).

a. Out-of-Tolerance Conditions.

(1) Identify each out-of-tolerance or unsatisfactory condition found. This is not applicable for ILS/ MLS parameters reported in Fields 8 and 9 of FAA Form 8240-8, Flight Inspection Report--Instrument Landing System or Fields 9, 10, and 11 of FAA Form 8240-16, Flight Inspection Report--Microwave Landing System. Where there are no provisions to identify out-of-tolerance facility/ approach/ procedure performance (e.g., FAA Form 8240-2, Field 8), place an asterisk next to the “as left” condition and describe the out-of-tolerance condition that was found in Remarks.

(2) Indicate whether or not the condition was corrected.

(3) For military facilities, approaches, or procedures, include a statement that military personnel or units were briefed or advised and the date (e.g., tower/maintenance briefed 4/26/89).

b. Facility, Approach, or Procedure Narrative. When narrative references are necessary to describe the facility/ approach/ procedure, they must be given as direct quotes. For example:

(1) Observation (Permissible)

"The facility structure has deteriorated at 210°. Work was noted on a highway near the facility/ approach/ procedure in that sector."

(2) Unsubstantiated reference (Prohibited).

"The highway construction southwest of the facility/ approach/ procedure is causing deterioration of the course structure."

c. Dash Marks. If a facility parameter/component is not inspected, but should be, place a dash mark in the appropriate space. (Example: When a marker is not checked, place a dash in the facility inspected block, Field 7, FAA Form 8240-8. The dash should not be placed in the facility status block). Explain each dashed item in the Remarks field.

d. Site Evaluation, Commissioning, and Special Flight Inspection Reports. Remarks for these types of inspections must contain the special flight request number assigned by the FICO and sufficient detail to explain the extent of changes, modifications, and final results so they can be clearly understood by recipients of such reports. Additionally, for a maintenance request or on site request, include the reason for the inspection. Contents of this paragraph do not apply to shipboard TACAN inspections.

e. Notice to Airmen (NOTAM(s)/ Restrictions). Record NOTAM(s)/ Restrictions issued, revised, or cancelled as a result of the inspection. Reconfiguration flight inspections require revalidation of previous restriction(s) and, if necessary, issuance of new NOTAM(s)/ Restrictions as appropriate.

NOTE: During a reconfiguration flight inspection, cancel all existing restrictions and re-issue as necessary using the "Reconfiguration Date".

Enter the NOTAM/ restriction as published (or as recommended for military facilities), the identification of the issuing flight service station (FSS), and the date the NOTAM/ restriction information was forwarded to the FSS or appropriate organization.

If the previous flight inspector issued the NOTAM, or facility, approach, or procedure restriction remains in effect and is not changed by the present inspection, enter, "NOTAM(s) / restriction dated _____ remain in effect," in the Remarks section of NOTAM block. This remark is required regardless of what is entered into Facility Status. However, once the NOTAM(s)/ restriction(s) information is included in the DOD Flight Information Publication, United States Government Flight Information Publication, or other appropriate publication, this remark is not required.

The current NOTAM information as issued will be maintained in the AVNIS facility data.

f. Facility Status. If a facility/approach/procedure classification status is changed as a result of the flight inspection, enter appropriate remarks to identify the reason for the change along with a verbatim copy of the published NOTAM (see Paragraph 21e). Include who was notified and when.

g. Approach Lighting System. When commissioning an approach lighting system, either in conjunction with a NAVAID approach or as a separate system, enter the type of lighting system inspected and its status (e.g., ALSF-1, touchdown zone, and centerline lighting checked "satisfactory" or "unsatisfactory") (see Appendix 5, Paragraph 10).

h. Standard Instrument Approach Procedures (SIAP(s)). After checking a SIAP for compliance with Order 8200.1, United States Standard Flight Inspection Manual, Chapter 6, enter the following remark: "SIAP/ SIAP(s) verified IAW Order 8200.1, USSFIM, Chapter 6". When the report form provides a dedicated block to indicate the status of a SIAP(s) (e.g., Appendix 17, Field 20), the above remark is not required on existing SIAP(s). If one of the following circumstance(s) is applicable to the inspection of a SIAP(s), report the results of the inspection appropriately: If required, report the SIAP information in the following order: Airport name, city, state, SIAP(s), and amendment number (e.g., Tulsa Intl, Tulsa OK, VOR Rwy 23 Amdt 1).

(1) Periodic Complete. Enter the following remark: "SIAP/ SIAP(s) verified IAW Order 8200.1, USSFIM, Chapter 6" or enter "X" in dedicated SIAP block(s) when provided (e.g., satisfactory (SAT) or unsatisfactory (UNSAT).

(2) New or amended SIAP(s). Report the SIAP information with the statement "SIAP verified IAW Order 8200.1, USSFIM, Chapter 6."

(3) SIAP(s) not checked. If during a scheduled SIAP evaluation not all the SIAP(s) are checked, enter an asterisk in the SIAP(s) verified "SAT" block(s). Record the SIAP information with the statement "SIAP not inspected."

(4) SIAP found unsatisfactory. During a scheduled SIAP evaluation where there are multiple SIAP(s) and not all were found satisfactory, place an asterisk in the SIAP(s) verified "SAT" block. This documents that at least one SIAP was satisfactory. Record the SIAP information for the unsatisfactory SIAP(s) in Remarks with the statement "SIAP found UNSAT" followed by a description of the unsatisfactory condition(s).

(5) More than one SIAP is identified on a single page of the DOD Flight Information Publication or United States Government Flight Information Publication. The SIAP verification, when accomplished, must be entered on the appropriate form.

(6) After Accident Reports. If the information is contained on the after accident continuation sheet, an entry in this field is not required.

i. AVNIS Facility Data. If the Location, Identifier, Owner, and/or Equipment are changed, show the revised data on the first facility inspection report following the change and remark, e.g., the former identifier was (indicate the identifier formerly shown in Field 2). Flight inspection-initiated changes must be explained in the Remarks section, if appropriate.

j. Expanded Service Volume (ESV). Whenever the ESV is established or revalidated, define the lower limits of the ESV by facility component, azimuth/bearing (From) or beginning and ending azimuth/bearing if an arc is flown, distance and minimum reception altitude (MRA) (azimuth not required on ILS). There is no requirement to report the upper limit of the ESV, unless interference is reported or suspected, or if requested specifically in FAA Form 6050-4, Expanded Service Volume Request. If requested in FAA Form 6050-4, both upper and lower limits are required for localizers and TLS azimuths. Include appropriate remarks regarding the status of the ESV check, including fix displacement area information as flown (i.e., if unsatisfactory, explain why). Indicate if the ESV check is an original request or a revalidation.

k. 75 MHz Marker Beacons which Support an Instrument Approach Procedure. The operation of 75 MHz markers must be documented on the report which certifies the primary NAVAID, (e.g., VOR, ILS, NDB).

(1) For commissioning checks of 75 MHz markers, changes of equipment or antennas, enter all checklist items checked and their status (e.g., "satisfactory" or "unsatisfactory"). If dual equipment is installed, document the minor axis width for both transmitters.

(2) For periodic type inspections, enter a statement to indicate the marker was checked satisfactorily (e.g., 75 MHz marker system(s) checked "satisfactory" or "unsatisfactory"). This statement is not required on reports which have 75 MHz fields (e.g., ILS reports).

(3) If any part of the 75 MHz marker system is unsatisfactory, annotate in this field.

l. Weather Broadcast Information. On commissioning reports only, list all weather broadcast capabilities for each facility inspected.

m. Mobile/ tactical facilities installed in support of a specific temporary (normally not to exceed 90 days) requirement will use a four-letter ID for reporting. Enter the four-letter ID in the ident field. Enter the transmitted ident, if different, in the Remarks section. The assignment of the four letter ID's is as follows:

<u>The first letter will always be an X</u>

<u>The second and third letters will indicate the region where the temporary facility is located</u>:

AL = Alaskan
CE = Central
CN = Canada
EA = Eastern
EU = Europe
GL = Great Lakes
IN = International (not otherwise coded)
LC = Latin American/Caribbean
NE = New England
NM = Northwest Mountain
PC = Asia/Pacific
SO = Southern
SW = Southwest
WP = Western Pacific

<u>The fourth letter will indicate the owner</u>

A = Air Force
R = Army
N = Navy/Marines
C = Coast Guard

EXAMPLE: XSWA = Mobile deployment of an Air Force asset located in the Southwest Region.

n. Other. Enter all other remarks required by the appendixes in this order.

o. Special Checks Which Meet Periodic Requirements. When a special check meets periodic requirements, enter the remark, "Periodic requirements met." (Updating the periodic inspection following an after-accident inspection has to meet specific conditions—see Appendix 14, Paragraph 2 c). If necessary, identify which transmitter was completed (e.g., xmtr #1—periodic requirements met; xmtr #2—out of service).

p. Critical Area Interference Checks. When a Critical Area Interference Check is accomplished, enter the following, "The FAA does not consider this flight inspection as a valid check of interference caused by aircraft/vehicles in the ILS critical zone."

q. Structure Tolerance (95% Rule). Notify the FICO when structure tolerance (95% rule) is applied to a Category II/III facility. The FICO will notify the applicable region or military command engineering staff upon initial application of this criteria. Enter in Remarks the FICO was notified. (Ref Order 8200.1, Paragraph 15.51a.)

r. RHO-THETA Magnetic Variation Change Inspection. Include remarks detailing the published facility restriction, receiver checkpoint, and ESV radial changes based on the MAGVAR change. For example, a published coverage restriction of 210 - 250° would be changed to 214 - 254° after a MAGVAR change from 2° West to 6° West. Submit the appropriate changes to Flight Inspection Resource and Data Management Group on VN 200 Form 8240-20.

s. Completion of an Inspection Previously Reported as Incomplete. Enter a statement indicating the check completes the inspection requirements of the report dated mm/dd/yy (e.g., This completes the requirements for the inspection dated 02/11/02).

t. RFI Checks. Enter a narrative description of checks performed and results obtained. Provide physical description and latitude/ longitude of suspected interference source. For incomplete or unsuccessful checks, report bearings obtained, and aircraft location, provide any information that may aid another crew in locating the source.

22 - 25. RESERVED.

APPENDIX 1. FLIGHT INSPECTION FORMS

The FAA flight inspection report forms contained in this order are intended to be computer generated. If this process is not available, local reproduction of the forms included in each appendix is authorized.

FAA FORM	DATE	TITLE
8240-1	3/2000	Flight Inspection Report – Continuation Sheet

NOTE: Use this continuation sheet when additional space is required to document facility performance (see Figure 1). Use the same heading information as in the primary report.

8240-2	10/2005	Flight Inspection Report – VOR, VOR/ DME, VORTAC, TACAN, VOT
8240-3	3/2000	Flight Inspection Report - VOR, VOR/ DME, VORTAC, TACAN ORBITAL Worksheet
8240-4	10/2005	Flight Inspection Report - VOR, VOR/ DME, VORTAC, TACAN ORBITAL Plot
8240-5	10/2005	Flight Inspection Report – Non-Directional Beacon, Direction Finding, Visual Aids, Communications
8240-6	10/2005	Flight Inspection Report – Precision Approach Radar
8240-6-1	1/2003	Flight Inspection Report – Precision Approach Radar GPN-22/ TPN-25 Continuation Sheet
8240-6-2	1/2003	Flight Inspection Report – Precision Approach Radar TPN-22 Continuation Sheet
8240-7	4/2000	Flight Inspection Report - ILS Worksheet
8240-7-1	3/2000	Flight Inspection Report - ILS Continuation Worksheet
8240-8	10/2005	Flight Inspection Report – Instrument Landing System
8240-9	1/2003	Flight Inspection Report – Instrument Landing System Supplement Sheet

FAA FORM	DATE	TITLE
8240-11	10/2005	Flight Inspection Report – ILS/ MLS Maintenance Alert
8240-12	10/2005	Flight Inspection Report – Surveillance Radar
8240-12-1	10/2005	Flight Inspection Report - Surveillance Radar Coverage Plot
8240-13	10/2005	Flight Inspection Report – General Characteristics
8240-14	3/2000	Flight Inspection Report – After-Accident Continuation Sheet
8240-16	10/2005	Flight Inspection Report – Microwave Landing System
8240-16-1	4/2000	Flight Inspection Report – MLS Commissioning Data Words
8240-17	10/2005	Flight Inspection Report - RNAV
8240-19	10/2005	Flight Inspection Report - Endfire Glide Slope Transverse Structure Plot
8240-20	10/2005	Facility Restriction/ Checkpoint/ Rollout/ GS CBP
8240-21	10/2005	Flight Inspection Report – Controlling Obstacle Evaluation
8240-22	4/96	Facility Data

FLIGHT INSPECTION FORMS
FIGURE 1. FLIGHT INSPECTION REPORT--CONTINUATION SHEET

PAGE OF PAGES

FLIGHT INSPECTION REPORT--CONTINUATION SHEET		REVIEW INITIALS
1. LOCATION:		2. IDENT:
3. FACILITY TYPE:	4. DATE(S) OF INSPECTION:	

FAA FORM 8240 - 1 (3/2000) (FORMFLOW) (Formerly FAA Form 8240-15)

APPENDIX 2. FLIGHT INSPECTION REPORT VOR, VOR/ DME, VORTAC, TACAN, VOT FAA FORM 8240-2

Record the following:

1. Fields 1--6 - Complete as shown in Chapter 2, Paragraph 12.

2. Field 7 - Facility/ Component Inspected. Check the appropriate block(s) to signify all components of the facility being reported. If only the VOR portion of a VORTAC facility has been checked, place an "X" in the VORTAC block and an "X" in the VOR block. For VOR/DME facilities, place an "X" in the VOR/DME block. If only the VOR portion of the VOR/DME has been checked, place an "X" in the VOR/DME block and an "X" in the VOR block. When using the automated form, an entry in the VOT block will change the form to indicate VOT information in Field 10.

3. Field 8 - Radial Data.

a. Service Designation (Desig). Label each column with the facility designator pertaining to the reported information (e.g., VOR, TAC).

b. Radial Use. Indicate radial use by an abbreviation (if no procedural use, leave the block blank). Do not use “ESV,” as it does not describe procedural use. Other abbreviations may be used if explained in "Remarks" portion of report. When using the automated form, a drop down box is available for radial use selection. Some standard examples are as follows:

ARR	Automated Flight Inspection System (AFIS) Reference Radial
Ref	Reference Radial
V16	Airway
GCP	Ground Receiver Checkpoint
ACP	Airborne Receiver Checkpoint
Apch	Approach
IApch	Initial Approach
MApch	Missed Approach
Hold	Holding Pattern
J180	Jet Route
Dir	Direct Route
RNAV	Area Navigation (RNAV) Procedures
Null	Null Radial
5DEG	Offset (Special Check) of VOR APCH
FEDR	Feeder
INTX	Radial Used to Support a Fix or Intersection
STAR	Standard Terminal Arrival Route
SID	Standard Instrument Departure
DP	Departure Procedure

c. Azimuth. Enter the magnetic azimuth from the facility (in whole degrees). For RNAV procedures, enter the procedure start/stop azimuth in tenths of degrees (e.g., 120.6 - 060.5). For a VOT, designate azimuth as "360/from."

d. Transmitter (s). Identify the transmitter checked. If transmitters were alternated during one flight, enter the transmitter "1" or "2" first (whichever had the greatest alignment error), in the "transmitters" block (e.g., 2/1 for TX 2 having the greatest error).

e. MSL Altitude. Enter the altitude divided by 100 (e.g., "20" for 2,000 feet, "7.2" for 720 feet). If altitude changes occurred, enter the highest and lowest altitudes in the order checked (e.g., 25-20). Leave blank when reporting ground checkpoints.

f, Distance From/ To. Show the starting point (From) and the termination point (To), in nautical miles, of the radial or VOR/DME RNAV procedure being reported.

g. Roughness, Scalloping, and Bends. If these parameters are in tolerance, enter the maximum amplitude to the nearest tenth of a degree and indicate the distance from the station (e.g., 2.2/ 16.0). If these parameters are out-of-tolerance, enter the out-of-tolerance (amplitude/ distance) closest to the facility. When reporting radial roughness and/or scalloping that exceeds 3.0° but meets operational tolerances because of the distance and altitude criteria, report the worst case of actual roughness and scalloping, the mileage where it occurred, and place an asterisk in the reporting block, e.g., *5.0°/ 25.5. In the Remarks section, place a corresponding asterisk and state "Order 8200.1, Paragraph 11.60a or 11.60b applied." If multiple distance segments require separate entries, enter in the remarks section. The reported scalloping and roughness is combined. For RNAV procedures, report the azimuth of the maximum roughness and scalloping (e.g., 1.5/010).

Bends/ CMA and Bends. Enter the maximum Bend and Bend/CMA amplitude to nearest tenth of a degree. Indicate the direction of the bend as “+” or “-“ value, and the distance from the facility at which it occurs (e.g. +1.2/ 15.6). If these parameters are out-of-tolerance, enter the out-of-tolerance (amplitude/ distance) closest to the facility. If multiple segments require separate entries, enter in remarks section.

h. Polarization. Enter an “S” if Satisfactory or “U” if Unsatisfactory. Explain Unsatisfactory conditions in Remarks.

i. Alignment Error. Enter the alignment error, as a "+" or "-" value, and the distance from the facility at which it occurs. If automated flight inspection system (AFIS) average alignment is reported, indicate the alignment and distance, to the nearest mile, throughout the entire area that was sampled (e.g., + 0.5/ 10-65). Enter an "S" for satisfactory or "U" for unsatisfactory when approach alignment evaluations are by visual references to runway thresholds or airport environments. When an RNAV procedure is evaluated using AFIS orbital techniques, enter the average orbit alignment error.

j. Modulations. Enter "S" for Satisfactory or "U" for Unsatisfactory. USAF VOR modulation values must also be entered in Field 11, Remarks.

k. Transmitter Difference. Enter the difference of course alignment between transmitters, to the nearest tenth of a degree.

l. Signal Strength. If Satisfactory, enter the actual value of the lowest VOR signal strength in microvolts. Signal strength exceeding 300 μV may be reported as 300+. Report TACAN signal strength as Satisfactory "S" or Unsatisfactory "U". If VOR or TACAN signal strength is unsatisfactory, enter "U" and the closest distance from the facility it occurred, e.g., U/25.

m. Interference. Enter "S" if no interference noted; enter "U" if interference is noted, and document the area of interference in remarks field.

4. Field 9 - General. If any of these items are inspected, enter an "X" in the appropriate blocks (e.g., satisfactory (SAT) or unsatisfactory (UNSAT)). For voice, enter the feature checked in the drop down box. If more than one feature is checked, note the additional sources in the Remarks section.

5. Field 10 – Reference Radial/Monitor and/or Orbit Data. Complete this field when the reference radial and mean orbital alignment are established/ re-established IAW Order 8200.1, Paragraphs 11.21a and 11.21f. Do not report the reference radial data without the alignment orbit, or vice-versa. This field should also be completed when there is a need to permanently change flight profiles, e.g., direction, distance, and/or altitude. Once references are established, do not report periodic inspection results in this field unless the previously stated requirement(s) are met during the same inspection. Enter the azimuth monitor evaluation results when accomplished. The Aeronautical Information Specialist (AIS) will transfer data from the flight inspection report to the AVNIS data sheet whenever there is an entry/ change in any data block within this field, except the "Checkpoint" block. A Field 7 entry of VOT will change this field to indicate VOT data.

a. Last Date Established. Enter the month, day, and year that the reference radial/mean orbital alignment was established for each facility/ component checked. When a commissioning flight check is conducted over multiple dates, do not enter a date until the check is complete. The date entered will be the final date of the inspection. (Example: Dates entered in Field 4 are: 10/18, 11/12-14, 11/21/94; the date to be entered in "Last Date Inspected" is: 11/21/94). To maintain continuity of data, carry forward the information on each succeeding check until the flight check is complete, then include the final date of the inspection. Do not enter a date for monitor checks if it was not accomplished concurrently with the establishment of the reference radial/ alignment orbit.

b. Reference Radial. Enter the azimuth and distance of the reference checkpoint and the altitude flown divided by 100 (e.g., 265.5/ 18.3/ 45). For AFIS, enter the azimuth, the segment distance (to the nearest mile), and the altitude flown divided by 100 (e.g., 270/20-15/45). For a VOT, enter the azimuth 360 degrees/from (e.g., 360/ from).

c. Checkpoint. Enter the location where the monitors were evaluated. If evaluated airborne, enter the location as done for the reference radial. If monitors are checked where the reference checkpoint/ radial was evaluated, enter "Same." If the monitors are established on the ground, enter the azimuth and distance of the airport location and the term "Gnd" (e.g., 041.1/ 6.7/ Gnd). Describe the airport location in the remarks field (carrying forward the airport location on subsequent reports is optional). For a VOT, enter "VRP" if VOT Reference Point is used for monitor evaluation. If not, enter an * and describe, in remarks, the checkpoint location where the monitor evaluation was accomplished.

d. Orbit Data. When establishing or reestablishing a mean alignment, enter the direction (CW or CCW), distance (to the nearest mile), and altitude flown divided by 100.

e. Tx, Alignment, Alarm +, Alarm -. Use the appropriate blocks to report the results of the reference radial/ monitors and/or orbit data.

(1) Enter the transmitter evaluated under "TX." If a facility has two transmitters and both are checked, enter the transmitter number as in the example for Dual Transmitter.

(2) Enter the “normal condition” alignment error determined at the reference radial/checkpoint, or ARR if AFIS is used, in the Reference Radial “Alignment Column”.

(3) When monitors are checked, enter the amount of shift (+ is clockwise, AFIS code "R"; - is counterclockwise, AFIS code "L") in the Checkpoint "Alarm +" and "Alarm -" columns. The amount of shift must be referenced to the “normal condition” alignment error measured at the location the monitors are checked. The Checkpoint “Alignment” column must be left blank. See example.

(4) Enter the mean alignment in the Orbit Data “Alignment” column. See example.

SINGLE TRANSMITTER

	TX	ALIGNMENT	ALARM +	ALARM -
Reference Radial 265.5/ 18.3/ 45	1	-0.4		
Checkpoint Same	1		0.9	0.9
Orbit Data CCW/10/45	1	+0.2		

DUAL TRANSMITTER

	TX	ALIGNMENT	ALARM +	ALARM -
Reference Radial 270/ 20-15/ 45	1/ 2	-0.4/ -0.5		
Checkpoint 042.0/ 6.7 nm/ GND	1/ 2		0.9/ 0.8	0.8/ 0.7
Orbit Data CCW/ 10/ 45	1/ 2	+0.2/ -0.2		

6. Field 11 - Remarks. Complete as shown in Chapter 3. Additionally, after commissioning or reestablishing a receiver checkpoint, describe it in this field. Include the airport name and state (if on an airport), altitude at which check is made (airborne checkpoints), azimuth in degrees magnetic, the distance in miles, checkpoint description (e.g., Ground checkpoint: University of IL-Willard, IL, 332°, .9 nm, On runup pad Rwy 14; Airborne checkpoint: 2000', 175°, 8.0 nm, Over grain elevator at Pesotum). Notify the Flight Inspection Resource and Data Management Group via VN 200 Form 8240-20 of the establishment or cancellation of receiver checkpoints.

a. Radial Alignment. Report when the Flight Inspection Technical Support Manager authorizes radial alignment in lieu of an alignment orbit.

b. VOT. When commissioning a VOT, indicate the Identification feature (dots or steady tone).

c. USAF VOR(s). For USAF VOR(s), enter the modulation values found on at least one radial or arc segment flown during the inspection. These values must be reported in the following format: modulations/ radial flown or arc/start - stop radials/distance(s) to the nearest mile/MSL altitude divided by 100. Radial example: AM=30.8, FM=16.4, 9960=29.5/312/16-12/37. Orbital example: AM=30.9, FM=15.8, 9960=32.1/312 cw 349/40/25.

d. Reference Alignment. Indicate the date Maintenance was notified of ARR/ orbit reference alignment establishment/ re-establishment, IAW Order 8200.1, Paragraph 11.21f.

e. VOT or Ground Receiver Checkpoint Inspected Using a Portable ILS/ VOR Receiver

(1) Record the PIR detected course deviation, modulation levels, and signal strength.

(2) Record the model, serial number, and calibration date of the PIR, if available.

(3) Add the following statement, “Aviation System Standards Flight Inspection Technical Support Team authorized VOT flight inspection via PIR.”

(4) Do not add any data in Field 8 (RADIAL DATA) of FAA Form 8240-2.

(5) Place an asterisk in the “AIRCRAFT NO.,” field.

7. NOTAM(s). Complete as shown in Chapter 3, Paragraph 21.

FLIGHT INSPECTION REPORT--VOR, VOR/DME, VORTAC, TACAN, VOT
FIGURE 1. FAA FORM 8240-2

FLIGHT INSPECTION REPORT--VOR,VOR/DME,VORTAC,TACAN, VOT | REVIEW INITIALS

1. LOCATION: | 2. IDENT:

3. COMMON SYSTEM: | 4. DATE(S) OF INSPECTION: | 5. OWNER:

6. TYPE OF INSPECTION

	SITE EVALUATION		PERIODIC		SPECIAL
	COMMISSIONING		SURVEILLANCE		INCOMPLETE

7. FACILITY / COMPONENT INSPECTED

	VOR		VOR / DME		VORTAC		TACAN		VOT		DME

8. RADIAL DATA

SERVICE DESIGNATION								
RADIAL USE								
AZIMUTH								
TRANSMITTER (S)								
MSL ALTITUDE								
DISTANCE FROM								
DISTANCE TO								
ROUGHNESS / SCALLOPING								
BENDS / CMA								
BENDS								
POLARIZATION								
ALIGNMENT ERROR								
MODULATIONS								
TRANSMITTER DIFF.								
SIGNAL STRENGTH								
INTERFERENCE								

9. GENERAL	SAT	UNSAT
STANDBY POWER		
VOICE		
IDENTIFICATION		
DME ACCURACY		
DME COVERAGE		
SIAP(S) VERIFIED		

10. REFERENCE RADIAL/MONITORS AND ORBIT DATA

	LAST DATE ESTABLISHED VOR: TACAN:	T X	ALIGN	ALARM +	ALARM -
VOR	REFERENCE RADIAL: / - /				
VOR	CHECK POINT: / /				
VOR	ORBIT DATA : / /				
TAC	REFERENCE RADIAL: / - /				
TAC	CHECK POINT: / /				
TAC	ORBIT DATA : / /				

11. REMARKS:

FACILITY STATUS	
UNRESTRICTED	
RESTRICTED	
UNUSABLE	

NOTAM'S:

REGION:	FLIGHT INSPECTOR 'S SIGNATURE:	MISSION SPECIALIST'S SIGNATURE:	AIRCRAFT NO :
FIFO:			

FAA FORM 8240 - 2 (10/2005) (FORMFLOW) (Supersedes previous edition) Date Completed:

APPENDIX 3. FLIGHT INSPECTION REPORT VOR, VOR/ DME, VORTAC, TACAN ORBITAL WORKSHEET FAA FORM 8240-3

The VOR, VOR/ DME, VORTAC, TACAN Orbital Worksheet may be used by field personnel for preparing FAA Form 8240-4, VOR, VOR/ DME, VORTAC, TACAN Orbital Plot. Access the form when using the Automated Flight Inspection Form System by selecting FAA Form 8240-4 or FAA Form 8240-3 on the Flight Inspection Form System Main Menu, then selecting Page 2. The worksheet will not be included as part of the report. The data entered into the worksheet may be transferred to the appropriate fields used in the preparation of FAA Form 8240-4.

1. **Field 1.** Complete as shown in Chapter 2, Paragraph 12.

2. **Field 2.** Complete as shown in Chapter 2, Paragraph 12..

3. **Field 3.** AFIS DATA. Enter azimuth errors (+ or -) in the appropriate columns for the portion of orbit accomplished. The errors may be entered every 5 or 10° (option available when selecting automated FAA Form 8240-4 from the Flight Inspection Form System Main Menu). When all orbital data has been entered, you may transfer the azimuth error data to FAA Form 8240-4, Field 4, from FAA Form 8240-3 by selecting the plot option. Additionally, the VOR and TACAN mean alignment and the minimum, maximum errors displayed at the bottom of Field 3 may be transferred to their appropriate locations on FAA Form 8240-4.

FLIGHT INSPECTION REPORT
VOR, VOR/ DME, VORTAC, TACAN ORBITAL WORKSHEET
FIGURE 1. FAA FORM 8240-3

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FLIGHT INSPECTION REPORT--VOR,VOR/DME,VORTAC,TACAN ORBITAL WORKSHEET	REVIEW INITIALS
1. IDENT:	2. DATE(S):
3. AFIS DATA:	

Azimuth	VOR 1	Azimuth	VOR 2	Azimuth	TACAN 1	Azimuth	TACAN 2

Mean Alignment

☐ VOR 1: Min: Max:

☐ VOR 2: Min: Max:

☐ TACAN 1: Min: Max:

☐ TACAN 2: Min: Max:

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APPENDIX 4. FLIGHT INSPECTION REPORT VOR, VOR/ DME, VORTAC, TACAN ORBITAL PLOT FAA FORM 8240-4

This report must be completed whenever an alignment orbit is required by the VOR or TACAN checklist (see Order 8200.1, Chapter 11), or as deemed necessary. When VORTACs with standby equipment are checked, complete a separate form for the standby equipment. Additional forms may be used if needed for clarity; no more than 2 plots per form. This report may be used for coverage orbits if statements in the remarks section of FAA Report Form 8240-2 do not adequately define the areas of coverage. Record the following information:

1. VOR, TACAN, DME. Check one or more of the blocks at the right of the title block to show which components are plotted.

2. Fields 1 - 2. Complete as shown in Chapter 2, Paragraph 12.

3. Field 3 - Altitude. If a constant altitude is flown throughout the orbit, enter the altitude divided by 100 in the center of this field. If altitude changes are made during the orbit, mark with a dot the azimuth at which altitude changes occurred (use the azimuth scale at the bottom of Field 4). Enter the altitude divided by 100 between dots of equal altitude.

4. Field 4 - Azimuth Error (+ or -). Plot the course displacement observed during the orbit. Use the plotting codes shown at the top of this field if more than one component or transmitter is plotted. If only one component or transmitter is plotted manually, a solid line may be used. Plot the error every 5.0 or 10.0° and the start/stop points of partial orbits, using the azimuth scale at the bottom for reference. Plot out-of-tolerance areas every 2.0°. Comprehensive alignments, when they are required, must be plotted each 5.0°.

5. Field 5 - Checkpoint Location. Place a dot at each checkpoint using the azimuth scale in Field 4 or 9 as reference. If a theodolite was used, enter the word "Theodolite" in the center of this Field; if AFIS was used, enter the word "AFIS;" if shipboard, enter radar type if used.

6. Field 6 - DME Distance Unlocks. Enter a horizontal line in the areas where DME "unlock" conditions were observed during the orbit. Use the azimuth scale in Field 4 or 9 as reference.

7. Field 7 - TACAN Azimuth Unlocks. Enter a horizontal line to show the portions of the orbit where a TACAN azimuth "unlock" condition is observed. Use the azimuth scale in Field 4 or 9 as reference.

8. Field 8 - Area of Interference. Enter a horizontal line to indicate the areas where interference is observed, if such interference is considered to have detrimental effect on the usability of the facility. Use the azimuth scale in Field 4 or 9 as reference.

9. Field 9 - Roughness and Scalloping + or -. If roughness and scalloping in excess of ± 3.0° is observed, plot the amplitude on this graph, using the appropriate plotting codes shown at the top of Field 4. Plot maximum roughness and scalloping in each 10° sector on the 10° increment line. Use the azimuth scale at the bottom for guidance.

10. Field 10 - VOR/ TACAN Coverage Signal Strength. Plot VOR signal strength using the plotting codes shown at the top, left side of the field, if the signal strength drops below -93 dbm or 5 μV. For U.S. Navy shipboard TACAN's and other TACAN's or DME's, use the TACAN coverage plotting codes on the right side of this field and plot the TACAN or DME signal strength when the signal strength drops to a level which causes a condition of azimuth or distance unlock. If other plotting techniques are used, explain in Field 11.

