

Flight Procedures Cover Page	Task Action: Cancellation	Task Type: SID	Estimated Chart Date: 07/09/2026	APWS Task ID: 573CF9DFC9F442E4BD55CA5BBFB9B449	APWS Project ID: 72D22D9A4FAF411FB862A878D257E26E
Procedure: MULTI-SENSOR RNAV (FMS) "TOMICHI CREEK" DEPARTURE RWY 06, ORIGINAL		Enroute: YES	Specialist: Hirst, Charles		Agreement Number:
Airport ID: KGUC			Airport City: GUNNISON		State: CO
Facility ID:	Facility Type:	Flight Inspection Remark Type:			
Procedure Comments: CANCEL SPECIAL PROCEDURE, REPLACED BY PUBLIC LISSA AND GYLES RNAV SIDS. CANCEL 8260-7 WAIVER FOR MULTI-SENSOR RNAV (FMS) "TOMICHI CREEK" DEPARTURE RWY 06, ORIGINAL REASON FOR WAIVER CANCELLATION – SPECIAL PROCEDURES AT KGUC CANCELLED PER AFS & ATC REQUEST, REPLACED BY PUBLIC GYLES & LISSA (RNAV) SIDS. FOR ADDITIONAL INFORMATION CONTACT CASIMIR TABAKA, MANAGER 405-954-7931. 4/22/2026: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 02/04/2026. 8260-2: 1. FIX MAKEUP HBU VOR/DME MAG BRG/TRUE BRG CHANGED FROM 079.58/093.58 TO 079.57/093.57. 8/31/2026 THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 02/04/2026. 8260-2 DUFEL: 1. ADDED SPECIAL IAP RNAV (RNP) M RWY 25 BACK IN TO FIX USE. 2. ADDED SPECIAL IAP TO REQUIRED CHARTING. QUALITY 16 CHECKED QUALITY 12 CHECKED					



US Department of Transportation
Federal Aviation Administration

FLIGHT PROCEDURES STANDARDS WAIVER

Reports Identification Symbol FS 8220-7

Date

November 7, 1991

1. Flight Procedure Identification

MULTI-SENSOR RNAV (FMS) "Tomichi Creek" Departure Procedure Rwy 6, Original, Special Takeoff and Departure Procedure, Gunnison County, Gunnison, Colorado

2. Waiver Required And Applicable Standard

Positive course guidance: 8260.3B (TERPS), paragraph 1203 and 1203b require departure routes to be based on positive course guidance acquired within 5 nautical miles after completion of the turn on departures requiring turns.

3. Reason For Waiver (Justification for nonstandard treatment)

This departure procedure requires a right turn to DUFEL Intersection via the FMS track. Course guidance will be provided by the aircraft's Flight Management System (FMS) RNAV without radio updating. No TERPS criteria currently exists for this type of procedure, and this type of system, however a similar procedure was approved for use at Eagle, Colorado on December 15, 1990. That procedure has proven to be beneficial to air carrier operations both in terms of reduced departure minimums and enhanced safety.

Note: The interim guidelines for developing the ILS missed approach were established in accordance with the accompanying waiver dealing with "Interim Guidelines".

4. Equivalent Level of Safety Provided

This is a Special Instrument Departure procedure that will only be flown by air carriers operating Flight Management System (FMS) RNAV equipped aircraft certified for terminal IFR operations without radio updating and capable of a sustained climb of 500 feet per nautical mile to 12000 feet.

Technical data provided by American Airlines at the October 24, 1990, meeting as confirmed by AFS-410 indicates this system meets an acceptable level of accuracy for this type of operation. American Airlines' letter dated November 1, 1991, confirms the Boeing 757's capability to sustain a climb of 500 feet per nautical mile to 12000 feet.

This departure procedure overlies the FAR 121.189 route allowing a simple transition to a lower climb gradient in the event of an emergency increasing the level of safety.

5. How Relocation Or Additional Facilities Will Affect Waiver Requirement

The development of RNAV Departure criteria would eliminate the requirement for this waiver. When that criteria becomes available this departure procedure will be reviewed and/or amended and this waiver will be cancelled.

