Flight Procedures Cover Page	Task Action: FLIGHT CHECK	Task Type: SID	Estimated Chart Date: 03/19/2026	APWS Task ID: E99BD3E5BBD74226BB0919CBB1CC4383	APWS Project ID: A42B87A3D73F4C97AB6235BB1CD89933
Procedure: DUHCK ONE DEPARTURE (RNAV)		Enroute: YES	Specialist: Sweeting, Dexter		Agreement Number:
Airport ID: KFCM			Airport City: MINNEAPOLIS		State: MN
Facility ID:	Facility Type:	Flight Inspection Remark Type: New FC Slot			

Procedure Comments:
ACTIVE DATA USED FOR KANE, KFCM, KSTP AND RUNWAYS.

WAIVERS (1): ATC REQUESTED ALTITUDE LOWER THAN UNRESTRICTED CLIMB ALLOWED BY TERPS EVALUATION; WAIVER (2): REDUCED ROC.

MSP VOR MON - NEW RNAV SID.

KMZ:
KSTP_DIV_DEP_RWY_09_AMDT_1: CG CONTROLLING OBSTACLE.
KSTP_DIV_DEP_RWY_09_AMDT_1_1: CG AND CGTA CONTROLLING OBSTACLES.
KSTP_DIV_DEP_RWY_09_AMDT_1_2: CTA CONTROLLING OBSTACLE (1234 FT MSL BUILDING)
KSTP_DIV_DEP_RWY_13_AMDT_1: CG AND CGTA CONTROLLING OBSTACLES.
KSTP_DIV_DEP_RWY_13_AMDT_1_1: CTA CONTROLLING OBSTACLE (1137 FT MSL TANK)
KSTP_DIV_DEP_RWY_14_AMDT_1: CG AND CGTA CONTROLLING OBSTACLES.
KSTP_DIV_DEP_RWY_14_AMDT_1_1: CTA CONTROLLING OBSTACLE (2375 FT MSL TOWER)
KSTP_DIV_DEP_RWY_27_AMDT_1: CG CONTROLLING OBSTACLE.
KSTP_DIV_DEP_RWY_27_AMDT_1_1: CG AND CGTA CONTROLLING OBSTACLES.
KSTP_DIV_DEP_RWY_27_AMDT_1_2: CTA CONTROLLING OBSTCLE (2438 FT MSL TOWER)
KSTP_DIV_DEP_RWY_32_AMDT_1: CG CONTROLLING OBSTACLE.
KSTP_DIV_DEP_RWY_32_AMDT_1_1: CG AND CGTA CONTROLLING OBSTACLES.
KSTP_DIV_DEP_RWY_32_AMDT_1_2: CTA CONTROLLING OBSTACLE (1271 FT MSL BUILDING)

CONTACT: RAKE MCGRAW (AJV-A422), 405-954-8711

10/24/2025: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 08/26/2025.
1. REMARKS: DP RESTRICTIONS FOR ATC FACILITIES INFORMATION: ANE: UPDATED NOTE FROM " ...RWY 9, 27, 36: 190 CW 060 CLIMB TO 3000..." TO "...RWY 9, 27, 36: 190 CW 090 CLIMB TO 3000...".
2. REMARKS: DP RESTRICTIONS FOR ATC FACILITIES INFORMATION: ANE: UPDATED NOTE FROM " ...RWY 18: RIGHT TURN 190 CW TO 060 CLIMB TO 3000. LEFT TURN CW 060 TO CW 190 CLIMB TO 3500..." TO "...RWY 18: RIGHT TURN 190 CW 090 CLIMB TO 3000. LEFT TURN 190 CW 060 CLIMB TO 3500...".

Data as of: 10/27/2025 09:31:01 CDT

FLIGHT PROCEDURE STANDARDS WAIVER

1. FLIGHT PROCEDURE IDENTIFICATION:

ST Paul, MN, STP; Minneapolis, MN: ANE, FCM
DUHCK DEPARTURE (RNAV)

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

Deviation from standard criteria. 8260.3, Paragraph 1-4-2. An ATC requested maintained altitude lower than the unrestricted climb allowed by TERPS evaluation.

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

FAA Order 8260.3 does not describe how to assess obstacles for a SID supporting a range of initial headings when ATC requests a maintain altitude lower than unrestricted climb allowed by TERPS. AFS issued a Memo dated May 23, 2023 with the subject “Clarification to FAA Order 8260.46, Departure Procedure (DP) Program, Standard Instrument Departure (SID), which states a waiver is required to apply 8260.3, 13-2 in this case. (include evaluation method of the hold down maintain altitude, justification and description of the requested altitude vs the altitude of the unrestricted climb allowed by TERPS).

