ORDER

8240.52

AERONAUTICAL DATA MANAGEMENT

October 1, 2006

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Distribution: Special Addressees

Initiated By: Air Traffic Operations (ATO-W)
Aviation System Standards
Flight Inspection Operations
Flight Inspection Central Operations (FICO) Technical Services Sub-Team (TSS)(AJW-335A (Data))

RECORD OF CHANGES

DIRECTIVE NO. **8240.52**

CHANGE TO BASIC	SUPPLEMENTS			OPTIONAL	CHANGE TO BASIC	SUPPLEMENTS			OPTIONAL

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ORDER
8240.52

Effective Date:
10/01/06

SUBJ: AERONAUTICAL DATA MANAGEMENT

The purpose of this order is to prescribe standardized procedures for flight inspection data management. It is not intended as authorization for an agency to assume authority over any group of services which are not now under its jurisdiction. Similarly, it carries no designation of responsibility within any agency unless such has been so designated in its usual procedural manner, such as general orders, regulations, etc.

This order is directive upon all personnel charged with the responsibility for managing flight inspection data, or execution of the flight inspection mission. Compliance with this order, however, is not a substitute for common sense and sound judgment. Nothing in this order will be construed to relieve data management personnel, flight inspection crews, or supervisory personnel of the responsibility of exercising initiative in the execution of the mission, or from taking such emergency action as the situation warrants.

The Federal Aviation Administration will coordinate and provide approved changes to this order by means of a page revision method. Revised pages will be transmitted by a Federal Aviation Administration Change or Notice. Recommendations concerning changes or additions to the subject material are welcomed and should be forwarded to the following address:

Director of Aviation System Standards
PO Box 25082
Oklahoma City OK 73125

Attn: AJW-335A (Data)

/s/

Thomas C. Accardi
Director of Aviation System Standards

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Initiated By: Air Traffic Operations (ATO-W)
Aviation System Standards
Flight Inspection Operations
FICO TSS (AJW-335A(Data))

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CHAPTER 1
INTRODUCTION

1.10 PURPOSE. The purpose of this order is to prescribe standardized data products and procedures in the support of flight inspecting air navigation services. The data must accurately reflect the references to be used in the performance of inspecting the systems supporting the National Airspace System (NAS). These data will be the references for certifying the quality of signal-in-space, and the instrument flight procedures.

This order is directive upon all personnel charged with the responsibility for execution of the flight inspection mission, when such personnel or organization are so designated by its agency. Nothing in this order will be construed to relieve flight inspection crews or supervisory personnel of the responsibility of exercising initiative in the execution of the mission, or from taking such emergency action as the situation warrants.

1.11 DISTRIBUTION. This order is distributed to selected offices on a special mailing list. It is available on the Internet (**http://www.avn.faa.gov**). Distribution within the Department of Defense is accomplished through the National Geospatial Intelligence Agency. For the U.S. Air Force, this revision is included in the AF STDPUBs CD-ROM and is available on the Internet (**http://afpubs.hq.af.mil/**).

1.12 EFFECTIVE DATE. This order is effective October 1, 2006.

1.13 BACKGROUND:

a. U.S. Policy: Flight inspection is the quality assurance program that verifies the performance of air navigation services and associated instrument flight procedures prescribed IAW the appropriate orders and regulations.

International Group on International Aviation (IGIA) 777/ 4.6G specifies that the FAA will provide flight inspection of the common air navigation system, U.S. military aids worldwide, reimbursable services to other countries, and encourage other countries to establish their own flight inspection capability.

The accuracy and validity of the flight inspection is predicated on the data available to perform the mission. To ensure standardization, one source of data must be used for all flight inspection tasks of the NAS. The FAA's Aviation System Standards Office (AVN) has been designated as the single source.

b. Program Objectives. The following objectives reflect FAA philosophy. Current and future planning should be aligned to these objectives.

(1) Obtain accurate site survey data.

(2) Provide quality control of all data received, distributed, and archived.

(3) Provide accurate data to flight inspection crews in a format that affords ease-of-use.

(4) Act as the repository for all flight inspection results of systems supporting the NAS.

(5) Provide technical assistance regarding active, pending, and archived data.

(6) Process and track procedures packages to be flight inspected.

(7) Generate special inspections.

c. The Interface with Agency Rules. Instrument flight procedures and ATC services require periodic flight surveillance of the air navigation system and dictate strict enforcement of the performance standards adopted for each aid.

1.14 DEFINITIONS. This manual contains policy statements and guidance material. Directive verbs are used.

a. **Use MUST** when an action is mandatory.

b. **Use WILL** when it is understood the action will be taken.

c. **Use SHOULD** when an action is desirable but not mandatory.

d. **Use MAY** when an action is permissible.

1.15 IDENTIFYING CHANGES IN THE TEXT OF THIS MANUAL. A vertical bar is used to highlight substantive changes in the text. The bar will be inserted in the left margin of each column to identify the changes. This paragraph is used as a typical example. Vertical bars are not used in complete rewrites of the Basic Order.

1.16 AUTHORITY TO CHANGE THIS ORDER. The Administrator reserves the authority to approve changes that establish flight inspection data policy, delegate authority, or assign responsibility. The Director of Aviation System Standards may issue changes as necessary to implement data policy, and standardize procedures and techniques to ensure uniform references for the U.S. Flight Inspection Program.

CHAPTER 2
ADMINISTRATION

2.10 AUTHORITY. The Federal Aviation Administration, Aviation Systems Standards (AVN) is the sole approval authority for any data used in the task of flight inspecting facilities/ systems supporting the National Airspace System (NAS). The office within AVN tasked to manage all flight inspection data is referred to as the Flight Inspection Technical Services Sub-Team (TSS), AJW-335A (Data). The TSS is also the repository of all flight inspection records of the NAS.

2.11 RESPONSIBILITIES. The TSS is divided into three distinct but related areas of responsibility: flight inspection data, procedures processing, and technical services.

a. **Flight Inspection Data** is the gathering, disseminating, and archiving of all data associated with flight inspection.

b. **Procedures Processing** is the processing of developed procedures for flight inspection. This task includes scheduling inspections, tracking, recommending changes, and archiving developed procedures packages.

c. **Technical Services** provides technical advice and services relating to flight inspection data, historical research, issuance of special inspections, and recommendations relating to flight inspection.

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CHAPTER 3
DATA PRODUCTS

3.10 GENERAL. Some of the most important tools in flight inspection are the data products. These vital products include AVNIS, AIRNAV, Data Sheets, and Flight Inspection records. This chapter provides an explanation of these products and insight to their processing.

3.11 AVNIS is the main database that stores all of FAA's data relating to airport and facility surveys and pertinent flight inspection reference data. It is from this database that the facility data sheets are developed.

3.12 AIRNAV is the program used by the Data Specialists to create, change, or delete information in AVNIS.

3.13 DATA SHEETS. The printed (or electronic) product that provides the flight inspection crews the necessary data to perform the mission is referred to as the "Data Sheet". Refer to the appropriate appendices of this order for the different types and explanations.

3.14 FLIGHT INSPECTION RECORDS are the archives of the flight inspection results.

3.15 PROCEDURES. The following procedures are to provide guidance and understanding of the aeronautical data processes.

a. Data Submissions refer to the process of establishing data for new facilities, systems, or airports.

(1) By request of the TSS, or upon the initiative of the owner, the owner completes FAA Form 8240-22. Refer to Appendix 1 of this order.

(2) A quality control audit is performed on the submitted data. Refer to Paragraph 3.15 for the process.

(3) The data is established in AVNIS via the AIRNAV program.

(4) A data folder is established in TSS to track the history of the facility, system, or airport.

b. Data Change Requests. When established data requires amending or deleting, refer to the following.

(1) Owner refers to persons or organizations outside the FAA. Complete FAA Form 8240-22 per instructions in Appendix 1. Minor corrections may be made with a signed letter or an e-mail message that is traceable to the requester. An explanation for the change must accompany the request.

(2) Agency refers to the FAA, but excludes flight inspectors. Complete FAA Form 8240-22 per instructions in Appendix 1. Minor corrections may be made with a signed letter or an email message that is traceable to the requester. An explanation for the change must accompany the request.

(3) Flight Inspection. Requests for data changes by flight inspectors are usually due to flight inspection results. Change requests submitted by flight inspection crews must be made via FAA Form 8240-20. Refer to Appendix 2.

c. Data Access. Flight inspection data is sensitive by nature and is vitally important to numerous organizations. Therefore, the database is updated nightly. The following are procedures for access.

(1) General Public. Access to flight inspection data is limited; however, no password is needed for the following process and is therefore Internet accessible.

(a) Go to http://avnwww.jccbi.gov/datasheet/

(b) There are 3 drop-down boxes and 1 value field.

1 "Choose a Report": the type of report you wish to view

2 "Choose a specific data sheet": The type of facility

3 "Select or Sort by": narrows the field of search

4 "Value": the identification of the desired search (i.e., airport ICAO identifier, facility ID, etc.)

(c) The basic search information will appear if the data is available. Click on the ID on the far left side.

(d) If the text is too small to read

1 Go to "View" at the top of the screen

2 Left click on "Text Size"

3 Choose a size

(2) FAA Authorized. This web site is accessible to individuals or organizations with TSS approval. Generally, these persons/ organizations have a day-to-day working relationship with the data and have a need-to-know of slightly more sensitive information. This is an Intranet web site that shows real time updates.

(a) Go to http://avnokcprd.amc.faa.gov/foms

(b) The right side of the screen provides a number of options under "Guest Sites".

(c) Make a selection and follow the procedures as described in paragraph 3.15c(1) above.

(3) Flight Inspection. This access is granted to FAA employees/ offices that are actively involved in the performance of flight inspection. Other flight inspection organizations may be granted access upon approval of AVN. This is an Intranet web site.

(a) Upon approval by AVN's TSS, AVN's Information Technology (IT) Office will establish a log-in name and password.

(b) Go to http://avnokcprd.amc.faa.gov/foms

(c) Enter your "User Name" and "Password"

(d) From the menu, open the item labeled "AVN Datasheet System".

(e) Make a selection and follow the procedures as described in Paragraph 3.15c(1) above.

(4) Program Administrator. This access is for full authority. The procedures will not be discussed in this order.

(5) Archived Recordings/ Reports. Access to data relating to completed inspections is subject to approval by AVN.

(a) General Public. The general public has no direct access to flight inspection history via the internet. All requests must be submitted to the FICO TSS Flight Inspection Records Team.

(b) FAA Authorized:

1 Reports are accessed via the same intranet process as with datasheets. Instead of clicking the "datasheet" icon, click the appropriate date range "Flight Inspection Report Archive" icon.

2 Recordings are accessed by contacting the FICO TSS Flight Inspection Records Team.

d. Flight Inspection Results. The results of all flight inspections must be sent to TSS Flight Inspection Records Team.

(1) Flight Inspection Reports and Recordings. Refer to FAA Order 8240.36 (latest edition).

(2) Digital Data. Digital data are the results of inspections stored on a device such as CDs, PCMIA cards, memory sticks, thumb drives, etc. The procedures for storing these products will be determined at a later date.

e. TSS Quality Assurance The quality assurance objectives of the TSS are described below.

(1) AVNIS Data. All data entered into AVNIS is QC'ed by the Aeronautical Information Specialist (AIS).

(2) Flight Inspection Reports: The flight inspection report is a ledger and final product of the inspection. The FIFO the PIC is assigned to will normally accomplish the QC process. TSS checks the report when the recordings undergo analysis.

(a) Initial overview

1 Documented per FAA Order 8240.36 (latest revision).

2 Compare facility data to the data sheet.

3 Is all required additional documentation present?

(b) Were all required checks accomplished to match the status?

(c) Were any values mislabeled as satisfactory or unsatisfactory?

(3) Recordings: The recordings are a real-time data history of the inspection. These may be in the form of pictures, paper charts/ graphs, or digital data.

(a) The quality assurance of the recordings is accomplished at random, for research, or upon special request.

(b) Initial overview

1 Documented per FAA Order 8200.1 (latest revision), Paragraph 5.21.

2 Compare facility data used to the data sheet

3 All required additional documentation present

(c) Were all required checks accomplished?

(d) Does the final report reflect the data gathered?

(4) Digital Data: To be determined.

(5) Data change requests:

(a) FAA Form 8240-22

1 Check form for completeness

2 Ensure form is completed IAW Appendix 1

(b) FAA Form 8240-20

1 Check form for completeness

2 Ensure form is completed IAW Appendix 2

3 Rollout/ GS CBP

a Ensure codes are applicable.

b If RO Code = R4 or R5, research system to determine if Q4 or Q5 applies.

c Verify A/FD listing

d If performance classification has improved, research number of inspections that indicate an improvement and annotate Block 4H.

e Errors on the form must be corrected and submitted on a new form, or by written permission, for a TSS team member to correct.

4 Remarks (Pages 1 and 2)

a Ensure the request listed in this area is free of ambiguity.

b Ensure the requested change is listed as it should appear on the data sheet.

(c) ESV change requests are confirmed by a Technical Services Specialist

1 Verify request is in fact an ESV

2 Compare the request to the existing AVNIS database

3 Compare the request to the extent of the inspection (i.e., were all required checks completed)

4 Initial and date ESV requests that are satisfactory.

5 Notify the crew if the quality assurance of the ESV package is unsatisfactory.

6 Satisfactory requests will be processed.

(d) Requests for Data Sheet Changes by Non-Flight Inspection Crewmembers may be submitted in the form of letters, e-mails, and/or memos. Ensure the request:

1 Contains all of the basic information regarding the facility/ system.

2 Clearly defines the requested data change.

3 Provides references/ reasons for the change.

4 Contains who is requesting the change.

5 Is signed by the requester. For an e-mail, a sender's return information will suffice.

(e) File Transfer Protocol (FTP) sites: A search of web sites is made daily.

1 National Flight Data Digest (NFDD)

2 Surveys (i.e. NGS, etc.)

(f) Surveys submitted by CD or hardcopy are worked as received

f. ILS Category Checklists. The ILS Category checklist provides Flight Standards' All Weather Office (AWO) specific ILS information. This information is used to determine the suitability of an ILS system to provide lower approach minimums or higher category service. Refer to FAA Order 8400.13.

(1) Requests. Flight inspection requests are received from the AVN ILS Category Coordinator. This position resides in AVN's National Flight Procedures Group.

(2) TSS Package Development. The following items will be part of a folder that will eventually be archived:

(a) An "AVN ILS Category Checklist"

(b) Current data sheet

(c) Appropriate flight inspection reports

(d) All correspondence regarding the task

(3) Research. Regardless of request, research of a facility's history is necessary. The research provides the information required to complete the checklist, or determine the checks necessary to complete the checklist.

(4) Special Inspection. Must be generated, specifying the inspection requirements, when all of the information is unavailable, or if a required parameter has not been inspected.

(5) Form Completion. Complete the form only to the degree of request.

(6) Signatures. Regardless of outcome, the form must be signed by the Flight Inspection ILS Category Coordinator and the Chief Pilot, or equivalent.

(7) Forward Form. The original completed and signed checklist form is forwarded to the AVN ILS Category Coordinator.

(8) Archive. A copy of the signed form and the package is archived with the records/ recordings.

g. Procedures Processing. The TSS ensures the procedures package is complete and in an expected format order prior to being given to the flight inspection crew. In addition to the requirements of Order VN 8200.6, Flight Inspection Package, TSS will:

(1) Inventory and date-stamp all packages

(2) Verify all LPV packages have assigned GPS numbers

(3) Ensure the package is logged into Flight Operation Management System (FOMS)

(4) Create a special inspection for each procedure

(5) Copy the package for the flight inspection crew use

(6) File the original package

(7) Upon receipt of the Flight Inspection Pilot's signature on the cover page the TSS will:

(a) Ensure FOMS is correct

(b) Remove the package from files

(c) File the signed cover sheet

h. **Special Inspection Requests** are made by contacting the FICO scheduler assigned to that Technical Operations Service Area/ geographical area, or a Technical Services Specialist. This individual will:

(1) Determine if there is an existing special request that encompasses the request being made.

(2) Log all of the pertinent information into FOMS to clarify the request.

(3) Ascertain a date the inspection must be completed.

(4) Schedule the inspection and inform the requester of the expected date.

(5) Verify funding source

3.16 DEVIATIONS. Deviations from the products or procedures addressed in this chapter will be considered on an individual basis.

CHAPTER 4
PERSONNEL

4.10 GENERAL. The personnel within the TSS are highly trained individuals working as a team. To ensure quality products and service, this chapter establishes the minimum requirements for the TSS personnel.

4.11 QUALIFICATION REQUIREMENTS:

a. **The Aeronautical Information Specialist (AIS)** is the interface between the surveyor and the flight inspection crew. The minimum requirements are:

(1) Data:

(a) Experience with word processing and spreadsheet programs

(b) Experience with database entry and data retrieval

(c) Familiar with airport environment

(d) Basic trigonometry

(e) Basic statistical analysis skills

(f) Basic understanding of Flight Inspection requirements

(g) Basic understanding of TERPS requirements

(h) Basic understanding of surveying and surveying techniques

(i) Effective communication skills (verbal and written)

(2) Records:

(a) Experience with word processing and spreadsheet programs

(b) Experience with filing systems

(c) Basic understanding of Flight Inspection requirements

(d) Effective communication skills (verbal and written)

(e) Experience with database entry and data retrieval

(f) Basic statistical analysis skills

b. **Procedures Processor** is the interface between the flight inspection crew and the procedures developers.

(1) Procedures development/ evaluation experience

(2) Previously certified as a Flight Inspector (Pilot or Mission Specialist (MS))

c. **Technical Services.** The person(s) providing technical service functions for the TSS is the interface between the flight inspection crews and all other persons/ organizations. The minimum requirements are:

(1) Twenty-four continuous months as a certified Flight Inspection Mission Specialist (MS) or Flight Inspection Pilot. At least one position must be occupied by an MS.

(2) It is desirable to maintain currency in the mission because Technical Services is the conduit between flight crews and data.

(3) At least 30 days' experience with FAA's Flight Inspection Policy/ Technical Support Team

4.12 DUTIES and RESPONSIBILITIES:

a. **The Flight Inspection Technical Services Sub-Team (TSS)** provides the data services for flight inspection operations. All data used, gathered, and stored in the performance of flight inspecting the NAS is the responsibility of the TSS.

(1) AVNIS:

(a) Ensures current and accurate data

1 Gathers all pertinent data relating to facilities and airports for flight inspection, procedures development, and engineering purposes.

2 Ensures all data meets the requirements per FAA Number 405 (Standards For Aeronautical Surveys) and FAA Order 8260.19 (Flight Procedures and Airspace).

(b) Provides data to flight inspection, procedures development organizations, engineering, Air Traffic, airport managers, Department of Defense, National Flight Data Center, NASA, NTSB, NGS, AMZ-400, and foreign governments.

(2) Processes procedures packages for flight inspection

(3) Issues Special Inspections

(4) Archives all Flight Inspection reports, recordings, charts, and data regarding the NAS

(5) Provides technical assistance to flight inspectors, engineers, procedures developers, and customers.

(6) Provides quality assurance of flight inspection results.

b. Manager. The TSS Manager is responsible for ensuring all functions of the team work efficiently, effectively, and in concert.

c. Aeronautical Information Specialist (AIS). The AIS's focus is accuracy, completeness, and timeliness of data processing.

(1) Data:

(a) Updates the AVNIS database via the AIRNAV program.

(b) Coordinates as necessary with the National Flight Procedures Group (NFPG) all changes in data and policy affecting flight procedures.

(c) Coordinates as necessary with Flight Inspection Policy all changes of data affecting Flight Inspection.

(d) Serves as the AVN expert on airport and NAVAID data. As the expert, provides assistance to both internal and external organizations in understanding and interpreting data.

(e) As directed by the Office Manager, prepares and presents papers, briefings, and seminars relating to the collection and verification of airport and NAVAID data.

(f) Meets and confers with other database personnel in the Air Traffic Technical Operations Service Areas, Washington, and industry to establish, implement, and improve data interchanges and compatibility, standards, and policy.

(g) Coordinates with computer services personnel (automation) to develop updates and improvements to the AIRNAV database program.

(h) Participates in seminars and special projects to study the data system and inherent problems; in a continual effort to make it more responsive to the needs of those it serves.

(2) Records:

(a) Maintains the Flight Inspection reports database and the Flight Inspection recordings database IAW guidelines established by the group manager and FAA Order 8240.36.

(b) Conducts final quality control check of all Flight Inspection report general data (non-technical) prior to archival.

(c) Coordinates, as necessary, with AIS/ TSS MS on all issues relating to policy interpretation and deviations from guidelines established in FAA Order 8240.36.

(d) Maintains the file and records system IAW FAA Order 1350.15 (latest revision), Records Organization, Transfer, and Destruction Standards.

(e) Serves as the focal point for retrieval of flight inspection reports and flight recordings for the purpose of replying to Freedom of Information Act (FOIA) requests, congressional inquiries, and other official or priority response activities.

(f) Other responsibilities required in support of the records program.

d. Procedures Processor:

(1) Processes new and modified procedures packages for flight inspection.

(2) Schedules all helicopter procedures inspections.

(3) Acts as the liaison between the procedures development agencies and flight inspection for scheduling purposes.

e. Technical Services Specialist:

(1) Provides flight inspection expertise to the AIS(s) in interpreting data requirements, requests, and flight inspection results.

(2) Serves as AVN experts to both internal and external organizations on all matters concerning flight inspection reporting and application of FAA Order 8240.36.

(3) Serves as the lead for all issues relating to the data used by an Automated Flight Inspection System (AFIS) and coordinates changes to TI 4040.55 and TI 4040.56 as AFIS is upgraded or modified.

(4) As directed by the Office Manager, prepares and presents papers, briefings, and seminars relating to flight inspection data gathering, techniques, and reporting.

(5) Recommends to the Chief Pilot findings and trends discovered during the quality analysis process relating to job performance for aircrew members.

(6) Performs crew duties as a MS to conduct flight inspection itineraries in support of the NAS.

(7) Provides technical expertise for division automation requirements.

(8) Provides technical expertise, oversight, and develops measures for all production reports and measures.