6. Coordination With User Organizations (Specify)

American Airlines, Delta Airlines.

7. SUBMITTED BY

Office Identification

ANM-220

Title

Manager, Flt Procedures Branch

Signature

Preston C. Gardner, Jr.

8. REGIONAL/FIFO ENDORSEMENT

X	Approval Recommended
	Not Recommended
	Not Required

Comments

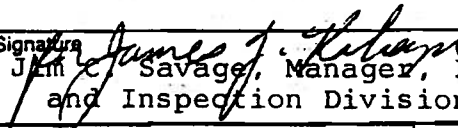
Date	Routing Symbol	Signature
11/13/91	OKC FIFO	 Larry L. Patterson, Manager

9. AVN ENDORSEMENT

X	Approval Recommended
	Not Recommended
	Not Required

Comments

Recommend approval based upon equivalent level of safety in block 4.

Date	Routing Symbol	Signature
Nov. 22, 1991	AVN-200	 Jim C. Savage, Manager, Flight Procedures and Inspection Division

10. AFO ACTION

X	Approved
	Disapproved
	Not Required

Comments

This waiver is approved based on the equivalent level of safety in Block 4.

CANCEL 8260-7 WAIVER FOR MULTI-SENSOR RNAV (FMS) "RIVER" DEPARTURE RWY 24,
ORIGINAL

REASON FOR WAIVER CANCELLATION - SPECIAL PROCEDURES AT KGUC CANCELLED PER
AFS & ATC REQUEST, REPLACED BY PUBLIC GYLES & LISSA
RNAV) SIDS.

Date	Routing Symbol	Signature
12/17/91	AFS-400	



U.S. Department of Transportation
Federal Aviation Administration

FLIGHT PROCEDURES STANDARDS WAIVER

Reports Identification Symbol FS 8220-7

Date

November 7, 1991

1. Flight Procedure Identification

MULTI-SENSOR RNAV (FMS) SPECIAL Instrument Procedures, Gunnison County, Gunnison, Colorado (Interim Guidelines)

2. Waiver Required And Applicable Standard

Multi-Sensor System or Flight Management System (FMS) RNAV Criteria: No criteria currently exists in 8260.3B (TERPS), Chapter 9 ILS, Chapter 12 Departure Procedures, Chapter 15 RNAV, or 8260.36 MLS, concerning the development of RNAV Takeoff and Departure Procedures or non-RNAV approaches with an RNAV segment in the procedure.

3. Reason For Waiver (Justification for nonstandard treatment)

This waiver is required to support the development of Multi-Sensor System, Flight Management System (FMS) RNAV departure, and missed approach procedures that overlie the FAR 121.189 and/or balked landing routes. These procedures enhance operational safety by allowing a simple transition in the event of an emergency. This waiver is intended to document the steps used to identify acceptable interim guidelines for developing procedures that will take advantage of the unique operational characteristics of certain aircraft equipped with Multi-Sensor System, Flight Management System (FMS) RNAV.

4. Equivalent Level of Safety Provided

These procedures were developed in accordance with the guidelines set forth in this waiver as agreed to in meetings conducted by the Flight Procedures Standards Branch, AFS-420, in Oklahoma City, OK on October 24, 1990, and September 26, 1991. Both the runway 6 and 24 departure procedures will require this waiver dealing with interim guidelines for developing these procedures, and a waiver to TERPS, Chapter, 12, paragraph 1203, and 1203b. dealing with course guidance. The ILS procedure will require this waiver and a waiver to TERPS, Chapter 9, paragraph 944, and 945 dealing with a climb gradient in the missed approach segment.

Item 4. Equivalent Level of Safety continued on Attachments (6 pages)

5. How Relocation Or Additional Facilities Will Affect Waiver Requirement

The development of RNAV Departure criteria, and ILS/RNAV Approach and Missed Approach criteria would eliminate the requirement for this waiver. When that criteria becomes available the procedures at Gunnison, Colorado will be reviewed and/or amended and this waiver will be cancelled.