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

FAA Order 8260.3, Section 13-2, Diverse Departure Assessment was applied to assess obstacles to ensure obstacle clearance to the requested altitude and for the evaluation of the hold down altitude.
a. TERPS Maintain/Top altitude: see attached for each airport assessment.
b. Lowest assigned altitude by ATC for traffic: see attached for each airport assessment.
c. Diverse Assessment Distance: see attached for each airport assessment.
d. The MVA assessment: see attached for each airport assessment.
e. Climb gradient for obstacle assessment: see attached for each airport assessment.
f. Radar is required for the SID.
g. FAA JO 7110.65, paragraph 5-6-3.b. "After reaching the first MVA/MIA sector, all subsequent MVA/MIA sectors encountered must be met." This requires the controller to ensure the aircraft doesn't go into a higher MVA once they reached the first MVA sector altitude.
h. ATC is not allowed to let an aircraft climbing to the initially assigned altitude in b above enter a higher MVA unless ATC has assigned and the pilot reached the altitude equal to or higher than the MVA sector they are entering or FAA Order 7110.65, paragraph 5-6-3.a.(1) or (2) is being applied (ATC is responsible for obstacle separation until the aircraft reaches the MVA altitude or higher).
i. Affected MSP ATC Facilities will make sure all controllers are aware of this waiver for compliance.

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

ATC needs to vector aircraft for separation within a constrained airspace (Class B) as well as for noise abatement requirements. The design requirement for vectors is compliant with FAA Order 8260.58, Appendix E.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

This action was coordinated with MSP TRACON (M98), ZMP ARTCC, Minneapolis Tower, Delta and Southwest Airlines, NATCA, AJV-A, Central Service Area Flight Procedures Team leads, and FS.

7. SUBMITTED BY:

DATE	OFFICE IDENTIFICATION	TITLE	SIGNATURE

8. FLIGHT STANDARDS ACTIONS:

☐ **APPROVED** ☐ **DISAPPROVED** ☐ **NOT REQUIRED**

COMMENTS:

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

FLIGHT PROCEDURE STANDARDS WAIVER

1. FLIGHT PROCEDURE IDENTIFICATION:

ST Paul, MN, STP; Minneapolis, MN: ANE, FCM
DUHCK DEPARTURE (RNAV)

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

Deviation from standard criteria. 8260.3, Paragraph 2-1-3. Using less ROC than required for DP level OCS.

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

a. Two different rounding criteria are used for evaluation.
(1). FAA Order 8260.3 requires 1000 feet of level ROC when assessing level flight. The altitude must be rounded up to the next higher 100 foot altitude.
(2). ATO allows the altitude to be rounded down to the next lower 100 foot for 49 feet or less.
c. MSP ATCT/TRACON will be using radar vectors and the MVA to separate aircraft.
d. The TERPS evaluation doesn't account for the ATC hold down/lowest assigned altitude.
e. The departure procedures were designed originally before the change to criteria but have not been brought into compliance. MSP ATCT/TRACON has a need to separate the flow for departures and arrivals. MSP ATCT/TRACON has an LOA requirement to turn departures based on a range of headings using all runways when needed and the hold down/ lowest assigned altitude would be based on the MVA.

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

(1). Aircraft will be required to climb to ATC assigned altitude based on radar and the MVA so controllers will know where the aircraft is. (see attached supporting documentation for the ATC hold down/lowest assigned altitude by ATC).
(2). Pilots are required per 14 CFR to check their altimeter on the ground and ensure it is not more than 75 feet off from the airport altitude when departing.
c. ATC is required to validate the altitude on initial contact.
d. Per 14 CFR, part 91.185 the pilot is expected to climb to the requested/assigned altitude and proceed direct to the assigned/filed route of flight.
e. Level ROC on approach is 500/250 in the terminal environment. The aircraft would only be assigned the initial altitude based on the MVA (see attached supporting documentation for the controlling obstacle information) for a short period of time to ensure initial separation. The aircraft will then be assigned the Maintain altitude (see attached supporting documentation for the Maintain altitude assigned by ATC).

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

Climbing the aircraft to an altitude 100ft higher will cause major issues with LOA and other ATC existing agreements.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

This action was coordinated with MSP TRACON (M98), ZMP ARTCC, Minneapolis Tower, Delta and Southwest Airlines, NATCA, AJV-A, Central Service Area Flight Procedures Team leads, and FS.