11. Field 11 - Remarks. Enter any information that will clarify or be of assistance in interpreting the reported data.

12. Field 12 - Orbital Data. Enter the maximum negative and the maximum positive alignment error (include the sign) plotted on the graph in Field 4, as well as the algebraic difference between the two. Mark the "TX" block for VOR and designate the transmitter number. Mark the "TP" block for TACAN and designate the transponder number. Enter the mean alignment (e.g., +0.2), orbit direction (CW or CCW), and the orbit radius in nautical miles (e.g., 10 nm).

FLIGHT INSPECTION REPORT
VOR, VOR/ DME, VORTAC, TACAN ORBITAL PLOT
FIGURE 1. FAA FORM 8240-4

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FLIGHT INSPECTION REPORT -- VOR,VOR/DME,VORTAC,TACAN ORBITAL PLOT

VOR
TACAN
DME

1. LOCATION:

IDENT:

2. DATE(S) OF INSPECTION:

3. ALTITUDE

4. AZIMUTH ERROR (+ OR -) PLOTTING CODE: VOR #1 ——— VOR #2 - - - - TACAN #1 · · · · · TACAN #2- ·-- ··

4 3 2 1 0 1 2 3 4 + –

AZ: 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360

5. CHECKPOINT LOCATION

A F I S

6. DME DISTANCE UNLOCK

7. TACAN AZIMUTH UNLOCK

8. AREA OF INTERFERENCE

9. ROUGHNESS & SCALLOPING + / - (Plot if greater than + / - 3.0°)

3 2 1

AZ: 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360

10. VOR COVERAGE SIGNAL STRENGTH #1 ——— #2 - - - - TACAN COVERAGE SIGNAL STRENGTH #1· · · · · #2 - ·-- ··

dbm -80 -85 -90 -95 -100

AZ: 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360

11. REMARKS:

12. ORBITAL DATA	EQUIPMENT			-	+	SPREAD	MEAN	DIR	RADIUS
	TX	TP	NO.						
	TX	TP	NO.						

REGION:	FLIGHT INSPECTOR 'S SIGNATURE:	MISSION SPECIALIST'S SIGNATURE:	AIRCRAFT NO :
FIFO:	N / A		

FAA FORM 8240 - 4 (10/2005) (FORMFLOW) Supersedes previous edition

Date Completed:

APPENDIX 5. FLIGHT INSPECTION REPORT NONDIRECTIONAL BEACON, DIRECTION FINDING, VISUAL AIDS, COMMUNICATIONS FAA FORM 8240-5

This report must be used to report the results of all commissioning, periodic, special inspections, and after accidents of the aids listed above. Changes to facility status or restrictions for NDB's used only as Compass Locators must be reported on FAA Form 8240-8. The periodic and special inspections of visual aids or NDB(s) that support an ILS system must be reported on FAA Form 8240-8, except when the inspection of the visual aid or NDB is independent of the ILS. In this instance, use FAA Form 8240-5 for the report. If the NDB is used as a compass locator for an ILS, and the NDB also supports an NDB approach, two reports are required when the periodic is also conducted on the NDB approach. If the inspection only encompasses the NDB stand-alone approach, only the NDB report is required. All bearings must be reported as "FROM" the facility, unless there is a specific need to report them as "TO" the facility. Any bearings reported as "TO" the facility must be clearly indicated.

> **NOTE:** Lights which do not support lower minima (e.g., LIRL, MIRL, PAPI, VASI, REIL) are not associated with the SIAP. Lights required for lower than one (1) mile visibility (nonprecision approach) or ¾ mile visibility (precision approach) or supporting lower than Category I (approach lights, TDZ, RCL, HIRL when runway visual range (RVR) required) are associated with the SIAP and should be reported on the associated facility form.

1. Field 1 - Location. Complete as shown in Chapter 2, Paragraph 12, and include the NDB name, in parenthesis, if different than the NDB location name. For charted visuals flight procedures (CVFP(s)), enter the location listed in the SIAP information.

2. Field 2 - Identifier (Ident)

a. For NDB and DF, enter the facility identifier listed on the AVNIS Facility Data Sheet.

b. For Instrument Flight Rules (IFR) airport night evaluation and general airport lighting (e.g., taxiway lighting), use the ICAO airport identifier.

c. For CONUS visual aids, enter the AVNIS runway identifier. For runway lighting systems (High Intensity Runway Lights (HIRL(s)), Medium Intensity Runway Lights (MIRL(s)), centerline lights, etc.) this may require two reports, one report for each end of the same runway (e.g., KSNA 19R and KSNA 01L).

d. For international visual aids, including runway lighting systems, enter the AVNIS runway identifier.

e. For Charted Visual Flight Procedures (CFVP(s)), enter the ICAO airport identifier. Multiple procedures to the same airport may be reported on one report form.

f. **For Communications,** enter the AVNIS identifier for the facility being checked (i.e., KSLC, ZLA).

3. **Field 3 - Common System**. Complete as shown in Chapter 2, Paragraph 12.

4. **Field 4 - Date/Dates of Inspection**. Complete as shown in Chapter 2, Paragraph 12.

5. **Field 5 - Owner.** Complete as shown in Chapter 2, Paragraph 12.

6. **Field 6 - Type of Inspection.** Complete as shown in Chapter 2, Paragraph 12.

7. **Field 7 - Facility/Component Inspected**. Place an "X" in the appropriate block indicating the facility being inspected. For CVFP(s), place an “X” in the visual aids block.

8. **Field 8 - Nondirectional Beacon**

a. **Radio Class Code.** Enter the applicable code as it appears in the FAA AVNIS data unless information is changed by the report. Identify UHF facilities by adding "UHF." If inspecting the DME only of an NDB/ DME, leave blank.

b. **Frequency.** Enter the published frequency of the NDB.

c. **DME Channel**. If an NDB/ DME is inspected, enter the published DME channel.

d. **Items Checked.** Enter an "X" in the appropriate block to indicate the item inspected did or did not meet prescribed tolerances. The bearing accuracy block may be left blank, except for UHF homing beacons. If voice is inspected on a periodic inspection, mark the appropriate "SAT" or "UNSAT" block. A (SAT) entry indicates all available voice capabilities for the facility (e.g., ATIS, AWOS/ ASOS) are satisfactory. If (UNSAT) for one or more voice capabilities, explain in Remarks.

9. **Field 9 - Direction Finding**

a. **Checkpoint.** For AFIS, leave blank. For manual, describe checkpoints in Remarks.

b. **Aircraft Altitude**. Enter the aircraft's altitude over the checkpoint, divided by 100 (e.g., "50" for 5,000 feet).

c. **Aircraft Distance.** Enter the distance of the aircraft from the antenna to the nearest mile.

d. **Bearing/Aircraft.** Enter the aircraft's magnetic azimuth, to the nearest degree from the direction finding (DF) antenna, when the DF bearing is given.

e. **Bearing/DF.** Enter the bearing, to the nearest degree, issued by the controller.

f. Bearing/ Error. Enter the difference between the aircraft azimuth and the bearing issued by the controller (e.g., aircraft azimuth 331°, issued bearing 333°, the error is -2.0°).

g. Frequency Used. Enter the frequency used to obtain the DF bearing.

h. Station Passage. Enter an "X" in the appropriate block. If not required, leave blank.

i. Standby Power. Enter an "X" in the appropriate block. If not checked, leave blank.

> **NOTE:** Whenever an alignment orbit is flown (e.g., commissioning check, maintenance request, and as determined by the flight inspector), it may require several pages of DF checkpoints to satisfy the requirements of a complete orbit.

10. Field 10 - Visual Aids

a. Facility Inspected. Check the appropriate block to indicate the facility or facilities inspected. If the visual system inspected is not of the type covered by the four blocks, insert an asterisk after facility inspected and describe in Field 12.

> **NOTE:** More than one type of visual system may be indicated in this field, provided the flight inspector shows clearly which facility each entry refers to and the entries in Fields 1, 2, 4, and 6 are common to each facility. If these provisions cannot be met, complete separate forms.

b. Runway(s) Served. Enter the numerical (and alphabetical when appropriate) designators which have been published to identify the runways served by the system(s) being reported.

c. Items Checked. Enter an "X" in the appropriate block to indicate that an item inspected did or did not meet operational tolerances. Additionally, when visual glide slope indicator (VGSI) facilities are being checked:

(1) When an angle is determined by flight inspection, enter the commissioned angle <u>and</u> the angle determined during the inspection following the "glide slope angle" block (e.g., 3.00°/ 2.95°), or

(2) When the commissioned angle is unknown and/or the angle is not determined during the inspection, enter an asterisk following the "glide slope angle" block (e.g., */ *) and explain in the "Remarks" field.

11. Field 11 - Communications. Check the appropriate block to indicate the facility being inspected. In cases where Pilot-to-Forecaster or Combined Station Tower were checked, enter P/F or CS/ T in the block following "Communications" and enter an "X" in the "other" block. Several frequencies may be listed on one line when the "X(s)" placed in the blocks on that line are common to all frequencies listed. Assignment of facility status is not required.

12. Field 12 --Remarks. Complete as defined in Chapter 3.

a. Nondirectional Beacons. When routes are flown, enter the bearing, altitude, and distance flown (e.g., 030/ 2800/ 45.0). When the NDB is also used as a compass locator associated with an ILS system, enter the ILS identification on commissioning reports only (e.g., compass locator/ LOM/ LMM associated with RGR ILS).

b. Visual Aids. Indicate if the inspection was conducted at night (e.g., "runway end identifier lights (REIL) evaluated at night). Omission of this remark will indicate the check was conducted during the daytime. If the visual aid supports an ILS procedure, enter the ILS identification on commissioning reports only (e.g., approach lighting system (ALS) supports RGR ILS).

13. NOTAM(s). Complete as shown in Chapter 3, Paragraph 21e. If the NDB is associated with an ILS, the restrictions must be added to the ILS AVNIS data sheet.

FLIGHT INSPECTION REPORT
NDB, DIRECTION FINDING, VISUAL AIDS, COMMUNICATIONS
FIGURE 1. FAA FORM 8240-5

FLIGHT INSPECTION REPORT--NONDIRECTIONAL BEACON, DIRECTION FINDING, VISUAL AIDS, COMMUNICATIONS	REVIEW INITIALS

1. LOCATION:		2. IDENT:
3. COMMON SYSTEM:	4. DATE/DATES OF INSPECTION:	5. OWNER:

6. TYPE OF INSPECTION		SITE EVALUATION		PERIODIC		SPECIAL
		COMMISSIONING		SURVEILLANCE		INCOMPLETE

7. FACILITY / COMPONENT INSPECTED		DIRECTION FINDING		NDB		NDB / DME		COMMUNICATIONS		VISUAL AIDS

8. NONDIRECTIONAL BEACON

RADIO CLASS CODE: FREQUENCY: DME CHANNEL:

ITEMS CHECKED	S A T	UNSAT	ITEMS CHECKED	SAT	UNSAT	ITEMS CHECKED	S A T	UNSAT
IDENTIFICATION			COVERAGE			STATION PASSAGE		
INTERFERENCE			NEEDLE OSCILLATIONS			STANDBY EQUIPMENT		
VOICE			BEARING ACCURACY			STANDBY POWER		

9. DIRECTION FINDING

CHECKPOINT	AIRCRAFT ALTITUDE	AIRCRAFT DISTANCE	BEARING			FREQUENCY USED
			AIRCRAFT	D F	ERROR	

STATION PASSAGE		SATISFACTORY		UNSATISFACTORY		STANDBY POWER		SATISFACTORY		UNSATISFACTORY

10. VISUAL AIDS

FACILITY INSPECTED		ALS		REIL		VASI		PAPI		RUNWAY (S) SERVED:	
ITEMS CHECKED	S A T	UNSAT	ITEMS CHECKED		SAT	UNSAT	ITEMS CHECKED			S A T	UNSAT
INTENSITY			ANGULAR COVERAGE				SEQUENCE FLASHERS				
GLIDE SLOPE ANGLE			OBST. CLEARANCE (VGSI)				FOCUS AND ADJUSTMENTS				
COINCIDENCE (PAR/ILS/MLS)			RUNWAY LIGHTS				RADIO CONTROL SYSTEM				

11. COMMUNICATIONS			APROACH CONTROL		F S S		TOWER		CENTER		OTHER
FREQUENCY USED	PRIMARY		SECONDARY		VOICE QUALITY		COVERAGE		STANDBY POWER		
	S A T	UNSAT	S A T	UNSAT	S A T	UNSAT	S A T	UNSAT	S A T	UNSAT	

12. REMARKS:

FACILITY STATUS		NOTAM's:
UNRESTRICTED		
RESTRICTED		
UNUSABLE		

REGION:	FLIGHT INSPECTOR 'S SIGNATURE:	MISSION SPECIALIST'S SIGNATURE:	AIRCRAFT NO :
FIFO:			

FAA FORM 8240 - 5 (10/2005) (FORMFLOW) (Formerly FAA Form 8240-19) Date Completed:

APPENDIX 6. FLIGHT INSPECTION REPORT PRECISION APPROACH RADAR (PAR), FAA FORM 8240-6; PAR GPN-22/ TPN-25 CONTINUATION SHEET, FAA FORM 8240-6-1; AND PAR TPN-22 CONTINUATION SHEET, FAA FORM 8240-6-2

Complete one FAA Form 8240-6, Precision Approach Radar, per runway identifier.

1. FAA FORM 8240-6, FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR

a. Field 1 - Location. Complete as shown in Chapter 2, Paragraph 12.

b. Field 2 - Identifier (Ident). Enter the ident listed in AVNIS for the specific runway. Report only one runway identifer per report.

c. Field 3 - Runway. Enter the applicable runway designator.

d. Fields 4--6. Complete as shown in Chapter 2, Paragraph 12.

e. Field 7 - Equipment Type Designation. Enter the type of equipment inspected (e.g., MPN-11, GPN-22, or TPN-19).

f. Field 8 - Azimuth Radar. Under the designated channel enter an "X" in the appropriate block to indicate that an item was inspected and that it did or did not meet operational tolerance.

g. Field 9 - Elevation Radar

(1) Under the designated channel enter an "X" in the appropriate block to indicate that an item was inspected and that it did or did not meet operational tolerance.

(2) Published Angle/Actual Angle. In the "Published Angle" block, enter the commissioned angle for each channel checked. In the "Actual Angle" block, enter the measured PAR angle for each channel checked. If the actual angle is not checked, leave blank.

h. Field 10 - Approaches

(1) Moving Target Indicator (MTI). Enter "Y" (Yes), "N" (No), or “NA” (Not Applicable) to show if the MTI feature was used during the approach.

(2) Polarization. Indicate the type of polarization used during the approach (e.g., circular polarization (CP) or linear polarization (LP)). For computer-generated radars, enter circular polarization (CP).

(3) Other Approach Conditions. This space is to be utilized to indicate any condition pertinent to the approach (e.g., lower safe limit check, adverse weather conditions).

(4) SAT/ UNSAT. Enter an "X" in the appropriate block to show if the approach was satisfactory or unsatisfactory.

i. Field 11 - General

(1) Item. Enter an "X" in the appropriate block to show what item was inspected and that it did or did not meet operational tolerance.

(2) Frequencies Used. List the frequencies inspected in the appropriate block.

(3) Lighting Systems. If all lighting features required to support the lowest authorized visibility are Satisfactory, mark accordingly. Explain Unsatisfactory conditions in Remarks.

j. Field 12 - Remarks. Complete as defined in Chapter 3. Enter additional remarks, such as:

(1) When PAR equipment has been replaced or when a major modification has been performed.

(2) When azimuth or elevation MTI is required on the final approach. (This requirement does not constitute a facility restriction.)

k. NOTAM(s). Complete as shown in Chapter 3, Paragraph 21.

2. FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR CONTINUATION SHEETS. Complete a separate form for each runway inspected.

NOTE: Form abbreviations used in FAA Forms 8240-6-1 and 8240-6-2 are as follow:

FTC	- Fast Time Constant
ACQ	- Acquisition
MTI	- Moving Target Indicator
RWY	- Runway
CK'S	- Checks Required
NOR	- Normal
BK UP	- Back Up
AUTO	- Automatic
COH	- Coherent
NON-COH	- Noncoherent
CFAR	- Constant False Alarm Rate
ALS	- Automatic Landing Subsystem
S/N	- Serial Number
C	- Commissioning
P	- Periodic
RCVR CHAN	- Receiver Channel Number

a. FLIGHT INSPECTION REPORT—PRECISION APPROACH RADAR GPN-22/TPN-25 CONTINUATION SHEET, FAA FORM 8240-6-1

(1) Field 1 - Location. Enter as in Field 1, FAA Form 8240-6.

(2) Field 2 - Identifier (Ident). Enter as in Field 2, FAA Form 8240-6.

(3) Field 3 – Runway. Enter the applicable runway designator.

(4) Field 4- Date/ Dates of Inspection. Enter as in Field 4, FAA Form 8240-6.

(5) Field 5 - Computer Generated Precision Approach Radar Run Configurations.

(a) Asterisks indicate the required configuration for each run.

(b) Enter an "X" in the appropriate blocks to show which configuration was actually checked.

(c) The "Checks Required" columns shows which runs are necessary to satisfy commissioning and periodic requirements.

(d) Enter receiver sensitivity, clutter (rain) reject, etc., in the blocks provided, as required in Order 8200.1, Paragraph 14.23b.

(6) Field 6 - Remarks. Enter comment for each feature which either is not available in the required configuration or produces an unsatisfactory or out-of-tolerance result.

b. FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR TPN-22 CONTINUATION SHEET, FAA FORM 8240-6-2

(1) Field 1 - Location. Enter as in Field 1, FAA Form 8240-6.

(2) Field 2 - Identifier (Ident). Enter as in Field 2, FAA Form 8240-6.

(3) Field 3 - Runway. Enter the applicable runway designator.

(4) Field 4 - Date(s) of Inspection. Enter as in Field 4, FAA Form 8240-6.

(5) Field 5 - System Serial #. Enter the serial number provided by Maintenance.

(6) Field 6 - Computer Generated Precision Approach Radar Run Configurations

(a) Asterisks indicate the required configuration for each run.

(b) Enter an "X" in the appropriate blocks to show which configuration was actually checked.

(c) The "Checks Required" columns show which runs are necessary to satisfy commissioning and periodic requirements.

(7) Field 7 - Enter program data as required in Order 8200.1, Paragraph 14.23c. Enter transmitter power and receiver sensitivity values provided by Maintenance. Leave polarization blank.

(8) Field 8 - Remarks. Enter comment for each feature which either is not available in the required configuration or produces an unsatisfactory or out-of-tolerance result.

FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR
FIGURE 1. FAA FORM 8240-6

FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR						REVIEW INITIALS
1. LOCATION:						2. IDENT:
3. RUNWAY:	4. DATE(S) OF INSPECTION:					5. OWNER:
6. TYPE OF INSPECTION		SITE EVALUATION		PERIODIC		SPECIAL
		COMMISSIONING		SURVEILLANCE		INCOMPLETE

7. EQUIPMENT TYPE DESIGNATION:

8. AZIMUTH RADAR	CHANNEL "A"		CHANNEL "B"		9. ELEVATION RADAR	CHANNEL "A"		CHANNEL "B"	
	SAT.	UNSAT.	SAT.	UNSAT.		SAT.	UNSAT.	SAT.	UNSAT.
COURSE ALIGNMENT					GLIDE SLOPE ALIGNMENT				
DEVIATION ACCURACY					RANGE ACCURACY				
RANGE ACCURACY					COVERAGE				
COVERAGE / USABLE DIST					PUBLISHED ANGLE				
M T I					ACTUAL ANGLE				
AZIMUTH ONLY MINIMA									

10. APPROACHES

MTI	POLARIZATION	OTHER APPROACH CONDITIONS	SAT.	UNSAT.

11. GENERAL

ITEM	SAT.	UNSAT.	FREQUENCIES USED	
			FOUND SATISFACTORY	FOUND UNSATISFACTORY
CONTROLLER PERFORMANCE				
ILS / MLS / VGSI COINCIDENCE				
STANDBY EQUIPMENT				
STANDBY POWER				
LIGHTING SYSTEMS				

12. REMARKS:

FACILITY STATUS		NOTAM's:
UNRESTRICTED		
RESTRICTED		
UNUSABLE		

FIFO:	FLIGHT INSPECTOR'S SIGNATURE:	MISSION SPECIALIST'S SIGNATURE:	AIRCRAFT NO:

FAA FORM 8240 - 6 (10/2005) (FormFlow) (Supersedes previous edition) Date Completed:

FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR GPN-22/ TPN-25 CONTINUATION SHEET
FIGURE 2. FAA FORM 8240-6-1

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FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR GPN-22/TPN-25 CONTINUATION SHEET	REVIEW INITIALS
1. LOCATION:	2. IDENT:
3. RUNWAY:	4. DATE(S) OF INSPECTION:

5. COMPUTER GENERATED PRECISION APPROACH RADAR RUN CONFIGURATIONS

RUN	TRACK MODE		FTC		ACQ		MTI		RCVR CHAN	ANGLE	CHECK'S	
	NOR	BK UP	ON	OFF	AUTO	OFF	COH	NON-COH			"C"	"P"
1. "A" CURSOR PRIMARY	*		*		*		*				X	X
2. "A" CURSOR PRIMARY		*		*		*		*			X	
3. "A" CURSOR BACK UP	*		*		*		*				X	X
4. "B" CURSOR BACK UP	*		*		*		*				X	X
5. "B" CURSOR PRIMARY	*		*		*		*				X	

* FEATURES REQUIRED

RECEIVER SENSITIVITY
NOR: _____ NON-COH: _____ COH: _____

CLUTTER (RAIN) REJECT
YES: _____ NO: _____ N/A: _____

TRANSMITTER POWER: _____ db

USABLE RANGE ON
20 NM RADAR: _____

FIRMWARE
PART #: _____ VERSION#: _____

DIGITAL MTI BASELINE
LIMITING SETTINGS _____

6. REMARKS:

FAA FORM 8240 - 6 - 1 (10/2005) (FORMFLOW) (Supersedes previous edition) Date Completed:

FLIGHT INSPECTION REPORT—PRECISION APPROACH RADAR TPN-22 CONTINUATION SHEET FIGURE 3. FAA FORM 8240-6-2

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FLIGHT INSPECTION REPORT--PRECISION APPROACH RADAR TPN-22 CONTINUATION SHEET

REVIEW INITIALS

1. LOCATION:

2. IDENT:

3. RUNWAY:

4. DATE(S) OF INSPECTION:

5. SYSTEM SERIAL #

6. COMPUTER GENERATED PRECISION APPROACH RADAR RUN CONFIGURATIONS

RUN	MTI		CFAR		ALS PAR MODE		AZIMUTH 46° SECTOR	USABLE DISTANCE	ANGLE	CHECKS	
	ON	OFF	ON	OFF	AUTO	MANUAL	ON			"C"	"P"
1. "A" CURSOR AUTO		*		*	*		*			X	X
2. "B" CURSOR AUTO		*		*	*		*			X	X
3. "A" CURSOR AUTO	*			*	*		*			X	X
4. "B" CURSOR AUTO	*			*	*		*			X	X
5. "A" CURSOR MANUAL		*	*			*	*			X	
6. "A" CURSOR MANUAL	*		*			*	*			X	
ALTERNATE TOUCHDOWN POINTS ON SAME RUNWAY HEADING											
1. "A" CURSOR AUTO		*		*	*		*			X	X
2. "A" CURSOR MANUAL		*		*		*	*			X	X
3. "B" CURSOR MANUAL		*		*		*	*			X	X

* FEATURES REQUIRED

7. PROGRAM DATA:

NAME: _____ PART NUMBER: _____ VERSION: _____

SERIAL NUMBER: _____ BUILD DATE: _____

TRANSMITTER OUTPUT POWER: _____ RECEIVER SENSITIVITY: _____ POLARIZATION: _____

8. REMARKS:

FAA FORM 8240 - 6 - 2 (03/2003) (FORMFLOW) (Supersedes previous edition) Date Completed:

APPENDIX 7. FLIGHT INSPECTION REPORT ILS WORKSHEET, FAA FORM 8240-7 AND ILS CONTINUATION WORKSHEET, FAA FORM 8240-7-1

This form must be used on all ILS flight inspection evaluations and may be handwritten. It must be retained with the corresponding recordings. The quantity of information entered on this form is not mandatory but should contain sufficient detail to explain the checks completed and the results found.

1. FAA Form 8240-7, ILS Worksheet

a. Field 1 - Location. Complete as shown in Chapter 2, Paragraph 12.

b. Field 2 - Identification (Ident). Enter the 3-letter identifier of the ILS facility being inspected.

c. Field 3 - Runway No. Enter the runway designator served by the ILS.

d. Field 4 – Date. Enter the date(s) of the checks.

e. Field 5 - Owner. Complete as shown in Chapter 2, Paragraph 12.

f. Field 6 - Type Check. Complete as shown in Chapter 2, Paragraph 12.

g. Field 7 - Facility Inspected. Place an "X" in the appropriate block(s) to signify components have been inspected.

h. Field 8 - Facility Status. Enter an "X" in the appropriate block for the localizer front course (F/C), glide slope (GS), and localizer back course (B/C) if inspected.

i. Field 9 - Localizer Data

(1) Width: Enter commissioned course width

(2) CAT: Enter Category

(3) B: Enter Cat I or Cat II commissioned course width + 17% or CAT III commissioned course width + 10%

(4) S: Enter Cat I or Cat II commissioned course width - 17% or CAT III - 10%

(5) Dual Freq: Enter Yes or No

(6) Dual Tx: Enter Yes or No

(7) Voice: Enter Yes or No

(8) ESV: Enter Yes or No

(9) Back Course: Circle Y or N.

j. Field 10 - Glide Slope Data

(1) Angle: Enter commissioned angle

(2) CAT: Enter category of facility

(3) H: Enter high angle limit (+ 10% for CAT I and II, + 4% for CAT III)

(4) L: Enter low angle limit (- 7.5% for CAT I and CAT II, - 4% for CAT III)

(5) GS Type: Enter glide slope equipment type (null reference, capture effect, etc.)

(6) Dual Tx: Enter Yes or No

(7) ESV: Enter Yes or No

(8) GRD Temp: Enter temperature used when conducting ILS-2 runs

(9) OAT: Enter temperature used when conducting ILS-2 runs

(10) Baro: Enter barometric pressure used when conducting ILS-2 runs

(11) Alt: Enter MSL altitude ILS-2 runs were flown.

k. Field 11 - Notes: Enter any additional information that may be useful in interpreting the results of the flight inspection (e.g., the calibration values, distances, altimeter setting, etc.)

l. Field 12 - Enter in chronological order the checks conducted and the results. Use enough detail that a qualified person can interpret the information and correlate the data to the flight inspection recordings.

(1) Run Number (#). Enter the numerical sequence of each check or test.

(2) Facility Configuration (CFG). Enter the number of the transmitter being inspected and the transmitter configuration code as listed below:

Localizer Transmitter Configuration	Code
Normal	N
Special Requirements	Z
Alignment Alarm Left	L
Alignment Alarm Right	R
Course Width Wide	W
Course Width Narrow	S
RF Power Alarm	P
Localizer, CRS Wide, CLR Wide	B
Localizer, CRS NAR, CLR Wide	C

Glide Slope Transmitter Configuration	Code
Normal	N
Wide	W
Wide and CLR Demodulation	B
Narrow	S
Dephase Advance	A
Dephase Retard	R
Attenuate Middle Antenna	M
Attenuate Upper Antenna	U
Low Angle Alarm	L
High Angle Alarm	H
RF Power Alarm	P
Special Requirements	Z
Transverse Structure (FAF ALT)	T
Phase Verification Main Sideband Advance Phase	PSA
Phase Verification Main Sideband Retard Phase	PSR
Phase Verification Middle Antenna Advance Phase	PMA
Phase Verification Middle Antenna Retard Phase	PM

Waveguide Glide Slope Configuration	Code
Main Sideband Advance	MA
Main Sideband Retard	MR
Upper Auxiliary Attenuate	UZ
Upper Auxiliary Advance	UA
Upper Auxiliary Retard	UR
Lower Auxiliary Attenuate	LZ
Upper and Lower Waveguide Advance	ULA
Upper and Lower Waveguide Retard	ULR
Main Waveguide Feed Advance	FA
Main Waveguide Feed Retard	FR
Lower Main Feed Attenuate	LMZ
Upper Main Feed Attenuate	UMZ

(3) **The remaining columns** are intended for use as designated. They may be altered if necessary.

(4) **Remarks/ Other Data**. When manual mode is used to perform an inspection, enter the word "Non-AFIS" on the line preceding manual inspection entries.

Suggested abbreviations to be used when completing this form:

RWY	- Runway
FREQ	- Frequency
CW	- Commissioned or measured Course Width
CAT	- Category of ILS
CE	- Capture Effect
NR	- Null Reference
SBR	- Sideband Reference
EH	- Endfire Short
ED	- Endfire Standard
EU	- Endfire, Upslope Version
WG	- Waveguide
ANGLE	- Commissioned Glidepath
GND TEMP	- Ground Temperature
OAT	- Outside Air Temperature
BARO	- Barometric Altimeter Setting
ALTITUDE	- Altitude to Fly on ILS-2
PW	- Path Width
PA	- Path Angle
ALN	- Alignment
190 μA	- 190 Microamp Angle
Mod	- Modulation
90 Hz Sym	- Symmetry of 90 Hertz side of width
SBP	- Structure Below Path
Z1	- Localizer & Glide Slope Structure in Zone 1
Z2	- Localizer & Glide Slope Structure in Zone 2
Z3	- Localizer & Glide Slope Structure in Zone 3
Z4	- Localizer Structure in Zone 4
Z5	- Localizer Structure in Zone 5
POL	- Polarization
150 CLR	- Minimum localizer clearance on 150 Hz side of localizer
90 CLR	- Minimum localizer clearance on 90 Hz side of localizer

2. FAA Form 8240-7-1, ILS Continuation Worksheet

a. Field 1 - Notes. Enter any additional information that may be useful in interpreting the results of the flight inspection.

b. Field 2. Complete as shown in FAA Form 8240-7, Paragraph 1l.

FLIGHT INSPECTION REPORT—ILS WORKSHEET
FIGURE 1. FAA FORM 8240-7

PAGE of PAGES

FLIGHT INSPECTION REPORT - - ILS WORKSHEET

1. LOCATION:		2. IDENT:
3. RUNWAY NO:	4. DATE(S) OF INSPECTION:	5. OWNER:

6. TYPE OF INSPECTION		SITE EVALUATION		PERIODIC		SPECIAL
		COMMISSIONING		SURVEILLANCE		INCOMPLETE

7. FACILITY INSPECTED		LOCALIZER		SDF		GLIDE SLOPE		75 mHz MARKERS		DME
		LDA		TLS		LIGHTING SYSTEM		COMPASS LOCATORS		OTHER

8. FACILITY STATUS	F/C	G/S	B/C	9. LOCALIZER DATA		10. GLIDE SLOPE DATA	
UNRESTRICTED				WIDTH	CAT	ANGLE	CAT
				B	S	H	L
RESTRICTED				DUAL FREQ	DUAL TX	GS TYPE	
				VOICE	ESV	DUAL TX	ESV
UNUSABLE				BACK CRS Y / N	(B 7.02 / S 2.49)	GND TEMP	OAT
						BARO	ALT

11. NOTES: LOC - TH _____

12. RUN #	CFG	PA or ALN 150 CLR	PA (Corrected)	SBP 90 CLR/Z1	PW or CW Z2	SYM Z3	MOD Z4	REMARKS: Z5/POL

FAA FORM 8240 - 7 (4/2000) (FORMFLOW) (Formerly FAA Form 8240-21)

FLIGHT INSPECTION REPORT—ILS CONTINUATION WORKSHEET
FIGURE 2. FAA FORM 8240-7-1

IDENT: PAGE _____ of _____PAGES

FLIGHT INSPECTION REPORT -- ILS CONTINUATION WORKSHEET

1. NOTES:

RUN #	CFG	PA or ALN 150 CLR	PA (Corrected)	SBP 90 CLR/Z1	PW or CW Z2	SYM Z3	MOD Z4	REMARKS: Z5 / POL

FAA FORM 8240 - 7 - 1 (3/2000) (FORMFLOW) (Formerly FAA Form 8240-21-1)

APPENDIX 8. FLIGHT INSPECTION REPORT INSTRUMENT LANDING SYSTEM FAA FORM 8240-8

FAA Forms 8240-8, Instrument Landing System, and 8240-9, Instrument Landing System Supplement Sheet (see Appendix 9), are designed to be used together to report all the components or conditions of an instrument landing system (when necessary). This appendix provides guidelines for completing FAA Form 8240-8. For Transponder Landing Systems (TLSs), separate forms are required for each runway or separate approach procedure.