(9) As required, serves as project focal point or co-focal point for Flight Inspection Operations projects/ programs (e.g., Instrument Flight Procedures (IFP), ISO-9001 Certification)/ Flight Inspection Report Processing System (FIRPS).

(10) Assists the team manager in gathering data to answer FOIA requests, congressional inquiries, and other high priority information requirements.

(11) Serves as Flight Inspection Operations focal point for all processed technical reports and recordings (i.e., special requests, reports, recordings, etc.)

(12) Provides specialized AVNIS technical input as necessary to Software Change Request (SCR).

(13) May be required for testing and evaluation of newly acquired data hardware and software.

(14) Conducts in-depth analysis and provides program advice.

(15) Special Inspections:

(a) Receives requests from internal and external agencies for special inspections.

(b) Determines the checks required to satisfy the customer's needs.

(c) Schedules the inspection and tracks its progress.

(16) Provides assistance to the Procedures Processor.

(17) Conducts random quality assurance and analysis of flight inspection reports and recordings to ensure compliance with Flight Inspection Policy and Flight Safety and Standardization.

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APPENDIX 1
FAA FORM 8240-22
FACILITY DATA

A1.10 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 FAA Form 8240-22 when any of the information is changed (e.g., frequency change, antenna placement, equipment change). Do not report temporary changes in facility restrictions or inoperative components. Forward the original copy of FAA Form 8240-22 to Flight Inspection Technical Services Sub-Team (TSS):

FAA/ MMAC/ TSS, AJW-335A (Data)
TPSB Rm. B-15
P.O. Box 25082
Oklahoma City OK 73125

A1.11 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 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.

A1.12 INFORMATION NOT APPLICABLE to the NAVAID. When completing a required section, leave any block blank when not applicable.

A1.13 DECIMAL ACCURACY. When using trigonometry functions for computations, report values to nearest hundredth. For other accuracies, see the reporting instructions by block.

A1.14 TRUE BEARING. References to true bearing imply true azimuth in degrees and hundredths of degrees.

A1.15 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".

A1.16 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.

A1.17 ELEVATIONS. All elevations are reported in Mean Sea Level (MSL). For all elevations reported, also provide the ellipsoid elevation (height above ellipsoid (HAE)) in Block 84, Remarks.

A1.18 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.

A1.19 AIRPORT/ FACILITY (Section I)

a. **Location.** Enter the city and state or country where the facility is located.

b. **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).

c. **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 Group.

d. **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.

e. **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.

f. **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).

g. **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).

A1.20 GENERAL (Section II)

a. **Type Facility**. Indicate the type facility(ies) being reported (e.g., VORTAC, glide slope, simplified directional facility (SDF)). 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.

b. **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).

c. **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). The same applies to PAR identifiers. These alpha codes must be the same as those used to accomplish the daily flight log. For ARSR facilities, use “Z” plus the identifier of the controlling ARTCC or military installation. Light systems will use the airport identifier and runway number.

d. **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.

e. **Common System.** N/A

f. **Commissioned Date.** Enter the month, day, and year the facility was commissioned (e.g., July 6, 1989, must be entered as 7/6/89).

g. **Equipment Type.** For ILS facilities, enter the equipment type code from Table A1-1 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 the current generation if appropriate. Leave blank when reporting communications facilities which have numerous types/ nomenclature of equipment.

h. **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 Tables A1-2, A1-3, or A1-4 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.

i. **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.

j. **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).

k. **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.

l. **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).

m. Primary Power. Enter an "X" in the appropriate box.

n. Power. Enter an "X" in the appropriate box.

o. 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.

p. Monitor. Enter an "X" in appropriate box(es).

q. 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.

r. 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).

s. Magnetic (Mag) Variation/ Year. Enter the magnetic variation listed in AVNIS files and the epoch year for navigation aids (e.g., E10 degrees, 1985). If the magnetic variation is not on file, contact NFPG to determine the magnetic variation and epoch year.

t. 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").

u. Automated Flight Inspection System (AFIS) Radial. N/A

v. Power Output. N/A

w. 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.

x. 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.

y. Commissioned. Enter the commissioned localizer course width and/or commissioned ILS/ MLS/ PAR/ VGSI glidepath angle, to the nearest hundredth of a degree.

z. 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.

aa. 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.

bb. 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.

$$\text{TCH} = \left[949.0 \text{ x } \tan 3.00\right] - \left[1077.4 - 1075.4\right] = \left(949.0 \text{ x } .05241\right) - 2.0 = 49.73 - 2.0 = 47.73 \text{ ft.}$$

cc. ILS/ MLS/ PAR/ VGSI Angle Coincidence. Enter (to the nearest hundredth) the commissioned angle of each, if installed, for determination of angle coincidence.

dd. Restricted. Enter an "X" in the appropriate box. If the facility has permanent restrictions assigned, enter an "X" in the "Yes" box.

A1.21 LOCALIZER DATA (ILS, SDF, LDA) OR MLS AZIMUTH (Section III): 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."

a. Localizer/ Azimuth Antenna Coordinates. Enter latitude and longitude as specified in Block 19.

b. 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.

c. **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.

d. **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.

e. **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).

f. **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 description.

g. **Offset Localizer (LOC) True Bearing.** Enter the inbound true bearing of an offset MLS azimuth or localizer (to the nearest hundredth).

h. **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).

i. **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.

j. **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.

k. **Back Course (BC) True Bearing.** Enter the inbound true bearing of the back course (to the nearest hundredth).

l. **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.

m. **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."

n. **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).

o. **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.

A1.22 GLIDEPATH DATA (ILS, PAR, VGSI) OR MLS ELEVATION (Section IV): 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."

a. **Glide Slope/ Elevation Antenna Coordinates.** Enter latitude and longitude as specified in Block 19.

b. **Distance to Outer Marker (OM)/ Middle Marker (MM)/ Inner Marker (IM).** Enter the distance (to the nearest foot) and nautical 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.

c. 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 $\left[\frac{100 + (855 - 850)}{\tan 3.00°}\right] - 1200 = \left[\frac{105}{0.05241}\right] - 1200 = 2003.52 - 1200 = 803.52\ ft.$

d. 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").

e. 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.

f. 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.

g. 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.

h. 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).

i. 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.

(1) 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.

(2) 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.

(3) MSL. To calculate MSL, add tapeline, earth curvature, and the elevation used to compute the GPI in Block 63.

j. 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.

k. 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).

l. 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).

m. 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.

A1.23 VOR, VOR/ DME, VORTAC, TACAN, DME (Section V). (For flight inspection purposes only)

A1.24 AIR TRAFFIC CONTROL (ASR, ARSR, CENTER, PAR, TOWER, VHF-DF, UHF-DF) (Section VI): Complete Blocks 79, 80, 81, and 82 for radar facilities only.

a. Type Secondary. Enter the equipment type of the secondary radar and serial number, if needed.

b. Moving Target Indicator (MTI) Blind Speed. Enter the blind speed.

c. Video Mapping. Enter an "X" in the appropriate box.

d. Antenna Tilt. Indicate whether fixed or variable antenna and enter antenna tilt in hundredths of a degree in the appropriate space. A variable tilt antenna can be remotely controlled.

e. Nonprecision Approaches. Enter airport name and runway served by the facility.

A1.25 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).

(1) 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).

(2) 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. For End Fire: Quadrature Phase Monitor Installed (Yes/ No).

(3) Visual Glide Slope Indicator Systems (VGSI). Enter the latitude, longitude, and elevation of SER and RRP; the latitude and longitude of the AER; and the latitude and longitude of DISPL-AER.

(4) 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.).

(5) Expanded Service Volume. Describe all authorized expanded service volumes by component, azimuth, distance, and MAA/ MRA altitudes.

(6) 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).

(7) 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 TSS, using the data sheet transmittal option, or by sending a new FAA Form 8240-22 to TSS.

(8) 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.

(9) FIFO. Enter the 3-letter designator of the flight inspection office having primary responsibility for inspection of the facility.

(10) Facility Identification (Ident) and Facility Type. Same as Blocks 10 and 8.

(11) Date Prepared. Enter month, day, and year that facility data form was prepared.

(12) Typed Name and Signature. Enter the name and the signature of the person who approved the data sheet for use (if applicable).

A1.26 ILS/ MLS EQUIPMENT AND ANTENNA TYPE CODE TABLES

NOTE: Equipment/ Antenna types are not limited to those listed in the tables.

Table A1-1
ILS Equipment Type Codes

5968	ASII	GRN-31	THOMSON
AI	ASII-1100	LP	TI
AI-1100	ASII-1110	MARK 1F	TLS
AI-MK1F	ASII-2100	MK20	TOSHIBA
AIRSYS ATM381N	ASSI-1100	MK20A	WATTS
AL	AV-1100	MOBILE	WK MK4
ALCATEL	AVI	NEC	WL
AMS2100	BENDIX	NM3513B	WL 1260
AMS2110	BUTLER	NM3533B	WL 1261
AS	CARDION	NORMARC	WL MK1
AS 1100	CD	NR	WL MK10
AS1100JC	CE	OT	WL MK1B
ASI	FA6939	PB	WL MK1D
ASI 2100	FA9353	PHILLIPS	WL MK1E
ASI 2110	FA9783	PL	WL MK1F
ASI MK20	FX	SEE RMKS	WL MK2
ASI MK20A		SEL	WL MK20
ASI-110	GRN-27	ST	WL MK20A
ASI-1100	GRN-29	TH	WL MK3
ASI-1110	GRN-30	THOMPSON	WL MK4

Table A1-2
Localizer – Antenna Type Codes

4D	4-DIPOLE
6D	6-DIPOLE
SL	8-LOOP
CE	CAP-EFF
LD	LDA
LP	LOG-PER
M7	MRN-7
NE	NERA
OT	OTHER
PB	PARABOLIC
TW	TRAV-WAVE
TT	TWIN T
V4	VRING-14
V5	VRING-15
V8	VRING-8
WG	WAV-GUIDE
YG	YAGI

Table A1-3

Glidepath – Antenna Type Codes

CE	CAP-EFF
EF	END-FIRE
EH	END-SHORT
ED	END-STD
EU	END-UPSLOPE
MR	MOD-SREF
M8	MRN-8
NE	NERA
NR	NULL-REF
OT	OTHER
SR	SIDE-REF
WG	WAV-GUIDE

Table A1-4
MLS Antenna Options

TYPE	AZIMUTH GUIDANCE BEAM WIDTH	SCAN ANGLE	ELEVATION GUIDANCE BEAM WIDITH	SCAN ANGLE
Type I	2^{o}	$\pm 40^{o}$	1.5^{o}	0.9^{o} to 15^{o}
Type II	2^{o}	$\pm 40^{o}$	1^{o}	0.9^{o} to 15^{o}
Type III	1^{o}	$\pm 40^{o}$	1.5^{o}	0.9^{o} to 15^{o}
Type IV	1^{o}	$\pm 40^{o}$	1^{o}	0.9^{o} to 15^{o}
Type V	1^{o}	$\pm 10^{o}$	1^{o}	0.9^{o} to 15^{o}
Type VI	1^{o}	$\pm 60^{o}$	1^{o}	0.9^{o} to 15^{o}
Other (Specify in Remarks)				

INSTRUCTIONS FOR COMPLETION OF FACILITY DATA
FIGURE 1. FAA FORM 8240-22

PAGE 1 of 2 PAGES

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

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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)

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	2. ICAO IDENT	3. MAG VAR / YR	4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth)
PUEBLO, CO		MAG VAR: EPOCH YR:	LATITUDE: LONGITUDE:

5. AIRPORT / FACILITY NAME	6. OWNER	7.FIELD ELEVATION (MSL)
PUEBLO	FAA	

II. GENERAL

8. TYPE FACILITY	9. FREQ / CHANNEL	10. IDENTIFICATION	11. CLASS / CATEGORY	12. COMMON SYSTEM	13. COMMISSIONED DATE
VORTAC	116.7/114X	PUB	H	[X] YES [ ] NO	VOR 8/8/58 TAC 4/5/60

14. EQUIPMENT TYPE	15. TYPE ANTENNA	16. ANTENNA ELEV. - MSL	17. ANTENNA HEIGHT-FT	18. CONTROL STATION AND FREQUENCY
VOR 2ND GEN TAC GRN-9B	VOR TUO-1 TAC RTA-2	VOR 4760.0 TAC 4760.0		DEN FSS

19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th)	20. PRIMARY POWER	21. STANDBY POWER	22. STANDBY EQUIP.	23. MONITOR
LATITUDE: N38-17-39.30 LONGITUDE: W104-25-44-10	[X] COMMERCIAL [ ] ENGINE	[ ] COMMERCIAL [X] ENGINE [ ] BATTERY [ ] NONE	TAC VOR [X] YES [X] NO	[X] YES [ ] NO [ ] SINGLE [X] DUAL

24. RUNWAY NUMBER	25. RUNWAY TRUE	26. MAG VARIATION / YEAR	27. VOICE	28. AFIS RADIAL	29. POWER OUTPUT
		MAG VAR: E13 EPOCH YR: 1965	NONE	64	VOR 125 W TAC 5 KW

30. RUNWAY DIMENSIONS	31. DISPLACED TH	32. COMMISSIONED	33. ASR VERT COVERAGE & OPERATIONAL REQ
LENGTH: FT WIDTH: FT LANDING LENGTH: FT	[ ] YES [ ] NO DISPLACED : FT	WIDTH: DEG ANGLE: DEG	RADIAL: DISTANCE: ALTITUDE:

34. THRESHOLD ELEV	35. TCH	36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE			37. RESTRICTED
	TCH: FT AGL RDH: FT AGL	ILS/MLS (Degrees)	PAR (Degrees)	VGSI (Degrees)	[ ] YES [X] NO

III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH

38. LOCALIZER / AZIMUTH ANTENNA COORDINATES	39. DISTANCE TO OM	40. DISTANCE TO MM	41. DISTANCE TO IM (FT)	42. DISTANCE IM TO TH (FT)
LATITUDE: LONGITUDE:	(NM): (FT) :	(NM) : (FT) :	(NM) : (FT) :	

43. DISTANCE TO TH	44. DIST TO STOP END	45. USABLE DISTANCE	46. OFFSET LOC TRUE BEARING	47. LOC CW MONITOR
		NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		WIDE : NARROW:

48. LOCALIZER COURSE TAILORED	49. BACK COURSE USABLE DISTANCE	50. BC TRUE BEARING	51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT
[ ] YES [ ] NO WIDTH AT TH (FT):	NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		

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	56. DISTANCE TO OM	57. DISTANCE TO MM	58. DISTANCE TO IM	59. DISTANCE TO PT "C"
LATITUDE: LONGITUDE:	(NM): (FT) :	(NM) : (FT) :	(NM) : (FT) :	(NM) : (FT) :

60. DISTANCE TO TH	61. RWY ELEV ABEAM GS ANTENNA	62. TDZE (MSL)	63. DISTANCE - THRESHOLD TO GPI (FT)		
(NM) : (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)			66. ALTITUDE OVER MM (FT)		
	TAPELINE	EC	MSL	TAPELINE	EC	MSL

67. ALTITUDE OVER IM (FT)		68. DIST OM - TH (FT)	69. DIST MM - TH (FT)	70. GLIDE PATH / ELEVATION MONITOR
TAPELINE	MSL			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)

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V. VOR, VOR / DME, VORTAC, TACAN, DME

74. REFERENCE RADIAL	AZIMUTH / CHECK POINT DESCRIPTION	75. THEODOLITE POSITION
267	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)

VOR ELIP: 4698.6 TAC/DME ELIP: 4698.6

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	2. ICAO IDENT	3. MAG VAR / YR	4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to the nearest hundredth)
OKLAHOMA CITY, OK	KOKC	MAG VAR: E7 EPOCH YR: 1985	LATITUDE: N35-23-34.90 LONGITUDE: W097-36-01.50

5. AIRPORT / FACILITY NAME	6. OWNER	7. FIELD ELEVATION (MSL)
WILL ROGERS WORLD	FAA	1295

II. GENERAL

8. TYPE FACILITY	9. FREQ / CHANNEL	10. IDENTIFICATION	11. CLASS / CATEGORY	12. COMMON SYSTEM	13. COMMISSIONED DATE
ILS/DME	LOC 110.90/46X GP 330.80	RGR	2	[X] YES [ ] NO	LOC 11/4/88 GP 11/3/88 DME 2/11/80

14. EQUIPMENT TYPE	15. TYPE ANTENNA	16. ANTENNA ELEV. - MSL	17. ANTENNA HEIGHT-FT	18. CONTROL STATION AND FREQUENCY
LOC WL GP WL	LOC LP GP NR	LOC 1287.0 GP 1281.0		WILL ROGERS TOWER 118.3/257.8

19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th)	20. PRIMARY POWER	21. STANDBY POWER	22. STANDBY EQUIP.	23. MONITOR
LATITUDE: LONGITUDE:	[X] COMMERCIAL [ ] ENGINE	[ ] COMMERCIAL [ ] ENGINE [X] BATTERY [ ] NONE	[X] YES [ ] NO	[X] YES [ ] NO [ ] SINGLE [X] DUAL

24. RUNWAY NUMBER	25. RUNWAY TRUE	26. MAG VARIATION / YEAR	27. VOICE	28. AFIS RADIAL	29. POWER OUTPUT
35R	359.96	MAG VAR: E7 EPOCH YR: 1985	NONE		

30. RUNWAY DIMENSIONS	31. DISPLACED TH	32. COMMISSIONED	33. ASR VERT COVERAGE & OPERATIONAL REQ
LENGTH: 9802 FT WIDTH: 150 FT LANDING LENGTH: 9802 FT	[ ] YES [X] NO DISPLACED: FT	WIDTH: 3.65 DEG ANGLE: 2.90 DEG	RADIAL: DISTANCE: ALTITUDE:

34. THRESHOLD ELEV	35. TCH	36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE			37. RESTRICTED
		ILS/MLS (Degrees)	PAR (Degrees)	VGSI (Degrees)	
1282.8	TCH: FT AGL RDH: 58.0 FT AGL	2.90			[ ] YES [X] NO

III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH

38. LOCALIZER / AZIMUTH ANTENNA COORDINATES	39. DISTANCE TO OM	40. DISTANCE TO MM	41. DISTANCE TO IM (FT)	42. DISTANCE IM TO TH (FT)
LATITUDE: N35-24-29.92 LONGITUDE: W097-35-19.06	(NM): 6.79 (FT): 41245	(NM): 2.30 (FT): 13966	(NM): 1.98 (FT): 12004	1033

43. DISTANCE TO TH	44. DIST TO STOP END	45. USABLE DISTANCE	46. OFFSET LOC TRUE BEARING	47. LOC CW MONITOR
10971	1169	18 NM AT 5787 FT (MSL / MAA) NM AT FT (MSL / MRA)		WIDE: 4.27 NARROW: 3.03

48. LOCALIZER COURSE TAILORED	49. BACK COURSE USABLE DISTANCE	50. BC TRUE BEARING	51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT
[X] YES [ ] NO WIDTH AT TH (FT): 699.14	N/A NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)	179.96	9883

52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L	53. FRONT COURSE CHECK POINT	54. BACK COURSE CHECK POINT
C/L	LOM 6.8 DME	N/A

IV. GLIDE PATH DATA (ILS, PAR, VGSI) or MLS ELEVATION

55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES	56. DISTANCE TO OM	57. DISTANCE TO MM	58. DISTANCE TO IM	59. DISTANCE TO PT "C"
LATITUDE: N35-22-52.18 LONGITUDE: W097-35-14.15	(NM): 5.16 (FT): 31362	(NM): .67 (FT): 4083	(NM): .35 (FT): 2121	(NM): (FT):

60. DISTANCE TO TH	61. RWY ELEV ABEAM GS ANTENNA	62. TDZE (MSL)	63. DISTANCE - THRESHOLD TO GPI (FT)		
			ILS	PAR	VGSI
(NM): .18 (FT): 1088	1286.1	1294	GPI: 1153.14 RPI: 1088.00	GPI:	GPI: RPI:

64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L	65. ALTITUDE OVER OM OR CK PT. (FT)			66. ALTITUDE OVER MM (FT)		
	TAPELINE	EC	MSL	TAPELINE	EC	MSL
RIGHT 400	1588.73		2898.35	206.84		1493.33

67. ALTITUDE OVER IM (FT)		68. DIST OM - TH (FT)	69. DIST MM - TH (FT)	70. GLIDE PATH / ELEVATION MONITOR
TAPELINE	MSL			
107.45	1393.55	30274	2995	ANGLE (High): 3.12 ANGLE (Low): 2.68

71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT	72. TYPE OF APPROACH LIGHTING:	73. TYPE OF RUNWAY LIGHTING:
1286.1	ALSF-2	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'ELIP 1198.5 BLOCK 61 USED TO COMPUTE GPI, RPI, POINT C.