7. SUBMITTED BY:

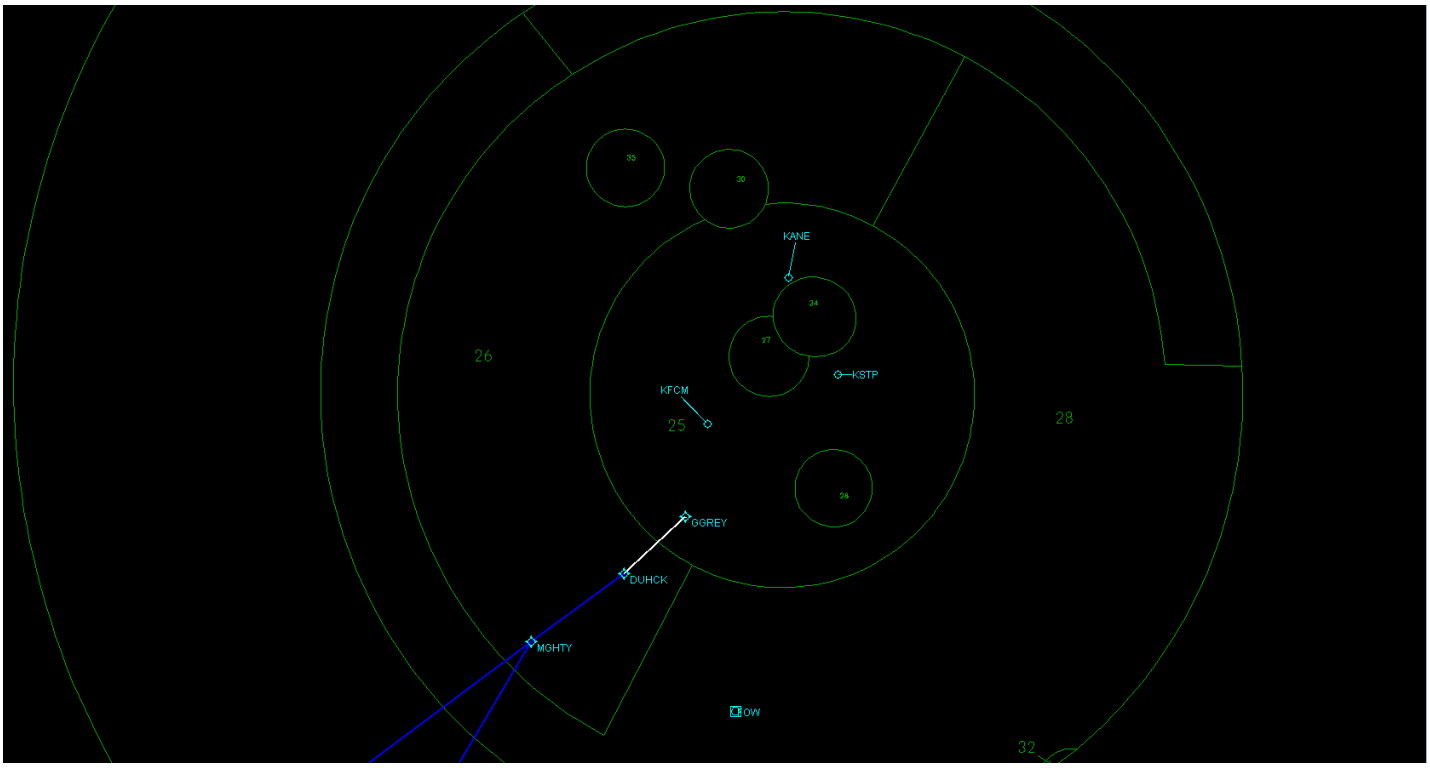
DATE **OFFICE IDENTIFICATION** **TITLE** **SIGNATURE**

8. FLIGHT STANDARDS ACTIONS:

☐ **APPROVED** ☐ **DISAPPROVED** ☐ **NOT REQUIRED**

COMMENTS:

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


35
30
KANE
34
27
KSTP
26
KFCM
25
28
24
GGREY
DUHCK
MGHTY
OW
32

DUHCK ONE DEPARTURE (RNAV)
(DUHCK1.DUHCK) FIG

MINNEAPOLIS, MINNESOTA
FLYING CLOUD (FCM)

