

Flight Procedures Cover Page	Task Action: FLIGHT CHECK	Task Type: IAP	Estimated Chart Date: 03/19/2026	APWS Task ID: 195E6D1244B5406E9E61172D2137BD1F	APWS Project ID: 00C896C3A8AF44F6BC889E6278105E1A
Procedure: ILS OR LOC RWY 17L AMDT 5		Enroute: NO	Specialist: Hirst, Charles		Agreement Number:
Airport ID: KDEN			Airport City: DENVER		State: CO
Facility ID: BXP	Facility Type: ILS	Flight Inspection Remark Type: New FC Slot			

Procedure Comments:
REDESIGN MISSED APPROACH. REMOVE ALL REFERENCES TO DEN VOR IN PREPARATION FOR DEN VOR DECOM. AFS REQUIRED.

ACTIVE AIRNAV AIRPORT & RUNWAY DATA USED
PENDING AIRNAV FINAL ILS NAVAID DATA USED
ACTIVE AIRNAV VOR DATA USED

8260-1 WAIVERS ON REQUEST: 1
KAILE TO OVVAL, TSHNR TO KLING LEG LENGTH TO SUPPORT ATC VECTORS

FOR ADDITIONAL QUESTIONS CONTACT CASEY HILL, MANAGER 4059540624



9/23/2025: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 8/14/2025.

8260-1:
1. CHANGED DISTANCE TSHNR TO KLING FROM 3.17 NM TO 3.11 NM - CURRENT LEG LENGTH IS 3.11 NM, CORRECTING FORMS TO SHOW PROPER DISTANCE.

9/29/2025: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 9/23/2025.

8260-3:
1. ADDITIONAL FLIGHT DATA REMOVED "CHART LOC RWY 17R" - NO LONGER REQUIRED
2. ADDITIONAL FLIGHT DATA REMOVED "CHART LOC RWY 16L" - NO LONGER REQUIRED
3. ADDITIONAL FLIGHT DATA REMOVED "CHART LOC RWY 16R" - NOLONGER REQUIRED
4. ADDITIONAL FLIGHT DATA ADDED "CHART IN PROFILE VIEW: I-BXP DME ANTENNA" - IAW 8260.19K 8-6-11S DME ANTENNA IS BEFORE THE THRESHOLD



8260-1:
1. UPDATED WAIVER TO REFLECT VECTOR ANGLE RESTRICTED AT KAILE AND TSHNR TO 45 DEGREES.

1. FLIGHT PROCEDURE IDENTIFICATION:

Denver, CO
Denver International, KDEN
ILS OR LOC RWY 17L

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

8260.58D para 1-3-1c:

ATC turns to join initial and intermediate segments. The first leg of an initial and the first leg of an intermediate segment must be a TF that accommodates a 90-degree intercept angle. Use standard turn parameters at the start fix, except a 25-degree bank angle applies. Where a shorter leg is needed, reduce airspeed in increments of not less than five KIAS until the desired length is achieved (see table 1-2-2).

3. REASON FOR WAIVER (JUSTIFICATION FOR NONSTANDARD TREATMENT):

Request to publish the ILS OR LOC RWY 17L using the leg length from KAILE to OVVAL of 3.52 NM versus the requirement of at least 4.19 NM to support ATC vectors.

Request to publish the ILS OR LOC RWY 17L using the leg length from TSHNR to KLING of 3.11 NM versus the requirement of at least 4.27 NM to support ATC vectors.

In order to maintain the current arrival rates at KDEN, ATC has stated their need to be able to vector aircraft to these fixes.

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

The prohibition against vectoring to KAILE (in excess of 45°) for this procedure will be included in the facilities Standard Operation Policy (SOP) which will be effective on the publication date of this procedure amendment. ATC will be limited to vectoring to headings 235.72°T (227.72°M) CW 325.72°T (317.72°M). By reducing the intercept angle, the published leg length meets criteria requirements for ATC Vectors.

The prohibition against vectoring to TSHNR (in excess of 45°) for this procedure will be included in the facilities Standard Operation Policy (SOP) which will be effective on the publication date of this procedure amendment. ATC will be limited to vectoring to headings 242.44°T (234.44°M) CW 332.44°T (324.44°M). By reducing the intercept angle, the published leg length meets criteria requirements for ATC Vectors.