OM N35-17-42.00 W097-35-18.10 ELEV 1198.0' ELIP 1110.5 GALLY LOM 350 KHZ

MM N35-22-11.80 W097-35-18.90 ELEV 1263.0' ELIP 1175.5

IM N35-22-31.20 W097-35-19.00 ELEV 1271.3' ELIP 1183.8

AER N35-22-41.42 W097-35-18.97 ELIP 1195.3

SER N35-24-18.35 W097-35-19.06 ELEV 1286.4' ELIP 1198.8

RUNWAY C/L ABEAM GP ANTENNA N35-22-52.18 W097-35-18.98 ELIP 1198.6

DME N35-24-30.73 W097-35-21.81 ELEV 1304.0' ELIP 1216.5 LOC ELIP:1199.5 GS ELIP: 1193.5

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

HORIZ DATUM: NAD 83 VERT DATUM: NAVD 88 * End Fire: Quadrature Phase Monitor Installed (Yes/No)**

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	2. ICAO IDENT	3. MAG VAR / YR	4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth)
PANAMA CITY, FL	KPAM	MAG VAR: E 0 EPOCH YR: 1985	LATITUDE: N30-04-11.38 LONGITUDE: W085-34-34.29

5. AIRPORT / FACILITY NAME	6. OWNER	7.FIELD ELEVATION (MSL)
TYNDALL AFB	USAF	18

II. GENERAL

8. TYPE FACILITY	9. FREQ / CHANNEL	10. IDENTIFICATION	11. CLASS / CATEGORY	12. COMMON SYSTEM	13. COMMISSIONED DATE
PAR		PAM		[ ] YES [X] NO	5/3/89

14. EQUIPMENT TYPE	15. TYPE ANTENNA	16. ANTENNA ELEV. - MSL	17. ANTENNA HEIGHT-FT	18. CONTROL STATION AND FREQUENCY
FPN-62A SN 118	PHASED ARRAY	14.0		TYNDALL APPROACH CONTROL 119.75//373.0/124.15/294.5

19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th)	20. PRIMARY POWER	21. STANDBY POWER	22. STANDBY EQUIP.	23. MONITOR
LATITUDE: N30-04-08.98 LONGITUDE: W085-34-26.81	[X] COMMERCIAL [ ] ENGINE	[ ] COMMERCIAL [X] ENGINE [ ] BATTERY [ ] NONE	[X] YES [ ] NO	[X] YES [ ] NO [X] SINGLE [ ] DUAL

24. RUNWAY NUMBER	25. RUNWAY TRUE	26. MAG VARIATION / YEAR	27. VOICE	28. AFIS RADIAL	29. POWER OUTPUT
31R	314.48	MAG VAR: EPOCH YR:			

30. RUNWAY DIMENSIONS	31. DISPLACED TH	32. COMMISSIONED	33. ASR VERT COVERAGE & OPERATIONAL REQ
LENGTH: 1003 FT WIDTH: 200 FT LANDING LENGTH: 1003 FT	[ ] YES [X] NO DISPLACED : FT	WIDTH: DEG ANGLE: 2.50 DEG	RADIAL: DISTANCE: ALTITUDE:

34. THRESHOLD ELEV	35. TCH	36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE			37. RESTRICTED
		ILS/MLS (Degrees)	PAR (Degrees)	VGSI (Degrees)	
16.0	TCH: 49.72 FT AGL RDH: FT AGL	2.50	2.50	PAPI 2.50	[ ] YES [X] NO

III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH

38. LOCALIZER / AZIMUTH ANTENNA COORDINATES	39. DISTANCE TO OM	40. DISTANCE TO MM	41. DISTANCE TO IM (FT)	42. DISTANCE IM TO TH (FT)
LATITUDE: LONGITUDE:	(NM): (FT) :	(NM) : (FT) :	(NM) : (FT) :	

43. DISTANCE TO TH	44. DIST TO STOP END	45. USABLE DISTANCE	46. OFFSET LOC TRUE BEARING	47. LOC CW MONITOR
		NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		WIDE : NARROW:

48. LOCALIZER COURSE TAILORED	49. BACK COURSE USABLE DISTANCE	50. BC TRUE BEARING	51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT
[ ] YES [ ] NO WIDTH AT TH (FT):	NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		

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	56. DISTANCE TO OM	57. DISTANCE TO MM	58. DISTANCE TO IM	59. DISTANCE TO PT "C"
LATITUDE: LONGITUDE:	(NM): (FT) :	(NM) : (FT) :	(NM) : (FT) :	(NM) : (FT) :

60. DISTANCE TO TH	61. RWY ELEV ABEAM GS ANTENNA	62. TDZE (MSL)	63. DISTANCE - THRESHOLD TO GPI (FT)		
			ILS	PAR	VGSI
(NM) : (FT) :		16.0	GPI: RPI:	GPI : 1138.78	GPI: RRP:

64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L	65. ALTITUDE OVER OM OR CK PT. (FT)			66. ALTITUDE OVER MM (FT)		
	TAPELINE	EC	MSL	TAPELINE	EC	MSL
LEFT 473						

67. ALTITUDE OVER IM (FT)		68. DIST OM - TH (FT)	69. DIST MM - TH (FT)	70. GLIDE PATH / ELEVATION MONITOR
TAPELINE	MSL			ANGLE (High): ANGLE (Low) :

71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT	72. TYPE OF APPROACH LIGHTING:	73. TYPE OF RUNWAY LIGHTING:
	ALSF-1	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 ELIP -75.2

SER N30-04-47.42 W085-35-04.14 ELEV 15.7' ELIP -75.5

PAR ELIP: -77.20

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 8240-22, NDB

FACILITY DATA

I. AIRPORT / FACILITY

1. LOCATION	2. ICAO IDENT	3. MAG VAR / YR	4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth)
ALEXANDRIA, MN		MAG VAR: EPOCH YR:	LATITUDE: LONGITUDE:

5. AIRPORT / FACILITY NAME	6. OWNER	7.FIELD ELEVATION (MSL)
ANDRI	STATE OF MN	

II. GENERAL

8. TYPE FACILITY	9. FREQ / CHANNEL	10. IDENTIFICATION	11. CLASS / CATEGORY	12. COMMON SYSTEM	13. COMMISSIONED DATE
NDB	281	AJW	MHW	[X] YES [ ] NO	4/6/81

14. EQUIPMENT TYPE	15. TYPE ANTENNA	16. ANTENNA ELEV. - MSL	17. ANTENNA HEIGHT-FT	18. CONTROL STATION AND FREQUENCY
AERO COM		1404.0		PNM FSS

19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th)	20. PRIMARY POWER	21. STANDBY POWER	22. STANDBY EQUIP.	23. MONITOR
LATITUDE: N45-47-30.00 LONGITUDE: W095-18-19.00	[X] COMMERCIAL [ ] ENGINE	[ ] COMMERCIAL [ ] ENGINE [ ] BATTERY [X] NONE	[ ] YES [X] NO	[ ] YES [X] NO [ ] SINGLE [ ] DUAL

24. RUNWAY NUMBER	25. RUNWAY TRUE	26. MAG VARIATION / YEAR	27. VOICE	28. AFIS RADIAL	29. POWER OUTPUT
		MAG VAR: E 5 EPOCH YR: 1985	NONE		25 W

30. RUNWAY DIMENSIONS	31. DISPLACED TH	32. COMMISSIONED	33. ASR VERT COVERAGE & OPERATIONAL REQ
LENGTH: FT WIDTH: FT LANDING LENGTH: FT	[ ] YES [ ] NO DISPLACED : FT	WIDTH: DEG ANGLE: DEG	RADIAL: DISTANCE: ALTITUDE:

34. THRESHOLD ELEV	35. TCH	36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE			37. RESTRICTED
	TCH: FT AGL RDH: FT AGL	ILS/MLS (Degrees)	PAR (Degrees)	VGSI (Degrees)	[ ] YES [X] NO

III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH

38. LOCALIZER / AZIMUTH ANTENNA COORDINATES	39. DISTANCE TO OM	40. DISTANCE TO MM	41. DISTANCE TO IM (FT)	42. DISTANCE IM TO TH (FT)
LATITUDE: LONGITUDE:	(NM): (FT) :	(NM) : (FT) :	(NM) : (FT) :	

43. DISTANCE TO TH	44. DIST TO STOP END	45. USABLE DISTANCE	46. OFFSET LOC TRUE BEARING	47. LOC CW MONITOR
		NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		WIDE : NARROW:

48. LOCALIZER COURSE TAILORED	49. BACK COURSE USABLE DISTANCE	50. BC TRUE BEARING	51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT
[ ] YES [ ] NO WIDTH AT TH (FT):	NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		

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	56. DISTANCE TO OM	57. DISTANCE TO MM	58. DISTANCE TO IM	59. DISTANCE TO PT "C"
LATITUDE: LONGITUDE:	(NM): (FT) :	(NM) : (FT) :	(NM) : (FT) :	(NM) : (FT) :

60. DISTANCE TO TH	61. RWY ELEV ABEAM GS ANTENNA	62. TDZE (MSL)	63. DISTANCE - THRESHOLD TO GPI (FT)		
(NM) : (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)			66. ALTITUDE OVER MM (FT)		
	TAPELINE	EC	MSL	TAPELINE	EC	MSL

67. ALTITUDE OVER IM (FT)		68. DIST OM - TH (FT)	69. DIST MM - TH (FT)	70. GLIDE PATH / ELEVATION MONITOR
TAPELINE	MSL			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 COMPLTION OF FACILITY DATA
FIGURE 5. SAMPLE FAA FORM 8240-22, NDB (Continued)

PAGE 2 of 2

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

NDB ELIP: 1319.2

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	2. ICAO IDENT	3. MAG VAR / YR	4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth)
PANAMA CITY, FL	KPAM	MAG VAR: E 0 EPOCH YR: 1985	LATITUDE: N30-04-11.38 LONGITUDE: W085-34-34.29

5. AIRPORT / FACILITY NAME	6. OWNER	7.FIELD ELEVATION (MSL)
TYNDALL AFB	USAF	18

II. GENERAL

8. TYPE FACILITY	9. FREQ / CHANNEL	10. IDENTIFICATION	11. CLASS / CATEGORY	12. COMMON SYSTEM	13. COMMISSIONED DATE
ASR/SECRA		PAM		[X] YES [ ] NO	ASR 8/23/82 SECRA 8/23/82

14. EQUIPMENT TYPE	15. TYPE ANTENNA	16. ANTENNA ELEV. - MSL	17. ANTENNA HEIGHT-FT	18. CONTROL STATION AND FREQUENCY
GPN-20 SN 40		7.5		TYNDALL APPROACH CONTROL 119.75/373.0/124.15/294.5

19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th)	20. PRIMARY POWER	21. STANDBY POWER	22. STANDBY EQUIP.	23. MONITOR
LATITUDE: N30-04-06.14 LONGITUDE: W085-33-35.42	[X] COMMERCIAL [ ] ENGINE	[ ] COMMERCIAL [X] ENGINE [ ] BATTERY [ ] NONE	[X] YES [ ] NO	[ ] YES [X] NO [ ] SINGLE [ ] DUAL

24. RUNWAY NUMBER	25. RUNWAY TRUE	26. MAG VARIATION / YEAR	27. VOICE	28. AFIS RADIAL	29. POWER OUTPUT
		MAG VAR: E 0 EPOCH YR: 1985			ASR 56 DBM SECRA 300W

30. RUNWAY DIMENSIONS	31. DISPLACED TH	32. COMMISSIONED	33. ASR VERT COVERAGE & OPERATIONAL REQ
LENGTH: FT WIDTH: FT LANDING LENGTH: FT	[ ] YES [ ] NO DISPLACED : FT	WIDTH: DEG ANGLE: DEG	RADIAL: 70 DISTANCE: 54 ALTITUDE: 23000

34. THRESHOLD ELEV	35. TCH	36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE			37. RESTRICTED
	TCH: FT AGL RDH: FT AGL	ILS/MLS (Degrees)	PAR (Degrees)	VGSI (Degrees)	[ ] YES [ ] NO

III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH

38. LOCALIZER / AZIMUTH ANTENNA COORDINATES	39. DISTANCE TO OM	40. DISTANCE TO MM	41. DISTANCE TO IM (FT)	42. DISTANCE IM TO TH (FT)
LATITUDE: LONGITUDE:	(NM): (FT) :	(NM) : (FT) :	(NM) : (FT) :	

43. DISTANCE TO TH	44. DIST TO STOP END	45. USABLE DISTANCE	46. OFFSET LOC TRUE BEARING	47. LOC CW MONITOR
		NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		WIDE : NARROW:

48. LOCALIZER COURSE TAILORED	49. BACK COURSE USABLE DISTANCE	50. BC TRUE BEARING	51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT
[ ] YES [ ] NO WIDTH AT TH (FT):	NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		

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	56. DISTANCE TO OM	57. DISTANCE TO MM	58. DISTANCE TO IM	59. DISTANCE TO PT "C"
LATITUDE: LONGITUDE:	(NM): (FT) :	(NM) : (FT) :	(NM) : (FT) :	(NM) : (FT) :

60. DISTANCE TO TH	61. RWY ELEV ABEAM GS ANTENNA	62. TDZE (MSL)	63. DISTANCE - THRESHOLD TO GPI (FT)		
(NM) : (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)			66. ALTITUDE OVER MM (FT)		
	TAPELINE	EC	MSL	TAPELINE	EC	MSL

67. ALTITUDE OVER IM (FT)		68. DIST OM - TH (FT)	69. DIST MM - TH (FT)	70. GLIDE PATH / ELEVATION MONITOR
TAPELINE	MSL			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

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	2. ICAO IDENT	3. MAG VAR / YR	4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth)
SPOKANE, WA	KSKA	MAG VAR: E 19 EPOCH YR: 1985	LATITUDE: N47-36-54.59 LONGITUDE: W117-39-17.06

5. AIRPORT / FACILITY NAME	6. OWNER	7.FIELD ELEVATION (MSL)
FAIRCHILD AFB	USAF	2462

II. GENERAL

8. TYPE FACILITY	9. FREQ / CHANNEL	10. IDENTIFICATION	11. CLASS / CATEGORY	12. COMMON SYSTEM	13. COMMISSIONED DATE
VASI		SKA		[ ] YES [X] NO	1974 SEE REMARKS

14. EQUIPMENT TYPE	15. TYPE ANTENNA	16. ANTENNA ELEV. - MSL	17. ANTENNA HEIGHT-FT	18. CONTROL STATION AND FREQUENCY
VASI-12 2 BAR				

19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th)	20. PRIMARY POWER	21. STANDBY POWER	22. STANDBY EQUIP.	23. MONITOR
LATITUDE: LONGITUDE:	[ ] COMMERCIAL [ ] ENGINE	[ ] COMMERCIAL [ ] ENGINE [ ] BATTERY [ ] NONE	[ ] YES [ ] NO	[ ] YES [ ] NO [ ] SINGLE [ ] DUAL

24. RUNWAY NUMBER	25. RUNWAY TRUE	26. MAG VARIATION / YEAR	27. VOICE	28. AFIS RADIAL	29. POWER OUTPUT
23	246.75	MAG VAR: EPOCH YR:			

30. RUNWAY DIMENSIONS	31. DISPLACED TH	32. COMMISSIONED	33. ASR VERT COVERAGE & OPERATIONAL REQ
LENGTH: 13901 FT WIDTH: 300 FT LANDING LENGTH: 13901 FT	[ ] YES [X] NO DISPLACED : FT	WIDTH: DEG ANGLE: 2.50 DEG	RADIAL: DISTANCE: ALTITUDE:

34. THRESHOLD ELEV	35. TCH	36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE			37. RESTRICTED
		ILS/MLS (Degrees)	PAR (Degrees)	VGSI (Degrees)	
2414.5	TCH: 49.11 FT AGL RDH: FT AGL	2.50	2.50	2.50	[ ] YES [X] NO

III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH

38. LOCALIZER / AZIMUTH ANTENNA COORDINATES	39. DISTANCE TO OM	40. DISTANCE TO MM	41. DISTANCE TO IM (FT)	42. DISTANCE IM TO TH (FT)
LATITUDE: LONGITUDE:	(NM): (FT) :	(NM) : (FT) :	(NM) : (FT) :	

43. DISTANCE TO TH	44. DIST TO STOP END	45. USABLE DISTANCE	46. OFFSET LOC TRUE BEARING	47. LOC CW MONITOR
		NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		WIDE : NARROW:

48. LOCALIZER COURSE TAILORED	49. BACK COURSE USABLE DISTANCE	50. BC TRUE BEARING	51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT
[ ] YES [ ] NO WIDTH AT TH (FT):	NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)		

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	56. DISTANCE TO OM	57. DISTANCE TO MM	58. DISTANCE TO IM	59. DISTANCE TO PT "C"
LATITUDE: LONGITUDE:	(NM): (FT) :	(NM) : (FT) :	(NM) : (FT) :	(NM) : (FT) :

60. DISTANCE TO TH	61. RWY ELEV ABEAM GS ANTENNA	62. TDZE (MSL)	63. DISTANCE - THRESHOLD TO GPI (FT)		
			ILS	PAR	VGSI
(NM) : .17 (FT) : 1063	RRP 2417.2	2423	GPI: RPI:	GPI :	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)			66. ALTITUDE OVER MM (FT)		
	TAPELINE	EC	MSL	TAPELINE	EC	MSL

67. ALTITUDE OVER IM (FT)		68. DIST OM - TH (FT)	69. DIST MM - TH (FT)	70. GLIDE PATH / ELEVATION MONITOR
TAPELINE	MSL			ANGLE (High): ANGLE (Low) :

71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT	72. TYPE OF APPROACH LIGHTING:	73. TYPE OF RUNWAY LIGHTING:
	ALSF-1/VASI	HIRL

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

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 ELIP 2356.3

SER N47-36-27.51 W117-40-50.20 ELEV 2461.9' ELIP 2353.6

RRP N47-37-17.57 W117-37-58.08 ELIP 2401.0

BCE ADVISES SYSTEM INSTALLED IN 1974: COMMISSIONING DATE UNKNOWN.

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	2. ICAO IDENT	3. MAG VAR / YR	4. AIRPORT REFERENCE POINT (degrees, minutes, seconds - to nearest hundredth)
WICHITA, KS	KICT	MAG VAR: E 7 EPOCH YR: 1985	LATITUDE: N37-38-59.80 LONGITUDE: W097-25-57.80

5. AIRPORT / FACILITY NAME	6. OWNER	7.FIELD ELEVATION (MSL)
WICHITA MID-CONTINENT	FAA	1332.0

II. GENERAL

8. TYPE FACILITY	9. FREQ / CHANNEL	10. IDENTIFICATION	11. CLASS / CATEGORY	12. COMMON SYSTEM	13. COMMISSIONED DATE
MLS/DME	AS 556 EL 556 DME 25Y	JOZ*	1	[X] YES [ ] NO	AS 4/24/87 EL 4/24/87

14. EQUIPMENT TYPE	15. TYPE ANTENNA	16. ANTENNA ELEV. - MSL	17. ANTENNA HEIGHT-FT	18. CONTROL STATION AND FREQUENCY
AS WL EL WL	AS TYPE 6/60 EL TYPE 6	AZ 1319.0 EL 1316.5		ICT ATCT 118.2/257.8

19. ANTENNA LOCATION (Deg, Min, Sec - to 1/100th)	20. PRIMARY POWER	21. STANDBY POWER	22. STANDBY EQUIP.	23. MONITOR
LATITUDE: LONGITUDE:	[X] COMMERCIAL [ ] ENGINE	[ ] COMMERCIAL [ ] ENGINE [X] BATTERY [ ] NONE	[ ] YES [X] NO	[X] YES [ ] NO [ ] SINGLE [ ] DUAL

24. RUNWAY NUMBER	25. RUNWAY TRUE	26. MAG VARIATION / YEAR	27. VOICE	28. AFIS RADIAL	29. POWER OUTPUT
19L	200.01	MAG VAR: E 7 EPOCH YR: 1985	NONE		

30. RUNWAY DIMENSIONS	31. DISPLACED TH	32. COMMISSIONED	33. ASR VERT COVERAGE & OPERATIONAL REQ
LENGTH: 7302 FT WIDTH: 150 FT LANDING LENGTH: 7302 FT	[ ] YES [X] NO DISPLACED: FT	WIDTH: DEG ANGLE: 3.00 DEG	RADIAL: DISTANCE: ALTITUDE:

34. THRESHOLD ELEV	35. TCH	36. ILS/MLS / PAR / VGSI ANGLE COINCIDENCE			37. RESTRICTED
		ILS/MLS (Degrees)	PAR (Degrees)	VGSI (Degrees)	
1318.9	TCH: 44.0 FT AGL RDH: FT AGL	3.00		3.00	[X] YES [ ] NO

III. LOCALIZER DATA (ILS, SDF, LDA) or MLS AZIMUTH

38. LOCALIZER / AZIMUTH ANTENNA COORDINATES	39. DISTANCE TO OM	40. DISTANCE TO MM	41. DISTANCE TO IM (FT)	42. DISTANCE IM TO TH (FT)
LATITUDE: N37-38-23.05 LONGITUDE: W097-25-38.42	(NM): 7.10 FAF (FT): 43159	(NM): N/A (FT):	(NM): N/A (FT):	N/A

43. DISTANCE TO TH	44. DIST TO STOP END	45. USABLE DISTANCE	46. OFFSET LOC TRUE BEARING	47. LOC CW MONITOR
8471	1169	20 NM AT 21319 FT (MSL / MAA) NM AT FT (MSL / MRA)		WIDE : NARROW:

48. LOCALIZER COURSE TAILORED	49. BACK COURSE USABLE DISTANCE	50. BC TRUE BEARING	51. DISTANCE TO C/L RWY ABEAM GLIDE PATH ANT- FT
[ ] YES [ ] NO WIDTH AT TH (FT): N/A	N/A NM AT FT (MSL / MAA) NM AT FT (MSL / MRA)	20.01	7585

52. DIRECTION (L or R) AND DISTANCE LOC OFFSET FROM RWY C/L	53. FRONT COURSE CHECK POINT	54. BACK COURSE CHECK POINT
C/L	KECHI INT RADAR 7.1 DME	N/A

IV. GLIDE PATH DATA (ILS, PAR, VGSI) or MLS ELEVATION

55. GLIDE SLOPE / ELEVATION ANTENNA COORDINATES	56. DISTANCE TO OM	57. DISTANCE TO MM	58. DISTANCE TO IM	59. DISTANCE TO PT "C"
LATITUDE: N37-39-32.16 LONGITUDE: W097-25-01.49	(NM): 5.85 FAF (FT): 35574	(NM): N/A (FT):	(NM): N/A (FT):	(NM): (FT):

60. DISTANCE TO TH	61. RWY ELEV ABEAM GS ANTENNA	62. TDZE (MSL)	63. DISTANCE - THRESHOLD TO GPI (FT)		
			ILS	PAR	VGSI
(NM): .15 (FT): 886	1318.9	1319.0	GPI: 840.21 RPI: 840.21	GPI :	GPI: RPP:

64. DIRECTION (L or R) AND DISTANCE FROM ANTENNA TO RWY C/L	65. ALTITUDE OVER OM OR CK PT. (FT)			66. ALTITUDE OVER MM (FT)		
	TAPELINE	EC	MSL	TAPELINE	EC	MSL
LEFT 399	1864.35		3211.12	N/A		

67. ALTITUDE OVER IM (FT)		68. DIST OM - TH (FT)	69. DIST MM - TH (FT)	70. GLIDE PATH / ELEVATION MONITOR
TAPELINE	MSL			
N/A		34688 FAF	N/A	ANGLE (High): 3.23 ANGLE (Low): 2.78

71. ELEVATION USED TO COMMISSION GLIDE SLOPE - FT	72. TYPE OF APPROACH LIGHTING:	73. TYPE OF RUNWAY LIGHTING:
1316.5	VASI-4L	REIL HIRL

FAA FORM 8240 - 22 (4/96) (FORMFLOW)

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 IDENT 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 ELIP 1226.7

SER N37-38-33.91 W097-25-33.45 ELEV 1319.8' ELIP 1225.6

DME N37-38-22.37 W097-25-36.08 ELEV 1331.0' ELIP 1236.8 AZ ELIP:1224.8 ELEV ELIP: 1222.3

RUNWAY C/L ABEAM EL ANTENNA N37-39-33.51 W097-25-06.15 ELIP 1224.7

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 2

FAA FORM 8240-20
AVNIS DATA CHANGE SUBMISSION

A2.10 GENERAL. The Mission Specialist (MS) and/or the Pilot In Command (PIC) must complete this form for all change requests to the AVNIS database. If there is not an appropriate block for entering the specific change, enter the information into Field 5, Remarks. All other changes should be reported on page 2, Field 2.