NOTE: Commissionings of visual aids, NDB(s), and after accident reports on NDB(s) must be reported on FAA Form 8240-5.

1. Field 1 - Identification (Ident). Enter the facility identifier.

2. Field 2 – Location. Enter the airport identifier as specified on the AVNIS Data Sheet.

3. Field 3 - State (St)/ Country Code. Enter the state code for facilities located in the United States or country code for facilities located outside the United States.

4. Field 4 - Runway No. Enter runway designator served by the ILS.

5. Field 5- Owner. Complete as shown in Chapter 2, Paragraph 12.

6. Field 6 – Category. Enter the lowest minima performance category of the facility (I, II, III).

7. Fields 7 and 8 – Complete as shown in Chapter 2, Paragraph 12.

8. Field 9 - Items Inspected. Place an "X" in the appropriate block(s) to signify components or SIAP(s) have been inspected. DME refers to any source of DME that may be required for the ILS approach (see Field 12). For TLS facilities, if only part of the system is checked, enter an “X” in the TLS block and in the component checked (e.g., if only the glide slope was checked, place an “X” in the TLS and glide slope blocks. If the whole system is checked, place an “X” in the TLS block only). The Offset block refers to an offset localizer or LDA. Enter an “X” in localizer and an “X” in offset to indicate the item inspected was an offset localizer. Complete in the same manner for an offset LDA.

9. Field 10 - Azimuth. This field must be left blank when that component of the ILS is not inspected or reported on the same flight inspection form (e.g, do not enter "COM'D WIDTH" for the azimuth if the reported information is glide slope only, or vice versa). Enter the data for both the front and back courses in the appropriate transmitter (TX) column. If the localizer transmitter cannot be determined, indicate in Field 14.

a. ILS-1 Altitude. Enter the MSL altitude in feet at which the ILS-1 maneuvers were flown.

b. Commissioned (Com’d) Width. Enter the tailored or standard course sector width.

c. Inspection Criteria. When the inspection is performed to a higher standard than the official category because it has been authorized IAW FAA Order 8400.13, Procedures for the Approval of Special Authorization Category II and Lowest Standard Category I Operations, and has a published “Special Authorization CAT II Operations to RVR 1600 or 1200” SIAP, enter the higher standard category. If the facility is not inspected to a higher standard, leave blank.

d. TX1/ TX2 CD (Code) Column. Under the appropriate transmitter number, enter an "X" for any out-of-tolerance condition found and not corrected during the inspection; enter a "C" for any out-of-tolerance condition found and corrected during the inspection. Enter “SS” when structure is “SAT” per Order 8200.1, Paragraph 15.51a. Enter “CS” when clearance is “SAT” per Order 8200.1, Paragraph 15.51c. Do not enter an “X” or “C” for any out-of-tolerance found in Zone 4 and 5 on a CAT I localizer (Zone 5 for Category II localizer) when the structure is analyzed for the purpose of defining a facility’s “Class” of performance.

e. TX1/ TX2 Initial Column. Under the appropriate transmitter number, enter the "as found" operating condition in this column, if this condition was changed or altered during the inspection.

f. TX1/ TX2 Final Column. Under the appropriate transmitter number, enter the operating condition at the completion of the inspection. Use this column to report the results of after accident checks.

g. Course Width. Enter the measured, normal course sector width for each transmitter checked.

h. Symmetry. Enter the percent of symmetry of the 90 Hz side.

i. Modulation. Enter the "on course" modulation level in percent for each transmitter checked.

j. Clearance 150. Enter the minimum value in microamperes and the degrees from the course on the 150 Hz side (front or back) for each transmitter checked. An entry of 180/ 20.0 means the minimum clearance was 180 μA at 20° from the course. When a facility is restricted, enter the minimum clearance value found in the unrestricted area in Field 10. Also report the minimum clearance found within the restricted area in Field 14.

NOTE: Do not report the algebraic sign from the AFIS clearance readout.

For a TLS, indicate “S” for Satisfactory or “U” for Unsatisfactory. Explain Unsatisfactory conditions in Remarks. Clearance plots are not required.

k. Clearance 90. Enter the results found on the 90 Hz side as shown in Subparagraph 9j.

l. Course Structure - General Information. When a facility is restricted from a point in a zone, enter the maximum course displacement in the unrestricted portion of the zone in Field 10. Also report the maximum structure found within the restricted area in Field 14.

m. Course Structure - Z1, Z2, Z3, Z4, Z5. Report the maximum course displacement in microamperes due to roughness, scalloping, or bends for each transmitter checked. Report the course displacement for each zone and the distance from the threshold, antenna (back course), or missed approach point (e.g., 5/ 0.7 indicates the displacement was 5 μA at 0.7 nm). If distances are referenced to the MAP or antenna (back course), note in Remarks. When necessary to more accurately locate a structure value in a particular zone, report mileage to the nearest hundredth.

Zone 4 and 5 structure, which is analyzed for the purpose of defining a facility's "Class" of performance must be reported unless restricted. Only the zones used to identify the normal "Category" of the system must be used to assign facility status. For inspections where Zone 4 and Zone 5 structure are evaluated both through roll-out and airborne (50 ft), report the roll-out results in Field 10 and the airborne results in Field 14.

(1) When zones have tolerances which have linear rates of change, report the structure closest to the tolerance limit.

(2) Report the out of tolerance furthest from the threshold, antenna (back course), or missed approach point. Report additional out-of-tolerance structure closer to the threshold, antenna (back course), or missed approach in Field 14, if appropriate.

n. Vertical Polarization - Enter "S" if Satisfactory or "U" if Unsatisfactory. Explain Unsatisfactory conditions in Remarks.

o. Alignment. Enter the course displacement in microamperes, left or right of the designed course (e.g., 3R is 3 μA right of the course, "CL", for no alignment error). LDA(s) oriented to a non-descript point-in-space, where adequate visual checkpoints are not available and AFIS runway updates are impractical, must be reported either Satisfactory (S) or Unsatisfactory (U).

p. Identification. Enter "S" if Satisfactory or "U" if Unsatisfactory.

q. Power Ratio. Enter the power ratio value in dB.

r. Usable Distance/ PWR Setting. If a RF power monitor check is conducted to check the service volume, enter the maximum distance in nautical miles from the antenna where the check was Satisfactory and the power setting in watts. For dual frequency equipment, document the distance in nautical miles first, followed by the power setting of the course transmitter, then the power setting of the clearance transmitter i.e., 18.0/ 12.0/ 2.0.

s. Monitor. Leave blank.

(1) Course Width (Narrow). Enter the course sector width when narrowed to the monitor reference setting. For dual frequency localizers, enter the course narrow/ clearance wide results when checked.

(2) Clearance 150. Enter as shown in Subparagraph 9j, the minimum clearance measured on the 150 Hz side, when the facility is in the narrow monitor reference setting. For dual frequency localizers, enter the minimum clearance measured on the 150 Hz side when the facility is in the course narrow/ clearance wide monitor reference setting.

(3) Clearance 90. Enter as shown in Subparagraph 9j, the minimum clearance measured on the 90 Hz side, when the facility is in the narrow monitor reference setting. For dual frequency localizers, enter the minimum clearance measured on the 90 Hz side when the facility is in the course narrow/ clearance wide monitor reference setting.

(4) Course Width (Wide). Enter the course sector width when increased to the monitor reference setting. For dual frequency localizers, report the course wide/ clearance wide results.

(5) Clearance 150. Enter as shown in Subparagraph 9j, the minimum clearance measured on the 150 Hz side, when the facility is in wide monitor reference setting. For dual frequency localizers, enter the minimum clearance measured on the 150 Hz side when the facility is in course wide/ clearance wide monitor reference setting.

(6) Clearance 90. Enter as shown in Subparagraph 9j, the minimum clearance measured on the 90 Hz side, when the facility is in wide monitor reference setting. For dual frequency localizers, enter the minimum clearance measured on the 9 0 Hz side when the facility is in course wide/ clearance wide monitor reference setting.

(7) Alignment R. Enter the course displacement in microamperes, with the course alignment shifted to the right (150 Hz side) monitor reference setting. Reference the displacement to the designed azimuth alignment or modulation balance reference.

(8) Alignment L. Enter the course displacement in microamperes, with the course alignment shifted to the left (90 Hz side) monitor reference setting. Reference the displacement to the designed azimuth alignment or modulation balance reference.

(9) Localizer Only Structure. Report localizer only approach final segment maximum structure. Report the structure closest to the tolerance limit (e.g., localizer only structure 14/ 0.4 miles)

t. Instrument Landing System Data - Marker Width(s) -- Outer Marker, Middle Marker, or Inner Marker. For commissioning flight inspections, enter the minor axis width in feet.

10. Field 11 - Glide Slope. Columns are provided for each transmitter and are labeled similar to the localizer entries. This field must be left blank when that component of the ILS is not inspected or reported on the same flight inspection form (e.g., do not enter "COMD ANGLE" for the glideslope if the reported information is localizer only, or vice versa). Enter the data in the appropriate (TX) column. If the glideslope transmitter cannot be determined, indicate in Field 14.

a. Commissioned (Com'd) Angle. Enter the commissioned angle.

b. ILS-2 Altitude. Enter the altitude in feet MSL at which the ILS-2 maneuvers were flown.

c. Inspection Criteria. When a CAT I facility performance is monitored to CAT II Standards IAW FAA Order 8400.13, enter CAT II in this field (this will be the first character of the "Performance Class" that is available on the AVNIS data sheet). If it is not, leave blank.

d. TX1/ TX2 CD Column. Under the appropriate transmitter number, enter an "X" for any out-of-tolerance condition found and not corrected during the inspection; enter a "C" for any out-of-tolerance condition found and corrected during the inspection. Enter "SS" when structure is "SAT" per Order 8200.1, Paragraph 15.51a.

e. TX1/ TX2 Initial Column. Under the appropriate transmitter number, enter the "as found" operating condition in this column, if this condition was changed or altered during the inspection.

f. TX1/ TX2 Final Column. Under the appropriate transmitter number, enter the operating condition at the completion of the inspection. Use this column to report the results of after accident checks.

g. Angle. Enter the measured, actual glidepath angle. If the reported angle is not the actual angle, explain in Field 14.

h. Modulation. Enter the modulation level in percent.

i. Width. Enter the width of the normal glidepath envelope, as measured on a level run.

j. Structure Below Path. Enter the normal level run angle where 190 μA of fly-up signal occurs.

k. Symmetry. Enter the percent of symmetry of the 90 Hz side.

l. Path Structure - General Information. If a facility is restricted from a point in a zone, enter the maximum on-path displacement in the unrestricted portion of the zone in Field 11.

m. Path Structure Z1, Z2, Z3. Report the maximum on-path displacement in microamperes due to roughness, scalloping, or bends for each transmitter checked. Report the path displacement for each zone and the distance from the threshold (e.g., 5/ 0.7 indicates the displacement was 5 μA at 0.7 nm). If it is necessary to more accurately identify structure in a particular zone, report mileage to the nearest hundredth. Due to flight inspection limitations of the Sierra AFIS system, manual analysis of Z3 glide slope structure is required.

(1) When zones have tolerances that have linear rates of change, report the structure closest to the tolerance limit.

(2) Report the out of tolerance furthest from the threshold. Report additional out-of-tolerance structure closer to the threshold in Field 13, if appropriate.

n. Angle Alignment " B – C". This value represents the worst (with respect to tolerances) average deviation of Zone 3 best fit straight line angle from commissioned glide slope angle, as measured from Point B to Point C. Enter first value in μA and second value in nm. Due to flight inspection limitations of the Sierra AFIS system, manual analysis of the first corrected error trace is required. When using the Sierra AFIS system, this value represents the worst (with respect to tolerances) deviation of the mean angle from commissioned glide slope angle, as measured from Point B to Point C. Enter the first value in μA and the second value in nm.

o. Angle Alignment "C – T". This value represents the worst (with respect to tolerances) average deviation of Zone 3 best fit straight line angle from commissioned glide slope angle, as measured from Point C to Threshold. Enter first value in μA and second value in nm. Due to flight inspection limitations of the Sierra AFIS system, manual analysis of the first corrected error trace is required. When using the Sierra AFIS system, this value represents the worst (with respect to tolerances) deviation of the mean angle from commissioned glide slope angle, as measured from Point C to Threshold. Enter the first value in μA and the second value in nm.

p. Angle Alignment "T". This value represents the Zone 3 μA value at Point T and the Zone 3 BFSL deviation from the commissioned glide slope angle at Point T in feet. Enter first value in μA and second value in feet. Due to flight inspection limitations of the Sierra AFIS system, there is no capability to determine this value. When using the Sierra AFIS system, leave blank.

11. Field 12 - General. This field is used to document the condition of facilities or visual aids, which are part of or used as a component of the ILS approach and are checked concurrently.

a. 75 MHz Markers, Compass Locators, DME. Enter "X" in the appropriate column (if inspected).

(1) Satisfactory means that all markers in the system being inspected are in tolerance. If any markers are found out-of-tolerance, and the condition not corrected, indicate markers as "Unsatisfactory" and explain in Field 14.

(2) When the DME for an ILS approach is provided by a VOR/ DME, VORTAC, or TACAN, enter, following the word "DME", the identifier, and the type facility providing the DME (e.g., BLV TAC).

(3) The "compass locators" block is used to report the condition of nondirectional beacons (NDBs) used as a part of an ILS system. If the identifier of the NDB is different from the ILS (compare the broadcast idents, not the AVNIS idents), enter the identifier after the words “compass locators”. If more than one NDB is a component of the ILS system, report the additional NDB(s) in the Remarks block.

(4) SIAP(s)/ Publications. For SIAP(s) check IAW Order 8200.1, Chapter 6, and Publications checked IAW Order 8200.1, Paragraph 4.34f, enter an “X” in the appropriate block (i.e., Satisfactory (SAT) or Unsatisfactory (UNSAT)). If one is Satisfactory and one is not, enter an “X” in the Satisfactory block and an asterisk in the Unsatisfactory block and explain in Remarks.

b. Lighting Systems. If all lighting features required to support the lowest authorized visibility are Satisfactory, mark accordingly. Explain Unsatisfactory conditions in Remarks

12. Field 13 - Facility Status. If inspected, enter an "X" in the appropriate block for the localizer front course (F/ C), glide slope (G/ S), and localizer back course (B/ C).

ILS Classification System: The classification system is intended to provide a more comprehensive method of describing ILS performance than the currently used Facility Performance Category alone. A facility's "Class" of performance is defined by using three characters. Flight inspection will report two of the three characters IAW Order 6750.24, Appendix 2. An excerpt from Order 6750.24 is provided as guidance for determining the appropriate character to enter in the ILS Classification System block.

a. **I, II, or III:** As an example, an ILS that conforms to the ICAO Annex 10 Facility Performance CAT III standards, meets the CAT III localizer course structure criteria to ILS Point "D", and conforms to the integrity and continuity of service objectives of Level 3, would be described as "Class IIID3". An ILS, which conforms to ICAO Annex 10 Facility Performance CAT I standards, has a localizer CAT III course structure to Point "E", and conforms to the integrity and continuity of service objectives of Level 2, would be described as "Class IE2". However, when a CAT I facility performance is monitored to CAT II standards, this same facility having a localizer CAT III course structure to Point "E" and conforming to the integrity and continuity of service objectives to Level 2 would be described as "Class IIE2".

Conversion of a Facility's Performance Class from CAT I to CAT II is dependent upon the facility performance being monitored to CAT II standards. When requested, IAW FAA Order 8400.13, Appendix 2, we are responsible for completing a flight check IAW the Flight Inspection Operations checklist contained therein. For our purposes, satisfactory results of all checklist items does not in and of itself constitute a reason to change the Facility's Performance Class from a CAT I to a CAT II within the ILS Classification System block. A change of the Facility's Performance Class will be dependent upon successful completion of all checklists contained in FAA Order 8400.13, Appendix 2, and publication of a "Special Authorization CAT II Operations to RVR 1600 or 1200" SIAP.

For tracking purposes, when the results of all Flight Inspection Operations checklist items are satisfactory, enter in Remarks, "This facility supports Facility Performance Class II". Upon publication of the "Special Authorization CAT II Operations to RVR 1600 or 1200" SIAP, the Facility's Performance Class within the "Performance Class" field on the AVNIS Facility Data Sheet will be changed by Flight Inspection Operations Technical Support from CAT I to CAT II. On future reports, when the facility supports CAT II requirements, enter CAT II into the ILS Classification System block.

b. **A, B, C, T (Threshold), D, or E:** This character defines the ILS point to which the localizer conforms to the Facility Performance CAT III course structure tolerances. Report only to point "T" for those facilities that have not completed a rollout check.

Enter the appropriate ILS Classification System characters in the block. Enter the Facility Performance Class (described in Paragraph 11a above) first, and the point to which the localizer conforms to the Facility Performance CAT III course structure tolerance (described in Paragraph 11b above) second. The 2nd character performance classification of "D" and "E" must be determined solely by rollout procedures. The low approach (50 ft) method may be used for subsequent classification if a comparability check was accomplished, found Satisfactory, and is documented on the AVNIS.

c. **NOTAM(s).** Complete NOTAM(s) block as directed in Chapter 3, Paragraph 21. Restriction information on NDB(s) used only as Compass Locators must be reported. This restriction status must be entered in the Remarks section of the ILS AVNIS Facility Data Sheet.

13. **Field 14 - Remarks**. If FAA Form 8240-9, Flight Inspection Report--Instrument Landing System Supplement Sheet, is used as part of the ILS report, all remarks may be reported on the supplemental sheet. When reporting localizer phasing (e.g., enter the start/ stop distance from the localizer antenna, the course sector side (90 Hz or 150 Hz), the offset from centerline (in degrees), and the MSL altitude flown).

a. **75 MHz Marker Beacon(s)**. See Chapter 3, Paragraph 21.

b. **Clearance Below Path.** When checking clearances to runway threshold on CAT I glide slopes with runway centerline localizers, explain in Field 13 (e.g., Clearance below path checked to Category II standards; results between Point C and Threshold are Satisfactory/ Unsatisfactory).

c. **Roll-Out Procedures.** When rollout procedures are established IAW Order 8200.1 for any localizer, document roll-out code in the Remarks, e.g., Rollout code is established as "S". The available codes include:

(1) **S =** Rollout accomplished; results of both the Rollout and the 50 ft run are within Category III tolerance and compare within 3 μA.

(2) **U4 =** Rollout accomplished; Zone 4 results do not meet Category II/ III tolerances.

(3) **U5 =** Rollout accomplished; Zone 5 results do not meet Category III tolerances.

(4) **R4 =** Rollout required for evaluation of Zone 4 and Zone 5. Rollout was accomplished; ground results meet Category II/ III requirements but do not compare with results of the 50 ft run in Zone 4.

(5) **R5 =** Rollout required only for evaluation of Zone 5. Rollout was accomplished; ground results meet Category III requirements; comparison with the 50 ft run was Satisfactory in Zone 4 but Unsatisfactory in Zone 5.

d. When accomplished, document **localizer course width/ clearance comparability check results** on the AVNIS Data Sheet and the report, including the procedure used (e.g., course width and clearance comparability verified from LCA of 1,200 feet MSL up to 4,555 feet MSL, using Procedure 1, IAW Order 8200.1, Paragraph 15.20k; or course width and clearance checks must be conducted at LCA of 1,200 feet MSL).

FLIGHT INSPECTION REPORT—INSTRUMENT LANDING SYSTEM
FIGURE 1. FAA FORM 8240-8

FLIGHT INSPECTION REPORT--INSTRUMENT LANDING SYSTEM | REVIEW INITIALS

1. IDENT:	2. LOCATION:	3. ST/COUNTRY	4. RWY:	5. OWNER:	6. CATEGORY:	7. DATE(S) OF INSPECTION:

8. TYPE OF INSPECTION		SITE EVALUATION		PERIODIC		SPECIAL
		COMMISSIONING		SURVEILLANCE		INCOMPLETE

9. ITEMS INSPECTED		LOCALIZER		OFFSET		SIAP		GLIDE SLOPE		75 mHz MARKERS		DME
		LDA		SDF		TLS		LIGHTING SYSTEM		COMPASS LOCATORS		OTHER

10. AZIMUTH

FRONT COURSE						COMD WIDTH:	BACK COURSE					
ILS-1 ALTITUDE:						INSPECTION CRITERIA:	ILS-1 ALTITUDE:					
TX 1			TX 2				TX 1			TX 2		
CD	INITIAL	FINAL	CD	INITIAL	FINAL		CD	INITIAL	FINAL	CD	INITIAL	FINAL
						COURSE WIDTH						
						SYMMETRY						
						MODULATION						
						CLEARANCE 150						
						CLEARANCE 90						
						STRUCTURE-Z 1						
						STRUCTURE-Z 2						
						STRUCTURE-Z 3						
						STRUCTURE-Z 4						
						STRUCTURE-Z 5						
						VERTICAL POLARIZATION						
						ALIGNMENT						
						IDENTIFICATION						
						POWER RATIO						
						USABLE DIS./PWR Setting						
						MONITOR						
						COURSE WIDTH (Narrow)						
						CLEARANCE 150						
						CLEARANCE 90						
						COURSE WIDTH (Wide)						
						CLEARANCE 150						
						CLEARANCE 90						
						ALIGNMENT R						
						ALIGNMENT L						
						LOC ONLY STRUCTURE						
						MARKER WIDTH(S)	OM:		MM:		IM:	

11. GLIDE SLOPE

ILS-2 ALTITUDE:						COMD ANGLE:
TX 1			TX 2			INSPECTION CRITERIA:
CD	INITIAL	FINAL	CD	INITIAL	FINAL	
						ANGLE
						MODULATION
						WIDTH
						STRUCTURE BELOW PATH
						SYMMETRY
						STRUCTURE-Z 1
						STRUCTURE-Z 2
						STRUCTURE-Z 3
						ANGLE ALIGNMENT "B - C"
						ANGLE ALIGNMENT "C - T"
						ANGLE ALIGNMENT "T"

12. GENERAL	SAT	UNSAT
75 mHz MARKERS		
COMPASS LOCATORS		
D M E		
LIGHTING SYSTEMS		
SIAP(S) / PUBLICATIONS		

13. FACILITY STATUS	F / C	G / S	B / C
UNRESTRICTED			
RESTRICTED			
UNUSABLE			
ILS CLASSIFICATION SYSTEM			

NOTAM's:

14. REMARKS:

REGION:	FLIGHT INSPECTOR 'S SIGNATURE:	MISSION SPECIALIST'S SIGNATURE:	AIRCRAFT NO :
FIFO:			

FAA FORM 8240 - 8 (10/2005) (FORMFLOW) (Supersedes previous edition) Date Completed:

APPENDIX 9. FLIGHT INSPECTION REPORT INSTRUMENT LANDING SYSTEM SUPPLEMENTAL SHEET FAA FORM 8240-9

This form is intended for use as a supplement to FAA Form 8240-8, Flight Inspection Report-Instrument Landing System, and will be used only as an attachment to a properly completed FAA Form 8240-8. When only checking a localizer-type facility, phasing data may be reported in Field 14 of FAA Form 8240-8 in lieu of completing this form.

1. Field 1 – Identification (Ident). Enter the facility ident.

2. Field 2 - Location. Enter the airport identifier as specified on the AVNIS Data Sheet.

3. Field. 3 – State (St)/ Country Code. Enter the state code for facilities located in the United States or country code for facilities located outside the United States.

4. Field 4 - Date/Dates of Inspection. Complete as shown in Chapter 2, Paragraph 12.

5. Field 5- Glide Slope. Enter the applicable path angle, path width, and structure below path for each condition outlined below.

> **NOTE:** If the actual path angle was determined during the inspection, apply the correction factor (per Order 8200.1, Chapter 15) to all reported on-path, level run angles.

a. Field 5a - Glide Slope Type. Enter the type of glide slope being reported. Use the suggested abbreviations shown in Appendix 7, Paragraph 1l(4).

b. Field 5b - Dephase

(1) Advance TX1/ TX2. Enter the measured values for each listed parameter and transmitter.

(2) Retard TX1/ TX2. Enter the measured values for each listed parameter and transmitter.

c. Field 5c – Main Sideband Dephase

(1) Advance TX1/ TX2. Enter the measured values for each listed parameter and transmitter.

(2) Retard TX1/ TX2. Enter the measured values for each listed parameter and transmitter.

d. Field 5d - Path Angle Lowered to Limit. Enter the measured values for each listed parameter and transmitter when the path angle has been lowered to the monitor reference setting.

e. Field 5e - Path Angle Raised to Limit. Enter the measured values for each listed parameter and transmitter when the path angle has been raised to the monitor reference setting.

f. Field 5f - Path Width Narrowed to Limit. Enter the measured values for each listed parameter and transmitter when the path width has been narrowed to the monitor reference setting.

g. Field 5g- Path Width Widened to Limit. Enter the measured values for each listed parameter and transmitter when the path width has been widened to the monitor reference setting; for capture effect facilities, leave this field blank and complete Field 5h.

h. Field 5h - Clearance TX Modulation Decreased to Limit (Primary TX Wide Limit). Enter the measured values for each listed parameter and transmitter when the clearance TX modulation level has been decreased to the monitor reference setting while the path width of the primary TX is in the monitor wide limit setting.

i. Field 5i - Attenuate Middle Antenna to Limit TX1/ TX2. Enter the measured values for each listed parameter and transmitter when the middle antenna signal is attenuated to the monitor reference setting.

j. Field 5j - Attenuate Upper Antenna to the Limit TX1/ TX2. Enter the measured values for each listed parameter and transmitter when the upper antenna signal is attenuated to the monitor reference setting.

k. Field 5k – Transverse Structure. Complete when endfire glide slope transverse structure is checked but FAA Form 8240-19 completion is <u>not</u> required (FAA Form 8240-19 is required on commissioning or other checks that are used as baseline data for later checks).

(1) Enter the glide slope crosspointer deflection (microamps/ 90Hz or 150 Hz) at the localizer 150 μA points left and right of localizer centerline, as referenced to the glide slope crosspointer found at localizer centerline. For example, at localizer centerline, the received signal is 10 μA of 90 Hz, and at the right side localizer 150 μA point, the received value is 15 μA of 150 Hz. The reported value in the "Right of CL" section of the Transverse Structure block must be 25 μA/ 150Hz.

(2) Reference the localizer crosspointer transition for right/ left determination (150 Hz = Right).

(3) In the "RADIUS" block, enter the distance in nautical miles from the localizer centerline abeam the glide slope.

(4) In the "ALTITUDE" block, enter the altitude flown, divided by 100.

l. Field 5l - Modulation Equality TX1/ TX2. Enter the crosspointer deflection in microamps and the predominate 90 Hz or 150 Hz modulation for each transmitter. Enter zero if obtained.

m. Field 5m - Phasing TX1/ TX2. Enter the crosspointer deflection in microamps and the predominate 90 Hz or 150 Hz modulation for each transmitter. Enter zero if obtained.

n. Field 5n - Front Course Area Where Phasing Was Conducted. In the "NM" block, enter the segment distance in nautical miles from the glide slope antenna where phasing repeatability existed (e.g., 4.0 – 1.0). In the "MSL" block, enter the altitude flown above mean sea level.

o. Field 5o – Mean Width/ Symmetry. Enter the transmitter checked, angle found above, angle found below, the mean width, and the mean symmetry of the 90 Hz side.

p. Field 5p – Tilt. Enter the transmitter checked, angle found on the 150 Hz side, and angle found on the 90 Hz side.

q. Field 5q – Achieved Reference Datum Height (ARDH). When FAA Order 8240.47, Determination of ILS Glidepath Angle, Reference Datum Heights, and Ground Point of Intercept, is used on a glide slope, enter the following information: ARDH in feet, Achieved GPI to Threshold Distance in feet, RDH in feet, and Final Aiming Point elevation in feet. Include this information in the Remarks Field on the AVNIS Facility Data Sheet. On commissioning, report the radio altimeter indication at the published CAT II Decision Height.

r. Field 5r – Glide Slope Aiming Point. (Glide Slope Coordinate Standardization (AFIS/ AVNIS)). Document the glide slope aiming point coordinates (i.e., centerline abeam or offset) used when applying FAA Order 8240.47, or anytime the glide slope aiming point coordinates are changed thereafter. Enter into OFFSET Field “CL” for centerline abeam or feet offset (i.e. 450L). Include this information in the Remarks Field of AVNIS.

s. Field 5s – Usable Distance/ Power Settings. (Standard or expanded service volumes). If a RF power monitor check is conducted to check service volume, enter the maximum distance in miles from the antenna where the check was Satisfactory. Request the RF level from the ground technician and enter the RF level in watts. For dual frequency equipment, enter the primary transmitter power setting first, followed by the clearance transmitter power setting. Place a slash between the reported distance and the power settings (i.e., 10 nm/ 3.0/0.350).

t. Clearance Below Path TX1/ TX2. Enter "S" if all clearances below path runs are Satisfactory. If any checks are Unsatisfactory, place an asterisk in this field and explain in Field 5.

6. Field 6 - Remarks. Use Field 6 to clarify any reported conditions in other fields.

FLIGHT INSPECTION REPORT--INSTRUMENT LANDING SYSTEM SUPPLEMENTAL SHEET
FIGURE 1. FAA FORM 8240-9

PAGE OF PAGES

FLIGHT INSPECTION REPORT--INSTRUMENT LANDING SYSTEM SUPPLEMENTAL SHEET

REVIEW INITIALS

1. IDENT:	2. LOCATION:	3. ST/COUNTRY:	4. DATE(S) OF INSPECTION:

5. GLIDE SLOPE

5a. GLIDE SLOPE TYPE:				PATH ANGLE				PATH WIDTH				STRUCTURE BELOW PATH			
				TX1		TX2		TX1		TX2		TX1		TX2	
				INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL	INITIAL	FINAL
5b. DEPHASE	ADVANCE	TX 1	TX 2												
	RETARD	TX 1	TX 2												
5c. MAIN SIDEBAND DEPHASE	ADVANCE	TX 1	TX 2												
	RETARD	TX 1	TX 2												
5d. PATH ANGLE LOWERED TO LIMIT															
5e. PATH ANGLE RAISED TO LIMIT															
5f. PATH WIDTH NARROWED TO LIMIT															
5g. PATH WIDTH WIDENED TO LIMIT															
5h. CLEARANCE TX MODULATION DECREASED TO LIMIT (PRIMARY TX WIDE LIMIT)															
5i. ATTEN. MIDDLE ANT TO LIMIT		TX 1	TX 2												
5j. ATTEN. UPPER ANT TO LIMIT		TX 1	TX 2												

5k. TRANSVERSE STRUCTURE		TX 1	LEFT OF CL uA Hz	RIGHT OF CL uA Hz
RADIUS	ALT	TX 2	LEFT OF CL uA Hz	RIGHT OF CL uA Hz

5l. MODULATION EQUALITY		TX 1		TX 2	
5m. PHASING		TX 1		TX 2	
5n. FRONT COURSE AREA WHERE PHASING WAS CONDUCTED		NM		MSL	
5o. MEAN WIDTH/SYMM	TX	ANGLE ABOVE:	ANGLE BELOW:	WIDTH:	SYMM:
5p. TILT	TX	150 Hz SIDE:		90 Hz SIDE:	
5q. ACHIEVED REF. DATUM HEIGHT:		ACHIEVED GPI -- THRESH DIS:	RDH:	AIM PT ELEV:	RADIO ALT:
5r. G.S. AIMING POINT	OFFSET:	LATITUDE:		LONGITUDE:	
5s. USABLE DISTANCE / PWR SETTING		TX 1		TX 2	
5t. CLEARANCE BELOW PATH		TX 1		TX 2	

6. REMARKS

FAA FORM 8240 - 9 (10/2004) (FORMFLOW) (Supersedes previous edition) Date Completed:

APPENDIX 10

(RESERVED)

APPENDIX 11. FLIGHT INSPECTION REPORT ILS/ MLS MAINTENANCE ALERT FAA FORM 8240-11

This form is intended to be used:

- To report ILS/ MLS maintenance alert results following a normal periodic check without monitors when a measured flight inspection parameter is equal to or exceeds 60 percent of the flight inspection tolerance

- When a CAT III ILS facility is found operating beyond the "adjust and maintain" limits specified in Order 8200.1, Paragraph 15.51g.