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

1. Moving the KAILE WP to accommodate the leg length requirement would impact multiple arrivals and additional Instrument Approaches which leads to descent gradient and segment length criteria violations.
2. Extending the leg length from TSHNR to KLING is not feasible as it would cause tie in problems with the existing FLATI STAR. Moving the TSHNR WP to accommodate the leg length requirement would impact multiple arrivals and additional Instrument Approaches which leads to descent gradient and segment length criteria violations.
3. Restricting ATC's ability to vector to these fixes would increase controllers workload and as they would have to resequence traffic to other (IAF/IF) fixes which allow unrestricted vectoring and could introduce airport delays due to decreased aircraft arrival rates.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

ZDV, D01, AFS

7. SUBMITTED BY:

DATE	OFFICE IDENTIFICATION	TITLE
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Digitally signed by
CASIMIR L TABAKA
Nov 18, 2025

SIGNATURE

8. AFS ACTIONS:

APPROVED DISAPPROVED NOT REQUIRED

COMMENTS:

DATE **ROUTING SYMBOL** **SIGNATURE**



Federal Aviation Administration

Memorandum

Date: August 22, 2023

To: Instrument Flight Procedures Service Providers

From: Eric S. Parker, Acting Manager, Flight Technologies and Procedures Division

Subject: Waiver to Order 8260.58, United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design, on Appendix C PBN Transition to ILS/GLS/LPV Final.

This memorandum waives FAA Order 8260.58, United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design, Appendix C, paragraph 2.a.(1), for procedures that meet all of the following guidelines:

1. The final approach segment length is no longer than 37,400 feet.
2. The glidepath angle is 3.00 degrees or more.
3. The Threshold Crossing Height is between 40 feet and 60 feet.
4. No PBN segment/s intersect the final approach course extended closer than 12,300 feet plus Distance to Turn Anticipation (DTA) from the PFAF.

This memorandum remains in effect until rescinded. Please direct all inquiries to the Flight Procedures and Airspace Group, Standards Section at 405-954-1139 or 9-AWA-AVS-AFS420@faa.gov.

DENVER, COLORADO

AL-9077 (FAA)

FIG

LOC/DME I-BXP 110.15 Chan 38(Y)	APP CRS 173°	Rwy Ldg 12000 TDZE 5339 Apt Elev 5434
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ILS or LOC RWY 17L

DENVER INTL (DEN)

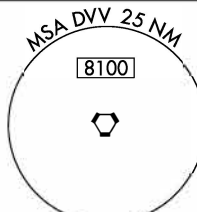
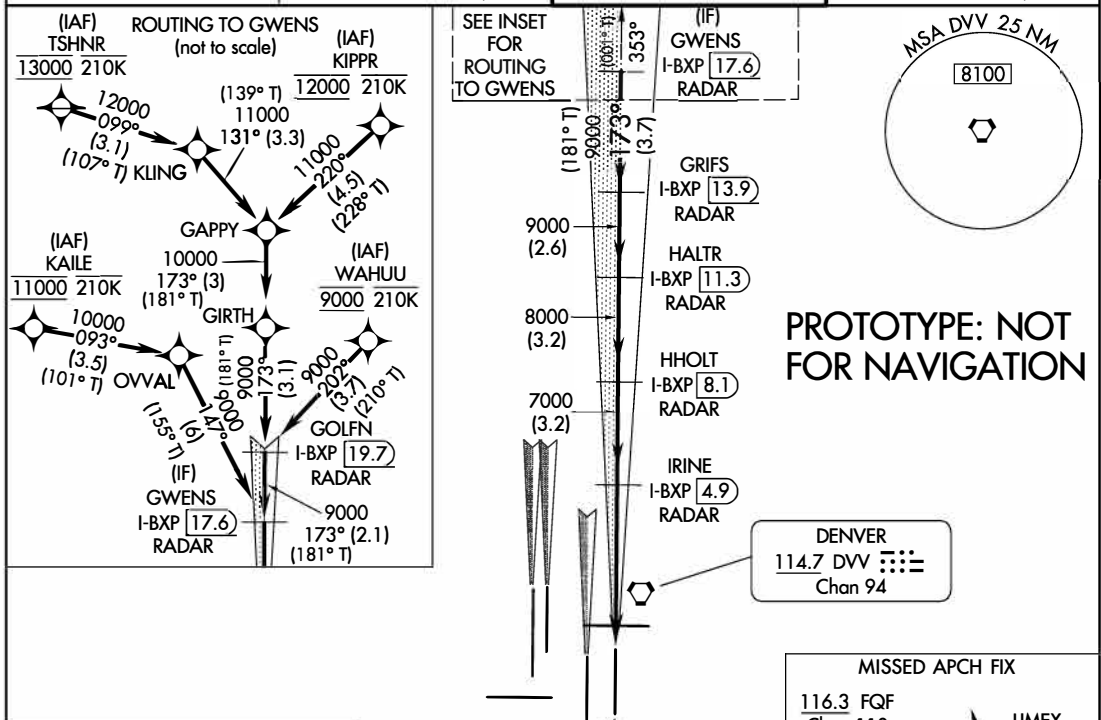
RNP APCH-GPS. From KAILE KIPPR TSHNR OR WAHUU.
DME or RADAR required.