This form must be sent directly to the TSS Aeronautical Information Specialist (AIS) by fax to (405) 954-3164 (alternate 8214), **or** as an attachment to an **email** to mailbox: 9-AMC-AVN-AVN210-DATA. Changes to checkpoints, restrictions, and other critical information must be submitted within five (5) working days of the flight inspection event. Other routine changes to the AVN database may be submitted no later than the submission of the flight inspection report. Send only the page(s) that contains information regarding a change request.

Changes to checkpoints, restrictions, and other critical information must be processed within five (5) working days of receipt of the completed FAA Form 8240-20. Other routine changes to the AVN database will be processed by the AIS as received.

A2.11 BLOCK 1, HEADING. This block provides the destination information for the form.

a. Attention. Enter the name of the TSS AIS responsible for the area where the facility is located, or, if unknown, enter "Aeronautical Information Specialist".

b. Location. Enter the name of the city associated with the facility. If more than one airport is located in the city, add the ICAO identifier.

c. Identification (Ident). Enter the facility ident.

d. Type. Enter facility type (i.e., VOR, ILS, etc.)

A2.12 BLOCK 2, CANCEL. This block is dedicated to canceling restrictions and/or checkpoints to the AVNIS database. It 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", or enter on page 2.

a. Facility Restriction: The published facility restriction to be canceled.

(1) Cmpnt: Enter component. Abbreviations are acceptable (i.e., "ILS/ L" to remove a localizer restriction; "VTAC/ V" to remove a restriction on the VOR portion of a VORTAC, etc.)

(2) Date: Enter the date shown on the AVNIS data sheet of the restriction that is being canceled.

(3) From: Starting radial of restriction (CW direction)

(4) To: Ending radial of restriction (CW direction)

(5) BYD: Start of restriction in nautical miles

(6) Below: Upper level altitude of restriction reported in MSL

(7) Remarks: Briefly note any additional information needed to explain cancellation of restriction.

b. Checkpoint: Ground or airborne receiver checkpoint to be canceled.

(1) Type: Enter type of checkpoint (i.e., air or ground).

(2) Airport: Enter airport name.

(3) RAD: Enter radial in degrees.

(4) Dist: Enter distance in nautical miles.

(5) Alt: Enter the altitude in feet MSL.

(6) Description: Describe the location of the checkpoint.

A2.13 BLOCK 3, PUBLISH. This block is dedicated to new/ original entries. Enter all data as described in Paragraph A2.12 above, except for the date field. The date field must contain the date the restriction was established.

A2.14 BLOCK 4, ROLLOUT/ GS CBP: This block will provide tracking of rollout and GS CBP results. 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 Services Specialist.

a. RO Code: The rollout code indicates the quality of localizer signal along the runway surface area. Refer to FAA Order 8200.1 (latest edition), Paragraph 15.20g(2) and enter the appropriate localizer code from the following list:

(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.

(6) NR: Not Required. This code is applied by TSS only.

(7) AC: Awaiting Check

b. **TSS Assigned Code:** *(For TSS 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.

(1) Q4: Periodic Rollout is 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 it need not be done on periodic inspections, as these zones are not currently used for IFR.

(2) Q5: Periodic Rollout is 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 it need not be done on periodic inspections, as the zone is not currently used for IFR.

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 in the AFD.

d. **Published Class.** *(For TSS use only)***:** The published facility performance class found in the A/FD. If there is not a published facility performance class in the A/ FD, enter "None".

e. **GS CBP Code:** Enter the appropriate code based on the flight inspection results.

(1) S**:** Indicates all normal and monitor reference configurations have Satisfactory glide slope clearance below path to the threshold.

(2) U: Indicates the glide slope clearance below path to threshold was Unsatisfactory in one or more of the configurations.

(3) N: Indicates the glide slope clearance below path to threshold has not been checked.

(4) AC: Awaiting Check (Same as N)

f. **TSS Verification:** *(For TSS use only)*. To be initialed and dated by the TSS. This confirms that the information in Field 4 on FAA Form 8240-20 has been verified to be correct.

g. **Upgrade Number:** *(For TSS 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 a corrective action has been made to improve the facility performance.

A2.15 BLOCK 5, REMARKS: Use Field 5 to clarify any pertinent information completed in Fields 1 through 4. Submit all other changes not covered on page 1 using Field 2, Data Sheet Changes, on Page 2.

a. **Provide** an explanation for the changes when there is no report or recordings accompanying the change request (i.e., "A research of recordings dating from 02/15/01 to present do not support the listed restriction.").

b. Enter a remark explaining any facility restriction created for flight inspection convenience or due to limits on where a flight inspection aircraft can operate. For example, restricting localizer coverage due to terrain, or VOR coverage due to political boundaries that prevent flying a complete orbit. In general, add a remark when it will help explain a facility restriction that is not obviously related to facility performance.

c. **Special Use by TSS.** The TSS will use this form for changes to the AVNIS data sheet product or A/ FD when no flight inspection recordings or report accompanies the form.

(1) Complete Field 6 as appropriate with "TSS" following the submitter's name.

(2) Forms that have been determined by TSS to be included with the flight inspection report records will be forwarded to AJW-335A (formerlyAVN-210A), Flight Inspection Reports Team.

(a) AJW-335A will scan the form for inclusion to the system.

(b) The form will be filed with the appropriate recordings folder.

A2.16 BLOCK 6, INSPECTION BASICS: Complete as shown in Chapter 2, Paragraph 12. Enter the aircraft number and the date sent. Enter the pilot and/or mission specialist crew number.

a. **Date of Inspection:** Date(s) of inspection

b. **Aircraft No:** Aircraft "N" number (i.e. N72)

c. **Pilot:** Pilot in Command (PIC) name and/or VN crew number

d. **MS:** Mission Specialist name and/or VN crew number

e. **Date Sent:** Date this form was sent to the AVN Data Specialist

A2.17 BLOCK 1, TO (Page 2): Page 2 is a continuation of Page 1. However, Page 2 may be submitted without Page 1 if Page 1 provides no additional information. The "TO" field serves the same purpose as the "HEADING" field on Page 1.

a. **Attention:** Enter the name of the Flight Inspection Central Operations Aeronautical Information Specialist responsible for the area where the facility is located, or, if unknown, enter "Aeronautical Information Specialist".

b. **Location:** Enter the name of the city associated with the facility. If more than one airport is located in the city, add the ICAO identifier.

c. **Identification (Ident):** Enter the facility ident.

d. **Type:** Enter facility type (i.e., VOR, ILS, etc.).

A2.18 BLOCK 2, DATA SHEET CHANGES (Page 2): This field is used in the same manner as Field 5, "Remarks" on Page 1.

a. Any data change requests that do not include restrictions, checkpoints, rollouts, or glide slope CBP checks are to be listed here.

b. List the change as it should appear on the AVNIS data sheet.

c. Provide clarification to any entry when appropriate.

A2.19 BLOCK 3, INSPECTION BASICS (Page 2): Complete as shown in Chapter 2, Paragraph 12. Enter the aircraft number and the date sent. Enter the pilot and/or mission specialist crew number.

a. **Date of Inspection:** Date(s) of inspection

b. **Aircraft No:** Aircraft "N" number (i.e. N72)

c. **Pilot:** Pilot in Command (PIC) name and/or VN crew number

d. **MS:** Mission Specialist name and/or VN crew number

A2.20 Date Sent: Date this form was sent to the AVN Data Specialist

Figure 1

FAA Form 8240-20
AVNIS DATA CHANGE SUBMISSION

AVNIS Data Change Submission

1. **TO: Flight Inspection Central Operations**

FAX: (405) 954-3164 **EMAIL: 9-AMC-AVN-AVN210-DATA**

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. R.O. CODE: _____ C. ACTUAL CLASS: _____ E. GS CBP CODE: _____

B. TSS ASSIGNED CODE: _____ D. PUBLISHED CLASS: _____ F. TSS VERIFICATION: _____

.G. UPGRADE NUMBER: _____

5. **REMARKS:**

6. DATE OF INSPECTION: _____ AIRCRAFT NO: _____ DATE SENT: _____

PILOT: _____ MISSION SPECIALIST: _____

AVNIS Data Change Submission

1. **TO: Flight Inspection Central Operations**
   FAX: (405) 954-3164 **EMAIL: 9-AMC-AVN-AVN210-DATA**

   ATTENTION: _____

   Please submit the following changes for incorporation into the appropriate flight publications.

   LOCATION: _____ ID: _____ TYPE: _____

2. **DATA SHEET CHANGES:**

3. DATE OF INSPECTION: _____ AIRCRAFT NO: _____ DATE SENT: _____

   PILOT: _____ MISSION SPECIALIST: _____

FAA Form 8240-20-2 (v1.1 12-2005)

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APPENDIX 3
NFDC CHANGE REQUEST

A3.10 GENERAL. Unlike the data sheet changes, National Flight Data Center (NFDC) changes affect the information distributed to the public. For this reason, all change requests are channeled through the Aviation System Standards Flight Inspection Technical Services Sub-Team (TSS).

A3.11 PROCESS. NFDC decides the manner in which they receive change requests. The following is a generalized set of guidelines.

a. TSS Notification. The TSS is notified of changes via:

(1) Flight Inspection Crew: FAA Form 8240-20

(2) FAA Agency Organization: FAA Form 8240-22

(3) Outside Agency: FAA Form 8240-22 and/or message format

b. TSS Verification. The TSS is obligated to verify the change request prior to dissemination to the public.

(1) Comparison. The requested change is compared to existing data (i.e. does the requested change already exist).

(2) Validity. The change request is verified as a valid request (i.e., a request to change the ID on a glide slope is not realistic).

(3) Inspection Correctness. Did the flight check crew inspect the change to the extent necessary to warrant a valid change?

c. NFDC Notification. Upon verifying a valid data change request, the TSS submits a change request to the NFDC.

A3.12 FORMS. There are no established forms or formats when notifying NFDC. If an FAA Form 8240-20 is involved, it will be forwarded.

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APPENDIX 4
AIRPORT/ RUNWAY DETAIL DATA

A4.10 GENERAL. The detailed airport/ runway datasheet contains general information and surveyed data of the airport and runways. A section of the data sheet also contains the data regarding VGSI systems and approach lights. There are three examples at the end of this appendix. The Airport Detail data sheet provides all information regarding the airport. The other two (Airport Header and Runway Detail) provide information limited only to your query. We will reference the Airport Detail data sheet only.

a. **State:** State where airport is located

b. **Country:** Country where airport is located

c. **Phone:** Phone number of the airport owner or manager

d. **Category:** Category of the airport (A=Airport, C=Seabase, H=Heliport, S=Stolport, B=Balloonport)

e. **FAR Part 139:** Yes/ No

f. **Magnetic Variation/Year:** Epoch year and magnetic variation

g. **Site Nbr:** Site number assigned to the airport by NFDC

h. **Sectional Chart:** Sectional chart this airport appears on

i. **Survey Code:** Survey accuracy (for TSS use only)
0 = other
1 = alp
2 = non-verified local or state surveys
3 = NOS ADAM program surveys
4 = NOS loran program surveys
5 = NOS AOC survey which have had runway changes
6 = NOS AOC survey, and military surveys
7 = NGS 405 survey with runway change since survey
8 = NGS 405 survey
8C = NGS Congressional surveys
8N = NGS survey requested by NFDC
8O = OEP survey
8T = 3rd party survey

j. **Weather Station:** Airport has observer on site to report weather (yes/ no)

k. **Control Tower:** Airport has an air traffic control tower (yes/ no)

l. **Control Zone:** Airport control zone (yes/ no)

m. **Control Zone Operational:** Fulltime or part-time

A4.11 COORDINATES: These are the coordinates of the airport reference point.

a. **Latitude/ Longitude:** Report values as in Appendix 1, Paragraph A1.20

b. **Field Elevation:** MSL elevation of the highest point on all landing surfaces at the airport

c. **Ellipsoid Elevation:** HAE of the field elevation

d. **Horz Datum:** Horizontal datum – datum of coordinates (should be in WGS84 or NAD83 or equivalent)

e. **Vert Datum:** Vertical datum – datum of field elevations (should be in NGVD29, or NAVD88, or equivalent)

A4.12 OFFICE: These offices are responsible for specific functions.

a. **Flight Inspection:** Flight inspection office responsible for flight checking facility

b. **Procedure Development:** Office responsible for procedure development

c. **Region Code:** Two-letter code of FAA region responsible for the airport.

d. **Service Area:** ATO service area responsible for the airport.

e. **OCC Code:** FAA Operations Control Area the airport is located in.

A4.13 AUTO WEATHER:

a. **Weather Source:**

b. **Location:** Location of the auto weather system, usually the airport identifier

c. **Type:** Type of AWOS (1, 2, 3, A). If the airport has ASOS or AWSS, this will show as Type 3

d. **Frequency:** Frequency the auto weather is transmitted over

e. **Service A:** Y = AWOS/ ASOS/ AWSS known to have service

A4.14 ALTIMETER:

a. **Type:** Local or remote

b. **Airport ID:** Identifier of airport where altimeter is located

c. **Field Alt Source:** Type of service providing the altimeter – for example AWOS or ASOS

d. **Latitude/Longitude:** Airport reference point latitude of airport where altimeter is located

e. **Start:** Start time altimeter is available

f. **End:** End time altimeter is available

A4.15 RUNWAY LIST: This is a list of the airport runways followed by a code that depicts whether the runway is active or not.

A4.16 RUNWAY DETAIL: This block (Landing Strip) provides data that is general to the runway surface.

a. **Surface:**

(1) Type:

SURFACE	DESCRIPTION
ALUMAT	ALUMINUM MAT
ASPCON	ASPHALT/CONCRETE
ASPDRT	ASPHALT/DIRT
ASPGRL	ASPHALT/GRAVEL
ASPH	ASPHALT
ASPTRF	ASPHALT/TURF
CONC	CONCRETE
CONGRL	CONCRETE/GRAVEL
CONTRF	CONCRETE/TURF
DIRT	DIRT
GRLDRT	GRAVEL/DIRT
GRLTRF	GRAVEL/TURF
GRVL	GRAVEL
ICE	ICE-STRIPS
MATS	MATS
PEM	PART ASPH/CONC/MACADAM
PSP	PIERCED STEEL PLANK
SNOW	SNOW
STEEL	STEEL
TURF	TURF
TURFDRT	TURF/DIRT
WATER	WATER
WOOD	WOOD

(2) Suffixes:

(a) G = Good

(b) F = Fair

(c) P = Poor

b. **Width:** The width of the runway in feet

c. **Physical Length:** The actual length of the paved surface from threshold to threshold in feet

A4.17 RWY NUMBER: Runway designation such as 36L, 06, etc. This data is specific to the runway end.

a. Status:

(1) A: The data is active.

(2) P: The data is pending

b. Survey. Survey accuracy code (TSS use only)

c. Markings:

MARKINGS	DESCRIPTION
BSC	BASIC
H	HELIPORT
NONE	NO MARKINGS
NPI	NON-PRECISION
NRS	RUNWAY NBRS ONLY
NSTD	NON-STANDARD
PIR	PRECISION

Markings Suffixes:

G = Good
F = Faded/ Fair
P = Poor

d. Threshold. The designated beginning of the runway that is available for landing. It is identified by the latitude, longitude, elevation, ellipsoid elevation (HAE), and horizontal and vertical datum of the center point.

e. Displaced Threshold. The designated beginning of the runway, other than the threshold, that is available for landing. It is identified by the latitude, longitude, elevation, ellipsoid elevation (HAE), and horizontal and vertical datum of the center point.

f. Landing Length: Runway landing length. If the runway is displaced, this will be the runway length minus the displaced distance.

g. FI RWY Length (for flight inspection use only)**:** The distance from threshold/ displaced threshold marking ("piano keys") to threshold/ displaced threshold marking at the far end of the runway.

h. FI RWY Height (for flight inspection use only)**:** The center point elevation of the alternate update point described in "g" above.

i. Tdz Elevation: Highest elevation in the first 3,000' of available runway landing surface

j. **True Bearing:** Front course true bearing of runway expressed in degrees

k. **Ft Disp Th:** Distance in feet from runway threshold to displaced threshold

l. **Gradient:** Average gradient from threshold to the departure end of the runway (the difference of both threshold elevations divided by runway length)

m. **RVR:** Runway-Visual-Range

(1) Touchdown – Yes/ No

(2) Midpoint – Yes/ No

(3) Rollout – Yes/ No

n. **Rail:** Yes/ No

o. **Rwy Survey:** Obstacle Identification Surface (OIS code), date of source, and source for NFPG use only

p. **Assoc. Fac:** Indicates all precision NAVAID(s) associated with the runway

q. **VGSI Lights:** Refer to Appendix 10 for VGSI data submissions.

(1) Type: Type of VASI/ PAPI (e.g., VASI-2L, PAPI-4R)

(2) Owner: Alphabetic code for owner of equipment

(3) Pilot Cntl Freq: Frequency of PCL feature if installed

(4) Th Cross Ht: Threshold crossing height of intended glide path

(5) High Angle: N/A

(6) Com Date: Commissioning date of VGSI

(7) Com Angle: Published glide path angle

(8) DWB Elev: N/A

(9) DWB Thres: N/A

(10) Ref Pt Lat/Long: Runway reference point Lat/ Long

(11) Ref Pt Elev: Runway reference point elevation

(12) Ref Pt Thres: Distance from runway reference point to threshold

(13) Verified: Yes/ No (for TSS use only)

r. Lights:

(1) Config: Type of lighting system

(2) Len: Length of approach lights

(3) Owner: Alphabetic code for owner of equipment

(4) Com Dt: Commissioning date of lights system

(5) Pilot Cntl: Frequency of PCL feature if installed

A4.18 REMARKS: This block is reserved for additional information.

a. Topic: What the remark is regarding

b. Priority: The order assigned by the data specialist

c. Date: Date the remark was entered

d. **Remark:** Verbiage regarding the remark

(1) Name of Non-Federal Owner

(2) Data Source, including survey type

(3) Explanation of pending data

(4) VGSI Height Group 4 as provided by the NFPG

A4.19 GPS PROCEDURES (includes all RNAV(s))**:** This is a listing of all published procedures from the IFP SIAP database associated with the airport.

a. Control: Flight Inspection control number for tracking purposes

b. Description: Procedure name (minus the location)

c. Proc Type: Type of GPS procedure

d. Amendment: Amendment number

e. Runway: Servicing runway

f. Status: Active (A)

g. Owner: Alphabetic code for owner of procedure (refer to 8240.36 current version)

A4.20 SIAP(s): This is a listing of all the published instrument approach procedures from the IFP SIAP database associated with the airport.

a. **Nav Ident:** The transmitted ID of the primary NAVAID

b. **Nav Type:** The type of primary NAVAID

c. **Description:** Name of the approach procedure

d. **Amendment:** The latest revision number of the procedure

e. **Type:** The code that identifies whether the procedure is public, private, military, etc. (refer to Order 8240.36 (current version) owner code table

A4.21 Non-IFP SIAP(s): This is a listing of all the published instrument approach procedures not yet handled by the IFP SIAP database associated with the airport. It is maintained in a temporary record in the AVN database.

a. **Nav Ident:** The transmitted ID of the primary NAVAID

b. **Nav Type:** The type of primary NAVAID

c. **Description:** Name of the approach procedure

d. **Amendment:** The latest revision number of the procedure

e. **Type:** The code that identifies whether the procedure is public, private, military, etc. (refer to Order 8240.36 (current version) owner code table

A4.22 ASSOCIATED APPROACH PATH MONITOR

a. **Ident:** Airport ID plus the runway number, sub-letter for circling, or 3 digit number for visual.

b. **APM Procedure Type:** Type of APM (straight-in, circling, other)

Figure A4-1

AIRPORT DETAIL

Rpt Date:06/08/2006

Airport Detail for KRKR(RKR)
ROBERT S. KERR
POTEAU

Report : APT002

State: OKLAHOMA
Country: UNITED STATES
Phone :
Category: AIRPORT
FAR Part 139: No

Magnetic Variation/Year: E 3 2005
Site Nbr: 19169.1A
Sectional Chart: MEMPHIS
Survey Code: 3

Weather Station: N
Control Tower: N
Control Zone: U
Control Zone Operational:

Coordinates
Latitude: N 35° 01' 17.8600"
Longitude: W 094° 37' 16.5100"
Field Elevation: 451.0
Elipsoid Elevation:
Horz Datum: NAD83
Vert Datum: NGVD29

Office
Flight Inspection: OKC
Procedure Development: 120
Region Code: SW
Service Area: CNTL
OCC Code: MID

Auto Weather
Weather Source: AWOS
Location: KRKR
Type: 3
Frequency: 120.625
Service A: Y

Altimeter

Type	Airport ID	Field Alt Source	Latitude	Longitude	Start	End
L	KRKR	AWOS	N 35° 01' 17.8600"	W 094° 37' 16.5100"		

Runway List

18 A 36 A

Runway Detail

Landing Strip

Surface: ASPH F Width: 75 Physical Length: 4006

Rwy Number: 18
Status: A Survey: 3
Markings: BSC-F

Threshold
Latitude: N 35° 01' 37.3800"
Longitude: W 094° 37' 12.4400"
Elevation: 445.0
Elipsoid Elev: 342.3 E
Horz. Datum: NAD83
Vert. Datum: NGVD29

Displaced Threshold
Latitude:
Longitude:
Elevation:
Elipsoid Elev:
Horz. Datum: NAD83
Vert. Datum: NGVD29

Landing Length: 4006
Fl RWY Length: 4006
Fl RWY Height: 448
Tdz Elevation: 451.0
True Bearing: 189.75
Ft Disp Th:
Gradient: 0.1%
RVR Touchdown:
MidPoint:
Rollout:
Rail: No
RWY Survey:
Assoc. Fac:

KRKR18

VGSI Lights Type: PAPI-2L
Owner:S Pilot Cntl Freq:
Th Cross Ht: 49
High Angle:
Com.Date:
Com.Angle: 2.75
DWB Elev:
DWB Thres:
Ref Pt Lat: N 35° 01' 28.6100"
Ref Pt Long: W 094° 37' 14.2700"
Ref Pt Elev: 451.0
Ref PtThres: 900
Verified: N

Lights

Config	Len	Owner	Com Dt	Pilot Cntl
ALSF-1		A		
MIRL		S		

Rwy Number: 36
Status: A Survey: 3
Markings: NPI-F

Threshold
Latitude: N 35° 00' 58.3200"
Longitude: W 094° 37' 20.6000"
Elevation: 448.0
Elipsoid Elev: 345.2 E
Horz. Datum: NAD83
Vert. Datum: NGVD29

Displaced Threshold
Latitude:
Longitude:
Elevation:
Elipsoid Elev:
Horz. Datum: NAD83
Vert. Datum: NGVD29

Landing Length: 4006
Fl RWY Length: 4006
Fl RWY Height: 445
Tdz Elevation: 451.0
True Bearing: 9.75
Ft Disp Th:
Gradient: -0.1%
RVR Touchdown:
MidPoint:
Rollout:
Rail: No
RWY Survey:
Assoc. Fac:

KRKR36

Lights

Config	Len	Owner	Com Dt	Pilot Cntl
REIL		S		
MIRL		S		

Remarks

Topic	Priority	Date	Remark
SURVEY	1	11/05/99	ADAM SURVEY JUN 89.