A Flight Inspection Central Operations (FICO) person will normally complete this form, based on flight crew input.

1. Field 1 - Location. Complete as shown in Chapter 2, Paragraph 12.

2. Field 2 - Identification (Ident). Complete as shown in Chapter 2, Paragraph 12.

3. Field 3 - Date/Dates of Inspection. Complete as shown in Chapter 2, Paragraph 12.

4. Field 4 - Parameter. Enter a description of the parameter under evaluation, which was found to be equal to or exceeding the defined tolerance criteria. Enter number of transmitter radiating, if known. Example: Glide Slope Path Width, TX 1. For value equal to or exceeding 60 percent of Flight Inspection (FI) tolerance, enter the measured value of the parameter, which is equal to or exceeds 60 percent of FI tolerances. (Example: Glide slope optimum path width = .70°. Maximum path width = .90°. so: .90° - .70 = .20°, which equals the allowable deviation from optimum. Multiply .60 times .20 and add resultant to .70 for the value (i.e., .60 x .20 = .12 + .70 = .82). Any value equal to or exceeding .82° would require an ILS maintenance alert be issued.

5. Field 5 - Enter the name of the person at the FICO who received alert results from the flight crew.

6. Field 6 - Remarks. Use Field 6 to clarify any reported conditions in other fields. When the FICO forwards the ILS/ MLS maintenance alert results to the regional maintenance engineering branch by telephone, enter the name of the person contacted and date, if different from date of inspection.

FLIGHT INSPECTION REPORT - ILS/ MLS MAINTENANCE ALERT
FIGURE 1. FAA FORM 8240-11

FLIGHT INSPECTION REPORT--ILS/MLS MAINTENANCE ALERT	
1. LOCATION:	2. IDENT:
3. DATE(S) OF INSPECTION:	
4. PARAMETER:	= OR > 60% OF FI TOLERANCE
5. ALERT RECEIVED BY:	
6. REMARKS:	

REGION:	FLIGHT INSPECTOR 'S SIGNATURE:	MISSION SPECIALIST'S SIGNATURE:	AIRCRAFT NO:
FIFO:			

FAA FORM 8240 - 11 (10/2005) (FORMFLOW) (Supersedes previous edition) Date Completed:

APPENDIX 12. FLIGHT INSPECTION REPORT SURVEILLANCE RADAR, FAA FORM 8240-12; AND SURVEILLANCE RADAR COVERAGE PLOT, FAA FORM 8240-12-1

1. FAA Form 8240-12, Flight Inspection Report--Surveillance Radar, is designed as a one-page report for surveillance radar inspections. However, when reporting horizontal and vertical coverage characteristics, FAA Form 8240-12-1, Surveillance Radar Coverage Plot, is used. The surveillance radar coverage plot must always be a supplement of a surveillance radar report.

a. Field 1 - Location. Enter the city or military installation, state or country, where the radar antenna is located, (e.g. Tinker AFB ARPT, Oklahoma City, OK). If there are multiple radar antenna inputs and more space is required, place an asterisk in this block and explain in Field 14.

b. Field 2 - Identifier (IDENT). Enter the location identifier published in Order 7350.5 for the location shown in Field 1, except for ARSR facilities. An ARSR facility will use the identifier of the controlling ARTCC, with an alpha subcode, of the radar location in Field 1 (e.g., the Fort Worth, Texas, ARTCC location identifier is ZFW and the alpha subcode is "A", therefore use ZFWA).

NOTE 1: Where more than one ASR is installed at the same location, each will be identified by the facility identifier plus an alpha subcode (e.g., TIKA, TIKB).

NOTE 2: Where more than one ARSR serves one ARTCC, each will be identified by the ARTCC identifier plus an alpha subcode (e.g., ZFWA, ZFWB).

c. Fields 4 -- 6. Complete as shown in Chapter 2, Paragraph 12.

d. Field 7 - System Inspected

(1) ASR, ARSR, SECRA, MSAW. Enter an "X" in the appropriate block(s) to indicate the type(s) of facilities inspected. **(If MSAW is the only check accomplished, enter an "X" in the MSAW block only).**

(2) Ground Equipment Type. Insert the designation of the ground equipment type (e.g., FPN-47 for primary and ATCBI-3 for secondary radar will be entered as FPN-47/ ATCBI-3). ASR/ 9 or ASR/ 8 radar facilities installed with Mode S capability will be designated as equipment type ASR/ 9/ Mode S or ASR/ 8/ Mode S. If the radar facility is Mode S capable but operating in Interim Beacon Interrogator (IBI) Mode, report as follows: ASR/ 9 or ASR/ 8/ Mode S (IBI).

e. Field 8 - Scope Location. Enter the location of the controller scope (e.g., Washington, D.C. ARTCC; Scott AFB, IL. RAPCON).

f. Field 9 - Fix Coverage

(1) Fix Name. Identify the radar fix inspected.

(2) Airway. Identify the airway associated with the fix. (e.g., V47, J123W).

(3) Altitude. Enter the lowest altitude checked at which coverage is satisfactory. Enter the altitude divided by 100 (e.g., 2500 feet would be 25).

(4) Channel. Enter the radar channel evaluated (e.g., A or B).

(5) Satisfactory/ Unsatisfactory (SAT/UNSAT). Enter an "X" in the appropriate block, to indicate the status of the fix.

g. Field 10 - Fixed (Fix) Target Identification (Ident)/Orientation Checkpoint.

(1) Check Point. A numerical listing is assigned to each checkpoint (e.g. #1, #2, #3, etc.)

(2) Channel. Enter the radar channel used during the checks (e.g., A or B).

(3) Azimuth (Radar/ Chart). Enter the azimuth bearing from the radar antenna, as determined at the radar scope, and the actual azimuth bearing determined from a chart or AFIS.

(4) Distance (Radar/ Chart). Enter the distance from the radar antenna as determined at the radar scope and the actual distance, determined from a chart or AFIS.

h. Field 11 - Route Coverage

(1) Route. Show the designation of the route checked (e.g., J123W, V12).

(2) From/To. Indicate the segment, in nautical miles, of the route checked or the name of the fix being checked.

(3) Channel (CHAN). Enter the radar channel evaluated (e.g., A or B).

(4) Altitude (ALT). Enter the lowest satisfactory coverage altitude checked. Enter the altitude divided by 100 (e.g. 2,500 ft would be 25).

(5) Polarization (POLAR). Enter the type of polarization used during the check. For MPN-25, indicate rain mode or clear mode, as appropriate.

(6) Moving Target Indicator (MTI). Enter "Y" (Yes) or "N" (No) to indicate if the MTI feature was in use.

(7) Secondary Radar (SECRA). Enter "Y" (Yes) or "N" (No) to show if the SECRA was operating satisfactorily during the inspection of the route.

(8) Satisfactory (SAT)/ Unsatisfactory (UNSAT). Enter an "X" in the appropriate block to indicate the status of the route.

i. Field 12 - Surveillance Approaches.

(1) Airport. Enter the name and state of the airport where each approach terminates.

(2) Runway (Rwy). Indicate the runway numbers where the approaches terminate.

(3) Approach Condition. List any conditions that affected the approaches or radar operation (e.g., adverse weather).

(4) Position (POS) - Map. Indicate the position of the aircraft (in feet) relative to the runway edge extended, at the procedural missed-approach point. An aircraft 300 feet left of the runway edge, at a missed approach point that is 0.5 nm from the runway threshold, would be reported as: 300 L / 0.5 nm.

(5) Polarization (POLAR). Indicate the type of polarization used during the approach.

For MPN-25, indicate rain mode or clear mode, as appropriate.

(6) Moving Target Indicator (MTI). Enter "Y" (Yes) or "N" (No) to indicate if the MTI feature was used.

(7) Channel (CHAN). Enter the radar channel evaluated (e.g., A or B).

(8) Satisfactory (SAT)/ Unsatisfactory (UNSAT). Enter an "X" in the appropriate block to indicate the status of each approach.

j. Field 13 - Standby Power. Enter an "X" in the appropriate block. If not checked, leave blank."

k. Field 14 - Remarks. Complete as shown in Chapter 3. When appropriate, list:

(1) When a major modification has been performed.

(2) When MTI is required for the ASR approach. (This requirement does not constitute a facility restriction.)

(3) When an air traffic control radar beacon system (ATCRBS) power optimization check is performed, report the interrogator power values. If dual equipment is installed, report the value for each transponder.

(4) When equipment changes/modifications are made and the inspection is used to reestablish the coverage, for example, "This inspection reestablishes the coverage and performance of the (ASR/ARSR/ACTRBS). The results found on this inspection will be the basis for subsequent performance." The remark may be expanded to be more specific.

2. FAA Form 8240-12-1, Surveillance Radar Coverage Plot. Check either ASR or ARSR, as appropriate.

NOTE: The flight inspector must complete this form only if requested by ground personnel.

a. Field 1 - Location. Enter as shown in Paragraph 1 of this appendix.

b. Field 2 - Date/ Dates of Inspection. Entry should be identical to the entry in Field 4 of the surveillance radar report.

c. Field 3 - Ground Equipment Type. Enter the same as the ground equipment type portion of field 7 of the surveillance radar report.

d. Field 4 - Aircraft Type. Specify the type of aircraft used for the inspection (e.g., NA-265, BE-300, C-140).

e. Field 5 - Antenna Tilt. Enter an "X" in the appropriate block. Variable (VAR) tilt antenna means the antenna tilt can be controlled from a remote position.

f. Field 6 - Optimum Angle. Show the mechanical antenna tilt angle which has been selected as the optimum for the installation being inspected.

g. Field 7 - Vertical Coverage. Plot the inner and outer fringe vertical coverage limits of the radar by placing a dot at each altitude and distance where the target returns become unusable. Connect the dots around the inner and outer coverage areas with a solid line. Show any holes noted within this vertical coverage area by placing dots at the extremities of the holes and enter the word "hole" between the dots. Plot vertical coverage results of secondary radar using dash lines to connect points of coverage in the same manner as that specified for the surveillance radar. If a secondary radar coverage plot is not required, a statement "secondary radar exceeds primary" is satisfactory.

(1) Inbound/ Outbound (IN-BND/ OUT-BND). The inbound and outbound columns in the "Vertical Coverage" field refer to the direction of flight during the outer fringe checks. Place an "X" in the appropriate block.

(2) Altitude (ALT). Place an "X" in the appropriate column to indicate the altitude scale. If necessary, blank out any numbers and enter the correct altitudes. These numbers indicate the actual altitudes divided by 1,000.

(3) Reference Azimuth. Enter the azimuth used for vertical coverage checks.

(4) Special Notes. Enter MTI GATE or any other data that may be used to aid in evaluating vertical coverage results.

(5) Mileage Scales. Place an "X" in the block to indicate the mileage scale applicable to this plot. The numbers shown are nautical miles.

(6) Outside Air Temperature (OAT). Enter the outside air temperature (OAT) in degrees centigrade (corrected to true) opposite each altitude plotted.

h. Field 8 - Horizontal Coverage. The horizontal coverage plot is subdivided into three separate circle graphs, the "A," "B," and "C" rings. The "A", "B" and "C" rings are associated with the information in Field 9, the "radar parameters" and "horizontal" columns. Each of these graphs consists of an amplitude of four lines, the circumferences of which are divided into 360°. The four lines of each graph represent target strengths of 0 (for unusable) through strength 3 (definitions of target quality will be found in Order 8200.1, Chapter 14). Up to three plots or portions thereof may be made in order to depict conditions during the inspection.

i. Field 9 - Radar Parameters. This field defines conditions of the radar during the vertical or horizontal checks. Entries in the "plot" column depict a condition or parameter setting of the radar during a particular check. Entries in the vertical (VERT) column indicate if a parameter or condition was applicable during the vertical check. Entries in the "A," "B," and "C" columns under the word "horizontal," indicate if a parameter or condition was applicable during the associated horizontal coverage plots. The options, orbit radius, altitude divided by 100, antenna tilt, scope range, and OAT under the "plot" column, require the entry of numerical values (e.g., scope range 50 means the radar is certified to 50 nm). The remaining "plot" column options must be circled, if applicable. If any options are unknown, leave blank.

FLIGHT INSPECTION REPORT—SURVEILLANCE RADAR
FIGURE 1. FAA FORM 8240-12

FLIGHT INSPECTION REPORT--SURVEILLANCE RADAR | REVIEW INITIALS

1. LOCATION: | 2. IDENT:

3. COMMON SYSTEM: | 4. DATE(S) OF INSPECTION: | 5. OWNER:

6. TYPE OF INSPECTION: SITE EVALUATION [ ] PERIODIC [ ] SPECIAL [ ]; COMMISSIONING [ ] SURVEILLANCE [ ] INCOMPLETE [ ]

7. SYSTEM INSPECTED: [ ] ASR [ ] ARSR [ ] SECRA [ ] MSAW GROUND EQUIPMENT TYPE:

8. SCOPE LOCATION:

9. FIX COVERAGE

FIX NAME	AIRWAY	ALTITUDE	CHANNEL	SAT	UNSAT

9. FIX COVERAGE (Continued)

FIX NAME	AIRWAY	ALTITUDE	CHANNEL	SAT	UNSAT

10. FIX TARGET IDENT / ORIENTATION CHECK POINT

CHECK POINT	CHANNEL	AZIMUTH		DISTANCE	
		RADAR	CHART	RADAR	CHART

11. ROUTE COVERAGE

ROUTE	FROM	TO	CHAN.	ALT.	POLAR.	MTI	SECRA	SAT.	UNSAT.

12. SURVEILLANCE APPROACHES

AIRPORT	RWY	APPROACH CONDITION	POS. - MAP	POLAR.	MTI	CHAN	SAT	UNSAT.
			/ NM					
			/ NM					
			/ NM					
			/ NM					
			/ NM					
			/ NM					

13. STANDBY POWER: [ ] SATISFACTORY [ ] UNSATISFACTORY

14. REMARKS:

FACILITY STATUS	
UNRESTRICTED	
RESTRICTED	
UNUSABLE	

REGION:	FLIGHT INSPECTOR 'S SIGNATURE:	MISSION SPECIALIST'S SIGNATURE:	AIRCRAFT NO :
FIFO:		N/A	

FAA FORM 8240 - 12 (10/2005) (FORMFLOW) (Formerly FAA Form 8240-8) Date Completed:

FLIGHT INSPECTION REPORT—SURVEILLANCE RADAR COVERAGE PLOT
FIGURE 2. FAA FORM 8240-12-1

PAGE OF PAGES

FLIGHT INSPECTION REPORT -- SURVEILLANCE RADAR COVERAGE PLOT | ASR | ARSR

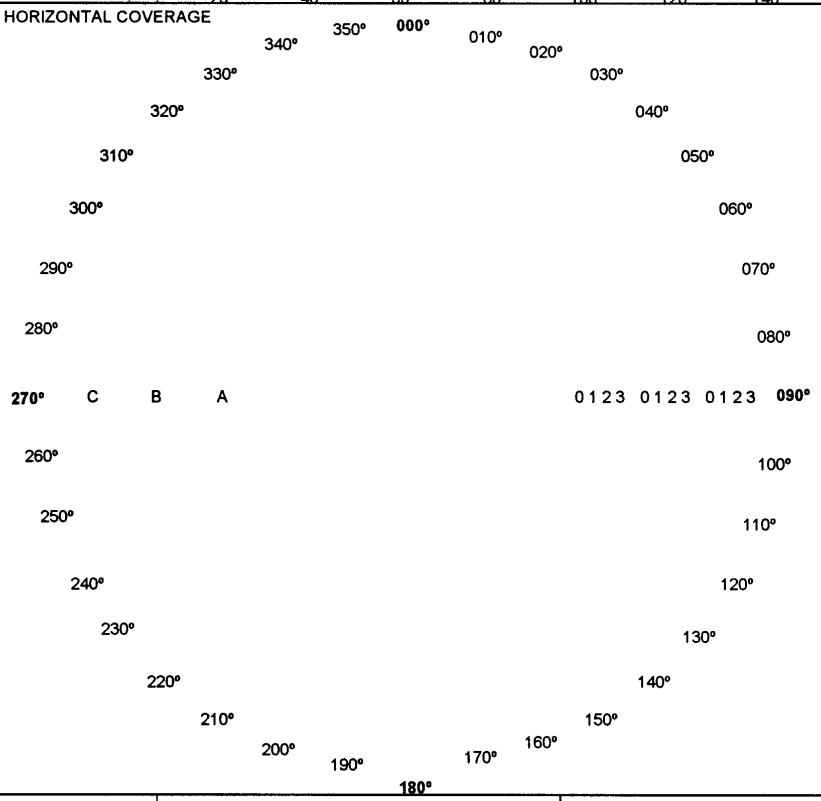
1. LOCATION:
2. DATE(S) OF INSPECTION:
3. GROUND EQUIP TYPE:
4. AIRCRAFT TYPE:
5. ANTENNA TILT: FIXED / VAR.
6. OPTIMUM ANGLE:

7. VERTICAL COVERAGE

IN-BND	OUT-BND	ALT.		REFERENCE AZIMUTH:	SPECIAL NOTES:	OAT
		45				
		40				
		35				
		30	10			
			9			
		25	8			
			7			
		20	6			
		19	5			
		18	4			
		17	3			
		16	2			
		15	1			

MILEAGE SCALES									
	5	10	15	20	25	30	35	40	45
	10	20	30	40	50	60	70	80	90
	20	40	60	80	100	120	140	160	180

8. HORIZONTAL COVERAGE



9. RADAR PARAMETERS

PLOT	Vert.	Horizontal A	Horizontal B	Horizontal C
ORBIT RADIUS				
ALTITUDE / 100				
ANTENNA TILT				
SCOPE RANGE				
OAT				
EQUIPMENT CHANNEL		A B	A B	A B
POWER SOURCE	P S	P S	P S	P S
POLARIZATION	C L	C L	C L	C L
MTI	ON OFF	ON OFF	ON OFF	ON OFF
AFC	ON OFF	ON OFF	ON OFF	ON OFF
FTC	ON OFF	ON OFF	ON OFF	ON OFF
STC	ON OFF	ON OFF	ON OFF	ON OFF
SECONDARY RADAR		ON OFF	ON OFF	ON OFF
ADVISORIES	S U	S U	S U	S U
RANGE ACCURACY	S U	S U	S U	S U
AZIMUTH ACCURACY	S U	S U	S U	S U
COVERAGE	S U		S U	

REGION:	FLIGHT INSPECTOR'S SIGNATURE:	MISSION SPECIALIST'S SIGNATURE:	AIRCRAFT NO:
FIFO:		N/A	

FAA FORM 8240 - 12 - 1 (10/2005) (FORMFLOW) (Formerly FAA Form 8240-9) Date Completed:

APPENDIX 13. FLIGHT INSPECTION REPORT GENERAL CHARACTERISTICS FAA FORM 8240-13

This form is used to report conditions that cannot be reported on the other forms or to report facilities that are not routinely inspected (e.g., taxi-way lights, airport services). SID(s), STAR(s), or departure procedures which utilize ground or space based sources will be reported on the appropriate 8240 series form.

1. Field 1 - Location. Facility location information will be obtained from the AVNIS Facility Data Sheet. Enter the airport name, location, and country code for facilities located outside the United States and the airport name, location, and state code for facilities within the United States. If the airport name is the same as the location, enter only once.

2. Field 2 - Identifier (Ident). Complete as shown in Chapter 2, Paragraph 12.

3. Fields 3--6. Complete as shown in Chapter 2, Paragraph 12.

4. Field 7 - Facility Component Inspected. Check the appropriate block. If the facility inspected is not contained in this field, mark the "other" block and enter in Field 8. If an extensive narrative is required and requires more space, put an asterisk in Field 8 and complete in Field 12.

5. Field 8 - Facility Type and Class, SID, or Unnamed Departure Procedure. Enter the facility type and class if not listed in Field 7. Enter the name of the SID or the words “Departure Procedure” for unnamed instrument departure procedures.

6. Field 9 - Out-of-Tolerance Conditions Initially Found. List all discrepancies not covered by a current, published NOTAM. Place an "X" in the appropriate column to show if the discrepancies were corrected or not.

7. Field 10 - Was a NOTAM Issued Based on the Results of This Inspection? Place an "X" in the appropriate block and list the NOTAM in the NOTAM block.

8. Field 11 - Is There a Previous NOTAM in Effect? Place an "X" in the appropriate block.

9. Field 12 - Remarks. Complete as shown in Chapter 3. Include procedural information and statement for departure procedures.

10. Facility Status. Complete as shown in Chapter 2, Paragraph 12.

11. NOTAM(s). Complete as shown in Chapter 3, Paragraph 21.

FLIGHT INSPECTION REPORT--GENERAL CHARACTERISTICS
FIGURE 1. FAA FORM 8240-13

FLIGHT INSPECTION REPORT--GENERAL CHARACTERISTICS						REVIEW INITIALS
1. LOCATION:						2. IDENT:
3. COMMON SYSTEM:	4. DATE(S) OF INSPECTION:					5. OWNER:
6. TYPE OF INSPECTION		SITE EVALUATION		PERIODIC		SPECIAL
		COMMISSIONING		SURVEILLANCE		INCOMPLETE
7. FACILITY COMPONENT INSPECTED		AIRPORTS		LIGHTING SYSTEMS		OTHER (Explain)
8. FACILITY TYPE AND CLASS, SID, OR UNNAMED DEPARTURE PROCEDURE:						

9. OUT OF TOLERANCE CONDITIONS INITIALLY FOUND *(Except those covered by previous NOTAM)*	CORRECTED YES	CORRECTED NO

10. WAS A NOTAM ISSUED BASED ON THE RESULTS OF THIS INSPECTION?		YES	11. IS THERE A PREVIOUS NOTAM IN EFFECT?		YES
		NO			NO

12. REMARKS *(Clarify conditions pertinent to facility integrity not otherwise shown in this report).*

FACILITY STATUS		NOTAMs:		
UNRESTRICTED				
RESTRICTED				
UNUSABLE				
REGION:		FLIGHT INSPECTOR'S SIGNATURE:	MISSION SPECIALIST'S SIGNATURE:	AIRCRAFT NO:
FIFO:				

FAA FORM 8240 - 13 (10/2005) (FORMFLOW) (Formerly FAA Form 8240-14) Date Completed:

APPENDIX 14. FLIGHT INSPECTION REPORT AFTER ACCIDENT CONTINUATION SHEET FAA FORM 8240-14

1. Purpose. The flight inspection after accident report (AA) must contain facility performance information and other conditions related to an accident or near mid-air collision or incident. The reported information must be obtained during a special AA inspection.

2. Reporting. Complete a flight inspection facility performance report (see Paragraph 4 of this appendix) and FAA Form 8240-14, Flight Inspection Report--After Accident Continuation Sheet, (see Paragraph 5 of this appendix) for each facility involved in the accident or incident. The objective of the AA reporting procedure is to ensure that each report is complete, accurate, and reflects only the facility performance and status, as measured during the AA inspection. Therefore, report only "as found" conditions. The AA report commands the highest priority for a pre-distribution review and final approval. Special distribution requirements for this type of report are described in Chapter 2, Paragraph 16b, and special review procedures are described in Paragraph 3 of this appendix.

a. Incomplete Inspections. If all the requirements of the AA inspection cannot be completed in one inspection (i.e., a visual check of the site area is required but cannot be made due to weather or other factors), the final report must contain the dates and information from all previous inspections.

b. Reporting Corrected Out-of-Tolerance Conditions. Out-of-tolerance conditions found during an AA inspection must not be corrected until after the AA inspection is completed. Report the out-of-tolerance condition, the corrected condition, and the results of any additional checks on a separate "special" maintenance request (MR) report. Explain the reason for this check in the remarks field (e.g., special inspection to correct out-of-tolerance conditions found during the AA inspection of (date)).

c. Periodic Update. An after-accident inspection may be used to update the periodic interval if two conditions are met:

- No out-of-tolerance conditions are found.
- All periodic requirements were completed.

In this case, state in the remarks field of the facility performance report that periodic requirements were met.

3. Special Report Review. The Flight Inspector must expeditiously complete and forward a preliminary AA report, plus supporting worksheets, to the Flight Inspection Records and Reports Team (formerly AVN-210A), within 3 days of completion of the inspection. The names of the flight inspector and the mission specialist (if required) must be typed into the signature blocks. The Flight Inspection Records and Reports Team must forward the pending report to the Flight Inspection Technical Support Team (formerly AVN-210), where it will be reviewed and changes may be recommended. The Flight Inspection Records and Reports Team will notify the flight inspector and the office manager of the results of the review. Upon receipt of the preliminary report approval, a final report must be completed, signed, and forwarded to the Flight Inspection Records Team, along with the worksheets and recordings, within 7 days of completion of the inspection.

4. Facility Performance Report Completion. To complete the facility performance portion of the AA report, use the guidelines as described in Chapters 2 and 3 and the appropriate appendixes of this order (e.g., ILS AA report must be reported on FAA Form 8240-8, using Appendix 8; VORTAC AA report must be reported on FAA Form 8240-2, using Appendix 2). Assign a facility classification (status) based on the results of the AA inspection.

5. FAA Form 8240-14, Flight Inspection Report--After Accident Continuation Sheet, Completion.

a. Fields 1, 2, 4 - Information in these fields will be the same as the corresponding fields on the facility performance report.

b. Field 3 - Enter the facility type.

c. Field 5 - Date and Time of Accident. Enter the month, day, year, and universal coordinated time (UTC) of the accident (e.g., 1/12/89, 1400Z). If the date and time are unknown, enter "UNKNOWN."

d. Field 6 - Aircraft Type and Number. Enter the aircraft manufacturer, model number, and number of the aircraft involved in the accident.

e. Field 7 - Procedures in Use at Time of Accident. Enter the procedure being used by the aircraft at the time of the accident (e.g., Nashville Metropolitan Airport, Nashville, TN, ILS Rwy 02L, Amdt. 1.). If this information is not available, enter "UNKNOWN." A "SAT" or "UNSAT" entry is not required.

f. Field 8 - Equipment in Use at Time of Accident. Enter the facility transmitter, receiver, or channel number that was in use at the time of accident. If the facility has a single transmitter, so state. For coordinate-based RNAV procedures, leave blank.

g. Field 9 - Date and Time of After Accident Inspection. Enter the date and UTC the AA flight inspection was started (e.g., 11/17/89, 1626Z).

h. Field 10 - Weather Conditions at Time of Inspection. Enter the weather conditions prevailing at the start of the inspection. Use plain English; do not use symbols.

i. Field 11 - Procedures Inspected and Extent of Inspection. Enter the procedure(s) inspected. If the entry is the same as in Field 7, enter the note, "Same as Field 7" and describe the extent of the SIAP inspected (e.g., "evaluated the final approach segment). A "SAT" or "UNSAT" is not required.

j. Field 12 – SIAP Obstacle Clearance Checked. Check the SIAP for compliance with FAA Order 8200.1, United States Flight Inspection Manual, Chapter 6. Place an "X" in the appropriate block.

k. Field 13 - Name and Routing Symbol of Accident Coordinator/Investigator. Enter the name and routing symbol of the person acting in the capacity of the accident coordinator/ investigator for the accident being reported. If this person is not an FAA employee, enter the name and business or military address.

l. Field 14 - Remarks. Enter any information required to clarify data in Fields 1--14. When all facility parameters are found within tolerance and no performance discrepancies are discovered, enter the following statement: "Facility operation found satisfactory." For coordinate-based RNAV procedures, enter “RNAV performance found satisfactory”. When there is a request to check the MSAW (Minimum Safe Altitude Warning) system as part of the AA inspection, enter a remark indicating the results.

FLIGHT INSPECTION REPORT--AFTER ACCIDENT CONTINUATION SHEET
FIGURE 1. FAA FORM 8240-14

PAGE OF PAGES

FLIGHT INSPECTION REPORT--AFTER ACCIDENT CONTINUATION SHEET		REVIEW INITIALS
1. LOCATION:		2. IDENT:
3. FACILITY TYPE:	4. DATE(S) OF INSPECTION:	
5. DATE AND TIME OF ACCIDENT:	6. AIRCRAFT TYPE AND NUMBER:	
7. PROCEDURES IN USE AT TIME OF ACCIDENT:		
8. EQUIPMENT IN USE AT TIME OF ACCIDENT:		
9. DATE AND TIME OF AFTER ACCIDENT INSPECTION:	DATE:	TIME:
10. WEATHER CONDITIONS AT TIME OF INSPECTION:		
11. PROCEDURES INSPECTED AND EXTENT OF INSPECTION:		
12. SIAP: ☐ SATISFACTORY ☐ UNSATISFACTORY	13. NAME AND ROUTING SYMBOL OF ACCIDENT COORDINATOR/INVESTIGATOR	
14. REMARKS:		

FAA FORM 8240 - 14 (3/2000) (FORMFLOW) (Formerly FAA Form 8240-17)

APPENDIX 15

(RESERVED)

APPENDIX 16. FLIGHT INSPECTION REPORTS MICROWAVE LANDING SYSTEM, FAA FORM 8240-16 AND MLS COMMISSIONING DATA WORDS, FAA FORM 8240-16-1

FAA Form 8240-16 will be used for all MLS inspections. For commissioning inspections of all MLS equipment, FAA Form 8240-16-1, MLS Commissioning Data Words, is required. This form is installed in the FormFill program as page 2 of FAA Form 8240-16.

1. Field 1 - Location. Complete as shown in Chapter 2, Paragraph 12.

2. Field 2 - Identification (Ident). Complete as shown in Chapter 2, Paragraph 12.

3. Fields 3 - 6. Complete as shown in Chapter 2, Paragraph 12.

4. Field 7. Runway No. Enter runway number served by the MLS.

5. Field 8 - Facility Inspected. Place an "X" in the appropriate block(s) to signify components inspected. DME refers to DME or DME/P installed with the MLS (see Field 12). If an offset azimuth is inspected, enter a statement in Field 15.

6. Field 9 - Azimuth. Use this field to report the operational characteristics of the azimuth portion of the MLS.

a. Azimuth (AZ) Course (CRS) Bearing (BRG). Enter the designed front azimuth course bearing(s) that support the procedure(s).

b. Back Azimuth (BAZ) Course (CRS) Bearing (BRG). Enter the designed back azimuth course bearing(s) that support the procedure(s).

c. Category. Enter the category of the most stringent operations supported (e.g., Category I, II, or III).

d. Front Azimuth/ Back Azimuth (TX1/TX2). Use these columns to report specific operational parameters for each transmitter. Use the "OT," "INITIAL," and "FINAL" columns as directed in Appendix 8, Paragraphs 6c, d, and e.

(1) Alignment. Enter the azimuth MCE of the approach course azimuth in hundredths of a degree, left or right of the designed azimuth course when the alignment is determined by manual methods (e.g., 0.04L indicates the course is 0.04° left of the designated approach azimuth). Enter the alignment error of the approach course azimuth as presented by the AFIS when using automated methods (e.g., - 0.04 indicates the course is 0.04° right of the designated approach azimuth). For mobile MLS facilities, under the “Initial” column, enter the alignment as found at the beginning of the flight check.

(2) Path Following Error (PFE). Enter the most significant error in hundredths of a degree and tenths of a mile. (e.g., 0.04/0.8 indicates a 0.04° error at 0.8 nm from threshold).

(3) Path Following Noise (PFN). Enter as indicated in Paragraph 6d(2).

(4) Control Motion Noise (CMN). Enter as indicated in Paragraph 6d(2).

(5) Out-of-Coverage Indications (OCI). Enter "S" or “U”, as appropriate, to indicate the results of the OCI check (whether or not OCI equipment installed). If OCI check is not performed, leave blank.

(6) Clearance. Enter "S" or “U”, as appropriate, if clearances are installed. If clearances are not installed, leave blank. Leave blank for mobile MLS facilities.