Simultaneous approach authorized. For inop ALS, increase S-LOC Cats C and D visibility to RVR 4500. *RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSRR
A5

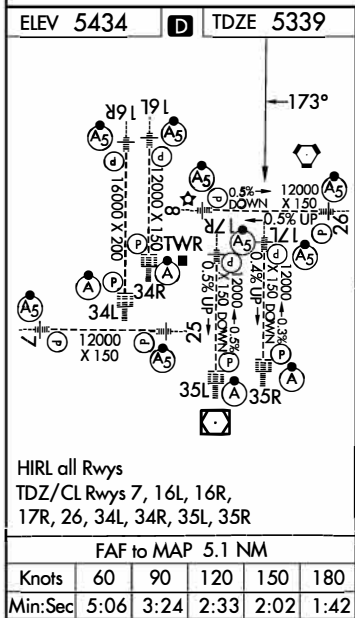
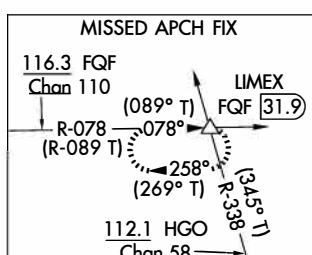
MISSED APPROACH: Climb to 5900 then climbing left turn to 10000 on heading 121° and FQF VORTAC R-078 to LIMEX INT/FQF 31.9 DME and hold.

D-ATIS 125.6 379.9	DENVER APP CON 119.3 307.3 (N) 120.35 379.3 (S)	DENVER TOWER 132.35 239.275	GND CON 121.35 379.175 (W) 121.85 377.1 (E)
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PROTOTYPE: NOT FOR NAVIGATION

DENVER
114.7 DVV
Chan 94



LOCALIZER 110.15
I-BXP
Chan 38(Y)

ELEV 5434	TDZE 5339	VGSI and ILS glidepath not coincident (VGSI Angle 3.00/TCH 66).					
5900	10000	FQF R-078	LIMEX	HALTR I-BXP 11.3	GRIFS I-BXP 13.9	GWENS I-BXP 17.6	
hdg 121°		IRINE I-BXP 4.9	HHOLT I-BXP 8.1	RADAR	RADAR	RADAR	
		I-BXP 0.2	I-BXP 0.6	7000	8000	9000	
		0.8	4.3 NM	3.2 NM	3.2 NM	2.6 NM	3.7 NM
CATEGORY		A	B	C	D		
S-ILS 17L*		5539/24 200 (200-½)					
S-LOC 17L		5640/24 301 (200-½)					

DENVER, COLORADO
Amdt 5 FIG

39°52'N-104°40'W

DENVER INTL (DEN)

ILS or LOC RWY 17L

AUTOMATED AL-9077 ILS or LOC RWY 17L

SW-1
7 AUG 2025
COMPILER: CG
REVIEWER:
DBL CHKR:
EFF: FIG

ACTIVE PROCEDURE

DENVER, COLORADO

AL-9077 (FAA)