GPS Procedures
Procedure

Control	Description	Proc Type	Amendment	Runway	Status	Owner
5589	RNAV (GPS) RWY 36	PROC/G	ORIG	36	A	B
5588	RNAV (GPS) RWY 18	PROC/G	ORIG	18	A	B

SIAPS

Nav Ident	Nav Type	Description	Amendment	Type
PGO	VORTAC	VOR/DME-A	ORIG	B

NON IFP SIAPS

Nav Ident	Nav Type	Description	Amendment	Type
PGO	VORTAC	VOR OR TACAN RWY 18	ORGA	B

Associated Approach Path Monitor

Ident	APM Procedure Type
KRKR36	STRAIGHT-IN

Figure A4-2
AIRPORT HEADER

Rpt Date:06/08/2006

Airport Inquiry for KRKR(RKR)
ROBERT S. KERR
POTEAU

Report : APT001

State: OKLAHOMA
Country: UNITED STATES
Phone :
Category: AIRPORT
FAR Part 139: No

Magnetic Variation/Year: E 3 2005
Site Nbr: 19169.1A
Sectional Chart: MEMPHIS
Survey Code: 3

Weather Station: N
Control Tower: N
Control Zone: U
Control Zone Operational:

Coordinates
Latitude: N 35° 01' 17.8600"
Longitude: W 094° 37' 16.5100"
Field Elevation: 451.0
Elipsoid Elevation:
Horz Datum: NAD83
Vert Datum: NGVD29

Office
Flight Inspection: OKC
Procedure Development: 120
Region Code: SW
Service Area: CNTL
OCC Code: MID

Auto Weather
Weather Source: AWOS
Location: KRKR
Type: 3
Frequency: 120.625
Service A: Y

Altimeter

Type	Airport ID	Field Alt Source	Latitude	Longitude	Start	End
L	KRKR	AWOS	N 35° 01' 17.8600"	W 094° 37' 16.5100"		

Runway List

18 A 36 A

Remarks

Topic	Priority	Date	Remark
SURVEY	1	11/05/99	ADAM SURVEY JUN 89.

GPS Procedures
Procedure

Control	Description	Proc Type	Amendment	Runway	Status	Owner
5589	RNAV (GPS) RWY 36	PROC/G	ORIG	36	A	B
5588	RNAV (GPS) RWY 18	PROC/G	ORIG	18	A	B

SIAPS

Nav Ident	Nav Type	Description	Amendment	Type
PGO	VORTAC	VOR/DME-A	ORIG	B

NON IFP SIAPS

Nav Ident	Nav Type	Description	Amendment	Type
PGO	VORTAC	VOR OR TACAN RWY 18	ORGA	B

Associated Approach Path Monitor

Ident	APM Procedure Type
KRKR36	STRAIGHT-IN

Figure A4-3

RUNWAY

Rpt Date:06/08/2006

KRKR(RKR)
ROBERT S. KERR
POTEAU

Report : RWY002

Magnetic Variation/Year:

Dir: E Variance: 3 Year: 2005

Landing Strip

Surface: ASPH F Width: 75 Physical Length: 4006

Rwy Number: 18

Status: A Survey: 3
Markings: Survey: BSC-F

Threshold
Latitude: N 35° 01' 37.3800"
Longitude: W 094° 37' 12.4400"
Elevation: 445.0
Elipsoid Elev: 342.3 E
Horz. Datum: NAD83
Vert. Datum: NGVD29

Displaced Threshold
Latitude:
Longitude:
Elevation:
Elipsoid Elev:
Horz. Datum: NAD83
Vert. Datum: NGVD29

Landing Length: 4006
Fl RWY Length: 4006
Fl RWY Height: 448
Tdz Elevation: 451.0
True Bearing: 189.75
Feet Displaced from Threshold:
Gradient: 0.1%
RVR Touchdown:
MidPoint:
Rollout:

RWY Survey:
Assoc. Fac:

VGSI Lights Type: PAPI-2L

Commissioned
Date:
Angle: 2.75

Type	Thres Cross Ht	High Angle
PAPI-2L	49	
Owner	Pilot Cntrl Freq	Verified
S		N

DownWind Bar
Elevation:
Threshold:

Reference Point:
Latitude: N 35° 01' 28.6100"
Longitude: W 094° 37' 14.2700"
Elevation: 451.0
Threshold: 900.0

Lights

Config	Len	Owner	Com Dt	Pilot Cntl
ALSF-1		A		
MIRL		S		

Rwy Number: 36

Status: A Survey: 3
Markings: Survey: NPI-F

Threshold
Latitude: N 35° 00' 58.3200"
Longitude: W 094° 37' 20.6000"
Elevation: 448.0
Elipsoid Elev: 345.2 E
Horz. Datum: NAD83
Vert. Datum: NGVD29

Displaced Threshold
Latitude:
Longitude:
Elevation:
Elipsoid Elev:
Horz. Datum: NAD83
Vert. Datum: NGVD29

Landing Length: 4006
Fl RWY Length: 4006
Fl RWY Height: 445
Tdz Elevation: 451.0
True Bearing: 9.75
Feet Displaced from Threshold:
Gradient: -0.1%
RVR Touchdown:
MidPoint:
Rollout:

RWY Survey:
Assoc. Fac:

Lights

Config	Len	Owner	Com Dt	Pilot Cntl
REIL		S		
MIRL		S		

Associated APM:

APM Ident	APM Procedure Type
KRKR36	STRAIGHT-IN

GPS Procedures

Procedure

Control	Description	Proc Type	Amendment
5589	RNAV (GPS) RWY 36	PROC/G	ORIG
5588	RNAV (GPS) RWY 18	PROC/G	ORIG

NON IFP SIAPS

Nav ID	Nav Type	Description	Amendment	Type
PGO	VORTAC	VOR OR TACAN RWY 18	ORGA	B

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APPENDIX 5
RHO-THETA DATA SHEET

The Rho-Theta data sheet provides the reference data for inspecting VOR, TACAN, DME, and VOT. The data sheet is divided into eleven areas: General Information, AFIS data, VOR (or VOT), TACAN, SIAP(s), Non-IFP SIAP(s), Receiver Checkpoints, ESV(s), Associated Approach Path Monitor, Restrictions, and Remarks.

A5.10 GENERAL. This block provides general information about the facility and associated airport.

a. **Service Area:** ATO service area responsible for the facility

b. **OCC Code:** FAA Operations Control Center area the facility is located in

c. **Horz Datum:** Horizontal datum – datum of coordinates (should be in WGS84 or NAD83 or equivalent)

d. **Vert Datum:** Vertical datum – datum of elevations (should be in NGVD29 or NAVD88 or equivalent)

e. **Country:** Two-letter code of country where facility is located

f. **Location:** Closest city associated with the facility

g. **St:** State

h. **Reg:** FAA region

i. **FIFO:** Flight Inspection Field Office with primary responsibility for the facility inspections

j. **Own:** Code identifying the owner of the facility

k. **ICAO:** International prefix code

l. **Class:** Service classification of the facility

m. **Voice:** The type of voice transmission (live, recorded, both, or none) and the recorded type (example: TWEB, HIWAS, etc.). If no voice transmission is available, will display ‘none’.

n. **Name:** Name of the facility if different from the location

o. **Yr/ Mvar:** Epoch year and magnetic variation

p. **Monitor-Cat:** Refer to FAA Order 8260.19

q. **Monitor-Lctn:** Location of the remote monitor

r. **ARTCC:** The enroute radar center associated with the facility

s. **NFPG-Procedures:** Office responsible for procedure development

A5.11 AFIS DATA. This block provides a quick reference for programming the AFIS.

a. **Ident:** The facility-transmitted identification

b. **Freq:** The frequency of the VOR. For TACAN(s), the associated VOR co-channel frequency

c. **Type:** The type of facility (i.e. VOR, VORTAC, etc)

d. **Lat/ Lon:** The latitude and longitude of the VOR antenna

e. **Hgt:** The MSL ground elevation of the antenna

f. **MVAR:** Epoch year and magnetic variation. This may be different from the associated airport.

g. **TLA/ TLO:** The latitude and longitude of the TACAN or DME antenna

A5.12 VOR (also VOT). This block provides information specific to the VOR portion of the system.

a. **Elev:** The MSL ground elevation of the antenna

b. **Doppler:** Yes or No

c. **Xmtr:** Single or Dual

d. **Restricted:** Yes or No

e. **Date Comm:** Date the facility was commissioned

f. **Date Recon:** Date the facility was reconfigured

g. **ESV:** Yes or No

h. **INS-RAD/ Dist/ Alt:** The radial / distances / and altitude of the area used for the airborne reference

i. **INS-RAD-Algn:** The transmitter number and misalignment of the INS-RAD or ARR when established

j. **Date ARR Established:** Date the ARR was established or re-established

k. **Align Orbit Dir/ Dist/ Alt/ Date:** The established alignment orbit for transmitter number, direction/ distance/ altitude/ and date.

l. **T1/ T2 Ref Mean Align:** The reference mean alignment listed in k above

m. **Equip Type:** Type of equipment

n. **Stby Power:** Type of standby power (Battery, commercial, generator, none, or unknown)

o. **Survey Accy:** Survey accuracy (for TSS use only)

A5.13 TACAN. This block's explanations are the same as Paragraph A5.12 above.

a. **Elev:** The MSL ground elevation of the antenna

b. **Channel:** TACAN channel

c. **Xmtr:** Single or Dual

d. **Restricted:** Yes or No

e. **Date Comm:** Date the facility was commissioned

f. **Date Recon:** Date the facility was reconfigured

g. **ESV:** Yes or No

h. **INS-RAD/ Dist/ Alt:** The radial / distances / and altitude of the area used for the airborne reference

i. **INS-RAD-Algn:** The transmitter number and misalignment of the INS-RAD or ARR when established

j. **Date ARR Established:** Date the ARR was established or re-established

k. **Align Orbit Dir/ Dist/ Alt/ Date:** The established alignment orbit for transmitter number, direction/ distance/ altitude/ and date.

l. **T1/ T2 Ref Mean Align:** The reference mean alignment listed in k above

m. **Equip Type:** Type of equipment

n. **Stby Power:** Type of standby power (Battery, commercial, generator, none, or unknown)

o. **Survey Accy:** Survey accuracy (for TSS use only)

A5.14 SIAP(s). This is a listing of all published instrument approach procedures from the IFP SIAP database where this is the primary NAVAID facility.

a. **Air ID:** Airport identifier

b. **Airport Name:** Name of the airport associated with the approach procedure

c. **State:** State

d. **Description:** SIAP name

e. **Amdt:** Amendment number

f. **Type:** The code for the owner of the SIAP

Table A5-1
Owner Codes

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

A5.15 NON-IFP SIAP(s). These are the new SIAP(s) that have not been added to the IFP SIAP database. It is temporary use only by TSS. Once the SIAP has been added to IFP SIAP, it will be listed in the SIAP(s) block. See Paragraph A5.14 above for a description of the entries.

A5.16 RECEIVER CHECKPOINTS. This is a listing of all receiver checkpoints associated with this facility.

a. **Type:** The facility component associated with the checkpoint/ airborne or ground

b. **Airport:** Name of the airport associated with the checkpoint

c. **Rad:** The radiated bearing from the facility

d. **Dist:** The slant-range distance in nautical miles from the facility to the checkpoint

e. **Alt:** The altitude to be flown for checking the airborne receiver checkpoint

f. **Description:** Description of the airborne receiver checkpoint

A5.17 ESV(s). This is a listing of all the ESV(s) associated with the facility.

a. **Cmpnt:** The facility that supports the ESV

b. **Qual:** The portion of the TACAN that supports the ESV (AZ, DME, or both)

c. **Svc Date:** Date the ESV checked satisfactory

d. **Remark:** Radial/ distance/ minimum altitude of the ESV (the maximum altitude may also be listed)/ fix name, route number, etc.

A5.18 ASSOCIATED APPROACH PATH MONITOR:

a. **Ident:** The airport ICAO identifier plus runway number

b. **Procedure Type:** Straight-in or circling

c. **Associated Type:** Primary or secondary

A5.19 RESTRICTION:

a. **Date:** Date the restriction was established

b. **Component:** Component of the facility that is restricted

c. **Description:** A detailed description of the restricted area (includes radials, distances, directions, altitudes, etc.)

A5.20 REMARKS: This area is reserved for additional helpful information.

A5.1101 Date: Date the remark was entered

A5.1102 Remark: Description of the remark

Figure A5-1
VORTAC

Date:06/08/06 12:28pm

*** * * VORTAC INQUIRY - ACTIVE * * ***

Service Area:CNTL OCC:MID DATUMS Hortz: NAD83 Vert: NGVD29 CTRY: US
LCTN: PAGE ST: OK REG: SW FIFO: OKC OWN: F

LCTN	PAGE	ST	OK	REG	SW	FIFO	OKC	OWN	F	ICAO	K	CLASS	L	VOICE		RECORDED	AWOS
NAME	RICH MOUNTAIN	MONITOR-CAT					MONITOR-LCTN		MLC	FSS				NFPO-PROCEDURES	120		
YR/MVAR	1995/E4								ARTCC	ZFW							

***** AFIS DATA *****

IDENT	PGO	HGT	2700
FREQ	113.50	MVAR	1995/E4
TYPE	VORTAC	TLA	N34-40-49.67
LAT	N34-40-49.67	TLO	W094-36-32.41
LON	W094-36-32.41		

***** SIAPS *****

Air ID	Airport Name	State	Description	Amdt	Type
KMEZ	MENA INTERMOUNTAIN MUNI	AR	VOR/DME-A	10	B
KRKR	ROBERT S. KERR	OK	VOR/DME-A	ORIG	B

***** NON IFP SIAPS *****

Air ID	Airport Name	State	Description	Amdt	Type
KRKR	ROBERT S. KERR	OK	VOR OR TACAN RWY 18	ORGA	B

***** VOR ***** DFL CODE - VTAC/V

ELEV	2700	EQUIP-TYPE	2ND-GEN
DOPPLER	N	STBY-POWER	G
XMTR	S	SURVEY-ACCY	6
RESTRICTED	Y		
DATE-COMM	07/01/59		
DATE-RECON			
ESV	Y		
INS-RAD/DIST/ALT	280 / ST10 STP 15 / 9000		
INS-RAD-ALGN	TX1 0.1		
ARR-DATE-ESTABLISHED	11/12/2004		

ALIGN ORBIT DIR/DIST/ALT/DATE
T1 CCW / 10 / 8000 / 11/12/04

T1 REF MEAN ALIGN 0
T2 REF MEAN ALIGN

***** TACAN ***** DFL CODE - VTAC/T

ELEV	2700	EQUIP-TYPE	2ND-GEN
CHAN	82X	STBY-POWER	G
XMTR	S	SURVEY-ACCY	6
RESTRICTED	Y		
DATE-COMM	04/09/71		
DATE-RECON			
ESV	Y		
INS-RAD/DIST/ALT	280 / ST10 STP 15 / 9000		
INS-RAD-ALGN	TX1 0.5		
ARR-DATE-ESTABLISHED	09/09/2003		

ALIGN ORBIT DIR/DIST/ALT/DATE
T1 CCW / 10 / 8000 / 09/09/03

T1 REF MEAN ALIGN .3
T2 REF MEAN ALIGN

***** RECEIVER CHECKPOINTS *****

***** ESVS *****

Cmpnt	Qual	Svc Date	Remark
VTAC	DME		R061/63NM/4000
VTAC			R069/63NM/4000
VTAC		03-MAY-00	R076/54NM/3200
		03-MAY-00	R076/54NM/3200
VTAC	AZIMUTH		R089/53NM/0-17500
VTAC		03-MAY-00	R352/47NM/3000

ASSOCIATED APPROACH PATH MONITOR

Ident	Procedure Type	Associated Type
KRKR36	STRAIGHT-IN	PRIMARY

RESTRICTION

01/01/2010 unusable 100° - 150° byd 10 NM blo 5000'

01/01/2010 AZIMUTH unusable 105° - 130° byd 10 NM blo 5000'

REMARKS

05/19/2000 05/03/00 ESVs ADDED PER ORDER SW 6050.12A DATED 05/03/00 & RICK WEBB, AVN-130

This report was last updated on : 06-JUN-06

APPENDIX 6
ASR/ ARSR DATA SHEET

The surveillance radar datasheet provides data regarding long-range, en route, and terminal systems.

A6.10 GENERAL. This block of information provides the general information regarding the system.

a. **GTM:** Facility needs MSAW check for General Terrain Mapping (Yes/ No)

b. **Service Area:** ATO Service Area responsible for the facility

c. **OCC Code:** FAA Operations Control Center area the facility is located in

d. **Lctn:** Name of associated city where facility is located as determined by NFDC

e. **Horz Datum:** Horizontal datum – datum of coordinates (should be in WGS84 or NAD83 or equivalent)

f. **Vert Datum:** Vertical datum – datum of elevations (should be in NGVD29 or NAVD88 or equivalent)

g. **Ctry:** Two-letter code of country where facility is located

h. **St:** State

i. **Reg:** Two-letter code of FAA region

j. **FIFO:** Flight inspection office responsible for flight checking facility

k. **Own:** Alphabetic code for owner of equipment

l. **Fac ID:** Facility identifier (See Paragraph A1.20)

m. **Lctn:** Location of the facility

n. **St:** Two-letter code of state where the antenna is located

o. **Reg:** FAA region where facility is located

p. **Yr/ Mvar:** Epoch year and magnetic variation

q. **Scope Loc:** Location of the controller scope and type of service (i.e., RATCF, ATCT, RAPCOM, etc.)

r. **NFPG Procedures Responsibility:** Office responsible for procedure development

s. **ARTCC:** Air Route Traffic Control Center where ARSR control scope is located (N/A for ASR facilities).

t. **ARTS:** Automated Radar Terminal System type (i.e., 1, 2, 3, etc.)

u. **ICAO:** The prefix code for the facility identification (i.e., continental U.S. = K, Alaska = P, etc.)

A6.11 ASR. This is the data specific to the Primary Radar.

a. **DFL Code:** Code to be used when completing DFL(s)

b. **ANT Lat/ Lon:** Surveyed location of the antenna

c. **Elev:** Surveyed MSL ground elevation of the antenna

d. **Ant Angle/ Tilt:** Tilt angle of antenna / fixed or variable

e. **Equip Type:**

NOTE: Equipment/ Antenna types are not limited to those listed in the tables.

Table A6-1
ASR Equipment Type Codes

3-12	ASR-7/F	FPN-66	MPN-14H	TPN-24
ALENIA	ASR-7E	FPN-84	MPN-14K	TPN-25
ASR	ASR-7F	FPS-124	MPN-25	TPN-31
ASR-11	ASR-8	GPN-12	MPN-26	TPN-40
ASR-23SS	ASR-8D	GPN-20	NPG-360B	TPN-73
ASR-4	ASR-9	GPN-22	NPG-460B	TPS-73
ASR-4B	ATCR-4T	GPN-25	RAYTHEON	TPS-75
ASR-4D	CPN-4A	GPN-27	S511H	TPS-79
ASR-5	CSFTAMTD	GPN-30	TA-10K	TSQ-107B
ASR-5D	FPN-36	MKN-14	TA10-MTD	TSQ-71
ASR-5E	FPN-40	MPN-13A	TPN-18	TW1374A
ASR-6D	FPN-40A	MPN-13C	TPN-18A	TW2038A
ASR-7	FPN-62	MPN-14	TPN-19	

Table A6-2
ARSR Equipment Type Codes

2-60M	ARSR-1F	FPS-20	FPS-66A	FPS20/60
AEROSTAT	ARSR-2	FPS-20A	FPS-67	LAR-2
ARSR	ARSR-3	FPS-20H	FPS-67A	TPS-75
ARSR-1	ARSR-4	FPS-60	FPS-67B	TRAC2400
ARSR-1A	ARSR-60	FPS-64	FPS-7	TW-1253A
ARSR-1B	ARSR-60A	FPS-64A	FPS-8	
ARSR-1D	ARSR-60M	FPS-65A	FPS-91A	
ARSR-1E	FPS-117	FPS-66	FPS-93A	

Table A6-3
SECRA Equipment Type Codes

5470	COSSOR	MODE-S*	RBD	TPX-54
ALENIA	FPN-40	MODE-S/*	RBDE-5	TPX-56
AT-914	FPN-66	MPN-14K	RS-970	TS 3098
ATCBI-2	FPS-117	MSSR	RSM-970	TW1398C
ATCBI-3	FPS-63	NPG-905	SSR990	UPX-14
ATCBI-3E	FSQ-84	NPG-905G	TPN-18A	UPX-23
ATCBI-4	GPN-30	OS-60	TPS-73	UPX-27
ATCBI-4E	GPX-8	OV-94	TPX	UPX-29
ATCBI-5	MARK-12	OV-95	TPX-41	UPX-37
ATCBI-6	MARK-2	OX-17	TPX-42	UPX-39
CMSSR40	MODE S	OX-60	TPX-42A	
CMSSR40	MODE-S	OX60	TPX-44	

f. **Serial No:** Serial number of the transmitting equipment

g. **Date Comm:** Date the system was commissioned

h. **Date Recon:** Date the system was reconfigured

i. **Owner:** See Paragraph A5.15d

j. **MTI:** Moving Target Indicator (Yes/ No)

k. **Oprnl Req:**

(1) Az: Vertical coverage azimuth

(2) Dist: Distance required with the vertical coverage

(3) Alt: Altitude required with the vertical coverage azimuth

l. **Ch-Avail:** Single or dual

m. **Stby-Power:** C = commercial, G = generator, B = battery, or N =none

n. **Survey:** Survey Accuracy (TSS use only)

o. **Monitor-Lctn:** Remote monitor location

p. **Video-Map:** Yes/ No

A6.12 SECRA. This is the data specific to the Secondary Radar. The data field explanations are the same as Paragraph A6.11 above.