6. Coordination With User Organizations (Specify)

American Airlines, Delta Airlines.

7. SUBMITTED BY

Office Identification

ANM-220

Title

Manager, Flt Procedures Branch

Signature

Preston C. Gardner, Jr.

8. REGIONAL/FIFO ENDORSEMENT

X

Approval Recommended

Not Recommended

Not Required

Comments

Date

11/13/91

Routing Symbol

OKC FIFO

Signature

Harry W. Patterson, Manager

9. AVN ENDORSEMENT

X

Approval Recommended

Not Recommended

Not Required

Comments

Recommend approval based upon equivalent level of safety in block 4.

Date

Nov. 22, 1991

Routing Symbol

AVN-200

Signature

Jim C. Savage, Manager, Flight Procedures
and Inspection Division

10. AFO ACTION

X

Approved

Disapproved

Not Required

Comments

This waiver is approved based on the equivalent level of safety in Block 4.

CANCEL 8260-7 WAIVER FOR MULTI-SENSOR RNAV (FMS) "RIVER" DEPARTURE RWY 24,
ORIGINAL

REASON FOR WAIVER CANCELLATION - SPECIAL PROCEDURES AT KGUCU CANCELLED PER
AFS & ATC REQUEST, REPLACED BY PUBLIC GYLES & LISSA
RNAV) SIDS.

Date

12/7/91

Routing Symbol

AFS-500

Signature

Chris Rasmussen

ATTACHMENT

INTERIM GUIDELINES

Multi-Sensor RNAV (FMS) Special Procedure
Gunnison, Colorado

4. Equivalent Level of Safety Provided (continued)

- A. The terms Flight Management System (FMS), Flight Management Computer System (FMCS), and the Inertial Reference System (IRS) were among those used in both the October 24, 1990, and the September 26, 1991 meetings. FMCS and the IRS along with other systems are referenced in the Boeing 757 Flight Manual, and Advisory Circular 20-130, Airworthiness Approval of Multi-sensor Navigation Systems for use in the U.S. National Airspace System (NAS) and Alaska. Neither the Boeing 757 Flight Manual nor AC 20-130 reference the FMS. Order 8260.3B (TERPS) does not reference any of these systems, instead TERPS, paragraph 1500a(4) and 1501f(7) and AC 20-130 refer to systems that perform these functions as a Multi-sensor System RNAV. The FMS is referenced in the Flight Management Computer System Description Document Number D240T410-4, Section 1.2, Scope, which states in part the Flight Management Computer System is a subsystem of the Flight Management System. Neither the term "Flight Management System" nor the acronym "FMS" are supported by, or even appear in any other documents.

In the absence of supporting documentation, or criteria, and to assure consistency of application for the purpose of this waiver the acronym "FMS" is considered to be synonymous with the type of RNAV that supports the desired operation. To ensure positive procedures identification during communications with air traffic control the following guidelines were used to identify the procedures:

- (1) Departure procedures are identified in accordance with 8260.3B (TERPS), Chapter 15, paragraph 1503 except that "(FMS)" is added as follows for clarity: Multi-Sensor RNAV (FMS) "Name" Departure Procedure Rwy No.

Example: Multi-Sensor RNAV (FMS) "River" Departure Procedure Rwy 24

- (2) Approach procedures other than RNAV approaches are identified in accordance with 8260.19A, Chapter 8, paragraph 802a. and b. except that "(FMS)" is added as follows for clarity: (IDENT) FACILITY TYPE (FMS) Rwy No