(7) Basic Data Words. Enter "S" to signify all basic words transmitted by the facility are within specified limits of the facility data. If words are missing, incorrect, incomplete, or cannot be verified by other means, enter a "U." When commissioning mobile MLS facilities, under the “Initial” column, enter the status of the Data Words as found at the beginning of the flight check.

(8) Auxiliary Data Words. Enter "S" to signify all required auxiliary words transmitted by the facility are within specified limits of the facility data. If words are missing, incorrect, incomplete, or cannot be verified by the data sheet or other means, enter a "U." When commissioning mobile MLS facilities, under the “Initial” column, enter the status of the Data Words as found at the beginning of the flight check.

(9) Proportional (Prop) Guidance - Left. Enter the commissioned maximum proportional guidance angle left of the procedural azimuth.

(10) Proportional (Prop) Guidance - Right. Enter the commissioned maximum proportional guidance angle right of the procedural azimuth.

(11) Identification. Enter "S" if the coded identification is satisfactory. Enter "U" if unsatisfactory.

(12) Usable Distance. If a minimum power check is conducted to check the service volume, enter the maximum distance in miles from the ARD where the check was satisfactory.

(13) Monitor

(a) MCE - Left (L) Reference. Enter the course displacement from the as found normal MCE.

(b) PFE - Left (L) Reference. Enter the maximum PFE throughout the approach, as indicated in Paragraph 6d(2), with the course shifted left.

(c) MCE - Right (R) Reference. Enter the course displacement from the as found normal MCE.

(d) PFE - Right (R) Reference. Enter the maximum PFE throughout the approach, as indicated in Paragraph 6d(2), with the course shifted right.

7. Field 10 - Runway Azimuth. Use this field to report the operational characteristics of the azimuth portion of the MLS in the runway environment. Use the transmitter numbers as shown in field 9, "Azimuth," of this report form.

a. Zone-4/ Zone-5. Complete each column using the same guidelines as directed for the " OT," "INITIAL," and "FINAL" columns in Appendix 8, Paragraphs 6c, d, and e.

b. PFE, PFN, CMN. Enter the most significant error in tenths of a foot and hundredths of a mile to runway threshold, for each zone (e.g., 4.0/0.80 indicates a 4.0 error at 0.80 nm from threshold).

8. Field 11 - Elevation. Use this field to report the operational characteristics of the elevation portion of the MLS.

a. Minimum Glidepath (MGP). Enter the commissioned minimum glidepath angle in degrees.

b. Category. Enter as indicated in Paragraph 6c.

(1) Elevation Angle. Enter the measured, actual elevation angle in hundredths of a degree. If the reported angle is not the actual angle, explain in Field 15. For mobile MLS facilities, under the “Initial” column, enter the angle as found at the beginning of the flight check.

(2) PFE. Enter as indicated in Paragraph 6d(2).

(3) PFN. Enter as indicated in Paragraph 6d(2).

(4 CMN. Enter as indicated in Paragraph 6d(2).

(5) OCI. Enter as indicated in Paragraph 6d(5).

c. Below MGP Clearance. Enter "S" if clearance below the minimum glidepath is satisfactory. Enter "U" if unsatisfactory.

d. Usable Distance. If a minimum power check is conducted to check the service volume, enter the maximum distance in miles from the ARD where the check was satisfactory.

e. Monitor

(1) PFE-Angle High. Enter the maximum PFE throughout the approach, as indicated in Paragraph 6d(2), with the angle shifted high.

(2) Elevation (EL) Angle High - Monitor Reference. Enter the elevation angle, in hundredths of a degree, with the elevation angle shifted high.

(3) Elevation Angle Low - Monitor Reference. Enter the elevation angle, in hundredths of a degree, with the elevation angle shifted low.

(4) PFE-Angle Low. Enter the maximum PFE throughout the approach, as indicated in Paragraph 6d(2), with the angle shifted low.

9. Field 12 - General. This field is provided to document the operational performance of DME and lighting systems that are checked concurrently with the MLS. Additionally, for SIAP(s) checked IAW Order 8200.1, USSFIM, Chapter 6, enter an “X” in the appropriate block (i.e., satisfactory (SAT) or unsatisfactory (UNSAT)).

a. DME. Enter "X" in the appropriate block to indicate satisfactory or unsatisfactory operation.

b. Lighting Systems. If all lighting features required to support the lowest authorized visibility are Satisfactory, mark accordingly. Explain Unsatisfactory conditions in Remarks.

10. Field 13 - Facility Status. If inspected, enter an "X" in the appropriate block for the appropriate component to indicate the status of each MLS component.

11. Field 14 – NOTAM(s). Enter NOTAM(s) or facility restrictions as described in Appendix 8, Paragraph 9.

12. Field 15 - Remarks

a. Exempted Structure. When out-of-tolerance PFE, PFN, or CMN is exempted by the provisions of Order 8200.1, Paragraph 16.21, place an asterisk in the "OT" column next to the particular structure to be exempted and explain in field 15 (e.g., PFE SAT per Order 8200.1, Paragraph 15.21).

b. Standby Control Electronic Unit (CEU): Enter the serial numbers of the primary and standby CEU when commissioned.

c. Collocated MMLS. Report coordinates of pseudo runway threshold. Report a description of markers used for NCU updating and suitability determination of those markers for use without the Television Positioning System.

13. MLS Data Word Continuation Sheet Instructions

a. Fields 1, 2, and 4. Complete as shown in Chapter 2, Paragraph 12.

b. Data Word Fields. Fill in the Received Data Word information in the appropriate blocks.

c. MLS Misc Fields. Enter transmit channels and designed procedural azimuth, as indicated.

FLIGHT INSPECTION REPORT—MICROWAVE LANDING SYSTEM
FIGURE 1. FAA FORM 8240-16

FLIGHT INSPECTION REPORT--MICROWAVE LANDING SYSTEM | REVIEW INITIALS

1. LOCATION: | 2. IDENT:

3. COMMON SYSTEM: | 4. DATE(S) OF INSPECTION: | 5. OWNER:

6. TYPE OF INSPECTION		SITE EVALUATION		PERIODIC		SPECIAL
		COMMISSIONING		SURVEILLANCE		INCOMPLETE
7. RUNWAY NO:	8. FACILITY INSPECTED	FRONT AZIMUTH		ELEVATION		LIGHTING SYSTEM
		BACK AZIMUTH		D M E		

9. AZIMUTH

FRONT AZIMUTH						AZ. CRS. BRG:	BACK AZIMUTH					
TX 1			TX 2			BAZ. CRS. BRG:	TX 1			TX 2		
OT	INITIAL	FINAL	OT	INITIAL	FINAL	CATEGORY:	OT	INITIAL	FINAL	OT	INITIAL	FINAL
						MCE						
						PFE						
						PFN						
						CMN						
						OCI						
						CLEARANCE						
						BASIC DATA WORDS						
						AUX DATA WORDS						
						PROP. GUIDANCE - LEFT						
						PROP. GUIDANCE - RIGHT						
						IDENTIFICATION						
						USABLE DISTANCE						
						MONITOR						
						MCE - L. REF						
						PFE L. ALIGN						
						MCE - R. REF						
						PFE R. ALIGN						

ZONE 4						10. RUNWAY AZIMUTH	ZONE 5					
						PFE						
						PFN						
						CMN						

11. ELEVATION

TX 1			TX 2			MGP:
OT	INITIAL	FINAL	OT	INITIAL	FINAL	CATEGORY:
						ELEVATION ANGLE
						PFE
						PFN
						CMN
						OCI
						BELOW MGP GUIDANCE
						USABLE DISTANCE
						MONITOR
						EL. ANGLE - H. REF
						PFE - H. ANGLE
						EL. ANGLE - L. REF
						PFE - L. ANGLE

12. GENERAL

	SAT	UNSAT
DME		
LIGHTING SYSTEMS		
SIAP(S) VERIFIED		

13. FACILITY STATUS

	AZ	ELEV	BAZ
UNRESTRICTED			
RESTRICTED			
UNUSABLE			

14. NOTAM's:

15. REMARKS:

REGION:	FLIGHT INSPECTOR'S SIGNATURE:	MISSION SPECIALIST'S SIGNATURE:	AIRCRAFT NO:
FIFO:			

FAA FORM 8240 - 16 (10/2005) (FORMFLOW) (Supersedes Previous Edition) Date Completed:

FLIGHT INSPECTION REPORT—MLS COMMISSIONING DATA WORDS
FIGURE 2. FAA FORM 8240-16-1

PAGE OF PAGES

FLIGHT INSPECTION REPORT-MLS COMMISSIONING DATA WORDS		REVIEW INITIALS
1. LOCATION:		2. IDENT:
3. FACILITY TYPE:	4. DATE(S) OF INSPECTION:	
	MLS BASIC WORD 1 (EXAMPLE)	
F DIS	200 MTR	
AZ PROP COV	-40 TO + 40 DEG	
CLEARANCE SIGNAL TYPE	SB	
	MLS BASIC WORD 2 (EXAMPLE)	
MIN GLIDE PATH	3.0 DEG	
STATUS: AZ	NORMAL	
EL	NORMAL	
BZ	OFF/TEST	
DME	FA, STD 1 AVAIL	
	MLS BASIC WORD 3, 4 & 6 (EXAMPLE)	
AZ BEAMWIDTH	3.0 DEG	
EL BEAMWIDTH	2.0 DEG	
DME DISTANCE	0.0 MTR	
AZ ZERO-DEG PLANE	173 DEG	
BZ ZERO-DEG PLANE	353 DEG	
GND EQUIP IDENT		
	MLS AUXA WORD 1 (EXAMPLE)	
AZ ANTENNA OFFSET	-89 MTR	
AZ TO DATUM PT DIST	6210 MTR	
AZ TO DATUM HEIGHT	0 MTR	
AZ ANT/RUNWAY ALIGN	0.00 DEG	
AZ ANT COORDINATE	CONICAL/PLANAR	
AZ ANT HEIGHT	4 MTR	
	MLS AUXA WORD 2 (EXAMPLE)	
EL ANTENNA OFFSET	-91 MTR	
THRESHOLD TO DATUM POINT	233 MTR	
EL ANTENNA HEIGHT	5.5 MTR	
DATUM POINT ELEVATION	387 MTR	
THRESHOLD HEIGHT	0.7 MTR	
	MLS AUXA WORD 3 (EXAMPLE)	
DME OFFSET	-89 MTR	
DME TO DATUM POINT	0 MTR	
DME ANTENNA HEIGHT	5 MTR	
RUNWAY STOP END DIST	673 MTR	
	MLS MISC	
CHANNEL/FREQ		
DESIGNED PROCEDURAL AZIMUTH		
DME CHANNEL		

FAA FORM 8240 - 16-1 (4/2000) (FORMFLOW)

APPENDIX 17. FLIGHT INSPECTION REPORT RNAV FAA FORM 8240-17

This report must be used for reporting all site, commissioning, periodic, special, and other inspections. Periodic inspections do not require a report unless an unsatisfactory condition is found. Record the following information:

1. Field 1 - Location. Complete as shown in Chapter 2, Paragraph 12.

2. Field 2 - Identification (Ident). For an approach, enter the airport identifier. If the procedure is to a point in space, not to a designated airport, enter the airport identifier assigned to the procedure by the National Flight Data Center (NFDC). If no ident is assigned, leave blank. For a stand-alone point in space fix, enter the ARTCC identifier without a "K" prefix (i.e., ZSE). For routes, enter route name, i.e., Q501, etc. For a DP or STAR, enter the computer code listed on the PC form, i.e., computer code IDALE2.IDALE, enter "IDALE2".

3. Field 3 - Ctrl Number. Enter the GPS number listed on the PC form of the procedure package. Leave blank if a GPS number is not listed on the PC form of the procedure package.

4. Field 4 - Date/ Dates of Inspection. Complete as shown in Chapter 2, Paragraph 12.

5. Field 5 - Owner. Complete as shown in Chapter 2, Paragraph 12.

6. Field 6 – Type of Inspection. Complete as shown in Chapter 2, Paragraph 12, except for GPS overlay procedures when the primary facility (e.g., VOR, NDB) is out of service or decommissioned. For the GPS overlay, list the type of inspection as a "Special/ Proc".

7. Field 7 – Procedure Type. Indicate the type of RNAV inspected by entering one of the following abbreviations:

DP	RNAV Departure Procedure
GPS PS	GPS Point in Space
LPV	Wide Area Augmentation System
LNAV	Lateral Navigation
LNAV/ VNAV	Lateral Navigation/ Vertical Navigation
RNP	Required Navigation Performance
Route	Airway or Off-Airway En Route Procedure
SID	Standard Instrument Departure
STAR	Standard Terminal Arrival Route
Other	

If "Other" is entered, indicate component inspected in Remarks. Enter "Other" for GPS overlay procedures as described in Paragraph 6.

8. Field 8 – Procedure Name. Enter procedure name (e.g., RNAV (GPS) Rwy 19R, AACES RNAV TWO, Q505, Bismark 1)

9. Field 9 – RNP. Enter the most critical RNP value for the procedure. When not specified, leave blank.

10. Field 10. Procedure Modified. Enter a "Yes" in this field when changes to a SIAP have been made during the inspection. Include a comment in Remarks to indicate the specific change. Enter a "No" in this field if no changes have been made to a SIAP during the inspection.

11. Field 11. ARINC 424 Coding. ARINC 424 coding reflected on the appropriate procedure paperwork produces the ground track evaluated by the flight procedure specialist and is accurately reflected in the procedure text (e.g., missed approach, departure route description).

12. Field 12 – Runways. If applicable, enter the runway(s) served by the procedure. If the procedure serves more than one airport, enter the runway(s) of the primary airport. Enter additional airport names and runways in Remarks. If the approach is not to a specific runway, leave blank.

13. Field 13 – RAIM. RAIM availability, place an "X" in the appropriate box.

14. Field 14 - WAAS HPL (For RNAV WAAS LPV). Enter the largest received value (in meters) in the Final Approach Segment (FAS).

15. Field 15 – WAAS VPL (For RNAV WAAS LPV). Enter the largest received value (in meters) in the FAS.

16. Field 16 – GEO SNR (For RNAV WAAS LPV). Enter the lowest value received in db(s)) in the FAS.

17. Field 17 – SIAP. Initial Approach Waypoint (IAWP), Intermediate Waypoint (IWP), Final Approach Waypoint (FAWP), Missed Approach Waypoint (MAWP), Missed Approach Turning Waypoint (MATWP), and Missed Approach Holding Waypoint (MAHWP). Each waypoint must be reported when inspected. For No-FAF procedures, the only waypoint may be the facility for both the IAF and the MAP.

a. Waypoint Name – Enter waypoint name. When a waypoint is identified by the latitude/ longitude of a facility (e.g., XYZ VDME), enter the ident of the facility as the waypoint name.

b. SAT/ UNSAT - If the data accuracy is satisfactory at the waypoint, place an "X" in the "SAT" space. If unsatisfactory, place an "X" in the "UNSAT" space and explain in Remarks.

c. FAS Vertical Path Angle – Enter the commissioned vertical path angle for the FAS. For LNAV only approaches, leave blank. For GPS overlay procedures as described in Paragraph 6, leave blank.

18. Field 18 – Route, SID, STAR, and DP

a. Waypoint Name – Enter waypoint name. When a waypoint is identified by the latitude/ longitude of a facility (e.g., XYZ VDME), enter the ident of the facility as the waypoint name.

b. SAT/ UNSAT – If the data accuracy is satisfactory at the waypoint, enter an "X' in the "SAT" space. If unsatisfactory, enter an "X" in the "UNSAT" space and explain in Remarks.

19. Field 19 – DME Facilities Supporting Procedure. Enter the ident of each DME recorded. Enter additional facilities in Remarks.

20. Field 20 – Procedure Evaluation

a. Human Factors Cockpit Workload. Complete using Order 8200.1, Paragraph 6.15c as a guideline. Place an "X" in the appropriate box. Explain unsatisfactory conditions in Remarks.

b. Obstacle Verification. Place an "X" in the appropriate box. Explain unsatisfactory conditions in Remarks.

c. Communications. Place an "X" in the appropriate box. Explain unsatisfactory conditions in Remarks.

d. Lighting Systems. If all lighting features required to support the lowest authorized visibility are Satisfactory, mark accordingly. Explain Unsatisfactory conditions in Remarks. Leave blank if there is no lighting system associated with the procedure.

e. Procedure Flyability. Place an "X" in the appropriate box. Explain unsatisfactory conditions in Remarks.

21. Field 21 - Remarks. Complete as shown in Chapter 3, Paragraph 21. If applicable, enter the reimbursable agreement number and owner name. When a flight check is accomplished for DME facilities supporting a procedure, enter the following remark: "Facilities identified by RNAV-PRO were evaluated for signal strength and accuracy. This does not constitute approval for use of DME/ DME". For GPS overlay procedures as described in Paragraph 6, report the SIAP information and add "Overlay" after the amendment number (e.g., Tulsa, OK, VOR OR GPS RWY 23, Amdt 1, Overlay. TUL VOR OTS). If flight inspection is Satisfactory, enter remark, "GPS periodic requirements met". For an RNAV SIAP with LPV minima, include course alignment error (CS ER) glide path angle (GPA), threshold crossing height (TCH), and CRC remainder code.

22. NOTAM(s). Complete as shown in Chapter 3, Paragraph 21.

APPENDIX 17. FLIGHT INSPECTION REPORT – RNAV
FIGURE 1. FAA FORM 8240-17

FLIGHT INSPECTION REPORT-- RNAV					REVIEW INITIALS
1. LOCATION:					2. IDENT:
3. CTRL NUMBER:	4. DATE(S) OF INSPECTION:				5. OWNER:
6. TYPE OF INSPECTION		COMMISSIONING	SURVEILLANCE	INCOMPLETE	
		PERIODIC	SPECIAL		
7. PROCEDURE TYPE:	8. PROCEDURE NAME:				9. RNP:
10. PROC MODIFIED	YES / NO	11. ARINC 424 CODING	SAT / UNSAT	12. RWY(S):	
13. RAIM	SAT / UNSAT	14. WAAS HPL:	15. WAAS VPL:	16. GEO SNR:	

17. SIAP

WAYPOINT NAME		SAT	UNSAT	WAYPOINT NAME		SAT	UNSAT
IAWP				MATWP			
IAWP				MAHWP			
IAWP				WP			
IAWP				WP			
IWP				WP			
FAWP				WP			
MAWP				WP			
MATWP				WP			

FAS VERTICAL PATH ANGLE:

18. ROUTE - SID - STAR - DP

WAYPOINT NAME		SAT	UNSAT	WAYPOINT NAME		SAT	UNSAT
WP				WP			
WP				WP			
WP				WP			
WP				WP			
WP				WP			
WP				WP			
WP				WP			
WP				WP			

19. DME FACILITIES SUPPORTING PROCEDURE				20. PROCEDURE EVALUATION	SAT	UNSAT
DME		DME		HUMAN FACTORS		
DME		DME		OBSTACLE VERIFICATION		
DME		DME		COMMUNICATIONS		
DME		DME		LIGHTING SYSTEMS		
DME		DME		PROCEDURE FLYABILITY		

21. REMARKS:

NOTAMs:

REGION:	FLIGHT INSPECTOR 'S SIGNATURE:	MISSION SPECIALIST'S SIGNATURE:	AIRCRAFT NO:
FIFO:			

FAA FORM 8240 - 17 (10/2005) (FORMFLOW) (Supersedes previous edition) Date Completed:

APPENDIX 18

(RESERVED)

APPENDIX 19. FLIGHT INSPECTION REPORT ENDFIRE GLIDE SLOPETRANSVERSE STRUCTURE PLOT FAA FORM 8204-19

FAA Form 8240-19 will be used to plot the glide slope transverse structure on commissioning or other checks which are used as baseline data for later checks.

1. **Fields 1 - 3.** Complete as shown in Chapter 2, Paragraph 12.

2. **Field 4 - ANT TYPE.** Refer to Appendix 22, Remarks section. Current applicable codes are ED, EH, and EU.

3. **Field 5 - SITE ELEV.** Enter the site elevation in feet above Mean Sea Level (MSL).

4. **Field 6 - TX.** Identify the transmitter number for each plot (e.g., 1 or 2).

5. **Field 7 - CFG.** Enter the configuration of both the course and clearance transmitters, using the codes in Appendix 7, Paragraph 1l(2) (e.g., Course Normal and Clearance Power Reduced would be entered as N/P). Use "OFF" as an additional code. Do not use Code "T" on this form.

6. **Field 8 - ALT.** Enter the altitude used, divided by 100, during each evaluation that is plotted (e.g., 2,500' MSL would be 25).

7. **Field 9 - RADIUS.** Enter the radius in nautical miles. The distance must be referenced to localizer centerline abeam the glide slope.

8. **Field 10 - -FLT DIRECTION.** Enter the flight direction (CW or CCW) of the run.

9. **Field 11 - GS WIDTH.** Enter the normal width of the glide slope as measured on a level run.

10. **Field 12 - GLIDE SLOPE ANGLE.** Enter the actual angle measured on an ILS-3.

11. **Field 13.** Plot the glide slope deflection to 12° each side of localizer centerline in half-degree increments. Average through any short-term (less than one second) variations in the signal. Use the value found on the localizer centerline as the Zero Reference Baseline (Zero Ref Baseline). Determine and plot the Glide Slope crosspointer deflection values to this zero reference. For example, at localizer centerline, the received signal is 10 μA of 90Hz, and at 3.5° off course, the received value is 15 μA of 150 Hz; plotted values would be 0 at centerline and 25 μA of 150 Hz at 3.5°. Additionally, draw dashed vertical lines corresponding to the localizer 150 μA half-width points on the transverse structure recordings and plot the glide slope at these points. Connect the plotted data points with a solid line.

12. **Field 14 - REMARKS.** Enter any information needed to clarify entries in any field.

13. **GENERAL.** Enter FIFO, mission specialist signature, and aircraft number as instructed in Chapter 2, Paragraphs 12j, k, and l.

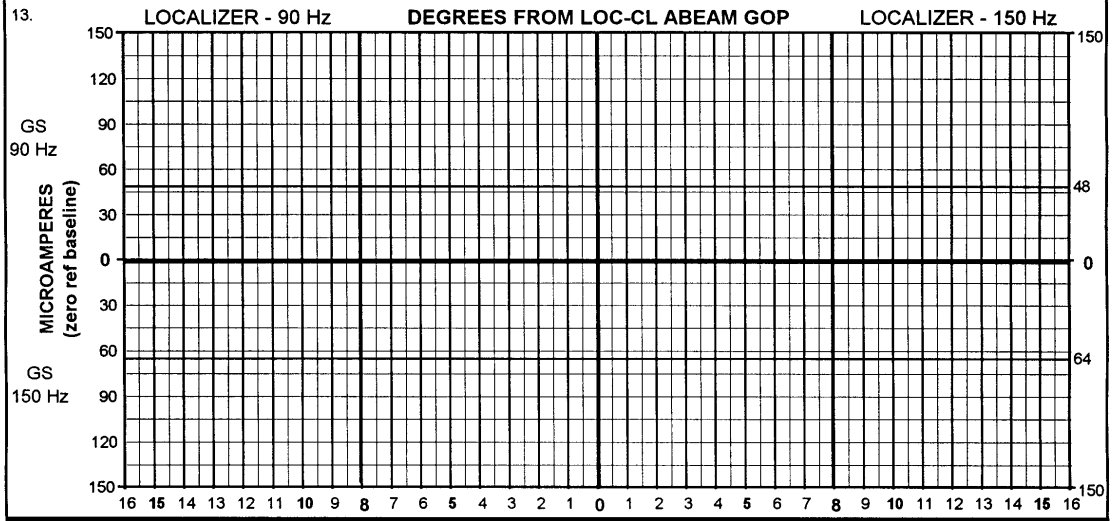
FLIGHT INSPECTION REPORT
ENDFIRE GLIDE SLOPE TRANSVERSE STRUCTURE PLOT
FIGURE 1. FAA FORM 8240-19

PAGE OF PAGES

FLIGHT INSPECTION REPORT-- TRANSVERSE-STRUCTURE PLOT

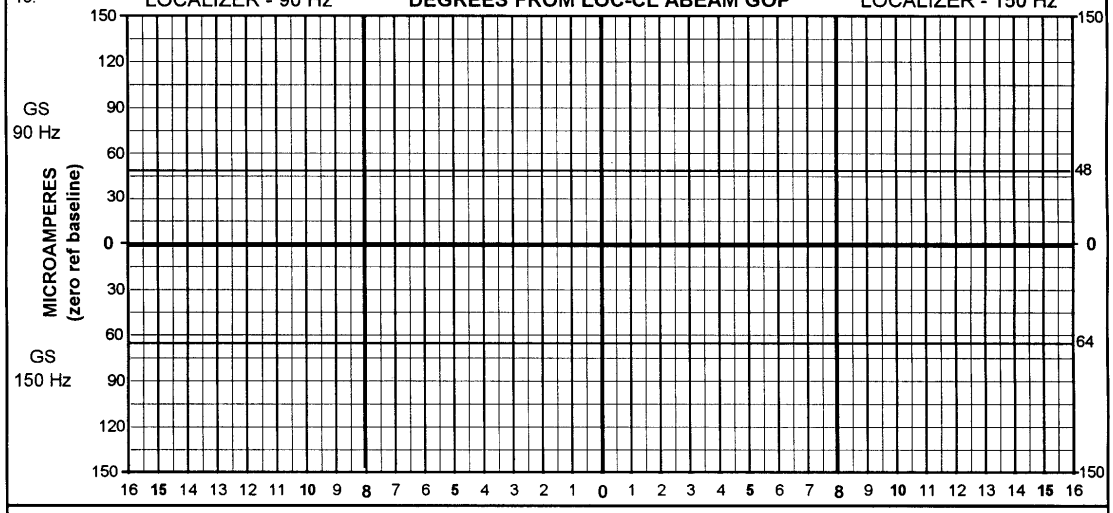
1. LOCATION:						2. IDENT:
3. DATE(S) OF INSPECTION:			4. ANT TYPE:			5. SITE ELEV:
6. TX:	7. CFG:	8. ALT:	9. RADIUS:	10. FLT DIRECT:	11. GS WIDTH:	12. GS ANGLE:

13.



6. TX:	7. CFG:	8. ALT:	9. RADIUS:	10. FLT DIRECT:	11. GS WIDTH:	12. GS ANGLE:

13.



14. REMARKS: (Draw vertical lines at Localizer 150μA-points.)

REGION:	FLIGHT INSPECTOR'S SIGNATURE:	MISSION SPECIALIST'S SIGNATURE:	AIRCRAFT NO:
FIFO:	N / A		

FAA FORM 8240 - 19 (10/2005) (FORMFLOW) Date Completed:

APPENDIX 20. FLIGHT INSPECTION REPORT FACILITY RESTRICTION/ CHECKPOINT/ ROLLOUT/ GS CBP FAA FORM 8240-20

This form is used to transmit a change in facility restrictions, checkpoints, rollouts, clearance below path (CBP), and data sheet remarks.

The form is used to report a new restriction or checkpoint in the "Publish" field and a canceled restriction or checkpoint in the "Cancel" field. If there is not an appropriate block for entering the restriction description, enter the description into Field 5, Remarks. This form must be sent directly to Resource and Data Management Officeby fax to (405) 954-3164 or as an attachment to a Lotus Notes message. Mail it to mailbox: 9-AMC-AVN-AVN210-DATA. This must be accomplished within five (5) working days of the flight inspection event.

1. Field 1

a. Attention. Enter the name of the Flight Inspection Resource and Data Management Data Specialist responsible for the area where the facility is located, or, if unknown, enter "Data Specialist".

b. Location. Complete as shown in Chapter 2, Paragraph 12.

c. Identification (Ident). Enter the facility ident.

d. Type. Enter facility type (e.g., VOR, ILS)

2. Field 2 - Cancel Facility Restriction/ Checkpoint. The cancel portion of the form may be completed in either of two ways. Each individual restriction may be listed, or the CMPNT and DATE portion of the first line may be completed with "ALL" entered into the Remarks column. If more space is required, use multiple pages or enter information in Field 5, Remarks.

a. Facility Restriction: The published facility restriction to be canceled.

CMPNT. Enter component. Abbreviations are acceptable (e.g., ILS/ L, VTAC)

DATE. Enter the date shown on the AVNIS data sheet of the restriction or checkpoint that is being canceled.

FROM/ TO/ BYD/ BELOW. Enter in the appropriate block the "radial (in degrees), distance (in nautical miles)", or altitude (in feet MSL).

REMARKS. Briefly note any additional information needed to explain cancellation or restriction.

b. **Checkpoint:** Ground or airborne receiver checkpoint to be canceled.

TYPE. Enter type of checkpoint (i.e., air or ground).

AIRPORT. Enter airport name.

RAD. Enter radial in degrees.

DIST. Enter distance in nautical miles.

ALT. Enter the altitude in feet MSL.

DESCRIPTION. Describe the location of the checkpoint.

3. **Field 3 - Publish Facility Restriction/ Checkpoint.** Enter all data as described in Field 2, except for the date field. This date field must contain the date the restriction/ cancellation information was forwarded to the flight service station or appropriate organization.

4. **Field 4 - Rollout/ GS CBP.** This field will provide tracking of rollout and GS CBP codes. Items A, C, and E are to be completed by the flight crew. Items B, D, F, G, and H are to be completed by the Technical Support Team (TST).

a. **FI Code.** Enter the appropriate localizer code from the following list:

S = Rollout accomplished; results of both the Rollout and the 50 ft run are within Category III tolerance and compare within 3 μA.

U4 = Rollout accomplished; Zone 4 results do not meet Category II/ III tolerances.

U5 = Rollout accomplished; Zone 5 results do not meet Category III tolerances.

R4 = Rollout required for evaluation of Zone 4 and Zone 5. Rollout was accomplished; ground results meet Category II/ III requirements but do not compare with results of the 50 ft run in Zone 4.

R5 = Rollout required only for evaluation of Zone 5. Rollout was accomplished; ground results meet Category III requirements; comparison with the 50 ft run was Satisfactory in Zone 4 but Unsatisfactory in Zone 5.

b. Technical Support Team (TST) Assigned Code (For TST use only). If Block 4a is coded R4 or R5, contact the appropriate Flight Standards All Weather Office for verification of facility use and apply either the R4/ R5 code or Q4/ Q5 code as applicable.

Q4 = Periodic Rollout not required. Rollout accomplished; results meet Category II/ III requirements, but Zone 4 ground results do not compare with results of the 50 ft run.
This code means that future evaluations of Zone 4 and Zone 5 must be through a Rollout Check but that <u>it need not be done on periodic inspections</u>, as these zones are not currently used for IFR.
This code is applied only by TST and does not apply to Category III.
Application to Category II is only appropriate IAW Order 8200.1, Paragraph 15.20g(3), Note 2.

Q5 = Periodic Rollout not required. Rollout accomplished; results meet Category II/ III requirements, but Zone 5 ground results do not compare with results of the 50 ft. run.
This code means that future evaluations of Zone 5 must be through a Rollout Check but that <u>it need not be done on periodic inspections</u>, as these zones are not currently used for IFR.
This code is applied only by TST and is only used to easily display the non-comparable zone.

c. Actual Class. Enter the ILS performance classification obtained as a result of the flight inspection. It may or may not be the same as the published ILS performance class.

d. Published Class (For TST use only)**:** The published facility performance class in the Airport / Facility Directory (A/ FD). If there is not a published facility performance class found in the A/ FD, enter "None".

e. GS CBP Code. Enter the appropriate code based on the flight inspection results.

S = Indicates all normal and monitor reference configurations have Satisfactory glide slope clearance below path to the threshold.

U = Indicates the glide slope clearance below path to threshold was Unsatisfactory in onr or more of the configurations.

N = Indicates the glide slope clearance below path to threshold has not been checked.

f. TST Verification. To be initialed and dated by the TST. This confirms that the information in Field 4 on the FAA Form 8240-20 has been verified to be correct and that the AVNIS Data Sheets and AF/ D must be updated by the Flight Inspection Operations Office Resource and Data Management Office Data Specialists.

g. A/ FD Change (For TST use only). Enter the facility classification to be published in the A/ FD. If no changes are to be made, leave blank.

h. Upgrade Number (For TST use only). The number of inspections that indicate the facility classification performs better than published in the A/ FD.

