Flight Procedures Cover Page	Task Action: FLIGHT CHECK	Task Type: STAR	Estimated Chart Date: 08/07/2025	APWS Task ID: 1F505CD5A92E4381901EBB58FD7D2679	APWS Project ID: 977FC7627AF045CA9379AE2CEE2A76B1
Procedure: BDR DENNA ONE (RNAV) STAR		Enroute: YES	Specialist: Denton, Hope		Agreement Number:
Airport ID: KBDR			Airport City: BRIDGEPORT		State: CT
Facility ID:	Facility Type:	Flight Inspection Remar New FC Slot	k Type:		

Procedure Comments:

WAIVER: FAA ORDER 8260.3F, PARA 2-2-7E. COMMON ROUTE AND RUNWAY TRANSITIONS (WAIVER SUBMITTED TO AFS BY EST FPT).

CONTACT CASIMIR TABAKA, AJV-A430, 405-202-7857.

03/11/2025

QUALITY.

14 CHECKE OUALITY 41 CHECKED

1. FLIGHT PROCEDURE IDENTIFICATION:

BRIDGEPORT, CT BDR DENNA ARRIVAL (RNAV)

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

Do not publish or code any altitudes on the procedure. Per 8260.3F, para 2-2-7e. Common route and runway transitions. Establish a mandatory, minimum or block altitude restriction at a fix that represents the lowest altitude authorized by the STAR or STAR runway transition.

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

- a. The DENNA STAR serves multiple airports and runway configurations within New York TRACON (N90) airspace and utilizes varying altitude restrictions to all airports based on dynamic traffic situations. Additionally, the procedure authorizes differing aircraft types, thus introducing different performance characteristics from one aircraft to another. The DENNA STAR is not a descend via procedure and ATC will issue CROSS (FIX) AT AND MAINTAIN or DESCEND AND MAINTAIN clearances to control the flow of traffic.
- b. Coding the procedure with an altitude on the common route that serves multiple airports with mixed aircraft types and differing performance characteristics may cause confusion and additional workload when the issued altitude is different from the coded restriction on the procedure. Coding two different altitudes on one procedure based on aircraft type is not allowed per design criteria.

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

- a. FAAO 7110.65, paragraph 4-5-6 and 5-6-1 requires altitude assignments above the minimum IFR altitude/minimum vectoring altitude (MIA/MVA).
- b. With RADAR required and ATC issuing a "CROSS (FIX) AT AND MAINTAIN" or "DESCEND AND MAINTAIN" clearance for all aircraft ensures the requirements are met. These altitudes provide obstacle clearance, communication, and navigable facility requirements for aircraft to utilize. When radio communications are in use, ATC will provide appropriate altitudes as specified in the ZBW/N90 Letter of Agreement for separation, including obstacle clearance.

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

Designing a STAR with coded altitudes was considered and deemed not feasible. Establishing coded altitudes on the STAR common route restricts ATC ability to dynamically assign altitudes based upon the traffic scenarios. A procedure with one coded altitude restriction on the common route that authorizes mixed aircraft performance characteristics and numerous airports of intended landing may create pilot confusion and questions resulting in a significant workload increase for ATC and pilots.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

Eastern Service Area Flight Procedures Team PBN FAA and NATCA leads
Boston ARTCC (ZBW)
New York TRACON (N90)
National Business Aviation Association (NBAA)
Aircraft Owners and Pilots Association (AOPA)

DATE	OFFICE IDENTIFICATION	TITLE

7. SUBMITTED BY:

Digitally signed by SIGNATURE CASIMIR L TABAKA

	Mar 13, 2025
8. AFS ACTIONS:	
☐ APPROVED ☐ DISAPPROVED ☐ NOT REQUIRED	

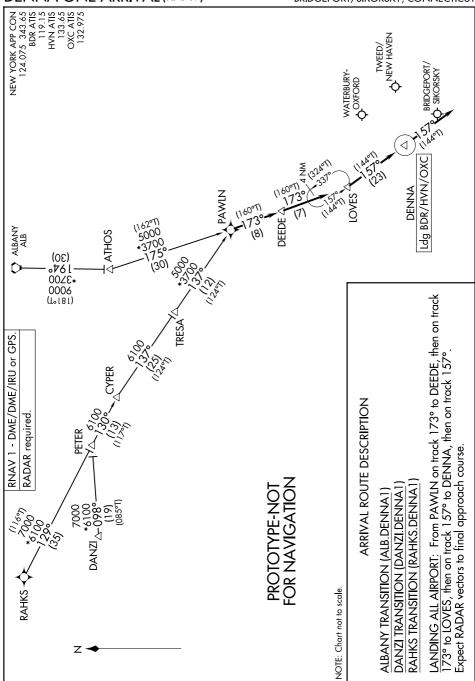
US Department of Transportation Federal Aviation Administration