Example: (I-GUC) ILS/DME (FMS) Rwy 6

ATTACHMENT

INTERIM GUIDELINES

Multi-Sensor RNAV (FMS) Special Procedure
Gunnison, Colorado

4. Equivalent Level of Safety Provided (continued)

- B. These are Special Instrument Procedures that will only be flown by air carriers operating specific aircraft types equipped with Multi-Sensor System RNAV, Flight Management System (FMS) certified for this specific operation.
- C. Manager, All Weather Operations Branch, AFS-410 witnessed American Airlines validation flights at Eagle, Colorado and attested to the Boeing B-757 Flight Management System RNAV performance and capability for this type of operation.
- D. Manager, Technical Programs Division, AFS-400 memorandum dated October 30, 1991 confirmed the Boeing 757 Flight Manual, page 14, Flight Management Computer System (FMCS) section allows use of the FMS to supplement that portion of the ILS missed approach that will be flown without course guidance.
- E. These procedures will be demonstrated to the Manager, All Weather Operations Branch, AFS-410 prior to being issued to an air carrier through their respective Principal Operations Inspector.
- F. Manager, Standards Development Branch, AVN-540 agreed to:
 - (1) The acceptability of using 8260.3B, Chapter 12 criteria for the development of Flight Management System RNAV departure procedures in the absence of appropriate RNAV departure criteria.
 - (2) The acceptability of using 8260.3B, Chapter 9, paragraphs 945 for the development of the ILS missed approach segment in the absence of appropriate ILS/RNAV criteria. A waiver to 8260.3B, Chapter 944 will be required for missed approach climb gradient.
- G. The following guidelines were agreed to by the attendees and/or are required by current criteria:
 - (1) Waypoints will be identified in accordance with ARINC Specification 424, page 38c, paragraph 7.2.6 b. (1), (2), and (3) except the first character should be the letter "F" and the bearing/distance should be from the Airport Reference Point (ARP) vice a VHF Navigation Aid. Waypoints collocated with existing intersections will not be renamed.

ATTACHMENT

INTERIM GUIDELINES

Multi-Sensor RNAV (FMS) Special Procedure
Gunnison, Colorado

4. Equivalent Level of Safety Provided (continued)

- (2) The Multi-Sensor RNAV (FMS) "Tomichi Creek" Departure Procedure Rwy 6, FAR Part 121.189, ILS/DME (FMS) Rwy 6 missed approach, and the balked or rejected landing procedure for runway 6 all have a common route or intended flight path through waypoint F088E.
- (3) The Multi-Sensor RNAV (FMS) "River" Departure Procedure Rwy 24, FAR Part 121.189, and the balked or rejected landing procedure for runway 24 all have a common route or intended flight path through waypoint F208I.
- (4) Takeoff and Departure Procedures
 - (a) The normal departure routes overlie the FAR Part 121.189 routes to the maximum extent possible.
 - (b) Each departure procedure will require a ceiling and visibility sufficient to see and avoid close in obstacles during visual portion of the departure procedure.
 - (c) Each departure procedure will require a climb gradient sufficient to clear all obstacles in the obstacle identification surface.
 - (d) Areas searched for obstacles were constructed per 8260.3B, paragraph 1203c and Figure 116L Combination Straight and Turning Departures. This provided a departure area large enough to encompass aircraft operations without course guidance when in practice course guidance will be provided by the Multi-Sensor System RNAV referred to as the (Flight Management System or FMS).
 - (e) 8260.3B, paragraph 1207b, Departure Routes: Shall be expressed as climb "VIA FMS TRACK".
- (5) ILS Missed Approach
 - (a) The missed approach overlies the balked landing route.
 - (b) The missed approach point (MAP) will be marked with a waypoint to facilitate course alignment between the MAP and the first waypoint identified in the missed approach segment. Only one MAP should be marked due the proximity of the ILS DH and LOC MAP.

ATTACHMENT

INTERIM GUIDELINES

Multi-Sensor RNAV (FMS) Special Procedure
Gunnison, Colorado

4. Equivalent Level of Safety Provided (continued)

(5) ILS Missed Approach (continued)

(c) 8260.19A, paragraph 815b.(5) Missed Approach Instructions:
Shall be expressed as climbing "VIA FMS TRACK".

(6) Flight Inspection to be based on no course guidance for both the departure procedure and the ILS missed approach.