(1) Only one inspection is required to downgrade a facility.

(2) Three consecutive inspections indicating an improvement of the facility are required to upgrade a facility, or

(3) A corrective action has been made to improve the facility performance.

5. Field 5 - Remarks. Use Field 5 to clarify any pertinent information in other fields.

6. Field 6 - Date of Inspection. Complete as shown in Chapter 2, Paragraph 12. Enter the aircraft number and the date sent.

7. Special Use by TST. The TST will use this form for changes to the AVNIS data sheet or A/ FD when no flight inspection recordings or report accompanies the form.

a. Complete the form per instructions listed in Paragraphs 1 through 4 of this appendix.

b. Field 5 - Remarks. Provide an explanation for the changes when there is no report or recordings accompanying the change request (e.g., “A research of recordings dating from 02/15/01 to present do not support the listed restriction.”)

c. Field 6. Provide the date the form is submitted. Type name in the appropriate field (Pilot or Mission Specialist) followed by “/TST”. Initial the field.

d. Forms that have been determined by TST to be included with the flight inspection report records will be forwarded to the Flight Inspection Reports and Reports Team.

(1) AVN-210A will scan the form for inclusion to the system.

(2) The form will be filed with the appropriate recordings folder.

FLIGHT INSPECTION REPORT
FACILITY RESTRICTION/ CHECKPOINT/ ROLLOUT/ GS CBP
FIGURE 1. FAA FORM 8240-20

NAVAID FACILITY RESTRICTION/CHECKPOINT/ROLLOUT/GS CBP TRANSMITTAL

1. **TO: RESOURCE AND DATA MANAGEMENT**
FAX: (405) 954-3164 **ATTENTION:**
Please submit the following changes for incorporation into the appropriate flight publications.
LOCATION: ID: TYPE:

2. ***CANCEL:*** **FACILITY RESTRICTION** ("FROM" CW "TO")

CMPNT	DATE	FROM	TO	BYD	BELOW	REMARKS

CHECKPOINT:

TYPE	AIRPORT	RAD	DIST	ALT	DESCRIPTION

3. ***PUBLISH:*** **FACILITY RESTRICTION** ("FROM" CW "TO")

CMPNT	DATE	FROM	TO	BYD	BELOW	REMARKS

CHECKPOINT:

TYPE	AIRPORT	RAD	DIST	ALT	DESCRIPTION

4. **ROLLOUT/GS CBP:**
A. F.I. CODE: _____ C. ACTUAL CLASS: _____ E. GS CBP CODE: _____
B. TST VERIFICATION: _____ D. PUBLISHED CLASS: _____ F. VERIFIED CORRECT: _____
G. A/FD CHANGE: _____ H. UPGRADE NUMBER: _____

5. **REMARKS:**

6.
DATE OF INSPECTION: _____ AIRCRAFT NO.: _____ DATE SENT: _____
PILOT: _____ MISSION SPECIALIST: _____

FAA FORM 8240 - 20 (10/2005) (FORMFLOW) (Formerly VN 200 8240-20) Date Completed:

APPENDIX 21. FLIGHT INSPECTION REPORT CONTROLLING OBSTACLE EVALUATION FAA FORM 8240-21

This form is to be completed whenever a new or different potentially controlling obstacle is identified or discovered during a periodic or special inspection.

1. Field 1 – Airport. Enter the airport identifier as specified on the AVNIS Data Sheet.

2. Field 2 – Runway. Enter the runway number or "Circling" for a circling approach.

3. Field 3 – State. Enter the state code.

4. Field 4 – Date(s) of Inspection. Complete as shown in Chapter 2, Paragraph 12.

5. Field 5 – Type of Inspection. Complete as shown in Chapter 2, Paragraph 12.

6. Field 6 – Procedure(s). When new potentially controlling obstructions not identified in the procedure package are discovered, enter the following information.

a. Procedure Name. Enter the procedure name (e.g., RNAV (GPS) Rwy 12R, ILS Rwy 30)

b. Description. Enter a brief description of the identified obstacle.

c. Location. Enter the latitude/ longitude or radial/ bearing and distance from a known facility. If the obstacle location cannot be described using latitude/ longitude, or radial/ bearing and distance to a known facility, an accurate description on a map may be used.

d. Estimate of Height. If evaluated, enter the in-flight height in feet MSL and enter in Remarks the method of height determination. Where possible, note the AGL elevation for the procedure developer.

7. Field 7 – Remarks. Enter any information needed to clarify entries in any field and to describe any other discrepancies found during the evaluation.

FLIGHT INSPECTION REPORT – CONTROLLING OBSTACLE EVALUATION
FIGURE 1. FAA FORM 8240-21

FLIGHT INSPECTION REPORT-CONTROLLING OBSTACLE EVALUATIONS | REVIEW INITIALS

1. AIRPORT:	2. RUNWAY:	3. STATE	4. DATE(S) OF INSPECTION:

5. TYPE OF INSPECTION		PERIODIC		SPECIAL

6. PROCEDURE(S)

	IDENTIFICATION OF NEW CONTROLLING OBSTACLE			
PROCEDURE NAME	DESCRIPTION	LOCATION	ESTIMATE OF HEIGHT	
		LAT/LON or RADIAL/BEARING & DISTANCE	MSL	AGL

7. REMARKS:

REGION:	FLIGHT INSPECTOR 'S SIGNATURE:	MISSION SPECIALIST'S SIGNATURE:	AIRCRAFT NO:
FIFO:			

FAA FORM 8240 - 21 (10/2005) (FORMFLOW) Date Completed:

APPENDIX 22. INSTRUCTIONS FOR COMPLETION OF FACILITY DATA, FAA FORM 8240-22

1. Purpose and Distribution. Information required on this form is used to prepare computer programs for FAA flight inspection aircraft and in the development of terminal instrument procedures. This data must be kept valid and current. Submit a new facility data form when any of the information is changed (e.g., frequency change, antenna placement, equipment change, etc.). Do not report temporary changes in facility restrictions or inoperative components. Forward the original copy of FAA Form 8240-22 to Flight Inspection Resource and Data Management, AVN-210, Post Office Box 25082, Oklahoma City, Oklahoma 73125.

2. Scope of the Form. Use a separate form for each facility and one for each precision approach except as follows:

a. MLS/ TLS/ ILS. Report the localizer and glidepath of an ILS system on the same report form and report the azimuth and elevation of an MLS system on the same report form. When reporting an MLS facility, draw a line through all ILS references on the report form. When reporting on a Transponder Landing System (TLS), report the localizer and glide slope on the same form; use a separate form for each separate runway or distinct flight procedure.

b. MLS/ ILS Supporting NAVAID(s). Report marker beacons, compass locators, and collocated DME data with the MLS/ ILS data.

c. VORTAC and VOR/ DME. DME and azimuth functions of VORTAC and VOR/DME facilities may be reported together if the antennas are collocated. Collocation of antennas, for facility data reporting only, is defined as 10 feet or less. (See instructions for completing block 19.)

d. PAR and ASR. PAR and ASR facilities operating from the same unit may be reported together. If the PAR serves more than one runway, complete a separate form for each runway served by the PAR. Report the ASR facility on the data sheet containing the PAR serving the primary instrument runway or report the ASR on a separate form.

e. Control Towers/ Communications Sites. Forms will not be required for control towers or transmitter/receiver sites unless they contain a direction finding (DF) or ultra high frequency (UHF) beacon.

3. Information not Applicable to the NAVAID. When completing a required section, leave any block blank when not applicable.

4. Decimal Accuracy. When using trigonometry functions for computations, report values to nearest hundredth. For other accuracies, see the reporting instructions by block.

5. True Bearing. References to true bearing imply true azimuth in degrees and hundredths of degrees.

6. Geographic Coordinates. All latitude and longitude coordinates must be referenced to NAD 1983 or World Geodetic System (WGS) 1984, depending on location. The reference system used must be specified with each set of coordinates. When entering coordinates, precede the latitude with "N" or "S" and the longitude with "E" or "W".

7. Displaced Threshold. When preparing a form on a facility which supports a runway having a displaced threshold, enter all data pertaining to runway threshold in reference to the beginning of the actual landing area of the runway. Displaced thresholds, due to temporary (less than 90-day) construction projects or runway repairs, should not be reported unless a precision approach touchdown point has been or is being changed.

8. Completing the Sections

a. Section I. Complete section I for all facilities located on an airport. For facilities not located on an airport, complete only Blocks 1, 5, and 6.

b. Section II. Complete Section II for all facilities. When commissioning data is available, fill out all blocks; otherwise, only those items detailing information about the equipment and its location need to be furnished to the flight inspection activity prior to the commissioning flight check.

c. Sections III, IV, V, and VI. In addition to completing sections I and II as specified above, complete the following sections according to type of facility: PAR, sections IV and VI; MLS elevation or ILS glide slope, section IV; MLS azimuth or ILS localizer-type, section III; blocks 72 and 73 of section IV; ASR, ARSR, SECRA, section VI; and VORTAC, VOR, TACAN, VOR/DME, section V. Complete Section VI as specified.

d. Visual Glide Slope Indicator. For visual glide slope indicator (VGSI), complete all of section I, complete Blocks 8, 10, 13, 14, 16 (enter - see remarks), 18, 24, 25, 30, 31, 32, 34, 35 (TCH), 36, and 37 of Section II, and Blocks 60, 61, 62, 63, 72, and 73 of Section IV. For precision approach path indicator (PAPI) and pulsating visual glide slope indicator (PVGSI), in addition to the above blocks, enter distance from threshold to runway centerline abeam the light bar/box in Block 60.

REPORTING INSTRUCTIONS BY BLOCK

SECTION I. AIRPORT/FACILITY

1. Location. Enter the city and state or country where the facility is located.

2. International Civil Aviation Organization (ICAO) Identification (Ident). Enter the ICAO airport designator. In the contiguous United States, this is "K" plus the airport identifier (e.g., KOKC).

3. Magnetic Variation (Mag Var)/ Epoch Year (Yr). Enter the magnetic variation of record for the airport reference point and the epoch year. If unknown, contact the National Flight Procedures Office, AVN-160.

4. Airport Reference Point. Enter the latitude and longitude of the airport reference point in degrees, minutes, and seconds to the nearest hundredth of a second.

5. Airport/ Facility Name. Enter the facility name and airport name if facility is located on airport. If the facility does not have a name, enter the associated airport name or name of the military installation.

6. Owner. Indicate the actual owner of the facility (e.g., FAA, U.S. Air Force, or U.S. Navy). If the facility is owned by a foreign country and being flight checked by a U.S. agency, indicate the country and agency (e.g., Thailand, DOA).

7. Field Elevation (MSL). Enter the official airport elevation to the nearest foot. If elevation is below sea level, enter a minus sign preceding the elevation (e. g., -23 feet).

SECTION II. GENERAL

8. Type Facility. Indicate the type facility(ies) being reported on (e.g., VORTAC, glide slope, simplified directional facility (SDF), etc.). If DME is located at the ILS, report it as an ILS/ DME. If DME is located at an MLS, report it as an MLS/ DME. If DME is located at an NDB, report it as NDB/ DME.

9. Frequency (Freq)/ Channel. Indicate the published frequency and/or channel of the facility(ies). Leave blank when reporting on an air traffic control or communications facility. If a DME is collocated with the localizer, glide slope, or NDB, report the DME channel with its associated facility (e.g., LOC 109.9/ 36X, if collocated with the MLS, report as AZ CH 602/5061.6; DME 048Y).

10. Identification. Enter the identifier. When reporting on a glide slope, enter the identifier of the associated localizer. Do not enter the prefix "I" for ILS or "M" used with the MLS systems. Where more than one ASR is in operation at the same location or at an associated location, these equipments will be identified with the letters A, B, C, etc., following the identification (e.g., NQIB). These alpha codes must be the same as those used to accomplish the daily flight log. For ARSR facilities, use identifier of the controlling ARTCC or military installation plus an alpha subcode unique to the particular ARSR. Light systems serving runways having an ILS, LOC, MLS, LDA, or SDF will use the identification of the azimuth system. For runways not served by an azimuth-type facility, use the airport identification plus an alpha character for all lighting serving a particular runway.

11. Class/ Category. Enter the frequency-protected service volume for VOR, VORTAC, VOR/DME, or TACAN (T, H, L), the MLS or ILS performance category (category I, II, or III), or NDB class (MH, H, HH, Compass Locator). Leave blank if not applicable.

12. Common System. Complete this block by entering an "X" in the "Yes" block if the facility is depicted for public use on any instrument approach procedure; if not, enter an "X" in the "No" block.

13. Commissioned Date. Enter the month, day, and year the facility was commissioned (e.g., July 6, 1989, must be entered as 7/6/89).

14. Equipment Type. For MLS or ILS facilities, enter the equipment type code from block 84, paragraph 84m of this appendix. For other facilities, enter the nomenclature of the equipment. In cases where more than one facility of the same type (except ILS or MLS) is installed at an airport, identify specific equipment by the use of serial numbers or alpha symbols (e.g., TPN-8, SN-13 or MPN-13A, SN 154). For VORTAC, VOR, VOR/DME, and TACAN facilities, enter "2ND-GEN," if appropriate. Leave blank when reporting communications facilities which have numerous types/nomenclature of equipment.

15. Type Antenna. Enter the antenna nomenclature and principle of operation (e.g., GRA-121, fixed dipole, rotating parasitics). For MLS or ILS facilities, enter the antenna type code from Block 84, Paragraph 84m, of this appendix. For MLS, also enter the number of degrees of proportional guidance of the azimuth system (e.g., type 1/ 40°). Leave blank for radar or communications facilities.

16. Antenna Elevation (Elev). Enter the elevation of the antenna base in feet, mean sea level (MSL) (to the nearest tenth, if available). If elevation is below sea level, precede the value by a minus sign (e.g., -15 feet). For ILS glide slope, use ground elevation, not the elevation of the pad. For an MLS, use the phase center of the elevation antenna. For waveguide glide slope, use the elevation of the midpoint of the antenna mast.

17. Antenna Height - FT AGL. For MLS, enter the height of the elevation phase center of the antenna above the reference datum elevation (i.e., reference datum elevation is the point on runway centerline ABEAM the elevation phase center antenna).

18. Control Station and Frequency. Enter the voice call sign of the station normally having remote control or monitor capability of a facility. Also, enter the primary frequency on which to establish contact. For VGSI systems, enter the agency/ facility which has on/off control; if automatic control, so indicate.

19. Antenna Location. Enter the geographic coordinates measured at the center of the antenna array in the following manner: Report all antenna locations, except communications facilities, in accuracies equivalent to two decimal portions of arc-seconds. This means that the coordinates will be reported as XX degrees, XX minutes, XX.XX seconds. Enter "N" or "S" to show latitude and "E" or "W" to show longitude (e.g., N31, 16', 22.22" and E31, 16', 22.22"). For communications facilities with several antennas, use coordinates from the center of the transmitter antenna group. When reporting on combined facilities (a VORTAC, VOR/DME, etc.), with antennas which are not collocated, enter "see Block 84" in this block and enter the separate antenna coordinates in Block 84. For MLS or ILS facilities, enter the coordinates in Blocks 38 and 55. For TLS facilities, use the coordinates of the “apparent antenna” positions for Blocks 38 and 55. Enter actual coordinates of the sensor and radiating antennas in Remarks (Block 84).

20. Primary Power. Enter an "X" in the appropriate box.

21. Standby Power. Enter an "X" in the appropriate box.

22. Standby Equipment (Equip). Enter an "X" in appropriate box(es) and, if more than one box is marked, enter the component on the line above the box to identify the component to which the "X" applies (e.g., VOR has dual transmitters and TACAN has single transponder: Enter an "X" in "Yes" box and "VOR" on the line above the "Yes" box; enter an "X" in the "No" box and "TACAN" on the line above the "No" box). If additional space is needed, continue in Block 84.

23. Monitor. Enter an "X" in appropriate box(es).

24. Runway Number. (Complete this block for ILS, MLS, PAR, VGSI, and localizer-type facilities.) Identify the primary instrument runway served by the facility. When more than one runway is served by a precision approach aid (such as a PAR), make a separate facility data form for each runway. For ASR or DF equipment, leave blank and complete Block 83; for VOR, VORTAC, VOR/DME, or TACAN, leave blank.

25. Runway True Bearing. Enter the true bearing of the runway to the nearest hundredth. For offset azimuth facilities, enter the course azimuth separately (see Block 46).

26. Magnetic (Mag) Variation/ Year. Enter the magnetic variation listed in AVN-210 files and the epoch year for navigation aids (e.g., E10 degrees, 1985). If the magnetic variation is not on file, contact AVN-160 to determine the magnetic variation and epoch year.

27. Voice. If the facility has remote voice capability, indicate where the microphone is located and the type of service (e.g., Automatic Terminal Information Service (ATIS), from Jackson, MS (JAN), Flight Service Station (FSS), enter "ATIS/JAN FSS").

28. Automated Flight Inspection System (AFIS) Radial. Enter (to the nearest degree) the AFIS reference radial.

29. Power Output. Indicate the transmitter power output (peak power for pulsed equipment and average power for nonpulsed transmitters) in watts, kilowatts, or db, measured at the transmitter.

30. Runway Dimensions. Enter (to the nearest foot) in the spaces provided, the length, width, and landing length of the primary instrument runway served by the facility. Leave blank for nonprecision facilities.

3l. Displaced Threshold (Th). Enter an "X" in appropriate box. If the runway threshold is displaced, enter the amount of displacement (to the nearest foot) in the space provided. Leave blank for nonprecision facilities.

32. Commissioned. Enter the commissioned localizer course width and/or commissioned ILS/ MLS/ PAR/ VGSI glidepath angle, to the nearest hundredth of a degree.

33. ASR Vertical (Vert) Coverage and Operational Requirements (Req). Enter the radial used to determine vertical coverage and define the operational requirements for the ASR. If more space is needed to define operational requirements, use Block 84.

34. Threshold Elevation (Elev). (Complete this block for ILS, localizer, SDF, LDA, MLS, PAR, VGSI facilities only). Enter the MSL altitude (to the nearest tenth of a foot) of the threshold (or displaced threshold, if applicable) of the instrument runway supported by the facility. If threshold elevation is below sea level, precede the elevation by a minus sign.

35. Threshold Crossing Height (TCH). Enter (in feet to the nearest hundredth) the value derived from multiplying the GPI distance (Block 63) and the tangent of the commissioned angle (Block 32) in the TCH space provided. Exception: If the TCH is determined by actual flight inspection measurements (Order 8240.47, Determination of ILS Glidepath Angle, Reference Datum Heights, and Ground Point of Intercept), enter the flight inspection value in the RDH space and disregard the GPI calculation for TCH. Enter an asterisk in Block 35 and enter in Block 84, "*Block 35, RDH, is flight inspection derived." For VGSI TCH computations, use the distance to threshold from runway reference point (RRP). VASI RRP is the point half way between the downwind and upwind light boxes. On single light bar systems, PAPI and PVGSI, the RRP is the point on the runway centerline abeam the light bar/box. To compute VGSI TCH, multiply the RRP distance by the tangent of the commissioned angle and subtract the difference between threshold elevation and RRP elevation. Formula for VGSI TCH: RRP distance x Tan of commissioned angle - [threshold elevation - RRP elevation]. Example: RRP distance = 949.0 ft; commissioned angle = 3.00°; threshold elevation = 1077.4 ft.; RRP elevation=1075.4 ft.

$$\text{TCH} = [949.0 \text{ x } \tan 3.00] - [1077.4 - 1075.4] = (949.0 \text{ x } .05241) - 2.0 = 49.73 - 2.0 = 47.73 \text{ ft.}$$

36. ILS/ MLS/ PAR/ VGSI Angle Coincidence. Enter (to the nearest hundredth) the commissioned angle of each, if installed, for determination of angle coincidence.

37. Restricted. Enter an "X" in the appropriate box. If the facility has permanent restrictions assigned, enter an "X" in the "Yes" box and state "see Block 84." In Block 84, enter "Block 37. (quote restrictions verbatim and date of restriction)."

SECTION III. LOCALIZER DATA (ILS, SDF, LDA) OR MLS AZIMUTH

Complete this section only for an MLS azimuth or localizer-type facility. If reporting a MLS azimuth facility, draw a line through "Localizer Data (ILS, SDF, LDA) or" leaving only "MLS Azimuth."

38. Localizer/ Azimuth Antenna Coordinates. Enter latitude and longitude as specified in Block 19.

39, 40, 41. Distance to Outer Marker (OM)/ Middle Marker (MM)/ Inner Marker (IM). Enter the distance in feet (to the nearest foot) and miles (to the nearest hundredth) from the center of the localizer or azimuth antenna array to the points indicated on runway centerline extended. If the antenna is offset from runway centerline, report distances as measured in a line parallel to runway centerline. If no markers exist, enter the distances to the FAF or checkpoints, using the appropriate azimuths.

42. Distance Inner Marker (IM) to Threshold (Th). Enter the distance (to the nearest foot) from the point on runway centerline extended abeam the marker to the displaced threshold or threshold.

43. Distance to Threshold (Th). Enter the distance (to the nearest foot) measured along the runway centerline from a point abeam the localizer or azimuth antenna to the displaced threshold or threshold.

44. Distance (Dist) to Stop End. Enter the distance (to the nearest foot) measured along the runway centerline from a point abeam the localizer or azimuth antenna to the stop end of the runway. An offset antenna inside the stop end, toward the threshold, will require the use of a minus sign preceding the distance value (e.g., offset stop end, -76 feet).

45. Usable Distance. Enter the maximum distance (to the nearest mile) at which coverage is checked at the maximum authorized altitude (MAA) (to the nearest foot) and the minimum reception altitude (MRA) (to the nearest foot). If the localizer or MLS azimuth has expanded service volume, enter "ESV" in the top right corner of the block and enter in Block 84 the authorized "ESV" (see Block 84e).

46. Offset Localizer (LOC) True Bearing. Enter the inbound true bearing of an offset MLS azimuth or localizer (to the nearest hundredth).

47. Localizer (LOC) Course Width (CW) Monitor. Enter (to the nearest hundredth) the localizer monitor limits (+ and - 17 percent of the commissioned course sector width shown in Block 32 for categories (CAT) I and II; + and - 10 percent for CAT III).

48. Localizer Course Tailored. Enter an "X" in the "Yes" box if the localizer course sector width is tailored. A tailored localizer course is designed to have a width of 700 feet at threshold; however, due to mathematical computations, etc., a tailored localizer course may be 700 feet + or - 5 feet at the threshold. Enter the commissioned sector course width (to the nearest foot) at the threshold (Th) in the space provided. Leave blank for MLS azimuth.

49. Back Course Usable Distance. Complete this block if the back course is advertised for use (complete the same as Block 45). If the back course has an ESV, describe in Block 84.

50. Back Course (BC) True Bearing. Enter the inbound true bearing of the back course (to the nearest hundredth).

51. Distance to Centerline (C/L) Runway (Rwy) Abeam Glidepath Antenna (Ant). Enter the distance (to the nearest foot) measured along the runway centerline from the point abeam the glidepath or elevation antenna to the point abeam the localizer or azimuth antenna.

52. Direction Left or Right (L or R) and Distance Localizer (LOC) Offset from Runway (Rwy) Centerline (C/L). If the localizer/azimuth antenna is offset from the runway center, enter the distance it is offset (to the nearest foot). The direction (right or left) is determined by facing the runway at the approach end (e.g., right 275 feet means the center of the localizer/ SDF/ azimuth antenna array is 275 feet to the right of, and measured perpendicular to, the runway centerline). If the localizer/ azimuth is on runway center, enter "C/L."

53. Front Course Checkpoint. Enter a description of and the distance (to the nearest tenth of a mile) to the checkpoint used to check localizer/azimuth course sector width or the FAF description (e.g., grain elevator/4.9 NM; FLOEE INT 15.6 DME; ELAIN INT/OM).

54. Back Course Checkpoint. Enter a description of and the distance (to the nearest tenth of a mile) to the checkpoint used to check localizer back course sector width (e.g., railroad and road/ 5.6 NM; GLH 5.9 DME). Leave blank when back course is not used.

SECTION IV. GLIDEPATH DATA (ILS, PAR, VGSI) OR MLS ELEVATION

Complete this section only if the facility is an MLS elevation, ILS glide slope, PAR, or visual glide slope indicator. If reporting an MLS elevation facility, draw a line through "Glidepath Data (ILS, PAR, VGSI) or," leaving only "MLS Elevation."

55. Glide Slope/ Elevation Antenna Coordinates. Enter latitude and longitude as specified in Block 19.

56, 57, 58. Distance to Outer Marker (OM)/ Middle Marker (MM)/ Inner Marker (IM). Enter the distance (to the nearest foot) and miles (to the nearest hundredth) measured from a point on the runway centerline abeam the glide slope or elevation antenna to the point on runway centerline extended abeam the applicable marker or fix. If a fix is used in lieu of an outer marker, delete the "OM" and enter "FAF" (final approach fix) or "CKPT" (checkpoint) in Block 56; if the fix is not described in Block 53, describe the fix in Block 84.

> **NOTE:** Distances entered in Blocks 56, 57, and 58 will be used to compute tapeline and earth curvature entries for Blocks 65, 66, and 67, respectively.

59. Threshold to Point (Pt) "C" Distance. Complete this entry for ILS and MLS only (optional). Report both feet and miles to the nearest hundredth. Compute distance as follows:

$$\left[\frac{100 + (\text{threshold elevation} - \text{elevation used to compute GPI in Block 63})}{\text{tangent of the commissioned angle}}\right] - \text{Distance to threshold in Block 60}$$

Example: Angle = 3.00°; threshold elevation = 855 ft.; runway elevation abeam glide slope = 850 ft; glide slope distance to threshold = 1200 ft.

Then $\left[\frac{100 + (855 - 850)}{\tan 3.00°}\right] - 1200 = \left[\frac{105}{0.05241}\right] - 1200 = 2003.52 - 1200 = 803.52\ ft.$

60. Distance to Threshold (Th). For an ILS glide slope or MLS elevation, enter the distance (to the nearest foot and hundredth of a mile) measured along the runway centerline from a point abeam the glide slope/elevation antenna to the runway displaced threshold or threshold. For visual glide slope indicator systems, enter the distance from the RRP to the runway displaced threshold or threshold. For localizer/ azimuth antennas which are offset from runway centerline extended, additional procedural data is required. This procedural data must be the distance from a point abeam the glide slope/elevation antenna (pseudo glide slope) to a point abeam the threshold (pseudo threshold) on the commissioned final approach course. To enter this additional procedural data, enter an asterisk in block 60; and in block 84, enter "*Procedural data: Distance pseudo G/P to pseudo AER = 1002'." Also, enter the latitude and longitude of the pseudo glidepath/elevation and pseudo threshold (e.g., pseudo G/P N41-09'-31.01" WO73-07'-46.14," pseudo AER N41-09'-24.28" WO73-07'-55.74").

61. Runway (Rwy) Elevation (Elev) Abeam Glide Slope (GS) Antenna. Enter the elevation (to the nearest tenth of a foot, if available) of the runway C/L abeam the ILS glide slope or MLS elevation antenna. For PAR facilities, leave blank. For VGSI installation, enter the runway C/L elevation at the RRP. Enter the corresponding coordinates in Block 84.

62. Touchdown Zone Elevation (TDZE) (MSL). Enter the elevation (to the nearest foot, if available) of the highest point of the first 3,000 feet of runway surface measured from the displaced threshold or threshold. Precede the MSL altitude with a minus sign if the TDZE elevation is below sea level.

63. Distance Threshold to Ground Point of Intercept (GPI). Enter the distance (to the nearest hundredth of a foot) from the displaced threshold or threshold to the GPI and the distance from the displaced threshold or threshold to the runway point of intercept (RPI) (e.g., ILS GPI 788.00, RPI 680.00; PAR GPI 1141.75; VGSI GPI 758.00, RRP (runway reference point) 660.00). To calculate the GPI distance, determine the height of the elevation/glidepath emanation point. This will be one of the following: elevation of the glide slope antenna site (Block 16); elevation of the midpoint of the waveguide glide slope antenna mast (Block 16); elevation of the MLS antenna phase center (Block 16); the runway elevation abeam the glide slope antenna (block 61); or a flight inspection derived value (Block 84). Enter in Blocks 71 and 84 the elevation used for GPI computations. From the preceding elevation selected, subtract the displaced threshold elevation or threshold elevation (Block 34).

> **NOTE:** If the selected elevation is lower than the threshold elevation, the result is negative and vice versa.

Divide the result by the tangent of the commissioned angle (Block 36). Algebraically add the result to the "distance to Th" in feet (Block 60). The result is the GPI entry for this block. For a VGSI GPI computation, the distance to the threshold is from the RRP (Block 60). To compute RPI, use FAA Order 8260.3, United States Standard for Terminal Instrument Procedures (TERPS), Figure 129 or 129A. Substitute the elevation/glidepath emanation height used to compute GPI for the antenna elevation or runway crown elevation as shown in the figures.

64. Direction Left or Right (L or R) and Distance From Antenna to Runway (Rwy) Centerline (C/L). Complete this block for glide slope, MLS elevation, and PAR only. Looking from threshold down the runway, indicate if the ILS glide slope, MLS elevation, or PAR antenna is left or right of runway centerline and enter the precise perpendicular distance to runway centerline (to the nearest foot).

65, 66, 67. Altitude Over Outer Marker (OM) or Checkpoint (CK PT)/ Middle Marker (MM)/ Inner Marker (IM). Complete these fields for glide slope and MLS elevation facilities. Enter the tapeline altitude, earth's curvature value (optional), and altitude (all to the nearest hundredth) over the points indicated, based on the commissioned glidepath angle or MLS elevation angle.

a. Tapeline. To calculate tapeline, multiply the tangent of commissioned glidepath angle or MLS elevation angle by the distance in feet from commissioned final approach course abeam the glide slope/elevation antenna to the appropriate marker or FAF on the same final approach course.

b. Earth Curvature (EC). To calculate EC, use distance in nautical miles from commissioned final approach course abeam glidepath/elevation antenna to appropriate marker or FAF, squared, multiplied by .883.

c. MSL. To calculate MSL, add tapeline, earth curvature, and the elevation used to compute the GPI in Block 63.

68, 69. Distance (Dist) Outer Marker (OM)/ Middle Marker (MM) to Threshold (Th). Enter the distance (to the nearest foot) from the point on runway centerline extended abeam the marker or FAF to the displaced threshold or threshold.

70. Glidepath/Elevation Monitor. Enter (to the nearest hundredth) the glidepath/ elevation monitor alarm points based on the commissioned angle and category, in accordance with Order 8200.1, Paragraph 15.60. For MLS, draw a line through glidepath and complete with maximum and minimum allowable angles (e.g., angle (high) 3.1; angle (low) 2.9).

71. Elevation used to commission Glide Slope. Enter the elevation (to nearest tenth of a foot, if available) that was used to commission the glide slope (see Block 63).

72, 73. Type of Approach Lighting/Type of Runway Lighting. Enter the type of approach lighting available and the type of runway lighting available for the runway number in Block 24.

SECTION V. VOR, VOR/ DME, VORTAC, TACAN, DME

Complete this section for VOR, VOR/ DME, VORTAC, TACAN, or DME facilities only.

74. Reference Radial/Checkpoint Description. Enter the reference radial azimuth (to the nearest whole degree). Enter checkpoint azimuth (to the nearest tenth of a degree), the distance (to the nearest tenth of a mile), MSL altitude used to establish alignment over the checkpoint, and a description of checkpoint (e.g., reference radial 270°, checkpoint 270.1°/14.3 nm/2500'/bridge over highway). This information should be available from the commissioning flight inspection report. For AFIS reference radial, enter radial azimuth in whole degrees, the start and stop distances from the facility in miles, and the MSL altitude used (e.g., AFIS reference radial: 270°/15-25 nm7500').

75. Theodolite Position. Enter the location of the theodolite in reference to the antenna when a theodolite is used to check the facility; if not required, leave blank.

76. Ground Receiver Checkpoints. Enter the airport name, radial, distance, and description of the checkpoints located on airports used to groundcheck airborne receivers.