A6.13 RESTRICTION. This block provides the information relating to unacceptable areas of coverage.

a. **Date:** The date the restriction was established

b. **Component:** Component of the facility that is restricted

c. **Description:** A detailed description of the restricted area (includes radials, distances, directions, and altitudes, etc.)

A6.14 SURVEILLANCE APPROACHES: All approaches are listed under the NON IFP SIAP(s) paragraph below.

A6.15 NON IFP SIAP(s): This block provides information of ASR approaches. It is for temporary use. New surveillance approaches that have not been entered into AVNIS will be listed here until they are transferred.

a. **Air ID:** Airport identifier

b. **Airport Name:** Name of airport where approach terminates

c. **State:** State

d. **Rwy:** Runway number where approach terminates

e. **MAP:** Missed Approach Point

f. **Type:** Owner of approach

A6.16 REMARKS: This block provides additional information that may clarify data or provide instructions to the flight inspection crew.

a. **Date:** Date the remark was entered

b. **Remark:** Verbiage

Figure A6-1

ASR

Date:06/08/06 11:44am *** * * ASR INQUIRY - ACTIVE * * ***

GTM: YES Service Area:CNTL OCC:MID DATUMS Hortz: NAD83 LCTN: OKLAHOMA CITY Vert: NAVD88 CTRY: US ST: OK REG: SW FIFO: OKC OWN: F

FAC-ID OKC LCNT OKLAHOMA CITY ST OK REG SW FIFO OKC YR/MVAR 1985/E7
SCOPE LOC WILL ROGERS WORLD TRACON NFPO-PROCEDURES RESPONSIBILITY 120 ARTCC
ARTS 3 ICAO K

*** * * ASR * * *** (DFL CODE - ASR)

ANT LAT	N35-22-42.64	EQUIP-TYPE	ASR-9	OWNER	F	CH-AVAIL	DUAL	SURVEY	8	VIDEO-MAP	YES
ANT LON	W097-37-07.98	SERIAL-NO		MTI	YES	STBY-POWER	G	MONITOR-LCTN			
ELEV	1249.0	DATE-COMM	09/11/92	OPRNL-REQ:	AZ	230 DIST	50	ALT	15000		
ANT:	ANGLE	DATE-RECON									
	TILT FIXED										

*** * * SECRA * * *** (DFL CODE - ASR/S)

ANT LAT	N35-22-42.64	EQUIP-TYPE	MODE-S	OWNER	F	CH-AVAIL	DUAL	SURVEY	8	VIDEO-MAP	YES
ANT LON	W097-37-07.98	SERIAL-NO		MTI	YES	STBY-POWER	G	MONITOR-LCTN			
ELEV	1249.0	DATE-COMM	05/23/94	OPRNL-REQ:	AZ	230 DIST	50	ALT	15000		
ANT:	ANGLE	DATE-RECON									
	TILT FIXED										

RESTRICTION:

Cmpnt	Svc Date	Remark
ASR	01/01/10	BYD 15 NM AND ABOVE 3000 FEET

SURVEILLANCE APPROACHES:

NON IFP SIAPS:

Air ID	Airport Name	State	Rwy	MAP	Type	Air ID	Airport Name	State	Rwy	MAP	Type
KTIK	TINKER AFB	OK	17	1.0	A	KTIK	TINKER AFB	OK	35	1.0	A
KPWA	WILEY POST	OK	35R	1.0	B	KOKC	WILL ROGERS WORLD	OK	17L	1.0	B
KOKC	WILL ROGERS WORLD	OK	17R	1.0	B	KOKC	WILL ROGERS WORLD	OK	35L	1.0	B
KOKC	WILL ROGERS WORLD	OK	35R	1.0	B						

ASSOCIATED APPROACH PATH MONITOR

Ident	Procedure Type	Associated Type
KOKC17P	STRAIGHT-IN	SECONDARY
KOKC35P	STRAIGHT-IN	SECONDARY
KPWA35P	STRAIGHT-IN	SECONDARY
KTIK17	STRAIGHT-IN	PRIMARY
KTIK35	STRAIGHT-IN	PRIMARY

REMARKS

01/09/2004 NGS 405 SURVEY DATED 12/02/2003.

This report was last updated on : 08-JUN-06

APPENDIX 7
PAR DATA SHEET

The Precision Approach Radar (PAR) data sheet provides the data associated with one system. This one system may provide service to multiple runways.

A7.10 GENERAL. The first block of data provides the general information regarding the airport and facility.

a. **Airport:** Name of airport where PAR is located

b. **Service Area:** ATO Service Area responsible for the facility

c. **OCC Code:** FAA Operations Control Center area the facility is located in

d. **Horz Datum:** Horizontal datum – datum of coordinates (should be in WGS84 or NAD83 or equivalent)

e. **Vert Datum:** Vertical datum – datum of elevations (should be in NGVD29 or NAVD88 or equivalent)

g. **Country:** Two-letter code of country where facility is located

h. **Arpt-ID:** Airport identifier

i. **RWY:** Runway number PAR serves

j. **Lctn:** Closest city associated with the facility

k. **St:** State

l. **Reg:** FAA region

m. **FIFO:** Flight Inspection Field Office with primary responsibility for the facility inspections

n. **Own:** Code identifying the owner of the facility

o. **Fac-ID:** Facility identifier with sub letter if more than one PAR at that site, (i.e., NBCA, NBCB) (See Paragraph A1.20)

p. **Ch-Avail:** Single or dual

q. Equip-Type:

NOTE: Equipment/ Antenna types are not limited to those listed in the tables.

Table A7-1
PAR Equipment Type Codes

CPN-4A	FPN-62B	GPN-22	NPG-435B	TPN-25
FPN-36	FPN-63	MPN-14	SPN-35C	TPN-31
FPN-40	FPN-63A	MPN-14H	TPN-18	TPN-32
FPN-61	FPN-63C	MPN-14K	TPN-18A	TPN-40
FPN-62	FPN-67	MPN-25	TPN-19	TPS-22
FPN-62A	FSQ-84	NPG-435	TPN-22	TSQ-71

r. Date Comm: Commissioning date

o. Date Recon: Reconfiguration date

p. Arpt-ID: Airport identifier

q. Lctn: Closest city associated with the facility

r. Serial-No: Serial number of equipment

s. Ant Lat/ Lon: Surveyed coordinates of antenna

t. Airport: Name of airport where PAR is located

u. St: State

v. Reg: FAA Region

w. FIFO: Flight Inspection Field Office with primary responsibility for the facility inspections

x. Own: Code identifying the owner of the facility

y. Survey-Accy: Survey accuracy (TSS use only)

z. Yr/ MVAR: Epoch year and magnetic variation

aa. FI-Rwy-Lgth (for flight inspection use only): The distance from threshold/ displaced threshold marking (“piano keys”) to threshold/ displaced threshold marking at the far end of the runway.

bb. FI RWY Hgt (for flight inspection use only): The center point elevation of the alternate update point described in FI-Rwy-Lgth above.

cc. NFPG Procedures Responsibility: Office responsible for procedure development

dd. **MTI:** Moving Target Indicator (yes or no)

ee. **Stby-Power:** Standby power

dd. **DFL Code:** Code to be used for reporting on DFL(s)

A7.11 RWY. Runway number served and status of runway (A = Active, P = Pending)

a. **Ident:** Facility identifier for runway being served (this is used in the Automated Flight Inspection System)

b. **Rw-Brg:** Runway true bearing

c. **MVAR:** Magnetic variation

d. **Status:** Status of PAR data (Active or Pending)

e. **GPI Lat/ Lon:** Coordinates of the Ground Point of Intercept for this runway

f. **PAR-Aln:** Commissioning angle of facility for this runway

g. **GS-Hgt:** Elevation of Ground Point of Intercept

h. **GS-Off:** PAR antenna offset

i. **Th-Hgt:** Elevation of threshold

j. **RE-Hgt:** Elevation of runway end (stop end of runway)

k. **TDZ Elevation:** Touchdown zone elevation

l. **TCH:** Threshold Crossing Height

m. **ILS-GS:** If there is an ILS glide slope also serving this runway (yes or no)

n. **GPI-Th:** Distance from Ground Point of Intercept to threshold

o. **Ant-CL:** Distance and direction PAR antenna to runway centerline (negative is left, positive is right)

p. **APL:** Lights associated with runway the PAR is serving

q. **Rwy-Length/ Width:** Runway physical length and width

r. **Dsplcd-Th-Dist:** Distance from threshold to displaced threshold

s. **Rwy-Ldg-Lgth:** Runway landing length

t. **Rwy-Brg:** Front course true bearing of runway express in degrees

u. **Th-Lat/Lon:** Surveyed coordinates of the threshold

v. **Th-Elev:** Threshold MSL elevation

w. **Th-Elip-Elev:** Threshold ellipsoid elevation (HAE)

x. **TDZ-Elev:** Touchdown zone elevation

y. **Dsplcd-Th-Lat/ Lon/ Elev/ Elip-Elev:** Displaced threshold data

z. **Re-Lat/ Lon/ Elev/ Elip-Elev:** Runway end (stop end of runway) data

A7.12 RESTRICTION:

a. **Date:** Date restriction was established

b. **Description:** Description of restriction

A7.13 REMARKS:

a. **Date:** Date remark was entered

b. **Description:** Remark verbiage

Figure A7-1

PAR

Date:06/08/06 11:45am

* * * PAR INQUIRY - PENDING * * *

Service Area:CNTL OCC:MID DATUMS Hortz: WGS84 Vert: CTRY: US

AIRPORT: NEW ORLEANS NAS JRB/ALVIN CALLENDER FLD ARPT-ID: KNBG RWY: 04 LCTN: NEW ORLEANS ST: LA REG: SW FIFO: OKC OWN: N

FAC-ID	NBG1	ARPT-ID KNBG	AIRPORT NEW ORLEANS NAS JRB/ALVIN CALLENDER FLD				
CH-AVAIL	DUAL	LCTN NEW ORLEANS	ST LA	REG SW	FIFO OKC	OWN	N
EQUIP-TYPE	FPN-63	SERIAL-NO 00002319	SURVEY-ACCY 6		MTI YES	STBY-POWER	G
DATE-COMM	06/30/95	ANT LAT N29-50-06.40	YR/MVAR 2000/E1			DFL CODE	PAR
DATE-RECOM		ANT LON W090-01-32.34	NFPO-PROCEDURES RESPONSIBILITY 120				

RWY:	04(A)	STATUS	Pending				
IDENT	NBG1	GPI-LAT	N 29-49-31.4700	GS-OFF	-300	TCH	50.6
RW-BRG	44.26	GPI-LON	W 090-2-06.6200	TH-HGT	-1.2	ILS-GS	YES
MVAR	E1	PAR-ALN	3.00	RE-HGT	-.8	GPI-TH	965.1
		GS-HGT	-1		ANT-CL L300		
						APL A C P Y	

RWY:	04(A)	STATUS	Pending				
RWY-LENGTH/WIDTH	10000/200	TH-LAT	N29-49-24.63	DSPLCD-TH-LAT		RE-LAT	N29-50-35.51
DSPLCD-TH-DIST		TH-LON	W090-02-14.27	DSPLCD-TH-LON		RE-LON	W090-00-55.03
RWY-LDG-LGTH	10000	TH-ELEV	-1.2	DSPLCD-TH-ELEV		RE-ELEV	-.8
RWY-BRG	44.26	TH-ELIP-ELEV	-86.1 E	DSP-TH-ELIP-ELEV		RE-ELIP-ELEV	-85.9 E
		TDZ-ELEV	2				

RESTRICTION:

REMARKS

12/15/2005 PENDING PAR FOR NEW PAR DATA RWY 04 ONLY PER NAVFIG, MARK BROWN REC'D 12/14/05.

11/05/1999 NAVY SURVEY 6 NOV 87.

This report was last updated on : 15-DEC-05

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APPENDIX 8
ILS DATA SHEET

The ILS datasheet provides data associated with Instrument Landing Systems, similar type systems, and systems established using the same type equipment.

A8.10 GENERAL. This block provides general information about the facility and associated airport.

a. **Airport:** Name of the airport where the facility is located

b. **Arpt-ID:** The airport ICAO identifier

c. **Rwy:** Runway number ILS serves

d. **Lctn:** Associated city of the airport where ILS is located

e. **St:** State

f. **Horz Datum:** Horizontal datum – datum of coordinates (should be in WGS84 or NAD83 or equivalent)

g. **Vert Datum:** Vertical datum – datum of elevations (should be in NGVD29 or NAVD88 or equivalent)

h. **Reg:** FAA region

i. **FIFO:** Flight Inspection Field Office with primary responsibility for the facility inspections

j **Ctry:** Two-letter code of country where ILS is located

k. **Own:** Code identifying the owner of the facility

A8.11 AFIS DATA. This block of data provides a quick reference for programming or verifying the AFIS data.

a. **Ident:** Facility identifier

b. **Rw-Brg:** Runway true bearing

c. **Freq:** Localizer frequency

d. **MVAR:** Magnetic variation

e. **CAT:** Published ILS category

f. **R-Ldg-Lgth:** Runway landing length

g. **GLA/ GLO:** Glide slope latitude/ longitude (if “AFIS-cords” field shows ‘antenna’, this is the glide slope antenna coordinates. If “AFIS-cords” field shows ‘Aim-Pt’, this is the centerline abeam the glide slope)

h. **GS-Ang:** Commissioned glide slope angle

i. **GS-Wid:** Glide slope width

j. **GS-Hgt:** Antenna ground elevation unless FAA Order 8240.47 is applied, then the reference elevation is used

k. **FI-Rwy-Lgth** (for flight inspection use only): The distance from threshold/ displaced threshold marking (“piano keys”) to threshold/ displaced threshold marking at the far end of the runway.

l. **GS-Off:** Direction and distance glide slope is from the runway centerline in feet (if "L1" appears here, the facility was commissioned using the aiming point coordinates)

m. **GS-OM-Dis:** Distance from runway centerline abeam the glide slope antenna to the outer marker in feet (or FAF if there is no outer marker)

n. **GS-TH-Dis:** Distance from runway centerline abeam the glide slope antenna to the runway threshold/ displaced threshold in feet

o. **TH-Hgt:** Threshold/ displaced threshold elevation

p. **RE-Hgt:** Runway end or stop end elevation

q. **FI RWY Hgt** (for flight inspection use only): The center point elevation of the alternate update point described in FI-Rwy-Lgth above.

p. **GS-LC-Dis:** Distance from the localizer to the runway centerline abeam the glide slope antenna in feet

r. **LC-Off:** Direction and distance localizer from the runway centerline in feet (negative is left, positive is right)

s. **LC-FCB:** Localizer front course true bearing (will be same as runway true bearing unless the localizer is offset)

t. **LC-BCB:** Localizer back course true bearing (will be same as runway true bearing unless the localizer is offset)

u. **LC-Wid:** Localizer commissioned width

A8.12 LOCALIZER. This block provides data specific to the localizer.

a. **DFL Code:** Code to be used for reporting DFL(s)

b. **Ant Lat/ Lon:** Coordinates of center of antenna array

c. **Elev:** Ground elevation of antenna array center

d. **Ant Type:** Refer to Table A1-2

e. **Dual Freq:** Yes or no

f. **US-Dist – FC/ BC:** Front/ Back course usable elevation and distance

g. **Clrnc Cvg-FC/ BC:** Front/ Back course clearance coverage (example: 90/35 150/35)

h. **CKPT-Desc FC/ BC:** Published description of FAF or checkpoint

i. **Loc-Width-Mx-Alert:** Localizer width maintenance alert tolerances

j. **Loc-Width-Initial:** Localizer initial width tolerances

k. **Xmtr:** Dual or single

l. **Equip-Type:** Refer to Table A1-1

m. **Stby Power:** Standby power

n. **ESV:** Yes or no

o. **Restricted:** Yes or no

p. **Loc-RE:** Distance from localizer to runway end (feet/ nm)

q. **Loc-TH:** Distance from localizer to threshold/ displaced Threshold (feet/ nm)

r. **Loc-IM:** Distance from localizer to Inner Marker (feet/ nm)

s. **Loc-MM:** Distance from localizer to Middle Marker (feet/ nm)

t. **Loc-OM:** Distance from localizer to Outer Marker (feet/ nm)

u. **Loc-FAF:** Distance from localizer to Final Approach Fix (feet/ nm)

v. **Mon-AL-WID:** Monitor width (wide/ narrow)

w. **Loc-AL-MX-Alert:** Localizer alignment maintenance alert tolerance

x. **Rollout:** One or two-letter code (refer to Order 8200.1). The following codes apply but are not in Order 8200.1.

(1) A/C: Awaiting check

(2) NR: Not required

y. **LCW-Tail:** Yes or no

z. **LCW-Ft-TH:** Localizer course width in feet at the threshold

aa. **Date Comm:** Date commissioned

bb. **Date Recon:** Date reconfigured

cc. **Survey Accy:** Survey accuracy code (TSS use only)

dd. **Voice:** Localizer voice (live, recorded, both, or none)

ee. **Rec Type:** Type of recorded voice (example: Tweb, Hiwas, etc)

A8.13 GLIDE SLOPE. This block provides data specific to the glide slope. This block will be completed only if there is a glide slope component.

a. **DFL Code:** Code to be used for reporting DFL(s)

b. **Elev:** Antenna ground elevation

c. **Ant Type:** Refer to Table A1-3.

d. **CL Elev Abm:** Runway center line abeam glide slope antenna elevation

e. **TCH / RDH:** Threshold Crossing Height/ Reference Datum Height

f. **Elev for Calc:** Site, reference, or crown elevation used to calculate TCH & GPI

g. **AFIS Coords:** AFIS glide slope coordinates (antenna or aim-pt)

h. **Ant Lat/ Lon:** Coordinates of glide slope antenna

i. **GS Wid MX Alert:** Glide slope width maintenance alert tolerance

j. **Xmtr:** Single or dual

k. **Equip Type:** Refer to Table A1-1.

l. **Freq:** Frequency of glide slope

m. **ESV:** Yes or no

n. **Restricted:** Yes or no

o. **GPI-TH:** Distance from Ground Point of Intercept to the threshold/ displaced threshold in feet

p. **RPI-TH:** Distance from Runway Point of Intercept to the threshold/ displaced threshold in feet

q. **GS Ang MX Alert:** Glide slope angle maintenance alert tolerance

r. **Dist TH Pt C:** Distance from the threshold/displaced threshold to Point "C" (feet/ nm)

s. **GS-TH:** Distance from runway center line abeam glide slope antenna to threshold/displaced threshold (feet/ nm)

t. **GS-IM:** Distance from runway center line abeam glide slope antenna to Inner Marker (feet/ nm)

u. **GS-MM:** Distance from runway center line abeam glide slope antenna to Middle Marker (feet/ nm)

v. **GS-OM:** Distance from runway center line abeam glide slope antenna to Outer Marker (feet/ nm)

w. **GS-FAF:** Distance from runway center line abeam glide slope antenna to Final Approach Fix (feet/ nm)

x. **Aim Pt Lat/ Lon:** Runway center line abeam glide slope antenna coordinates

y. **GS Ant Off:** Direction and distance glide slope antenna from runway center line (negative is left, positive is right)

z. **Mon Al Ang:** Monitor angle tolerance limits (high/ low)

aa. **Date Comm:** Date commissioned

bb. **Date Recon:** Date reconfigured

cc. **Survey Accy:** Survey accuracy code (TSS use only)

dd. **Stby Power:** Standby power

ee. **CBP-TH:** Clearance Below Path to threshold (S/ U). Code N specifies flight check not accomplished.