H. Summary:

- (1) Both the Multi-Sensor RNAV (FMS) departure procedures were developed in accordance with 8260.3B (TERPS), Chapter 12, Departure Procedures, paragraphs 1203c, and Figure 116L., this waiver outlining interim guidelines and a waiver to TERPS, paragraphs 1203, & 1203b. for no course guidance. TERPS, Chapter 15 Area Navigation (RNAV), was reviewed, and except for paragraph 1503, found to be inappropriate for these procedures.
- (2) The (I-GUC) ILS/DME (FMS) Runway 6 at Gunnison, Colorado was developed in accordance with Order 8260.36, Civil Utilization of Microwave Landing System (MLS), and 8260.3B (TERPS) Chapters 9 Instrument Landing System (ILS). TERPS, Chapter 15 Area Navigation (RNAV), was reviewed, and found to be inappropriate for this procedure. The missed approach segment was developed in accordance with TERPS, paragraphs 945a. & b., this waiver outlining interim guidelines, and a waiver to TERPS, paragraph 944a., & b.
- (3) These criteria do not provide for the integration of RNAV missed approach segments into non-RNAV approaches, and do not allow a climb gradient in the missed approach segment without a waiver. There is no criteria for RNAV Departure Procedures. Flight Management Systems (FMS) are not adequately defined and there is no criteria to develop procedures that take advantage of their unique capabilities. Advancements in todays technology has produced aircraft with substantially improved performance and navigation systems. This waiver illustrates the need to move forward with the development of new criteria.

ATTACHMENT

LIST OF ATTENDEES

FAA/AMERICAN AIRLINES MEETING
OKLAHOMA CITY, OKLAHOMA
OCTOBER 24-25, 1990

SUBJECT: USE OF FMS/RNAV DEPARTURES, EAGLE, COLORADO

<u>NAME</u>	<u>ORGANIZATION</u>	<u>TELEPHONE</u>
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JOE ROONEY	AVN-220	(405) 680-3382
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RALPH SEXTON	AVN-540	(405) 680-4164
MAURICE ANDERS	AVN-220	(405) 680-5886
CHUCK EVEREST	AVN-541	(405) 680-5811
MIKE AHERN	OKC FIFO	(405) 680-6656
FRANK HASMAN	AVN-542	(405) 680-4164
PAUL BEST	AFS-420	(202) 267-8277
JIM ENIAS	AFS-410	(202) 267-7211
DON PATE	AVN-540	(405) 680-4164
MIKE MCCLENDON	AAL FLT TECH/OPS	(817) 967-5253
BILL SYBLON	AAL FLT TECH/OPS	(817) 967-5253
JIM HOLTSCLAW	AAL ATC	(213) 646-5516

ATTACHMENT

LIST OF ATTENDEES

FAA/AMERICAN AIRLINES/DELTA MEETING
OKLAHOMA CITY, OKLAHOMA
SEPTEMBER 26, 1991

SUBJECT: USE OF MULTI-SENSOR RNAV (FMS) for DEPARTURES AND MISSED APPROACH
GUIDANCE, GUNNISON, COLORADO

<u>NAME</u>	<u>ORGANIZATION</u>	<u>TELEPHONE</u>	<u>FAX</u>
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BARRY TRUDEAU	AAL FLY ENG	(817) 967-5253	(214) 967-5443
GEORGE TERAJEWICZ	AAL OPS ENG	(817) 967-5253	(214) 967-5443
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BILL HENDERSON	FAA/AVN-270	(405) 680-6454	
RICHARD BRASIEL	FAA/OKC FIFO	(405) 680-3727	
CHARLIE TUTT	DELTA FLT OPS	(404) 530-7674	(404) 763-2949
ROY MAXWELL	DELTA ENG	(404) 765-3214	(404) 765-3304
MICHAEL AHERN	FAA/OKC FIFO	(405) 680-6662	
JOHN CHAPMAN	FAA/ANM-220	(206) 227-2221	(206) 227-1200
TOM KATRI	FAA/ASW-220	(817) 624-5220	(817) 624-5242
DON PATE	FAA/AVN-540	(405) 680-4164	(405) 680-4809