77. Theodolite Reference Points. In normal circumstances, this block is not used and may be left blank. If needed, enter the precise azimuth and description of reference points used to visually align the theodolite.

78. Airborne Receiver Checkpoints. For each airborne receiver checkpoint, enter the radial, distance, altitude, and description of the airborne receiver checkpoint; if the checkpoint is on an airport, enter the airport names in the "Name" space.

SECTION VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF-DF, UHF-DF)

Complete Blocks 79, 80, 81, and 82 for radar facilities only.

79. Type Secondary. Enter the equipment type of the secondary radar and serial number, if needed.

80. Moving Target Indicator (MTI) Blind Speed. Enter the blind speed.

81. Video Mapping. Enter an "X" in the appropriate box.

82. Antenna Tilt. Enter antenna tilt in hundredths of a degree in the appropriate space. A variable tilt antenna can be remotely controlled.

83. Nonprecision Approaches. Enter airport name and runway served by the facility.

84. Remarks. If there is insufficient space in any block, complete the entry in this block and reference the block number. If more space is required for remarks, attach another FAA Form 8240-22 and use Block 84, "Remarks" only. Label the pages as "Page 1 of 2," "Page 2 of 2," etc. This space will also be used to enter any other pertinent data for which no space has been provided (e.g., displaced threshold coordinates (DISPL-AER).

a. PAR. Enter the latitude, longitude, and elevation of the stop end (SER) of the runway centerline; the latitude and longitude of the approach end runway (AER) threshold centerline; latitude and longitude of displaced threshold (DISPL-AER); and the latitude and longitude of ground point of intercept (GPI).

b. Azimuth-Type Facility, MLS or ILS. Enter the latitude and longitude of the runway abeam the glide slope/elevation antenna phase center; the latitude and longitude and elevations of marker beacons, DME, and compass locators; the location identifier and frequency of compass locators; the latitude, longitude, and elevation of the SER; the latitude and longitude of the AER; and the latitude and longitude of DISPL-AER. For an offset localizer or MLS azimuth, enter the distance (in feet) from the AER that the approach course azimuth crosses runway centerline. Enter the area of the designed MLS clearance coverage of the antenna. If a localizer has dual frequencies, enter a remark to so indicate. Enter elevation used to compute GPI. If minor axis width of a marker is not optimum, enter actual marker width required and reason for special size.

c. Visual Glide Slope Indicator Systems

(1) VASI. Enter the distance from threshold to each row of light boxes; the elevation of the runway crown abeam each row of light boxes; the aiming angle of each row of light boxes; the latitude, longitude, and elevation of SER and RRP; the latitude and longitude of the AER; and the latitude and longitude of DISPL-AER.

(2) PAPI and PVGSI. Enter the elevation of the runway crown abeam the light bar, latitude, longitude, and elevation of the SER, and the latitude and longitude of AER, RRP, and DISPL-AER.

d. VOT. Describe the reference point and any restrictions to VOT use. For area VOT's, list each airport served, whether it is to be used in the air or on the ground, and any restrictions that may exist (e.g., altitude restrictions, etc.).

e. Expanded Service Volume. Describe all authorized expanded service volumes by component, azimuth, distance, and MAA/MRA altitudes.

f. Standard Instrument Approach Procedure (SIAP). List all SIAP's that each facility supports. Include the airport name and state; SIAP description; and the amendment number if the SIAP is public, private, or military (e.g., Will Rogers World, OK, NDB rwy 35R, amdt 1, public). If an NDB supports an ILS or MLS procedure, identify the NDB's use (e.g., NDB used as a compass locator at outer marker (LOM) for "RGR" ILS approach, runway 35R).

g. NOTAM(s). Record all existing facility NOTAM(s) verbatim with date NOTAM was given to issuing agency. When a NOTAM is issued, changed, or canceled, notify AVN-210, using the data sheet transmittal option, or by sending a new FAA Form 8240-22 to AVN-210. A history log of all facility NOTAM(s) may be retained by the FIFO(s).

h. Region. Enter the 3-letter region designator of the FAA region in which the facility is located. For USAF owned facilities, also enter the USAF major command identifier.

i. FIFO. Enter the 3-letter designator of the flight inspection office having primary responsibility for inspection of the facility.

j. Facility Identification (Ident) and Facility Type. Same as Blocks 10 and 8.

k. Date Prepared. Enter month, day, and year that facility data form was prepared.

l. Typed Name and Signature. Enter the name and the signature of the person who approved the data sheet for use (if applicable).

m. ILS/ MLS Equipment Type and Antenna Type Codes.

LOCALIZER - ANTENNA TYPE

Standard 8 Loop	SL
V-Ring 8 Element	V8
V-Ring 14 Element	V4
V-Ring 15 Element	V5
Wave Guide	WG
Traveling Wave	TW
LDA	LD
Twin T or "T" Type	TT
Log Periodic	LP
Capture Effect	CE
Parabolic	PB
N.E.R.A	NE
4 Element Dipole	4D
6 Element Dipole	6D
TLS Yagi	YG
Other	OT (Specify in Remarks)
Modified Log Periodic (back course)	ML

LOCALIZER/AZIMUTH EQUIPMENT TYPE

Standard equipment)	ST	(Other than solid state equipment)
AIL	AI	(Solid State equipment)
Aviation Systems, Inc.	AS	
Texas Instrument	TI	(Solid State equipment)
Wilcox	WL	(Solid State equipment)
Bendix/ Allied Signal	BX	
Phillips	PL	
Thompson	TH	
Lorenz	LZ	
Hazeltine	HZ	
ANPC	TL	
Other	OT	(Specify in Remarks)

GLIDEPATH - ANTENNA TYPE

Capture Effect	CE
Sideband Reference	SB
Modified Sideband Reference	MR
Null Reference	NR
Wave Guide	WG
N.E.R.A.	NE (Norwegian-made antenna used with WL equipment)
Endfire Standard (105)	ED
Endfire Short (106)	EH
Endfire – Upslope Version	EU
TLS Yagi	YG
Other	OT (Specify in Remarks)

GLIDEPATH/ELEVATION EQUIPMENT TYPE

Standard	ST (Other than Solid State equipment)
AIL	AI
Aviation Systems, Inc.	AS
Texas Instrument	TI
Wilcox	WL
Bendix/Allied Signal	BX
Thompson	TH
Lorenz	LZ
Hazeltine	HZ
ANPC	TL
Other	OT (Specify in Remarks)

MICROWAVE LANDING SYSTEM (MLS) ANTENNA OPTIONS

TYPE	AZIMUTH GUIDANCE BEAM WIDTH	SCAN ANGLE	ELEVATION GUIDANCE BEAM WIDITH	SCAN ANGLE
Type I	2°	$\pm 40^o$	1.5^o	0.9^o to 15°
Type II	2°	$\pm 40^o$	1°	0.9^o to 15°
Type III	1°	$\pm 40^o$	1.5^o	0.9^o to 15°
Type IV	1°	$\pm 40^o$	1°	0.9^o to 15°
Type V	1°	$\pm 10^o$	1°	0.9^o to 15°
Type VI	1°	$\pm 60^o$	1°	0.9^o to 15°
Other (Specify in Remarks)				

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 1. FAA FORM 8240-22

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FACILITY DATA

I. AIRPORT / FACILITY

1. LOCATION	2. ICAO IDENT	3. MAG VAR / YR MAG VAR: EPOCH YR:	4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth) LATITUDE: LONGITUDE:
5. AIRPORT / FACILITY NAME	6. OWNER	7.FIELD ELEVATION (MSL)	

II. GENERAL

8. TYPE FACILITY	9. FREQ / CHANNEL	10. IDENTIFICATION	11. CLASS / CATEGORY	12. COMMON SYSTEM ☐ YES ☐ NO	13. COMMISSIONED DATE
14. EQUIPMENT TYPE	15. TYPE ANTENNA	16. ANTENNA ELEV. - MSL	17. ANTENNA HEIGHT-FT	18. CONTROL STATION AND FREQUENCY	
19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th) LATITUDE: LONGITUDE:		20. PRIMARY POWER ☐ COMMERCIAL ☐ ENGINE	21. STANDBY POWER ☐ COMMERCIAL ☐ ENGINE ☐ BATTERY ☐ NONE	22. STANDBY EQUIP. ☐ YES ☐ NO	23. MONITOR ☐ YES ☐ NO ☐ SINGLE ☐ DUAL
24. RUNWAY NUMBER	25. RUNWAY TRUE	26. MAG VARIATION / YEAR MAG VAR: EPOCH YR:	27. VOICE	28. AFIS RADIAL	29. POWER OUTPUT
30. RUNWAY DIMENSIONS LENGTH: FT WIDTH: FT LANDING LENGTH: FT		31. DISPLACED TH ☐ YES ☐ NO DISPLACED : FT	32. COMMISSIONED WIDTH: DEG ANGLE: DEG	33. ASR VERT COVERAGE & OPERATIONAL REQ RADIAL: DISTANCE: ALTITUDE:	
34. THRESHOLD ELEV	35. TCH TCH: FT AGL RDH: FT AGL	36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE ILS/MLS (Degrees)	PAR (Degrees)	VGSI (Degrees)	37. RESTRICTED ☐ YES ☐ NO

III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH

38. LOCALIZER / AZIMUTH ANTENNA COORDINATES LATITUDE: LONGITUDE:		39. DISTANCE TO OM (NM): (FT) :	40. DISTANCE TO MM (NM) : (FT) :	41. DISTANCE TO IM (FT) (NM) : (FT) :	42. DISTANCE IM TO TH (FT)
43. DISTANCE TO TH	44. DIST TO STOP END	45. USABLE DISTANCE NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		46. OFFSET LOC TRUE BEARING	47. LOC CW MONITOR WIDE : NARROW:
48. LOCALIZER COURSE TAILORED ☐ YES ☐ NO WIDTH AT TH (FT):		49. BACK COURSE USABLE DISTANCE NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		50. BC TRUE BEARING	51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT
52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L		53. FRONT COURSE CHECK POINT		54. BACK COURSE CHECK POINT	

IV. GLIDE PATH DATA (ILS, PAR, VGSI) or MLS ELEVATION

55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES LATITUDE: LONGITUDE:		56. DISTANCE TO OM (NM): (FT) :	57. DISTANCE TO MM (NM) : (FT) :	58. DISTANCE TO IM (NM) : (FT) :	59. DISTANCE TO PT "C" (NM) : (FT) :
60. DISTANCE TO TH (NM) : (FT) :	61. RWY ELEV ABEAM GS ANTENNA	62. TDZE (MSL)	63. DISTANCE - THRESHOLD TO GPI (FT) ILS GPI: RPI:	PAR GPI :	VGSI GPI: RRP:
64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L		65. ALTITUDE OVER OM OR CK PT. (FT) TAPELINE / EC / MSL		66. ALTITUDE OVER MM (FT) TAPELINE / EC / MSL	
67. ALTITUDE OVER IM (FT) TAPELINE / MSL		68. DIST OM - TH (FT)	69. DIST MM - TH (FT)	70. GLIDE PATH / ELEVATION MONITOR ANGLE (High): ANGLE (Low) :	
71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT		72. TYPE OF APPROACH LIGHTING:		73. TYPE OF RUNWAY LIGHTING:	

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 1. FAA FORM 8240-22, CONTINUED

PAGE 2 of 2 PAGES

V. VOR, VOR / DME, VORTAC, TACAN, DME

74. REFERENCE RADIAL	AZIMUTH / CHECK POINT DESCRIPTION	75. THEODOLITE POSITION

76. GROUND RECEIVER CHECK POINTS			77. THEODOLITE REFERENCE POINTS	
RADIAL	DISTANCE	DESCRIPTION	BEARING	DESCRIPTION

78. AIRBORNE RECEIVER CHECKPOINTS

NAME	RADIAL	DISTANCE	ALTITUDE	DESCRIPTION

VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF - DF, UHF - DF)

79. TYPE SECONDARY	80. MTI BLIND SPEED	81. VIDEO MAPPING	82. ANTENNA TILT (Degrees)
		☐ YES ☐ NO	FIXED: VAR:

83. NON-PRECISION APPROACHES

AIRPORT	RUNWAY	AIRPORT	RUNWAY	AIRPORT	RUNWAY

84. REMARKS (Include all facility or airspace restrictions)

REGION:	FIO:	FACILITY IDENT:	FACILITY TYPE:

DATE PREPARED:	TYPED NAME:	SIGNATURE:

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 2. SAMPLE FAA FORM 8240-22, VORTAC

FACILITY DATA

I. AIRPORT / FACILITY

1. LOCATION: PUEBLO, CO	2. ICAO IDENT	3. MAG VAR / YR MAG VAR: EPOCH YR:	4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth) LATITUDE: LONGITUDE:
5. AIRPORT / FACILITY NAME: PUEBLO	6. OWNER: FAA	7. FIELD ELEVATION (MSL)	

II. GENERAL

8. TYPE FACILITY: VORTAC	9. FREQ / CHANNEL: 116.7/114X	10. IDENTIFICATION: PUB	11. CLASS / CATEGORY: H	12. COMMON SYSTEM: [X] YES [ ] NO	13. COMMISSIONED DATE: VOR 8/8/58 TAC 4/5/60
14. EQUIPMENT TYPE: VOR 2ND GEN TAC GRN-9B	15. TYPE ANTENNA: VOR TUO-1 TAC RTA-2	16. ANTENNA ELEV. - MSL: VOR 4760.0 TAC 4760.0	17. ANTENNA HEIGHT-FT	18. CONTROL STATION AND FREQUENCY: DEN FSS	
19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th) LATITUDE: N38-17-39.30 LONGITUDE: W104-25-44-10		20. PRIMARY POWER [X] COMMERCIAL [ ] ENGINE	21. STANDBY POWER [ ] COMMERCIAL [X] ENGINE [ ] BATTERY [ ] NONE	22. STANDBY EQUIP. TAC [X] YES VOR [X] NO	23. MONITOR [X] YES [ ] NO [ ] SINGLE [X] DUAL
24. RUNWAY NUMBER	25. RUNWAY TRUE	26. MAG VARIATION / YEAR MAG VAR: E13 EPOCH YR: 1965	27. VOICE: NONE	28. AFIS RADIAL: 64	29. POWER OUTPUT: VOR 125 W TAC 5 KW
30. RUNWAY DIMENSIONS LENGTH: FT WIDTH: FT LANDING LENGTH: FT		31. DISPLACED TH [ ] YES [ ] NO DISPLACED: FT	32. COMMISSIONED WIDTH: DEG ANGLE: DEG	33. ASR VERT COVERAGE & OPERATIONAL REQ RADIAL: DISTANCE: ALTITUDE:	
34. THRESHOLD ELEV	35. TCH TCH: FT AGL RDH: FT AGL	36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE ILS/MLS (Degrees)	PAR (Degrees)	VGSI (Degrees)	37. RESTRICTED [ ] YES [X] NO

III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH

38. LOCALIZER / AZIMUTH ANTENNA COORDINATES LATITUDE: LONGITUDE:		39. DISTANCE TO OM (NM): (FT):	40. DISTANCE TO MM (NM): (FT):	41. DISTANCE TO IM (FT) (NM): (FT):	42. DISTANCE IM TO TH (FT)
43. DISTANCE TO TH	44. DIST TO STOP END	45. USABLE DISTANCE NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		46. OFFSET LOC TRUE BEARING	47. LOC CW MONITOR WIDE: NARROW:
48. LOCALIZER COURSE TAILORED [ ] YES [ ] NO WIDTH AT TH (FT):		49. BACK COURSE USABLE DISTANCE NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		50. BC TRUE BEARING	51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT
52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L		53. FRONT COURSE CHECK POINT		54. BACK COURSE CHECK POINT	

IV. GLIDE PATH DATA (ILS, PAR, VGSI) or MLS ELEVATION

55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES LATITUDE: LONGITUDE:		56. DISTANCE TO OM (NM): (FT):	57. DISTANCE TO MM (NM): (FT):	58. DISTANCE TO IM (NM): (FT):	59. DISTANCE TO PT "C" (NM): (FT):
60. DISTANCE TO TH (NM): (FT):	61. RWY ELEV ABEAM GS ANTENNA	62. TDZE (MSL)	63. DISTANCE - THRESHOLD TO GPI (FT) ILS GPI: RPI:	PAR GPI:	VGSI GPI: RRP:
64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L		65. ALTITUDE OVER OM OR CK PT. (FT) TAPELINE / EC / MSL		66. ALTITUDE OVER MM (FT) TAPELINE / EC / MSL	
67. ALTITUDE OVER IM (FT) TAPELINE	MSL	68. DIST OM - TH (FT)	69. DIST MM - TH (FT)	70. GLIDE PATH / ELEVATION MONITOR ANGLE (High): ANGLE (Low):	
71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT		72. TYPE OF APPROACH LIGHTING:		73. TYPE OF RUNWAY LIGHTING:	

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 2. SAMPLE FAA FORM 8240-22, VORTAC (Continued)

PAGE 2 of 2 PAGES

V. VOR, VOR / DME, VORTAC, TACAN, DME

74. REFERENCE RADIAL 267	AZIMUTH / CHECK POINT DESCRIPTION	75. THEODOLITE POSITION
	267.5/19.5NM/73000'/INTBR OVER N STREAM AFIS: 64/20-15NM/12500'	N/A

76. GROUND RECEIVER CHECK POINTS			77. THEODOLITE REFERENCE POINTS	
RADIAL	DISTANCE	DESCRIPTION	BEARING	DESCRIPTION
249	4.0	CIR ON PAD S. SIDE AER 08L		
		PUEBLO MEMORIAL, CO		

78. AIRBORNE RECEIVER CHECKPOINTS

NAME	RADIAL	DISTANCE	ALTITUDE	DESCRIPTION
	294	7.8	7300	OVER KOAA TOWER 5.4 NM NW AIRPORT

VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF - DF, UHF - DF)

79. TYPE SECONDARY	80. MTI BLIND SPEED	81. VIDEO MAPPING	82. ANTENNA TILT (Degrees)
		☐ YES ☐ NO	FIXED: VAR:

83. NON-PRECISION APPROACHES

AIRPORT	RUNWAY	AIRPORT	RUNWAY	AIRPORT	RUNWAY

84. REMARKS (Include all facility or airspace restrictions)

ESV VOR AND TAC: 351R/59 NM/9400' (2/3/89)

SIAP: PUEBLO MEMORIAL, CO VOR OR TAC RWY 26R AMDT 26 PUBL

HORIZONTAL DATUM: NAD 83 VERTICAL DATUM: NAVD 88

REGION:	FIO:	FACILITY IDENT:	FACILITY TYPE:
ANM	SAC	PUB	VORTAC

DATE PREPARED:	TYPED NAME:	SIGNATURE:

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 3. SAMPLE FAA FORM 8240-22, ILS/ DME

PAGE 1 of 2 PAGES

FACILITY DATA

I. AIRPORT / FACILITY

1. LOCATION: OKLAHOMA CITY, OK	2. ICAO IDENT: KOKC	3. MAG VAR / YR: MAG VAR: E7; EPOCH YR: 1985	4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth): LATITUDE: N35-23-34.90; LONGITUDE: W097-36-01.50
5. AIRPORT / FACILITY NAME: WILL ROGERS WORLD	6. OWNER: FAA	7. FIELD ELEVATION (MSL): 1295	

II. GENERAL

8. TYPE FACILITY: ILS/DME	9. FREQ / CHANNEL: LOC 110.90/46X GP 330.80	10. IDENTIFICATION: RGR	11. CLASS / CATEGORY: 2	12. COMMON SYSTEM: [X] YES [ ] NO	13. COMMISSIONED DATE: LOC 11/4/88 GP 11/3/88 DME 2/11/80
14. EQUIPMENT TYPE: LOC WL GP WL	15. TYPE ANTENNA: LOC LP GP NR	16. ANTENNA ELEV. - MSL: LOC 1287.0 GP 1281.0	17. ANTENNA HEIGHT-FT	18. CONTROL STATION AND FREQUENCY: WILL ROGERS TOWER 118.3/257.8	
19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th) LATITUDE: ___ LONGITUDE: ___		20. PRIMARY POWER: [X] COMMERCIAL [ ] ENGINE	21. STANDBY POWER: [ ] COMMERCIAL [ ] ENGINE [X] BATTERY [ ] NONE	22. STANDBY EQUIP.: [X] YES [ ] NO	23. MONITOR: [X] YES [ ] NO [ ] SINGLE [X] DUAL
24. RUNWAY NUMBER: 35R	25. RUNWAY TRUE: 359.96	26. MAG VARIATION / YEAR: MAG VAR: E7; EPOCH YR: 1985	27. VOICE: NONE	28. AFIS RADIAL	29. POWER OUTPUT
30. RUNWAY DIMENSIONS: LENGTH: 9802 FT; WIDTH: 150 FT; LANDING LENGTH: 9802 FT		31. DISPLACED TH: [ ] YES [X] NO; DISPLACED: FT	32. COMMISSIONED: WIDTH: 3.65 DEG; ANGLE: 2.90 DEG	33. ASR VERT COVERAGE & OPERATIONAL REQ: RADIAL: DISTANCE: ALTITUDE:	
34. THRESHOLD ELEV: 1282.8	35. TCH: TCH: FT AGL; RDH: 58.0 FT AGL	36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE: ILS/MLS (Degrees): 2.90	PAR (Degrees):	VGSI (Degrees):	37. RESTRICTED: [ ] YES [X] NO

III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH

38. LOCALIZER / AZIMUTH ANTENNA COORDINATES: LATITUDE: N35-24-29.92; LONGITUDE: W097-35-19.06		39. DISTANCE TO OM: (NM): 6.79; (FT): 41245	40. DISTANCE TO MM: (NM): 2.30; (FT): 13966	41. DISTANCE TO IM (FT): (NM): 1.98; (FT): 12004	42. DISTANCE IM TO TH (FT): 1033
43. DISTANCE TO TH: 10971	44. DIST TO STOP END: 1169	45. USABLE DISTANCE: 18 NM AT 5787 FT (MSL / MAA); NM AT FT (MSL / MRA)		46. OFFSET LOC TRUE BEARING	47. LOC CW MONITOR: WIDE: 4.27; NARROW: 3.03
48. LOCALIZER COURSE TAILORED: [X] YES [ ] NO; WIDTH AT TH (FT): 699.14		49. BACK COURSE USABLE DISTANCE: N/A NM AT FT (MSL / MAA); NM AT FT (MSL / MRA)		50. BC TRUE BEARING: 179.96	51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT: 9883
52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L: C/L		53. FRONT COURSE CHECK POINT: LOM 6.8 DME		54. BACK COURSE CHECK POINT: N/A	

IV. GLIDE PATH DATA (ILS, PAR, VGSI) or MLS ELEVATION

55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES: LATITUDE: N35-22-52.18; LONGITUDE: W097-35-14.15		56. DISTANCE TO OM: (NM): 5.16; (FT): 31362	57. DISTANCE TO MM: (NM): .67; (FT): 4083	58. DISTANCE TO IM: (NM): .35; (FT): 2121	59. DISTANCE TO PT "C": (NM): (FT):
60. DISTANCE TO TH: (NM): .18; (FT): 1088	61. RWY ELEV ABEAM GS ANTENNA: 1286.1	62. TDZE (MSL): 1294	63. DISTANCE - THRESHOLD TO GPI (FT): ILS GPI: 1153.14; RPI: 1088.00	PAR GPI:	VGSI GPI: RRP:
64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L: RIGHT 400		65. ALTITUDE OVER OM OR CK PT. (FT): TAPELINE 1588.73; EC; MSL 2898.35		66. ALTITUDE OVER MM (FT): TAPELINE 206.84; EC; MSL 1493.33	
67. ALTITUDE OVER IM (FT): TAPELINE 107.45; MSL 1393.55		68. DIST OM - TH (FT): 30274	69. DIST MM - TH (FT): 2995	70. GLIDE PATH / ELEVATION MONITOR: ANGLE (High): 3.12; ANGLE (Low): 2.68	
71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT: 1286.1		72. TYPE OF APPROACH LIGHTING: ALSF-2		73. TYPE OF RUNWAY LIGHTING: HIRL/TDZ/CL	

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 3. SAMPLE FAA FORM 8240-22, ILS/DME (Continued)

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V. VOR, VOR / DME, VORTAC, TACAN, DME

74. REFERENCE RADIAL	AZIMUTH / CHECK POINT DESCRIPTION	75. THEODOLITE POSITION

76. GROUND RECEIVER CHECK POINTS			77. THEODOLITE REFERENCE POINTS	
RADIAL	DISTANCE	DESCRIPTION	BEARING	DESCRIPTION

78. AIRBORNE RECEIVER CHECKPOINTS

NAME	RADIAL	DISTANCE	ALTITUDE	DESCRIPTION

VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF - DF, UHF - DF)

79. TYPE SECONDARY	80. MTI BLIND SPEED	81. VIDEO MAPPING	82. ANTENNA TILT (Degrees)
		☐ YES ☐ NO	FIXED: VAR:

83. NON-PRECISION APPROACHES

AIRPORT	RUNWAY	AIRPORT	RUNWAY	AIRPORT	RUNWAY

84. REMARKS (Include all facility or airspace restrictions)

COMMISSIONED IAW 8240.47/REF ELEV = 1286' BLOCK 61 USED TO COMPUTE GPI, RPI, POINT C.

OM N35-17-42.00 W097-35-18.10 ELEV 1198.0' GALLY LOM 350 KHZ

MM N35-22-11.80 W097-35-18.90 ELEV 1263.0'

IM N35-22-31.20 W097-35-19.00 ELEV 1271.3'

AER N35-22-41.42 W097-35-18.97

SER N35-24-18.35 W097-35-19.06 ELEV 1286.4'

RUNWAY C/L ABEAM GP ANTENNA N35-22-52.18 W097-35-18.98

DME N35-24-30.73 W097-35-21.81 ELEV 1304.0'

LOC/CLR CHECKS AT LCA (2902' MSL) DUAL FREQUENCY LOCALIZER

SIAP: WILL ROGERS WORLD, OK ILS RWY 35R AMDT 7 PUBL
WILL ROGERS WORLD, OK ILS RWY 35R (CAT 2) AMDT 7 PUBL

HORIZONTAL DATUM: NAD 83 VERTICAL DATUM: NAVD 88

REGION:	FIO:	FACILITY IDENT:	FACILITY TYPE:
ASW	OKC	RGR	ILS/DME

DATE PREPARED:	TYPED NAME:	SIGNATURE:

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 4. SAMPLE FAA FORM 8240-22, PAR

FACILITY DATA

I. AIRPORT / FACILITY

1. LOCATION: PANAMA CITY, FL	2. ICAO IDENT: KPAM	3. MAG VAR / YR: MAG VAR: E 0; EPOCH YR: 1985	4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth): LATITUDE: N30-04-11.38; LONGITUDE: W085-34-34.29
5. AIRPORT / FACILITY NAME: TYNDALL AFB	6. OWNER: USAF	7. FIELD ELEVATION (MSL): 18	

II. GENERAL

8. TYPE FACILITY: PAR	9. FREQ / CHANNEL:	10. IDENTIFICATION: PAM	11. CLASS / CATEGORY:	12. COMMON SYSTEM: ☐ YES ☒ NO	13. COMMISSIONED DATE: 5/3/89
14. EQUIPMENT TYPE: FPN-62A SN 118	15. TYPE ANTENNA: PHASED ARRAY	16. ANTENNA ELEV. - MSL: 14.0	17. ANTENNA HEIGHT-FT:	18. CONTROL STATION AND FREQUENCY: TYNDALL APPROACH CONTROL 119.75//373.0/124.15/294.5	
19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th): LATITUDE: N30-04-08.98; LONGITUDE: W085-34-26.81		20. PRIMARY POWER: ☒ COMMERCIAL ☐ ENGINE	21. STANDBY POWER: ☐ COMMERCIAL ☒ ENGINE ☐ BATTERY ☐ NONE	22. STANDBY EQUIP.: ☒ YES ☐ NO	23. MONITOR: ☒ YES ☐ NO ☒ SINGLE ☐ DUAL
24. RUNWAY NUMBER: 31R	25. RUNWAY TRUE: 314.48	26. MAG VARIATION / YEAR: MAG VAR: EPOCH YR:	27. VOICE:	28. AFIS RADIAL:	29. POWER OUTPUT:
30. RUNWAY DIMENSIONS: LENGTH: 1003 FT WIDTH: 200 FT; LANDING LENGTH: 1003 FT		31. DISPLACED TH: ☐ YES ☒ NO; DISPLACED: FT	32. COMMISSIONED: WIDTH: DEG; ANGLE: 2.50 DEG	33. ASR VERT COVERAGE & OPERATIONAL REQ: RADIAL: DISTANCE: ALTITUDE:	
34. THRESHOLD ELEV: 16.0	35. TCH: TCH: 49.72 FT AGL; RDH: FT AGL	36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE: ILS/MLS (Degrees): 2.50	PAR (Degrees): 2.50	VGSI (Degrees): PAPI 2.50	37. RESTRICTED: ☐ YES ☒ NO

III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH

38. LOCALIZER / AZIMUTH ANTENNA COORDINATES: LATITUDE: LONGITUDE:		39. DISTANCE TO OM: (NM): (FT):	40. DISTANCE TO MM: (NM): (FT):	41. DISTANCE TO IM (FT): (NM): (FT):	42. DISTANCE IM TO TH (FT):
43. DISTANCE TO TH:	44. DIST TO STOP END:	45. USABLE DISTANCE: NM AT FT (MSL / MAA); NM AT FT (MSL / MRA)		46. OFFSET LOC TRUE BEARING:	47. LOC CW MONITOR: WIDE: NARROW:
48. LOCALIZER COURSE TAILORED: ☐ YES ☐ NO; WIDTH AT TH (FT):		49. BACK COURSE USABLE DISTANCE: NM AT FT (MSL / MAA); NM AT FT (MSL / MRA)		50. BC TRUE BEARING:	51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT:
52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L:		53. FRONT COURSE CHECK POINT:		54. BACK COURSE CHECK POINT:	

IV. GLIDE PATH DATA (ILS, PAR, VGSI) or MLS ELEVATION

55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES: LATITUDE: LONGITUDE:		56. DISTANCE TO OM: (NM): (FT):	57. DISTANCE TO MM: (NM): (FT):	58. DISTANCE TO IM: (NM): (FT):	59. DISTANCE TO PT "C": (NM): (FT):
60. DISTANCE TO TH: (NM): (FT):	61. RWY ELEV ABEAM GS ANTENNA:	62. TDZE (MSL): 16.0	63. DISTANCE - THRESHOLD TO GPI (FT): ILS GPI: RPI:	PAR GPI: 1138.78	VGSI GPI: RRP:
64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L: LEFT 473		65. ALTITUDE OVER OM OR CK PT. (FT): TAPELINE; EC; MSL		66. ALTITUDE OVER MM (FT): TAPELINE; EC; MSL	
67. ALTITUDE OVER IM (FT): TAPELINE; MSL		68. DIST OM - TH (FT):	69. DIST MM - TH (FT):	70. GLIDE PATH / ELEVATION MONITOR: ANGLE (High): ANGLE (Low):	
71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT:		72. TYPE OF APPROACH LIGHTING: ALSF-1		73. TYPE OF RUNWAY LIGHTING: HIRL/PAPI	

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 4. SAMPLE FAA FORM 8240-22, PAR (Continued)

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V. VOR, VOR / DME, VORTAC, TACAN, DME

74. REFERENCE RADIAL	AZIMUTH / CHECK POINT DESCRIPTION	75. THEODOLITE POSITION

76. GROUND RECEIVER CHECK POINTS			77. THEODOLITE REFERENCE POINTS	
RADIAL	DISTANCE	DESCRIPTION	BEARING	DESCRIPTION

78. AIRBORNE RECEIVER CHECKPOINTS

NAME	RADIAL	DISTANCE	ALTITUDE	DESCRIPTION

VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF - DF, UHF - DF)

79. TYPE SECONDARY	80. MTI BLIND SPEED	81. VIDEO MAPPING	82. ANTENNA TILT (Degrees)
		☐ YES ☐ NO	FIXED: VAR:

83. NON-PRECISION APPROACHES

AIRPORT	RUNWAY	AIRPORT	RUNWAY	AIRPORT	RUNWAY

84. REMARKS (Include all facility or airspace restrictions)

AER N30-03-38.05 W085-33-42.91

SER N30-04-47.42 W085-35-04.14 ELEV 15.7'