A8.14 ILS/ DME. This block provides the DME data associated with the system. This block will be labeled “Other DME” if a DME from another system is used (i.e., VTAC).

a. **DFL Code:** Code to be used for reporting DFL(s)

b. **Lat / Lon:** Coordinates of DME antenna

c. **Elev:** Ground elevation of DME antenna

d. **Xmtr:** Single or dual

e. **Channel:** DME channel number (example 44x)

f. **Restricted:** Yes or no

g. **DME Dist FAF/ Chkpt:** Distance DME to Final Approach Fix or checkpoint (nm)

h. **DME-GS-Abm-Dist:** Distance DME to centerline abeam the glide slope (measured down centerline) in feet

i. **DME Ant Off:** Distance DME antenna is offset from runway centerline in feet (negative is left, positive is right)

j. **DME-AER Dist:** Distance DME to threshold/displaced threshold (measured down centerline) in feet

k. **Data Comm:** Date commissioned

l. **Data Recon:** Date reconfigured

m. **Survey Accy:** Survey accuracy code (TSS use only)

n. **DME-SER Dist:** Distance of DME to stop end of runway (measured down centerline) in feet

A8.15 FAF/ MARKERS. This block provides the Final Approach Fix (FAF) and Marker Beacon data associated with this system. For FAF, the only data provided is Dist-TH, Tapeline and MSL-Altitude.

a. **Lat/ Lon:** Coordinates of marker beacons

b. **Elev:** N/A

c. **Dist-TH:** Distance to threshold/ displaced threshold

d. **Dist Dir CL:** Direction and distance marker beacon is from runway centerline extended (negative is left, positive is right)

e. **Date Comm:** Date commissioned

f. **Date Recon:** Date reconfigured

g. **Name/ Use:** Name or use of marker beacon

h. **Survey Accy:** Survey accuracy (TSS use only)

i. **Tapeline:** Tapeline elevation over the FAF or marker beacon

j. **Earth Curve:** N/A

k. **MSL Altitude:** Mean sea level altitude over the FAF or marker beacon

A8.16 AIRPORT DATA. This block provides the general airport data.

a. **Arp Lat/ Lon:** Airport reference point coordinates

b. **Field Elev:** MSL elevation of the highest point on all landing surfaces at the airport

c. **Fld Elip Elev:** HAE of the field elevation

d. **TH Lat/ Lon:** Threshold coordinates

e. **TH Elev:** Threshold MSL elevation

f. **TH Elip Elev:** Threshold ellipsoid elevation (HAE)

g. **RE Lat/ Lon/ Elev/ Elip Elev:** Runway end data

h. **Rwy-Lgth/ Widt:** Runway length and width

i. **Dsplcd-TH-Dist:** Distance from threshold to displaced threshold in feet

j. **Dsplcd TH Lat/ Lon/ Elev/ Elip Elev:** Displaced threshold data

k. **Rwy Ldg Lgth:** Runway landing length

l. **TDZ Elev:** Touchdown zone MSL elevation

m. **FAR Part 139:** Is the airport an FAR Part 139 airport (Yes or no)

A8.17 DECISION HEIGHTS. This block provides the published procedural data for Category II and III approaches.

a. **DH:** CAT II/ III Decision Heights (100', 150' and 200')

b. **Dist/ RALT:** Distance in feet from threshold/ radio altimeter setting

c. **Performance Class:** Refer to Order 8240.36, latest revision

d. **FPC Published:** Performance classification has been submitted to NFDC (Yes or no)

A8.18 GENERAL DATA. This block provides additional helpful data.

a. **Yr/ Mvar:** Epoch year and magnetic variation

b. **ICAO:** ICAO prefix identifier

c. **BC Status:** Back course status (restricted, unrestricted, unusable or none)

d. **Mon Cat:** Monitor category (example: 1, 2, 3)

e. **Rem Mon:** Remote monitor location (example: KOKC Twr)

f. **NFPG Procedures:** Office responsible for procedure development

A8.19 ASSOC-FACS. This block provides the associated facilities data.

a. **DFL Code**: Code to be used when completing DFL(s).

b. **Associated facilities**: DFL code; ident, frequency, and use (LOM, LMM, LIM, FAF, IAP, etc)

c. **APL:** type of light or lights associated with airport runway.

Codes:
A = approach ref light systems
C = centerline light systems
L = visual lead-in ref light systems
P = PAPI
R = REILS
T = taxi light system
V = VASI
Y = other (mirl, hirl, lirl, etc)
Z = touchdown zone light system

A8.20 PROCEDURES DATA. This block provides special flight inspection procedural data.

a. **Pseudo GS Lat/ Lon:** Latitude and longitude of pseudo glide slope based on localizer bearing

b. **Pseudo TH Lat/ Lon:** Latitude and longitude of pseudo threshold based on localizer bearing

c. **Psdo GS to Psdo TH:** Distance pseudo glide slope to pseudo threshold

d. **Loc Crosses C/ L:** Distance from threshold/ displaced threshold that the offset localizer course bearing will cross the centerline/ centerline extended (positive is in front of threshold, negative is beyond threshold)

A8.21 RESTRICTION. This block provides the restriction data associated with the ILS.

a. **Cmpnt:** Facility component(s) that is/ are restricted

b. **Date:** Date the restriction was established

c. **Description.** A detailed description of the restricted area (includes radials, distances, directions and altitudes, etc.)

A8.22 ESV. This block provides the ESV data associated with the ILS.

a. **Cmpnt:** Facility component(s) that supports the ESV

b. **Date:** Date the ESV was established

c. **Description.** Distance/ minimum and maximum altitude(s) of the ESV

A8.23 SIAP(s). This block lists the published instrument approach procedures from the IFP SIAP database.

a. **AirID:** ICAO identifier

b. **State:** State

c. **Description:** Name of approach

d. **Amdt:** Amendment of approach

e. **Type:** Code for owner of procedure

A8.24 NON-IFP PROCEDURES. These are the new SIAP(s) that have not been added to the IFP SIAP database. It is temporary use only by TSS. Once the SIAP has been added to the IFP SIAP, it will be listed in the SIAP(s) block. See Paragraph A8.23 above for a description of the entries.

A8.25 ASSOCIATED APPROACH PATH MONITOR:

a. **Ident:** The airport ICAO identifier plus runway number

b. **Procedure Type:** Straight-in or circling

c. **Associated Type:** Primary or secondary

A8.26 REMARKS. This area is reserved for additional helpful information.

a. **Date:** Date the remark was entered

b. **Remark:** Description of the remark

Figure A8-1

ILS, LOC, TLS, SDF

Date:06/08/06 12:58pm *** * * ILS INQUIRY - ACTIVE * * ***

Service Area:EAST OCC:ATL **DATUMS Hortz:** NAD83 **Vert:** NGVD29 **CTRY:** US

AIRPORT: JOHN F KENNEDY INTL **ARPT-ID:** KJFK **RWY:** 04R **LCTN:** NEW YORK **ST:** NY **REG:** EA **FIFO:** ACY **OWN:** F

*** * * AFIS DATA * * ***

IDENT	JFK	GLA	N40-37-40.08	GS-OFF	L1	GS-LC-DIS	8420
RW-BRG	30.76	GLO	W073-46-06.57	GS-OM-DIS	28079	LC-OFF	
FREQ	109.500	GS-ANG	3.00	GS-TH-DIS	1007	LC-FCB	30.76
MVAR	2000/W14	GS-WID	0.70	TH-HGT	13	LC-BCB	210.77
CAT	III	GS-HGT	13.1	RE-HGT	13	LC-WID	4.25
		R-LDG-LGTH	8400				

*** * * AIRPORT DATA * * ***

ARP-LAT	N40-38-23.10
ARP-LON	W073-46-44.13
FIELD-ELEV	13.1
FLD-ELIP-ELEV	
TH-LAT	N40-37-31.53
TH-LON	W073-46-13.25
TH-ELEV	13.1
TH-ELIP-ELEV	-92.9 E
RE-LAT	N40-38-42.85
RE-LON	W073-45-17.51
RE-ELEV	13.1
RE-ELIP-ELEV	-92.6 E
RWY-LGTH/WIDT	8400/200
DSPLCD-TH-DIST	
DSPLCD-TH-LAT	
DSPLCD-TH-LON	
DSPLCD-TH-ELEV	
DISP-TH-ELIP-ELEV	
RWY-LDG-LGTH	8400
TDZ-ELEV	13.1
FAR PART 139	Yes

*** * * LOCALIZER * * *** DFL CODE - ILS/L

ANT LAT	N40-38-51.57	XMTR	DUAL	LOC-RE	1027/ 0.169	LCW-TAIL	YES
ANT LON	W073-45-10.68	EQUIP-TYPE	WL MK20	LOC-TH	9427/ 1.551	LCW-FT-TH	700
ELEV	12.7	STBY-POWER	B	LOC-IM	10321/ 1.699	DATE-COMM	05/26/82
ANT-TYPE	LOG-PER	ESV	Y	LOC-MM	12036/ 1.981	DATE-RECON	01/26/06
DUAL-FREQ	YES	RESTRICTED	Y	LOC-OM		SURVEY-ACCY	6
US-DIST: FC	4513/ 18.0	BC		LOC-FAF	36499/ 6.007	VOICE	NONE
CLRNC-CVG:FC	90/35 150/35	BC		MON-AL-WID	W 4.97 N 3.53	REC TYPE	
CKPT-DESC: FC	OUTER MARKER			BC			

LOC-WIDTH-MX-ALERT: 4.67/ 3.83 LOC-AL-MX-ALERT: 4uA ROLLOUT: S

LOC-WIDTH-INITIAL: 4.84/ 3.66

DECISION-HEIGHTS:

DH	DIST/RALT	
(100)	903	112
(150)	1857	162
(200)	0	0

PERFORMANCE-CLASS III / E /

FPC PUBLISHED Y

*** * * GLIDE SLOPE * * *** DFL CODE - ILS/G

ELEV	13.8	XMTR	DUAL	DIST-TH-PT-C	901.1/ 0.148	GS-ANT-OFF	L400
ANT-TYPE	CAP-EFF	EQUIP-TYPE	WL MK20	GS-TH	1007 / 0.166	MON-AL-ANG	H 3.30/L 2.78
CL-ELEV-ABM	13.1	FREQ	332.600	GS_IM	1901/ 0.313	DATE-COMM	06/09/82
RDH	52.8(52.80)	ESV	N	GS-MM	3616/ 0.595	DATE-RECON	
ELEV-FOR-CALC	REF	RESTRICTED	Y	GS-OM		SURVEY-ACCY	6
AFIS-CORDS	AIMING PT	GPI-TH	1007.5	GS-FAF	28079/ 4.621	STBY-POWER	B
ANT: LAT	N40-37-42.10	RPI-TH	1007.0	AIM-PT:LAT	N40-37-40.08	CBP-TH	S
LON	W073-46-11.03			LON	W073-46-06.57		

GS-WID-MX-ALERT .82/.58 GS-ANG-MX-ALERT 3.12/ 2.88

GENERAL DATA:

YR/MVAR	2000/W14
ICAO	K
BC-STATUS	
MON-CAT	1
REM-MON	JFK ATCT
FULL-TIME 24 HOURS	
NFPO-PROCEDURES	110

*** * * ILS-DME * * *** DFL CODE - ILS/D

LAT	N40-38-53.29	XMTR	SINGLE	DME-DIS-FAF/CHKPT	6.0	DATA-COMM	05/13/83
LON	W073-45-13.18	CHANNEL	32X	DME-GS-ABM-DIST	8472	DATA-RECON	
ELEV	29	RESTRICTED	N	DME-ANT-OFF	L253	SURVEY-ACCY	6
				DME-AER-DIST	9479	DME-SER-DIST	1079

ASSOC-FACS

APL A C Y Z

	* FAF *	* MIDDLE-MARKER *	* INNER-MARKER *
LAT		N40-37-09.40	N40-37-23.90
LON		W073-46-30.60	W073-46-19.10
ELEV			
DIST-TH	27072/ 4.455	2609/ 0.429	894/ 0.147
DIST-DIR-CL		L4	R7
DATE-COMM		04/30/82	04/30/82
DATE-RECON			
NAME/USE			IM
SURVEY-ACCY		6	6
TAPELINE	1471.6	189.5	99.6
EARTH-CURVE	0.0	0.0	0.0
MSL-ALTITUDE	1503.6	202.9	112.8
DFL CODE		ILS/MM	ILS/MI

PROCEDURES DATA:

PSEUDO-GS-LAT: N00-00-00.00
PSEUDO-GS-LON: W000-00-00.00
PSEUDO-TH-LAT: N00-00-00.00
PSEUDO-TH-LON: W000-00-00.00
PSDO-GS-TO-PSDO-TH: 0
LOC-CROSSES-C/L: 0

RESTRICTION:

01/01/2010 GS unusable blo 2.5°
01/01/2010 LOC FRONT unusable byd 20° left of course byd 25° right of course

ESV:

LOC 01/01/10 25NM/6000

SIAPS:

AirId	State	Description	Amdt	Type
KJFK	NY	ILS RWY 4R	29B	B
KJFK	NY	ILS RWY 4R (CAT II)	29B	B
KJFK	NY	ILS RWY 4R (CAT III)	29B	B

NON IFP PROCEDURES:

ASSOCIATED APPROACH PATH MONITOR

Ident	Procedure Type	Associated Type
KJFK04P	STRAIGHT-IN	SECONDARY

REMARKS

COMM IAW 8240.47A 07/27/96 ARDH = 56.7 REF ELEV = 13.1

10/17/2002	RUNWAY 4R/22L OVERLAYED WITH NEW ELEVATION PROVIDED BY AIRPORT MANAGER. SINCE REF ELEVATION WAS THE CROWN ELEVATION, IT WAS ADJUSTED TO NEW CROWN ELEVATION.
11/05/1999	FAF: EBBEE INTXN/JFK 6 DME
11/05/1999	DME SERVES JOC RWY 22R AND JFK ILS RWY 04R
10/25/1993	NOS SURVEY 10/25/93. RUNWAY 4R/22L OVERLAYED WITH NEW ELEVATION PROVIDED BY AIRPORT MANAGER.
02/12/2003	WITH AMENDMENT 29B TO THE SIAP, ALL REFERENCE TO CONDA LOCATOR OUTER MARKER WAS REMOVED.

This report was last updated on : 05-JUN-06

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APPENDIX 9
MLS DATA SHEET

The MLS data sheet provides data associated with Microwave Landing Systems (MLS) and Mobile Microwave Landing Systems (MMLS).

A9.10 GENERAL. This block provides general information about the facility and associated airport.

a. **Airport:** Name of the airport where the facility is located

b. **Arpt-ID:** The airport ICAO identifier

c. **Rwy:** Runway number MLS serves

d. **Lctn:** Associated city of the airport where MLS is located

e. **St:** State

f. **Horz Datum:** Horizontal datum – datum of coordinates (should be in WGS84 or NAD83 or equivalent)

g. **Vert Datum:** Vertical datum – datum of elevations (should be in NGVD29 or NAVD88 or equivalent)

h. **Reg:** FAA region

i. **FIFO:** Flight Inspection Field Office with primary responsibility for the facility inspections

i. **Ctry:** Two-letter code of country where MLS is located

j. **Own:** Code identifying the owner of the facility

k. **FI-Rwy-Lgth** (for flight inspection use only): The distance from threshold/ displaced threshold marking (“piano keys”) to threshold/ displaced threshold marking at the far end of the runway.

l. **FI RWY Hgt** (for flight inspection use only): The center point elevation of the alternate update point described in FI-Rwy-Lgth above.

A9.11 AFIS DATA. This block of data provides a quick reference for programming or verifying the AFIS data.

a. **Ident:** Facility identifier

b. **Own:** Code identifying the owner of the facility

c. **Mon Cat:** Monitor category (example: 1, 2, 3)

d. **Rwy-FC Brg:** Runway front course true bearing

e. **Mon Loc:** Monitor location

f. **Rwy-BC Brg:** Runway back course true bearing

g. **Yr/ Mvar:** Epoch year and magnetic variation

h. **NFPG Procedures:** Office responsible for procedure development

i. **ICAO:** ICAO prefix identifier

j. **Performance Class:** N/A

k. **CAT:** Published MLS category

A9.12 AZIMUTH. This block provides data specific to the azimuth.

a. **DFL Code:** Code to be used for reporting DFL(s)

b. **Lat/ Lon:** Coordinates of center of antenna array

c. **Az Tru Dir:** Azimuth designed back course true bearing

d. **Az-Offs:** Direction and distance azimuth facility from the runway centerline in feet (negative is left, positive is right)

e. **Az-MDPT:** Distance from azimuth to MLS Datum Point (feet/ nm)

f. **Az Rwy Ang:** Angle between azimuth true direction and runway true bearing

g. **Ckpt-desc:** front course checkpoint description

h. **Az-TH:** Azimuth to threshold/ displaced threshold distance in feet/ meters

i. **Prop-Lim:** Proportional limits

j. **Az-Cn/ Pl:** Implemented azimuth beam geometry (CN=conical, PL=planar)

k. **Az-BMWD:** Azimuth beam width

l. **Channel:** Azimuth channel

m. **Xmtr:** Transmitters (single or dual)

n. **Az-RE:** Azimuth to stop end distance in feet/meters

o. **Clrnc-Cvg:** Clearance coverage

p. **Us-Dist:** Usable distance (altitude/ distance in nm)

q. **Dist-ESV:** Distance Expanded Service Volume (yes or no)

r. **Prop-ESV:** Proportional Expanded Service Volume (yes or no)

s. **Restricted:** Facility restricted (yes or no)

t. **OCI:** Out of Clearance Indication (if yes, see remarks)

u. **Ref-Monitor Limit:** Maximum Path Following Error (PFE) with course misaligned.

v. **Date-Comm:** Date commissioned

w. **Date Recon:** Date reconfigured

x. **Equip-Type:** Azimuth equipment type

NOTE: Equipment/ Antenna types are not limited to those listed in the tables.

Table A9-1
MLS Equipment Types

AIL
AVIATION SYSTEMS, INC
BENDIX
HAZELTINE
LORENZ
MRN-7
OTHER
PHILLIPS
TEXAS INSTRUMENT
THOMPSON
TRN-45
WILCOX

y. **Survey-Accy:** Survey accuracy (TSS use only)

z. **Ph-Ctr-Hgt:** Phase center height of azimuth antenna

aa. **Cl-Type:** Clearance type (0=Pulse, 1= SB)

A9.13 ELEVATION: This block provides data specific to the elevation antenna.

a. **DFL Code:** Code to be used in reporting DFL(s)

b. **Ant Lat/ Lon:** Elevation antenna coordinates

c. **Elev-MDPT:** MLS datum point elevation

d. **El-Hgt:** Elevation antenna phase center elevation

e. **El-Offs:** elevation offset from runway centerline direction and distance (negative is left, positive is right)

f. **MDPT Lat/ Lon:** MLS datum point coordinates

g. **MDPT-TH-DS:** MLS datum point to threshold/ displaced threshold distance in feet/ meters

h. **Xmtr:** Transmitters (single or dual)

i. **El-BMWD:** Elevation beam width

j. **El-MGP:** Elevation Minimum Glide Path (published glide path angle)

k. **TCH:** Threshold Crossing Height

l. **Dis-TH-Pt-C:** Distance from the threshold/ displaced threshold to Point "C" in feet/ meters

m. **MDPT-RE:** MLS datum point to stop end distance in feet/ meters

n. **Restricted:** Facility restricted (yes or no)

o. **El-Datum-Dht:** Height of the elevation antenna relative to the height of the MLS datum point (in meters)

p. **GPI-TH:** Distance from Ground Point of Intercept to threshold/ displaced threshold in feet

q. **Ref-Monitor Limit:** Maximum Path Following Error (PFE) with course misaligned.

r. **Date-Comm:** Date commissioned

s. **Date Recon:** Date reconfigured

t. **Equip-Type:** See Table A9-1

u. **Survey-Accy:** Survey accuracy code (TSS use only)

v. **RPI-TH:** Distance from Runway Point of Intercept to threshold/ displaced threshold in feet

A9.14 DME. This block provides data specific to the DME antenna.

a. **DFL Code:** Code to be used for reporting DFL(s)

b. **Lat/ Lon:** Coordinates of DME antenna

c. **Elev:** Phase center elevation of DME antenna

d. **Xmtr:** Single or dual

e. **Channel:** DME channel number (example 44x)

f. **DME Offs:** Distance DME antenna is offset from runway centerline in feet (negative is left, positive is right)

g. **DME-RE:** Distance DME to runway end

h. **Restricted:** Yes or no

i. **DME-MDPT:** DME to MLS datum point distance in feet

j. **DME-TH:** Distance DME to threshold/ displaced threshold (measured down centerline) in feet

k. **Data Comm:** Date commissioned

l. **Data Recon:** Date reconfigured

m. **Survey Accy:** Survey accuracy code (TSS use only)

A9.15 AIRPORT DATA. This block provides the general airport data.

a. **Arp Lat/ Lon:** Airport reference point coordinates

b. **Field Elev:** MSL elevation of the highest point on all landing surfaces at the airport

c. **Fld Elip Elev:** HAE of the field elevation

d. **TH Lat/ Lon:** Threshold coordinates

e. **TH Elev:** Threshold MSL elevation

f. **TH Elip Elev:** Threshold ellipsoid elevation (HAE)

g. **RE Lat/ Lon/ Elev/ Elip Elev:** Runway end data

h. **Rwy-Lgth/ Widt:** Runway length and width

i. **Dsplcd-TH-Dist:** Distance from threshold to displaced threshold in feet.

j. **Dsplcd TH Lat/ Lon/ Elev /Elip Elev:** Displaced threshold data

k. **Rwy Ldg Lgth:** Runway landing length

l. **TDZ Elev:** Touchdown zone MSL elevation

m. **DSPLCD RE Dist:** Distance runway stop end is displaced in feet.

n. **DSPLCD RE Lat/ Lon/ Elev /Elip Elev:** Displaced runway end data

o. **BAZ-Rwy-Ldg-Lgth:** Runway landing length when using the back azimuth

p. **BAZ-TDZ-Elev:** Back azimuth touchdown zone elevation

q. **FAR Part 139:** Is the airport an FAR Part 139 airport (Yes or no)

A9.16 ASSOC FACS. This block provides the associated light system(s).

APL: Type of light or lights associated with airport runway

Codes:
A = approach ref light systems
C = centerline light systems
L = visual lead-in ref light systems
P = PAPI
R= REILS
T = taxi light system
V = VASI
Y = other (MIRL, HIRL, LIRL, etc.)
Z = touchdown zone light system

A9.17 PROCEDURES DATA. This block provides special flight inspection procedural data.

a. **Pseudo EL Lat/ Lon:** Coordinates of pseudo elevation antenna based on azimuth bearing

b. **Pseudo TH Lat/ Lon:** Coordinates of pseudo threshold based on azimuth bearing

c. **Psdo EL to Psdo TH:** Distance pseudo elevation antenna to pseudo threshold

d. **AZ-Brg-Crosses C/L:** Distance from threshold/ displaced threshold that the azimuth course bearing will cross the centerline/ centerline extended (positive is in front of threshold, negative is beyond threshold)

A9.18 MOBILE MLS DATA: This block of data provides information unique to the military Mobile MLS (MMLS). This is applicable when the azimuth antenna is collocated with the elevation antenna. The azimuth true direction will parallel the runway.

a. **INB Tru Brg TH-AZ:** Bearing from threshold to azimuth antenna

b. **INB Tru Brg MAP-AZ:** Bearing from missed approach point to azimuth antenna

c. **Dist MAP-TH:** Distance from missed approach point to threshold/ displaced threshold in feet

d. **Dist MAP-AZ:** Distance from the missed approach point to azimuth antenna in feet

e. **MAP Lat/ Lon:** Missed Approach Point latitude/ longitude

A9.19 RESTRICTION. This block provides the restriction data associated with the MLS.

a. **Cmpnt:** Facility component(s) that is/ are restricted

b. **Date:** Date the restriction was established

c. **Description:** A detailed description of the restricted area (includes radials, distances, directions and altitudes, etc.)