FLIGHT PROCEDURE STANDARDS WAIVER

FLIGHT STANDARDS USE ONLY CONTROL NO.

COMMENTS:

DATE ROUTING SYMBOL SIGNATURE



FOR INFO ONLY



Memorandum

Date: January 31, 2023

To: **Instrument Flight Procedure Service Providers**

Digitally signed by WADE WADE EK TERRELL EK TERRELL

Date: 2023.01.31 09:21:16

From: Wade E.K. Terrell, Manager, Flight Procedures and Airspace Group

Subject: Waiver to FAA Order 8260.58C paragraph 1-2-5.c.(3), Maximum bank

angle

Background: The Performance Based Navigation (PBN) Aviation Rulemaking Committee (PARC) made a recommendation that the FAA adjust the turn parameters used in PBN instrument flight procedure (IFP) design to reflect modern avionics values. The Flight Procedures and Airspace Group analyzed current avionics specifications with the help of several FAA offices and RTCA SC-227 to identify the new bank angles necessary for current IFP design. The Flight Procedures and Airspace Group then conducted an Operational Safety Review (OSR) for this amendment to bank angle criteria. The outcome of the OSR was that no new hazard is introduced into the National Aerospace System (NAS).

Purpose: This memorandum waives FAA Order 8260.58C, United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design, paragraph 1-2-5.c.(3) and authorizes use of a maximum bank angle of 23 degrees above FL195 up to FL245 and a maximum bank angle of 16 degrees above FL245.

This waiver remains in effect until rescinded. No additional waiver request action is required. Please direct all inquiries to Thomas J. Nichols, Standards Section Manager, Flight Procedures and Airspace Group at 405-954-1171 or thomas, inichols@faa.gov

FOR INFO ONLY



Memorandum

Date: July 18, 2023

To: Instrument Flight Procedures Service Providers

WADE EK Digitally signed by WADE EK TERRELL

TERRELL Date: 2023.07.18 10:10:39

-03 00

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

Division

Subject: Waiver to FAA Order 8260.3, United States Standard for Terminal

Instrument Procedures (TERPS), STAR Termination Altitude

This memorandum waives the requirement of FAA Order 8260.3 paragraph 2-2-7.f(2) for Flight Standards approval when, due to an operational need, an altitude is not established at the termination fix on a STAR that does not join an approach.

Establishing an altitude at the termination fix on STAR that does not join an approach is beneficial for arrival descent planning purposes and is highly encouraged where practical. We recommend consulting Flight Standards, Flight Procedures and Airspace Group early in the design phase to assist in understanding how an altitude at a termination fix benefits operators.

No additional waiver request action is required. Please direct all inquiries to the Flight Procedures and Airspace Group, Standards Section (405) 954-1139 or <u>9-AWA-AVS-AFS420@faa.gov</u>.

FOR INFO ONLY



Memorandum

Date:

To: Instrument Flight Procedures Service Providers

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

Division

Subject: Waiver to FAA Order 8260.19, Flight Procedures and Airspace, STAR

Termination Altitude

This memorandum waives the requirement of FAA Order 8260.19 paragraph 4-5-2.j for an altitude to be specified at the termination fix at the STAR termination point [see memo dated July 18, 2023, subject: Waiver to FAA Order 8260.3, paragraph 2-2-7.f(2)].

When no altitude is specified at that fix, the lowest altitude that will be assigned by air traffic control at the termination fix must be used for descent gradient and obstacle clearance calculations and noted in the Remarks section of Form 8260-17.1. Example: LOWEST ASSIGNED ATC ALTITUDE AT GIZMO, 3000.

No additional waiver request action is required. Please direct all inquiries to the Flight Procedures and Airspace, Standards Section (405) 954-1139 or <u>9-AWA-AVS-AFS420@faa.gov</u>.