GPI N30-03-45.95 W085-33-52.16

HORIZONTAL DATUM: NAD 83 VERTICAL DATUM: NAVD 88

REGION:	FIO:	FACILITY IDENT:	FACILITY TYPE:
ASO (ICD)	ATL	PAM	PAR (31R)

DATE PREPARED:	TYPED NAME	SIGNATURE:

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 5. SAMPLE FAA FORM 8420-22, NDB

FACILITY DATA

I. AIRPORT / FACILITY

1. LOCATION ALEXANDRIA, MN	2. ICAO IDENT	3. MAG VAR / YR MAG VAR: EPOCH YR:	4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth) LATITUDE: LONGITUDE:
5. AIRPORT / FACILITY NAME ANDRI	6. OWNER STATE OF MN	7.FIELD ELEVATION (MSL)	

II. GENERAL

8. TYPE FACILITY NDB	9. FREQ / CHANNEL 281	10. IDENTIFICATION AJW	11. CLASS / CATEGORY MHW	12. COMMON SYSTEM [X] YES [ ] NO	13. COMMISSIONED DATE 4/6/81
14. EQUIPMENT TYPE AERO COM	15. TYPE ANTENNA	16. ANTENNA ELEV. - MSL 1404.0	17. ANTENNA HEIGHT-FT	18. CONTROL STATION AND FREQUENCY PNM FSS	
19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th) LATITUDE: N45-47-30.00 LONGITUDE: W095-18-19.00		20. PRIMARY POWER [X] COMMERCIAL [ ] ENGINE	21. STANDBY POWER [ ] COMMERCIAL [ ] ENGINE [ ] BATTERY [X] NONE	22. STANDBY EQUIP. [ ] YES [X] NO	23. MONITOR [ ] YES [X] NO [ ] SINGLE [ ] DUAL
24. RUNWAY NUMBER	25. RUNWAY TRUE	26. MAG VARIATION / YEAR MAG VAR: E 5 EPOCH YR: 1985	27. VOICE NONE	28. AFIS RADIAL	29. POWER OUTPUT 25 W
30. RUNWAY DIMENSIONS LENGTH: FT WIDTH: FT LANDING LENGTH: FT		31. DISPLACED TH [ ] YES [ ] NO DISPLACED : FT	32. COMMISSIONED WIDTH: DEG ANGLE: DEG	33. ASR VERT COVERAGE & OPERATIONAL REQ RADIAL: DISTANCE: ALTITUDE:	
34. THRESHOLD ELEV	35. TCH TCH: FT AGL RDH: FT AGL	36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE ILS/MLS (Degrees)	PAR (Degrees)	VGSI (Degrees)	37. RESTRICTED [ ] YES [X] NO

III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH

38. LOCALIZER / AZIMUTH ANTENNA COORDINATES LATITUDE: LONGITUDE:		39. DISTANCE TO OM (NM): (FT) :	40. DISTANCE TO MM (NM) : (FT) :	41. DISTANCE TO IM (FT) (NM) : (FT) :	42. DISTANCE IM TO TH (FT)
43. DISTANCE TO TH	44. DIST TO STOP END	45. USABLE DISTANCE NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		46. OFFSET LOC TRUE BEARING	47. LOC CW MONITOR WIDE : NARROW:
48. LOCALIZER COURSE TAILORED [ ] YES [ ] NO WIDTH AT TH (FT):		49. BACK COURSE USABLE DISTANCE NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		50. BC TRUE BEARING	51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT
52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L		53. FRONT COURSE CHECK POINT		54. BACK COURSE CHECK POINT	

IV. GLIDE PATH DATA (ILS, PAR, VGSI) or MLS ELEVATION

55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES LATITUDE: LONGITUDE:		56. DISTANCE TO OM (NM): (FT) :	57. DISTANCE TO MM (NM) : (FT) :	58. DISTANCE TO IM (NM) : (FT) :	59. DISTANCE TO PT "C" (NM) : (FT) :
60. DISTANCE TO TH (NM) : (FT) :	61. RWY ELEV ABEAM GS ANTENNA	62. TDZE (MSL)	63. DISTANCE - THRESHOLD TO GPI (FT) ILS GPI: RPI:	PAR GPI :	VGSI GPI: RRP:
64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L		65. ALTITUDE OVER OM OR CK PT. (FT) TAPELINE / EC / MSL		66. ALTITUDE OVER MM (FT) TAPELINE / EC / MSL	
67. ALTITUDE OVER IM (FT) TAPELINE	MSL	68. DIST OM - TH (FT)	69. DIST MM - TH (FT)	70. GLIDE PATH / ELEVATION MONITOR ANGLE (High): ANGLE (Low) :	
71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT		72. TYPE OF APPROACH LIGHTING:		73. TYPE OF RUNWAY LIGHTING:	

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 5. SAMPLE FAA FORM 8240-22, NDB (Continued)

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V. VOR, VOR / DME, VORTAC, TACAN, DME

74. REFERENCE RADIAL	AZIMUTH / CHECK POINT DESCRIPTION	75. THEODOLITE POSITION

76. GROUND RECEIVER CHECK POINTS			77. THEODOLITE REFERENCE POINTS	
RADIAL	DISTANCE	DESCRIPTION	BEARING	DESCRIPTION

78. AIRBORNE RECEIVER CHECKPOINTS

NAME	RADIAL	DISTANCE	ALTITUDE	DESCRIPTION

VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF - DF, UHF - DF)

79. TYPE SECONDARY	80. MTI BLIND SPEED	81. VIDEO MAPPING	82. ANTENNA TILT (Degrees)
		☐ YES ☐ NO	FIXED: VAR:

83. NON-PRECISION APPROACHES

AIRPORT	RUNWAY	AIRPORT	RUNWAY	AIRPORT	RUNWAY

84. REMARKS (Include all facility or airspace restrictions)

SIAP: CHANDLER FIELD, MN NDB RWY 31 AMDT 3 PUBL

HORIZONTAL DATUM: NAD 83 VERTICAL DATUM: NAVD 88

REGION:	FIO:	FACILITY IDENT:	FACILITY TYPE:
AGL	**BTL**	**AJW**	**NDB**

DATE PREPARED:	TYPED NAME:	SIGNATURE:

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 6. SAMPLE FAA FORM 8240-22, ASR/SECRA

FACILITY DATA

I. AIRPORT / FACILITY

1. LOCATION: PANAMA CITY, FL	2. ICAO IDENT: KPAM	3. MAG VAR / YR: MAG VAR: E 0; EPOCH YR: 1985	4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth): LATITUDE: N30-04-11.38; LONGITUDE: W085-34-34.29
5. AIRPORT / FACILITY NAME: TYNDALL AFB	6. OWNER: USAF	7. FIELD ELEVATION (MSL): 18	

II. GENERAL

8. TYPE FACILITY: ASR/SECRA	9. FREQ / CHANNEL	10. IDENTIFICATION: PAM	11. CLASS / CATEGORY	12. COMMON SYSTEM: [X] YES [ ] NO	13. COMMISSIONED DATE: ASR 8/23/82 SECRA 8/23/82
14. EQUIPMENT TYPE: GPN-20 SN 40	15. TYPE ANTENNA	16. ANTENNA ELEV. - MSL: 7.5	17. ANTENNA HEIGHT-FT	18. CONTROL STATION AND FREQUENCY: TYNDALL APPROACH CONTROL 119.75/373.0/124.15/294.5	
19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th): LATITUDE: N30-04-06.14; LONGITUDE: W085-33-35.42		20. PRIMARY POWER: [X] COMMERCIAL [ ] ENGINE	21. STANDBY POWER: [ ] COMMERCIAL [X] ENGINE [ ] BATTERY [ ] NONE	22. STANDBY EQUIP.: [X] YES [ ] NO	23. MONITOR: [ ] YES [X] NO; [ ] SINGLE [ ] DUAL
24. RUNWAY NUMBER	25. RUNWAY TRUE	26. MAG VARIATION / YEAR: MAG VAR: E 0; EPOCH YR: 1985	27. VOICE	28. AFIS RADIAL	29. POWER OUTPUT: ASR 56 DBM SECRA 300W
30. RUNWAY DIMENSIONS: LENGTH: FT WIDTH: FT; LANDING LENGTH: FT		31. DISPLACED TH: [ ] YES [ ] NO; DISPLACED: FT	32. COMMISSIONED: WIDTH: DEG; ANGLE: DEG	33. ASR VERT COVERAGE & OPERATIONAL REQ: RADIAL: 70 DISTANCE: 54; ALTITUDE: 23000	
34. THRESHOLD ELEV	35. TCH: TCH: FT AGL; RDH: FT AGL	36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE: ILS/MLS (Degrees)	PAR (Degrees)	VGSI (Degrees)	37. RESTRICTED: [ ] YES [ ] NO

III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH

38. LOCALIZER / AZIMUTH ANTENNA COORDINATES: LATITUDE: LONGITUDE:	39. DISTANCE TO OM: (NM): (FT):	40. DISTANCE TO MM: (NM): (FT):	41. DISTANCE TO IM (FT): (NM): (FT):	42. DISTANCE IM TO TH (FT)
43. DISTANCE TO TH	44. DIST TO STOP END	45. USABLE DISTANCE: NM AT FT (MSL / MAA); NM AT FT (MSL / MRA)	46. OFFSET LOC TRUE BEARING	47. LOC CW MONITOR: WIDE: NARROW:
48. LOCALIZER COURSE TAILORED: [ ] YES [ ] NO; WIDTH AT TH (FT):		49. BACK COURSE USABLE DISTANCE: NM AT FT (MSL / MAA); NM AT FT (MSL / MRA)	50. BC TRUE BEARING	51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT
52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L		53. FRONT COURSE CHECK POINT	54. BACK COURSE CHECK POINT	

IV. GLIDE PATH DATA (ILS, PAR, VGSI) or MLS ELEVATION

55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES: LATITUDE: LONGITUDE:	56. DISTANCE TO OM: (NM): (FT):	57. DISTANCE TO MM: (NM): (FT):	58. DISTANCE TO IM: (NM): (FT):	59. DISTANCE TO PT "C": (NM): (FT):
60. DISTANCE TO TH: (NM): (FT):	61. RWY ELEV ABEAM GS ANTENNA	62. TDZE (MSL)	63. DISTANCE - THRESHOLD TO GPI (FT): ILS: GPI: RPI:	PAR: GPI: / VGSI: GPI: RRP:
64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L		65. ALTITUDE OVER OM OR CK PT. (FT): TAPELINE / EC / MSL		66. ALTITUDE OVER MM (FT): TAPELINE / EC / MSL
67. ALTITUDE OVER IM (FT): TAPELINE / MSL		68. DIST OM - TH (FT)	69. DIST MM - TH (FT)	70. GLIDE PATH / ELEVATION MONITOR: ANGLE (High): ANGLE (Low):
71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT		72. TYPE OF APPROACH LIGHTING:		73. TYPE OF RUNWAY LIGHTING:

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 6. SAMPLE FAA FORM 8240-22, ASR/SECRA (Continued)

PAGE 2 of 2 PAGES

V. VOR, VOR / DME, VORTAC, TACAN, DME

74. REFERENCE RADIAL	AZIMUTH / CHECK POINT DESCRIPTION	75. THEODOLITE POSITION

76. GROUND RECEIVER CHECK POINTS			77. THEODOLITE REFERENCE POINTS	
RADIAL	DISTANCE	DESCRIPTION	BEARING	DESCRIPTION

78. AIRBORNE RECEIVER CHECKPOINTS

NAME	RADIAL	DISTANCE	ALTITUDE	DESCRIPTION

VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF - DF, UHF - DF)

79. TYPE SECONDARY	80. MTI BLIND SPEED	81. VIDEO MAPPING	82. ANTENNA TILT (Degrees)
TPX-42 SN 40	900+	[X] YES [ ] NO	FIXED: 0.00 VAR:

83. NON-PRECISION APPROACHES

AIRPORT	RUNWAY	AIRPORT	RUNWAY	AIRPORT	RUNWAY
TYNDALL AFB	13L	TYNDALL AFB	31R	TYNDALL AFB	13R
TYNDALL AFB	31L				

84. REMARKS (Include all facility or airspace restrictions)

SCOPE LOCATION: TYNDALL AFB RAPCON

HORIZONTAL DATUM: NAD 83 VERTICAL DATUM: NAVD 88

REGION:	FIO:	FACILITY IDENT:	FACILITY TYPE:
ASO (TCD)	ATL	PAM	ASR/SECRA

DATE PREPARED:	TYPED NAME:	SIGNATURE:

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 7. SAMPLE FAA FORM 8240-22, VASI

FACILITY DATA

I. AIRPORT / FACILITY

1. LOCATION: SPOKANE, WA	2. ICAO IDENT: KSKA	3. MAG VAR / YR: MAG VAR: E 19; EPOCH YR: 1985	4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth): LATITUDE: N47-36-54.59; LONGITUDE: W117-39-17.06
5. AIRPORT / FACILITY NAME: FAIRCHILD AFB	6. OWNER: USAF	7. FIELD ELEVATION (MSL): 2462	

II. GENERAL

8. TYPE FACILITY: VASI	9. FREQ / CHANNEL	10. IDENTIFICATION: SKA	11. CLASS / CATEGORY	12. COMMON SYSTEM: ☐ YES ☒ NO	13. COMMISSIONED DATE: 1974 SEE REMARKS
14. EQUIPMENT TYPE: VASI-12 2 BAR	15. TYPE ANTENNA	16. ANTENNA ELEV. - MSL	17. ANTENNA HEIGHT-FT	18. CONTROL STATION AND FREQUENCY	
19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th) LATITUDE: LONGITUDE:		20. PRIMARY POWER: ☐ COMMERCIAL ☐ ENGINE	21. STANDBY POWER: ☐ COMMERCIAL ☐ ENGINE ☐ BATTERY ☐ NONE	22. STANDBY EQUIP.: ☐ YES ☐ NO	23. MONITOR: ☐ YES ☐ NO ☐ SINGLE ☐ DUAL
24. RUNWAY NUMBER: 23	25. RUNWAY TRUE: 246.75	26. MAG VARIATION / YEAR: MAG VAR: EPOCH YR:	27. VOICE	28. AFIS RADIAL	29. POWER OUTPUT
30. RUNWAY DIMENSIONS: LENGTH: 13901 FT WIDTH: 300 FT; LANDING LENGTH: 13901 FT		31. DISPLACED TH: ☐ YES ☒ NO; DISPLACED: FT	32. COMMISSIONED: WIDTH: DEG; ANGLE: 2.50 DEG	33. ASR VERT COVERAGE & OPERATIONAL REQ: RADIAL: DISTANCE: ALTITUDE:	
34. THRESHOLD ELEV: 2414.5	35. TCH: TCH: 49.11 FT AGL; RDH: FT AGL	36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE: ILS/MLS (Degrees): 2.50	PAR (Degrees): 2.50	VGSI (Degrees): 2.50	37. RESTRICTED: ☐ YES ☒ NO

III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH

38. LOCALIZER / AZIMUTH ANTENNA COORDINATES: LATITUDE: LONGITUDE:		39. DISTANCE TO OM: (NM): (FT):	40. DISTANCE TO MM: (NM): (FT):	41. DISTANCE TO IM (FT): (NM): (FT):	42. DISTANCE IM TO TH (FT)
43. DISTANCE TO TH	44. DIST TO STOP END	45. USABLE DISTANCE: NM AT FT (MSL / MAA); NM AT FT (MSL / MRA)		46. OFFSET LOC TRUE BEARING	47. LOC CW MONITOR: WIDE: NARROW:
48. LOCALIZER COURSE TAILORED: ☐ YES ☐ NO; WIDTH AT TH (FT):		49. BACK COURSE USABLE DISTANCE: NM AT FT (MSL / MAA); NM AT FT (MSL / MRA)		50. BC TRUE BEARING	51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT
52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L		53. FRONT COURSE CHECK POINT		54. BACK COURSE CHECK POINT	

IV. GLIDE PATH DATA (ILS, PAR, VGSI) or MLS ELEVATION

55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES: LATITUDE: LONGITUDE:		56. DISTANCE TO OM: (NM): (FT):	57. DISTANCE TO MM: (NM): (FT):	58. DISTANCE TO IM: (NM): (FT):	59. DISTANCE TO PT "C": (NM): (FT):
60. DISTANCE TO TH: (NM): .17 (FT): 1063	61. RWY ELEV ABEAM GS ANTENNA: RRP 2417.2	62. TDZE (MSL): 2423	63. DISTANCE - THRESHOLD TO GPI (FT): ILS: GPI: RPI:	PAR: GPI:	VGSI: GPI: 1124.84 RRP: 1063.00
64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L		65. ALTITUDE OVER OM OR CK PT. (FT): TAPELINE / EC / MSL		66. ALTITUDE OVER MM (FT): TAPELINE / EC / MSL	
67. ALTITUDE OVER IM (FT): TAPELINE / MSL		68. DIST OM - TH (FT)	69. DIST MM - TH (FT)	70. GLIDE PATH / ELEVATION MONITOR: ANGLE (High): ANGLE (Low):	
71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT		72. TYPE OF APPROACH LIGHTING: ALSF-1/VASI		73. TYPE OF RUNWAY LIGHTING: HIRL	

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INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 7. SAMPLE FAA FORM 8240-22, VASI (Continued)

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V. VOR, VOR / DME, VORTAC, TACAN, DME

74. REFERENCE RADIAL	AZIMUTH / CHECK POINT DESCRIPTION	75. THEODOLITE POSITION

76. GROUND RECEIVER CHECK POINTS			77. THEODOLITE REFERENCE POINTS	
RADIAL	DISTANCE	DESCRIPTION	BEARING	DESCRIPTION

78. AIRBORNE RECEIVER CHECKPOINTS

NAME	RADIAL	DISTANCE	ALTITUDE	DESCRIPTION

VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF - DF, UHF - DF)

79. TYPE SECONDARY	80. MTI BLIND SPEED	81. VIDEO MAPPING	82. ANTENNA TILT (Degrees)
		☐ YES ☐ NO	FIXED: VAR:

83. NON-PRECISION APPROACHES

AIRPORT	RUNWAY	AIRPORT	RUNWAY	AIRPORT	RUNWAY

84. REMARKS (Include all facility or airspace restrictions)

AER N47-37-21.71 W117-37-43.82

SER N47-36-27.51 W117-40-50.20 ELEV 2461.9'

RRP N47-37-17.57 W117-37-58.08

BCE ADVISES SYSTEM INSTALLED IN 1974: COMMISSIONING DATE UNKNOWN.

	DOWNWIND BAR	UPWIND BAR
DISTANCE TO THRESHOLD	775'	1350'
AIMING ANGLE	2.00	2.50
RUNWAY CROWN ELEVATION	2416.5'	2418.2'

HORIZONTAL DATUM: NAD 83 VERTICAL DATUM: NAVD 88

REGION:	FIO:	FACILITY IDENT:	FACILITY TYPE:
ANM (SCD)	SAC	SKA	VASI (23)

DATE PREPARED:	TYPED NAME:	SIGNATURE:

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 8. SAMPLE FAA FORM 8240-22, MLS/DME

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FACILITY DATA

I. AIRPORT / FACILITY

1. LOCATION: WICHITA, KS	2. ICAO IDENT: KICT	3. MAG VAR / YR: MAG VAR: E 7; EPOCH YR: 1985	4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth): LATITUDE: N37-38-59.80; LONGITUDE: W097-25-57.80
5. AIRPORT / FACILITY NAME: WICHITA MID-CONTINENT	6. OWNER: FAA	7. FIELD ELEVATION (MSL): 1332.0	

II. GENERAL

8. TYPE FACILITY: MLS/DME	9. FREQ / CHANNEL: AS 556, EL 556, DME 25Y	10. IDENTIFICATION: JOZ*	11. CLASS / CATEGORY: 1	12. COMMON SYSTEM: [X] YES [ ] NO	13. COMMISSIONED DATE: AS 4/24/87, EL 4/24/87
14. EQUIPMENT TYPE: AS WL, EL WL	15. TYPE ANTENNA: AS TYPE 6/60, EL TYPE 6	16. ANTENNA ELEV. - MSL: AZ 1319.0, EL 1316.5	17. ANTENNA HEIGHT-FT	18. CONTROL STATION AND FREQUENCY: ICT ATCT 118.2/257.8	
19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th): LATITUDE: ; LONGITUDE:		20. PRIMARY POWER: [X] COMMERCIAL [ ] ENGINE	21. STANDBY POWER: [ ] COMMERCIAL [ ] ENGINE [X] BATTERY [ ] NONE	22. STANDBY EQUIP.: [ ] YES [X] NO	23. MONITOR: [X] YES [ ] NO; [ ] SINGLE [ ] DUAL
24. RUNWAY NUMBER: 19L	25. RUNWAY TRUE: 200.01	26. MAG VARIATION / YEAR: MAG VAR: E 7; EPOCH YR: 1985	27. VOICE: NONE	28. AFIS RADIAL	29. POWER OUTPUT
30. RUNWAY DIMENSIONS: LENGTH: 7302 FT; WIDTH: 150 FT; LANDING LENGTH: 7302 FT		31. DISPLACED TH: [ ] YES [X] NO; DISPLACED: FT	32. COMMISSIONED: WIDTH: DEG; ANGLE: 3.00 DEG	33. ASR VERT COVERAGE & OPERATIONAL REQ: RADIAL: ; DISTANCE: ; ALTITUDE:	
34. THRESHOLD ELEV: 1318.9	35. TCH: TCH: 44.0 FT AGL; RDH: FT AGL	36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE: ILS/MLS (Degrees): 3.00	PAR (Degrees):	VGSI (Degrees): 3.00	37. RESTRICTED: [X] YES [ ] NO

III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH

38. LOCALIZER / AZIMUTH ANTENNA COORDINATES: LATITUDE: N37-38-23.05; LONGITUDE: W097-25-38.42	39. DISTANCE TO OM: (NM): 7.10 FAF; (FT): 43159	40. DISTANCE TO MM: (NM): N/A; (FT):	41. DISTANCE TO IM (FT): (NM): N/A; (FT):	42. DISTANCE IM TO TH (FT): N/A
43. DISTANCE TO TH: 8471	44. DIST TO STOP END: 1169	45. USABLE DISTANCE: 20 NM AT 21319 FT (MSL / MAA); NM AT FT (MSL / MRA)	46. OFFSET LOC TRUE BEARING	47. LOC CW MONITOR: WIDE: ; NARROW:
48. LOCALIZER COURSE TAILORED: [ ] YES [ ] NO; WIDTH AT TH (FT): N/A		49. BACK COURSE USABLE DISTANCE: N/A NM AT FT (MSL / MAA); NM AT FT (MSL / MRA)	50. BC TRUE BEARING: 20.01	51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT: 7585
52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L: C/L		53. FRONT COURSE CHECK POINT: KECHI INT RADAR 7.1 DME		54. BACK COURSE CHECK POINT: N/A

IV. GLIDE PATH DATA (ILS, PAR, VGSI) or MLS ELEVATION

55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES: LATITUDE: N37-39-32.16; LONGITUDE: W097-25-01.49	56. DISTANCE TO OM: (NM): 5.85 FAF; (FT): 35574	57. DISTANCE TO MM: (NM): N/A; (FT):	58. DISTANCE TO IM: (NM): N/A; (FT):	59. DISTANCE TO PT "C": (NM): ; (FT):
60. DISTANCE TO TH: (NM): .15; (FT): 886	61. RWY ELEV ABEAM GS ANTENNA: 1318.9	62. TDZE (MSL): 1319.0	63. DISTANCE - THRESHOLD TO GPI (FT): ILS: GPI: 840.21; RPI: 840.21	PAR: GPI: ; VGSI: GPI: ; RPI:
64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L: LEFT 399		65. ALTITUDE OVER OM OR CK PT. (FT): TAPELINE 1864.35; EC ; MSL 3211.12	66. ALTITUDE OVER MM (FT): TAPELINE N/A; EC ; MSL	
67. ALTITUDE OVER IM (FT): TAPELINE N/A; MSL		68. DIST OM - TH (FT): 34688 FAF	69. DIST MM - TH (FT): N/A	70. GLIDE PATH / ELEVATION MONITOR: ANGLE (High): 3.23; ANGLE (Low): 2.78
71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT: 1316.5		72. TYPE OF APPROACH LIGHTING: VASI-4L		73. TYPE OF RUNWAY LIGHTING: REIL HIRL

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INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 8. SAMPLE FAA FORM 8240-22, MLS/DME (Continued)

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V. VOR, VOR / DME, VORTAC, TACAN, DME

74. REFERENCE RADIAL	AZIMUTH / CHECK POINT DESCRIPTION	75. THEODOLITE POSITION

76. GROUND RECEIVER CHECK POINTS			77. THEODOLITE REFERENCE POINTS	
RADIAL	DISTANCE	DESCRIPTION	BEARING	DESCRIPTION

78. AIRBORNE RECEIVER CHECKPOINTS

NAME	RADIAL	DISTANCE	ALTITUDE	DESCRIPTION

VI. AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF - DF, UHF - DF)

79. TYPE SECONDARY	80. MTI BLIND SPEED	81. VIDEO MAPPING	82. ANTENNA TILT (Degrees)
		☐ YES ☐ NO	FIXED: VAR:

83. NON-PRECISION APPROACHES

AIRPORT	RUNWAY	AIRPORT	RUNWAY	AIRPORT	RUNWAY

84. REMARKS (Include all facility or airspace restrictions)

***BLOCK 10. AMIS IDEN T IS JOZM.**

BLOCK 37. ELEV UNUSABLE CCW BEYOND 153 DEGREES (9/8/89)..

AZ BEAM WIDTH 1 DEGREE ELEV BEAM WIDTH 1 DEGREE

AER N37-39-41.74 W097-25-02.38

SER N37-38-33.91 W097-25-33.45 ELEV 1319.8'

DME N37-38-22.37 W097-25-36.08 ELEV 1331.0'

RUNWAY C/L ABEAM EL ANTENNA N37-39-33.51 W097-25-06.15

BLOCK 16 USED TO COMPUTE TCH, GPI, RPI, POINT C.

SIAP: WICHITA MID-CONTINENT, KS MLS RWY 19L ORIG PUBL

HORIZONTAL DATUM: NAD 83 VERTICAL DATUM: NAVD 88

REGION:	FIO:	FACILITY IDENT:	FACILITY TYPE:
ACE	OKC	JOZ	MLS/DME

DATE PREPARED:	TYPED NAME:	SIGNATURE:

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

APPENDIX 23
DISTRIBUTION OF FLIGHT INSPECTION REPORTS PERTAINING TO MILITARY FACILITIES

1. The following list of **Army** addressees must each be furnished one copy of flight inspection reports of U.S. Army facilities as follows:

a. Flight inspection reports relative to the contiguous United States, Latin America, Alaska, and Pacific Theatres (except Korea):

(1) Local Air Traffic Control Facility Chief

(2) COMMANDER
U.S. ARMY AERONAUTICAL SERVICES AGENCY
ATTN: AERONAUTICAL INFORMATION BRANCH
9325 GUNSTON ROAD
BUILDING 1466, SUITE N319
FORT BELVOIR, VA 22060-5582
email: usaasaaa@belvoir.army.mil

(3) COMMANDER USAAVNC
ATTN AFATS-CS-E
ATSCOM
FORT RUCKER, AL 36362-5246
email: afatscse@rucker.army.mil

b. Flight inspection reports relative to the European Theatre:

(1) Local Air Traffic Control Facility Chief

(2) ATTN: ATAS-AD
CDR, USA AERONAUTICAL SVCS DET EUROPE
Unit 29243
APO AE 09102
email: usaasde@hq.hqusareur.army.mil

(3) COMMANDER
U.S. ARMY AERONAUTICAL SERVICES AGENCY
ATTN: AERONAUTICAL INFORMATION BRANCH
9325 GUNSTON ROAD
BUILDING 1466, SUITE N319
FORT BELVOIR, VA 22060-5582
email: usaasaaa@belvoir.army.mil

(4) COMMANDER USAAVNC
ATTN: AFATS-CS-E
ATSCOM
FORT RUCKER, AL 36362-5246
email: afatscse@rucker.army.mil

(5) COMMANDER
3/58 AVIATION
CMR 430
ATTN: AETV-ABS3-E
APO AE 09096
email: john.rosa@12avnbde.army.mil

c. Flight inspection reports relative to the Korean Theatre:

(1) Local Air Traffic Control Facility Chief

(2) COMMANDER EIGHTH US ARMY
ATTN: EACJ-EA-ATC
UNIT 15236
APO AP 96205-0009582
email: chet.spangler@us.army.mil

(3) COMMANDER
U.S. ARMY AERONAUTICAL SERVICES AGENCY
ATTN: AERONAUTICAL INFORMATION BRANCH
9325 GUNSTON ROAD
BUILDING 1466, SUITE N319
FORT BELVOIR, VA 22060-5582
email: usaasaaa@belvoir.army.mil

(4) COMMANDER USAAVNC
ATTN: AFATS-CS-E
ATSCOM
FORT RUCKER, AL 36362-5246
email: afatscse@rucker.army.mil

d. The Flight Inspection Records Team, AVN-210A, must furnish a copy of all contiguous United States and Korean Army facility flight inspection reports to:

COMMANDER USAAVNC
ATTN: AFATS-CS-E
ATSCOM
FORT RUCKER, AL 36362-5246
email: afatscse@rucker.army.mil

2. The following list of **Navy** addressees must be furnished copies of flight inspection reports of Navy and Marine Corps facilities:

a. One copy of each flight inspection report of all Navy and Marine Corps facilities (worldwide) must be sent to:

(1) VELEZ COMMANDER
NAVAL AIR SYSTEMS COMMAND
PMA213F
VILLA ROAD, BLDG 8251, UNIT 11
SAINT INIGOES, MD 20684
email: None on File

(2) ATTN: JOHN MISONI, CODE 2334
SPAWARSYSCEN
53560 HULL STREET
SAN DIEGO, CA 92152-5001
email: tacan@spawar.navy.mil

(3) HEAD, NAVAL FLIGHT INFORMATION GROUP
1339 PATTERSON AVE, SE
ROOM 301
WASHINGTON NAVY YARD, DC 20374-5088
email: navfig@navy.mil

b. In addition to the distribution specified in Paragraph 2a, one copy of each flight inspection report for Marine Corps facilities (worldwide) must be sent to:

COMMANDANT OF THE MARINE CORPS
HEADQUARTERS U.S. MARINE CORPS
APC-5
WASHINGTON DC 20380-1775
email: None on File

c. For shipboard TACAN(s), AVN-210A must send one copy of the flight inspection report to the commands listed below; these commands must make any required distribution to each ship:

(1) For east coast ships (other than aircraft carriers):

COMNAVAIRLANT
ATTN: CODE N37
1279 FRANKLIN STREET
NORFOLK, VA 23511-2494
email: None on File

(2) For east coast aircraft carriers:
COMMANDER NAVAL AIR FORCE
ATTN: CODE N373
U.S. ATLANTIC FLEET
1279 FRANKLIN STREET
NORFOLK, VA 23511-2494
email: danette.myers@navy.mil

(3) For west coast ships (other than aircraft carriers):

COMMANDER NAVAL SURFACE FORCE
U.S. PACIFIC FLEET
2841 RENDOVA ROAD
SAN DIEGO, CA 92155-5035
email: None on File

(4) For west coast aircraft carriers:

COMMANDER NAVAL AIR FORCE
U.S. PACIFIC FLEET N32
PO BOX #357051
SAN DIEGO, CA 92135-7051
email: None on File

3. Flight inspection reports for Air Force facilities will be mailed to the local Airfield Operations Flight, Meteorological/ Navigation Work Center and the Major Command on file with the Flight Inspection Records Team (AVN-210A). The Flight Inspection Records Team (AVN-210A) will be notified of all changes/ corrections/ deletions of mailing addresses.

4. For all Air Force owned facilities, AVN-210A must send one copy of the flight inspection report to the address listed below.

HQ AFFSA/XAE
1535 Command Drive, Suite D308
Andrews AFB, MD 20762-7002