A9.20 ESV. This block provides the ESV data associated with the MLS.

a. **Cmpnt:** Facility component(s) that supports the ESV

b. **Date:** Date the ESV was established

c. **Description:** Parameters of the ESV

(1) Distance: Starting radial of restriction

(2) Lower Altitude: Lowest altitude of ESV

(3) Upper Altitude: If an upper limit is defined

A9.21 SIAP(s): This block lists the published instrument approach procedures from the IFP SIAP database.

a. **AirID:** ICAO identifier

b. **State:** State

b. **Description:** Name of approach

c. **Amdt:** Amendment of approach

d. **Type:** Code for owner of procedure

A9.22 NON-IFP PROCEDURES. These are the new SIAP(s) that have not been added to the IFP SIAP database. It is temporary use only by TSS. Once the SIAP has been added to IFP SIAP, it will be listed in the SIAP(s) block. See Paragraph A9.21 above for a description of the entries.

A9.23 DATAWORDS. This block of information provides a checklist to compare the correct MLS data words (data sheet) to what is being transmitted from the ground facility.

a. **BAS:** Basic data word number (1 through 6)

b. **Item:** Name of the data word

c. **Value:** Expected value of the word

d. **Aux:** Auxiliary data word number (1 through 4)

e. **Az to TH Distance:** Azimuth to threshold distance in feet/ meters (rounded to 100 meters)

f. **Az Prop CVG:** Azimuth proportional coverage negative limit and positive limit

g. **Clrnc Signal Type:** Clearance signal type (0=Pulse, 1=SB)

h. **Min Glide Path:** Minimum Glide Path (rounded to $1/10^{th}$ degree)

i. **Status:** 0=Does not exist, 1=Exists

j. **Az Beamwidth:** Azimuth beam width (rounded to 1/2 degree)

k. **El Beamwidth:** Elevation beam width (rounded to 1/2 degree)

l. **DME Distance:** DME to MLS datum point in feet/ meters (rounded to nearest 12.5 meters)

m. **Az Zero Deg Plane (MAG):** Azimuth magnetic direction in whole degrees (Az true direction modified by magnetic variation value)

n. **BAz Zero Deg Plane (MAG):** Back azimuth magnetic direction in whole degrees (Az true direction modified by magnetic variation value)

o. **Baz Prop Cvg:** Back azimuth proportional coverage

p. **Baz Beamwidth:** Back azimuth beam width

q. **Ground Equip Ident:** MLS facility ident

r. **Az-Ant Offset:** Azimuth antenna offset from centerline in feet/ meters (rounded to nearest meter) (negative is left, positive is right)

s. **Az to Datum Point:** Azimuth antenna to MLS datum point distance in feet/meters (rounded to nearest meter)

t. **Az-Ant / Rwy Algn:** Angle between azimuth true direction and runway true bearing

u. **Az Antenna:** Azimuth antenna coordinate system (0=Conical, 1=Planar)

v. **Az Ant Hgt:** Azimuth antenna height in relation to MLS datum point in feet/ meters (rounded to nearest meter)

w. **El Antenna Offset:** Elevation antenna offset from centerline in feet/meters (rounded to nearest meter) (negative is left, positive is right)

x. **TH to Datum Point:** Threshold to MLS datum point distance in feet/meters (rounded to nearest meter)

y. **El Ant Hgt:** Elevation antenna height in relation to MLS datum point in feet/ meters (rounded to nearest $1/10^{th}$ meter)

z. **Datum Point Elev:** Elevation of MLS datum point in feet/meters (rounded to nearest meter)

aa. **TH Hgt:** Azimuth antenna height in relation to MLS datum point in feet/meters (rounded to nearest $1/10^{th}$ meter)

bb. **DME Offset:** DME antenna offset from centerline in feet/ meters (rounded to nearest meter) (negative is left, positive is right)

cc. **DME to Datum Point:** DME to MLS datum point distance in feet/meters (rounded to nearest meter)

dd. **DME Hgt:** DME antenna height in relation to MLS datum point in feet/meters (rounded to nearest meter)

ee. **RE to Datum Point:** Stop end to MLS datum point distance in feet/meters (rounded to nearest meter)

ff. **Baz Ant Offset:** Back azimuth antenna lateral offset in feet/ meters (rounded to nearest meter) (negative is left, positive is right)

gg. **Baz to Datum Point:** Back azimuth to MLS datum point distance in feet/ meters (rounded to nearest meter)

hh. **Baz Ant / Rwy Align:** Angle between back azimuth true direction and runway true bearing

ii. **Baz Antenna:** Back azimuth antenna coordinate system (0=Conical, 1=Planar)

jj. **Baz Ant Hgt:** Back azimuth antenna height in relation to MLS datum point in feet/ meters (rounded to nearest meter)

A9.24 ASSOCIATED APPROACH PATH MONITOR:

a. **Ident:** The airport ICAO identifier plus runway number

b. **Procedure Type:** Straight-in or circling

c. **Associated Type:** Primary or secondary

A9.25 REMARKS. This area is reserved for additional helpful information.

a. **Date:** Date the remark was entered

b. **Remark:** Description of the remark

Figure A9-1

MLS

Date:06/08/06 12:05pm

* * * MLS INQUIRY - ACTIVE * * *

Service Area:ALSKA OCC:PAC DATUMS Hortz: NAD83 Vert: CTRY: US

AIRPORT: GALBRAITH LAKE ARPT-ID: PAGB RWY: 12 LCTN: GALBRAITH LAKE ST: AK REG: AL FIFO: ANC OWN: P

*** * * AFIS DATA * * ***

IDENT	GLM	RWY-FC-BRG	152.31	RWY-BC-BRG	332.33	NFPO-PROCEDURES	130
OWN	P			YR/MVAR	1985/E29	ICAO P CAT I	
MON-CAT	1	MON-LOC	GBH ATCT			PERFORMANCE CLASS	

*** * * AZIMUTH * * *** DFL CODE - MLS/A

LAT	N68-28-13.46	AZ-TH	6431/ 1960.2	CLRNC-CVG	-40/+40	DATE-COMM	12/30/92
LON	W149-28-36.14	PROP-LIM	-40/+40	US-DIST	22666 / 20.0	DATE-RECON	
AZ-TRU-DIR	332.31	AZ-CN/PL	CN	DIS-ESV	NO	EQUIP-TYPE	BENDIX
AZ-OFFS	L0	AZ-BMWD	2.0	PROP-ESV	NO	SURVEY-ACCY	0
AZ-MDPT	6015	CHANNEL	536	RESTRICITED	Y	PH-CTR-HGT	2666
AZ-RWY-ANG	0	XMTR	SINGLE	OCI	N	CL-TYPE	SB
		AZ-RE	1231	REF-MONITOR LIMIT:			
CKPT-DESC	I-LCP DME 6.6/GABRI INTXN						

*** * * ELEVATION * * *** DFL CODE - MLS/E

ANT-LAT	N68-29-04.21	MDPT-TH-DS	416 /126.8	RESTRICTED	Y	DATE-COMM	12/30/92
ANT-LON	W149-29-59.54	XMTR	SINGLE	EL-DATUM-DHT	2.8m	DATE-RECON	
ELEV-MDPT	2664.0	EL-BMWD	1.5			EQUIP-TYPE	BENDIX
EL-HGT	2673.2	EL-MGP	3.60			SURVEY-ACCY	0
EL-OFFS	R360	TCH	34.6	GPI-TH	549.5	RPI-TH	562.2
MDPT-LAT	N68-29-07.68	DS-TH-PT-C	1039.9/317				
MDPT-LON	W149-29-41.55	MDPT-RE	4836	REF-MONITOR LIMIT:			

*** * * DME * * *** DFL CODE - MLS/D

LAT	N68-28-13.41	XMTR	SINGLE	RESTRICTED	Y	DATE-COMM	06/13/95
LON	W149-28-36.17	CHANNEL	54X	DME-MDPT	5969	DATE-RECON	
ELEV	2666	DME-OFFS	R401	DME-TH	6385	SURVEY-ACCY	6
		DME-RE	1183				

*** * * AIRPORT DATA * * ***

ARP-LAT	N68-28-46.84
ARP-LON	W149-29-23.82
FIELD-ELEV	2666.4
FLD-ELIP-ELEV	
TH-LAT	N68-29-10.87
TH-LON	W149-29-46.12
TH-ELEV	2664.8
TH-ELIP-ELEV	2687.9 E
RE-LAT	N68-28-25.55
RE-LON	W149-28-41.37
RE-ELEV	2656.4
RE-ELIP-ELEV	2679.8 E
RWY-LGTH/WIDTH	5200/150
DSPLCD-TH-DIST	
DSPLCD-TH-LAT	
DSPLCD-TH-LON	
DSPLCD-TH-ELEV	
DISP-TH-ELIP-ELEV	
RWY-LDG-LGTH	5200
TDZ-ELEV	2666.4
DSPLCD-RE-DIST	
DSPLCD-RE-LAT	
DSPLCD-RE-LON	
DSPLCD-RE-ELEV	
DISP-RE-ELIP-ELEV	
BAZ-RWY-LDG-LGTH	
BAZ-TDZ-ELEV	
FAR PART 139	Yes

APL L R V Y

PROCEDURES DATA:

PSEUDO-EL-LAT
PSEUDO-EL-LON
PSEUDO-TH-LAT
PSEUDO-TH-LON
PSEUDO-EL-TO-TH
AZ-BRG-CROSSES-C/L

MOBILE MLS DATA:

INB TRU BRG TH-AZ
INB TRU BRG MAP-AZ
DIST MAP-TH
DIST MAP-AZ
MAP LAT
MAP LON

RESTRICTION:

12/30/92 AZ unusable 123° - 133° byd 10 NM blo 4700'
12/30/92 ELEV unusable blo 2.5°
12/30/92 MLS unusable 153° - 093°

ESV:

SIAPS:

AirId	State	Description	Amdt	Type	AirId	Description	Amdt	Type
PAGB	AK	MLS RWY 12	ORIG	X				

NON IFP PROCEDURES:

DATAWORDS:

BAS	ITEM		VALUE
1	AZ-TO-TH-DISTANCE		6431 / 2000
1	AZ-PROP-CVG		--40 TO +40
1	CLRNC-SIGNAL-TYPE		SB
2	MIN-GLIDE-PATH		3.6
2	STATUS:	AZ	1
		EL	1
		DME	1
		BAZ	
3	AZ-BEAMWIDTH		2.0
3	EL-BEAMWIDTH		1.5
3	DME-DISTANCE		5969 / 1825
4	AZ-ZERO-DEG-PLANE (MAG)		303
4	BAZ-ZERO-DEG-PLANE (MAG)		
5	BAZ-PROP-CVG		
5	BAZ-BEAMWIDTH		
6	GROUND-EQUIP-IDENT		GLM

AUX	ITEM	VALUE
1	AZ-ANT-OFFSET	0
1	AZ-TO-DATUM-POINT	6015 / 1833
1	AZ-ANT/RWY-ALIGN	0.00
1	AZ-ANTENNA	0
1	AZ-ANT-HGT	2 / 1
2	EL-ANTENNA-OFFSET	360 / 110
2	TH-TO-DATUM-POINT	416 / 127
2	EL-ANT-HGT	9.2 / 2.8
2	DATUM-POINT-ELEV	2664 / 812
2	TH-HGT	.8 / .2
3	DME-OFFSET	401 / 122
3	DME-TO-DATUM-POINT	5969 / 1819
3	DME-HGT	2 / .6
3	RE-TO-DATUM-POINT	4836 / 1474
4	BAZ-ANT-OFFSET	
4	BAZ-TO-DATUM-POINT	
4	BAZ-ANT/RWY-ALIGN	
4	BAZ-ANTENNA	
4	BAZ-ANT-HGT	

REMARKS

11/05/1999	OWNER: ALYESKA PIPELINE SERVICE COMPANY.
11/05/1999	MLS USES I-LCP, CHANNEL 054X, ASSOCIATED WITH LCP ILS.
11/05/1999	AZ AND EL SURVEYED BY OWNER. 1/93.
11/05/1999	10NM FLIGHT INSPECTION MANUEVER FLOWN AT 5100'. LEVEL RUN MANEUVEUR CCONDUCTED FROM 10NM AT 4700'.
11/05/1999	SEE FOLDER FOR APPROACH PLATES.
11/05/1999	ERROR BUDGET: AZ PFE @ ARD = 0.178; @ 20NM = 0.214
11/05/1999	ERROR BUDGET: AZ PFN @ ARD = 0.102; @ 20NM = 0.123
03/25/2004	ERROR BUDGET: EL PFE 0.1396 @ ARD, 0.1675 @ 20 NM.
03/25/2004	ERROR BUDGET: EL PFN 0.0914 @ ARD, 0.1096 @ 20 NM.
11/15/2002	REIMBURSABLE # AC-0432-VN9. THIS NUMBER IS NOT UPDATED BY DATA BRANCH.
04/17/2002	AUX DATA WORDS DELETED, 03/22/02.

This report was last updated on : 05-DEC-05

APPENDIX 10
VGSI DATA SUBMISSION FORMAT

A10.10 GENERAL. The owner of the lighting system must submit the data for all visual glide slope indicator (VGSI) type lighting systems for input to the AVNIS database. Use one form per system.

This format must be sent directly to the Flight Inspection Central Operations Aeronautical Information Specialist by fax to (405) 954-3164, alternate 8214) **or** as an attachment to an **email** to mailbox: 9-AMC-AVN-AVN210-DATA@FAA.GOV. The data must be submitted before a flight inspection will be scheduled.

A10.11 REQUIRED DATA.

a. **Airport name:** Name as it appears on FAA Form 5010-1 (http://www.gcr1.com/)

b. **Location:** The associated city as per FAA Form 5010-1

c. **Runway:** The runway designation of the runway the lights serve (i.e., 4L, 6, 19C)

d. **Airport Identifier:** Assigned identifier of the airport

e. **Owner:** The entity that owns the lighting system

f. **Type of VGSI:** The lighting system installed using the descriptions in the Airport/ Facility Directory (A/FD). VGSI system, #of bars, left or right of runway (i.e., VASI-2L, PAPI-2L, PAPI-4R)

g. **Runway Reference Point (RRP) distance:** Distance measured down centerline from the threshold (or displaced threshold if one exists) to the RRP (point at which the intended glidepath would intercept the runway). VASI RRP is the point halfway 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.

h. **The angle of the VGSI:** This is the angle of the glidepath the pilot will follow, not the angle of each light.

A10.12 ADDITIONAL DATA. Provide the following information if available (optional):

The Threshold Crossing Height (TCH) at threshold (or displaced threshold if one exists) to the tenth of a foot. This is a desired data element. For VGSI TCH computations, use the distance to threshold from the RRP. 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 = 1,077.4 ft; RRP elevation = 1,075.4 ft.

TCH = [949.0 x tan 3.00] – [1077.4 –1075.4] = (949.0 x .05241) –2.0 = 49.73 –2.0 = 47.73 ft

a. **The elevation** of the runway centerline at the RRP to the tenth of a foot. (i.e.. 750.2). Submit elevations in NAVD88 vertical datum (may be in EGM-96 if military). This is a desired data element.

b. **Runway geodetic data:** The coordinates and elevations for both ends of the runway and all displaced thresholds. Submit coordinates in NAD83 horizontal datum (may be in WGS84 or equivalent). Submit elevations in NAVD88 vertical datum (may be in EGM96 if military)(data on record at flight check can be viewed at: http://avnwww.jccbi.gov/datasheet).

A10.13 Submitted by. Provide the following information of the person submitting the data. If this person is not the person to contact regarding scheduling of flight inspection, please include a contact name and number also.

a. **Name:** Name of person submitting the data

b. **Title:** Position of the person submitting the data

c. **Organization:** If applicable, the organization of the person submitting the data

d. **Date:** Date data was gathered/ submitted

e. **Phone:** Phone number of person submitting the data

f. **E-mail:** Email address person submitting the data

Figure A10-1

VGSI DATA SUBMISSION FORMAT

PRELIMINARY DATA INFORMATION FOR NEW/RELOCATED VGSI FACILITIES			
REQUIRED DATA:			
Airport Name:		Location:	
Runway:	Airport Identifier:	Owner of VGSI:	
Type of VGSI (Ex: VASI-2L, PAPI-2L, PAPI-4R):			
The distance in feet from the Runway Reference Point (RRP) to the runway threshold (or the displaced threshold if one exists). Distances to the nearest foot**.**		feet	
The angle the VGSI is set to the hundredth of a degree**.**			
PROVIDE FOLLOWING DATA IF AVAILABLE:			
The Threshold Crossing Height at threshold (or displaced threshold if one exists) to the tenth of a foot.			
The elevation of the runway centerline at the RRP. to the tenth of a foot. (Ex. 750.2) Submit elevations in NAVD88 vertical datum (may be in EGM-96 if military)		feet	
The coordinates for both ends of the runway and all displaced thresholds Submit coordinates in NAD83 horizontal datum (may be in WGS84 or equivalent) (data on record at flight check can be viewed at: http://avnwww.jccbi.gov/datasheet/)			
Runway #	Latitude To the hundredth of a second	Longitude To the hundredth of a second	Elevation to the tenth of a foot
SUBMITTED BY:			
Name:		Date:	
Title:		Phone:	
Organization:		E-mail:	
Data forms should be sent to AVN by fax (405) 954-3164 or e-mail 9-AMC-AVN-AVN210-DATA@FAA.GOV Questions? (405) 954-5698/ 5878/ 7937/ 5930.			

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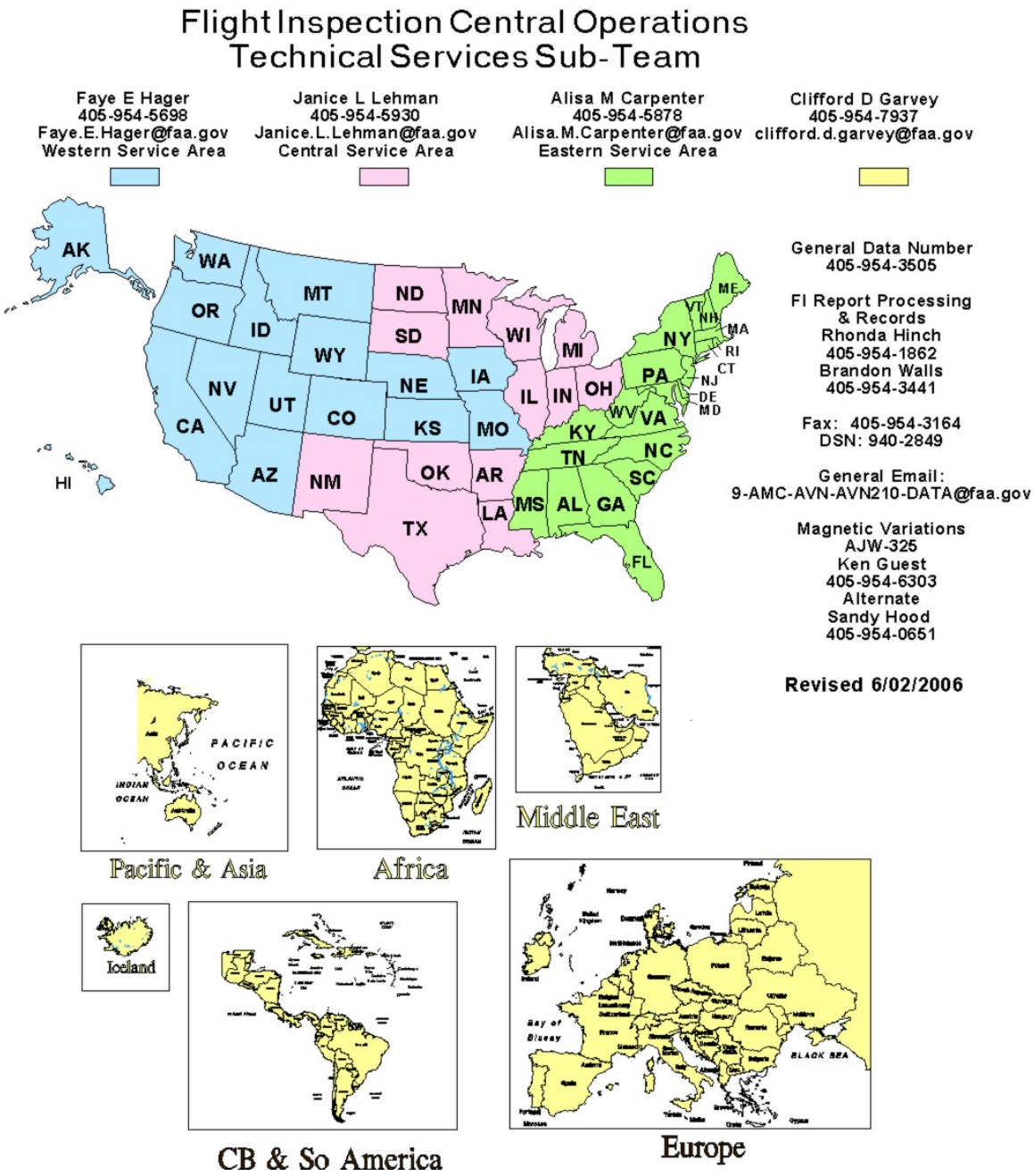
APPENDIX 11
AREA OF RESPONSIBILITY

Each AIS is assigned the following geographical Area of Responsibility (AOR).



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