24361

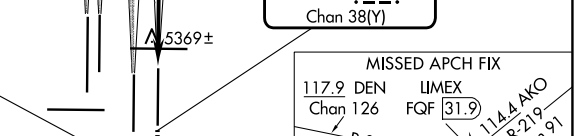
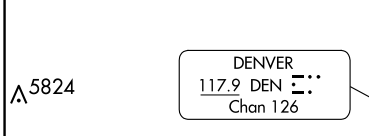
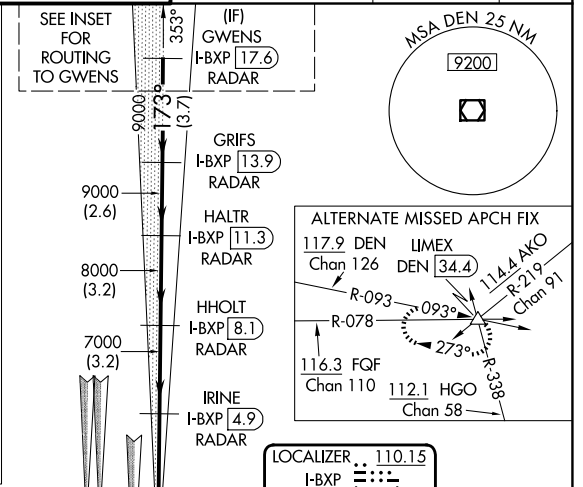
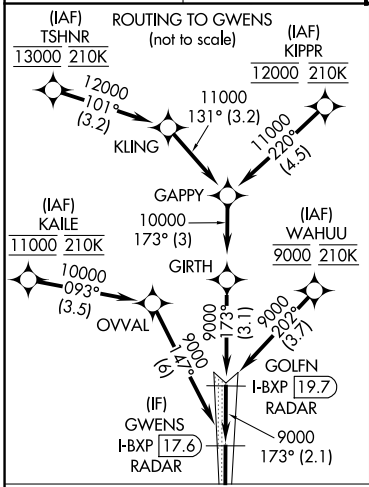
LOC/DME I-BXP 110.15 Chan 38 (Y)	APP CRS 173°	Rwy Idg TDZE 5339 Apt Elev 5434	
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ILS or LOC RWY 17L DENVER INTL (DEN)

▼ For inoperative MALSR, increase S-LOC Cats C/D visibility to RVR 4500. S-LOC 17L DME or RADAR required. Simultaneous approaches authorized with Rwy 17R and 16L/16R.
#RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR MISSED APPROACH: Climb to 5900 then climbing left turn to 10000 on heading 120° and FQF VORTAC R-078 to LIMEX INT/FQF 31.9 DME and hold.

D-ATIS 125.6 379.9 (ARR) 134.025 (DEP)	DENVER APP CON 119.3 307.3 (N) 120.35 379.3 (S)	DENVER TOWER 132.35 239.275	GND CON 121.35 379.175 (W) 121.85 377.1 (E)	CLNC DEL 118.75	CPDLC
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ELEV 5434	D	TDZE 5339			
HIRL all Rwys TDZ/CL Rwy 7, 16L, 16R, 17R, 26, 34L, 34R, 35L, 35R					
FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

RADAR or GPS REQUIRED

5900	10000	FQF R-078	LIMEX Δ	VGSi and ILS glidepath not coincident (VGSi Angle 3.00/TCH 66).											
hdg 120°		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">HALTR I-BXP 11.3 RADAR</td> <td style="width: 20%;">GRIFS I-BXP 13.9 RADAR</td> <td style="width: 20%;">GWENS I-BXP 17.6 RADAR</td> </tr> <tr> <td style="width: 20%;">*LOC only</td> <td style="width: 20%;">IRINE I-BXP 4.9 RADAR</td> <td style="width: 20%;">HHOLT I-BXP 8.1 RADAR</td> </tr> </table>				HALTR I-BXP 11.3 RADAR	GRIFS I-BXP 13.9 RADAR	GWENS I-BXP 17.6 RADAR	*LOC only	IRINE I-BXP 4.9 RADAR	HHOLT I-BXP 8.1 RADAR				
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9000	173°	9000	9000	9000											
GS 3.00° TCH 48															
0.7		4.4 NM		3.2 NM											
CATEGORY		A		B											
S-ILS 17L		# 5539/24 200 (200-½)													
S-LOC 17L		5620/24 281 (200-½)													

DENVER, COLORADO
Amdt 4A 11DEC14

39°52'N-104°40'W

DENVER INTL (DEN) ILS or LOC RWY 17L

SW-1, 15 MAY 2025 to 12 JUN 2025

SW-1, 15 MAY 2025 to 12 JUN 2025