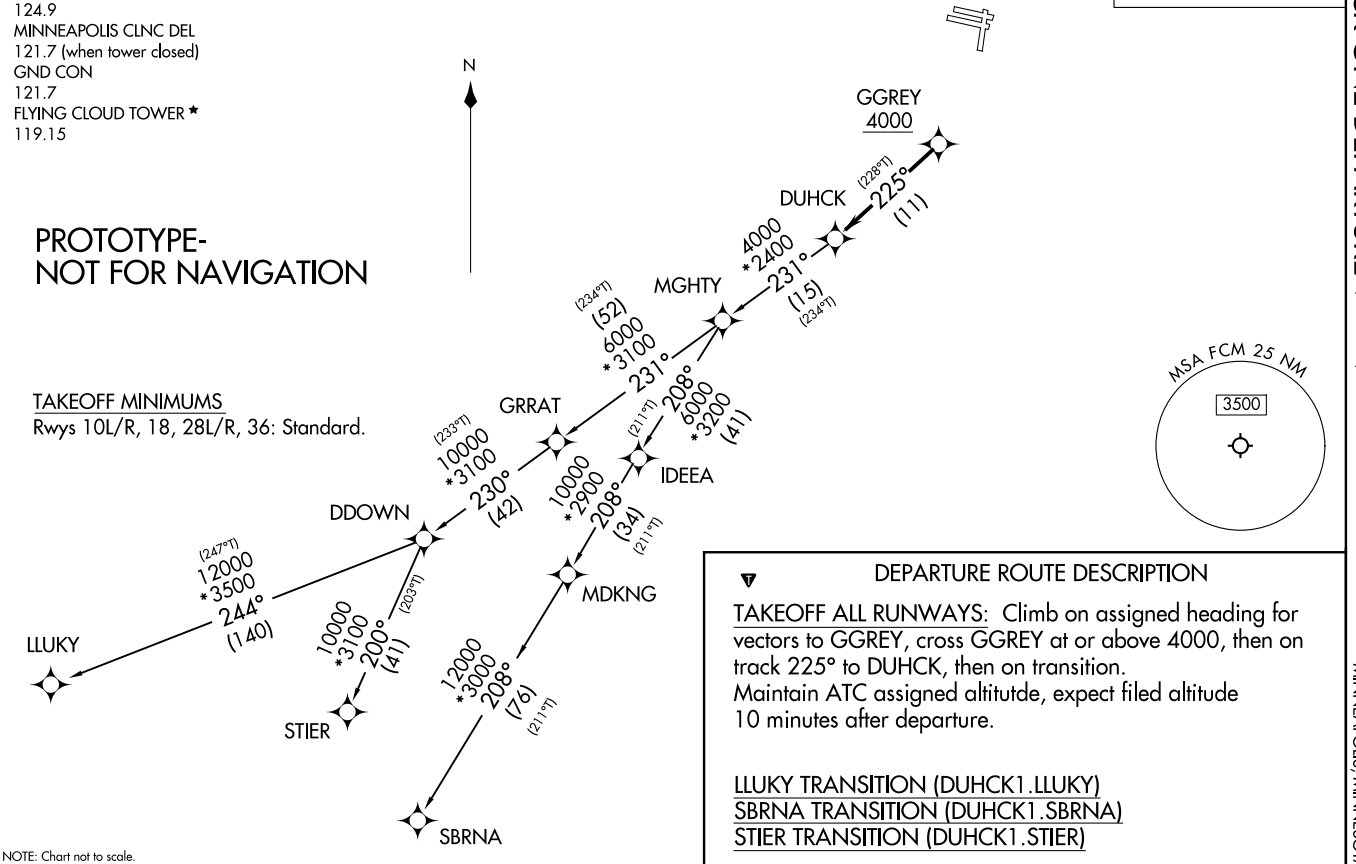
MINNEAPOLIS DEP CON
134.7 284.7
ATIS
124.9
MINNEAPOLIS CLNC DEL
121.7 (when tower closed)
GND CON
121.7
FLYING CLOUD TOWER ★
119.15

RNAV 1 - DME/DME/IRU or GPS.
RADAR required.

TOP ALTITUDE: ASSIGNED BY ATC

PROTOTYPE-
NOT FOR NAVIGATION

TAKEOFF MINIMUMS
Rwys 10L/R, 18, 28L/R, 36: Standard.



DEPARTURE ROUTE DESCRIPTION

TAKEOFF ALL RUNWAYS: Climb on assigned heading for vectors to GGREY, cross GGREY at or above 4000, then on track 225° to DUHCK, then on transition.
Maintain ATC assigned altitutde, expect filed altitude 10 minutes after departure.

LLUKY TRANSITION (DUHCK1.LLUKY)
SBRNA TRANSITION (DUHCK1.SBRNA)
STIER TRANSITION (DUHCK1.STIER)

NOTE: Chart not to scale.

(DUHCK1.DUHCK) FIG
DUHCK ONE DEPARTURE (RNAV)
AL-5094 (FAA)
FLYING CLOUD (FCM)
MINNEAPOLIS, MINNESOTA