

Flight Procedures Cover Page	Task Action: FLIGHT CHECK	Task Type: SID	Estimated Chart Date: 12/24/2026	APWS Task ID: B74BBB9970C44CEEB838F84716E7E48D	APWS Project ID: E85457DD180C4861BDE7958F60587C3A
Procedure: SID AYYLE ONE (RNAV) CLEVELAND, OH KBKL		Enroute: YES	Specialist: Clark, Jacob		Agreement Number:
Airport ID: KBKL			Airport City: CLEVELAND		State: OH
Facility ID:	Facility Type:	Flight Inspection Remark Type: New FC Slot			
Procedure Comments: ORIGINAL PROCEDURE USING ACTIVE AIRPORT DATA. AYYLE RNAV DEPARTURE BUILT FOR BKL USING AN OVERLAY OF THE GTLKE DEPARTURE FOR CLEVELAND. WAIVER: Deviation from standard criteria. 8260.3, Paragraph 1-4-2. An ATC requested maintained altitude lower than the unrestricted climb allowed by TERPS evaluation. WAIVER: Deviation from standard criteria: Order 8260.46K Appendix E, Section 1, para 2m(4). "Document the minimum crossing altitude at the IF on RNAV Radar departure procedures as follows: CHART: MINIMUM CROSSING ALTITUDE AT (RNAV IF)-(Altitude).". APPROVAL LETTER: Climb gradient exceeds 500 feet per NM, 8260.46K, para 2-1-5 B. KMZ: KBKL_AYYLE_ONE_DEPARTURE_(RNAV) KBKL_DIV_DEP_RWY_06L_ORIG KBKL_DIV_DEP_RWY_06R_ORIG KBKL_DIV_DEP_RWY_24L_ORIG KBKL_DIV_DEP_RWY_24R_ORIG CONTACT: APRIL SARMENTO: 405-954-0337. 8/10/26 THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 7/30/26. 8260-2 ALPHE: 1. REMOVED "ADDED CONTROLLER HIGH TO REQUIRED CHARTING" 8260-2 DAIFE: 1. REMOVED "CHANGED CONTROLLER TO CONTROLLER HIGH, ADDED DP" 8260-2 NOLNN: 1. CHANGED CONTROLLER TO CONTROLLER HIGH					

QUALITY
46
CHECKED

QUALITY
38
CHECKED

QUALITY
8
CHECKED

1. FLIGHT PROCEDURE IDENTIFICATION:

CLEVELAND, OH
BKL
AYYLE DEPARTURE (RNAV)

2. WAIVER REQUIRED AND APPLICABLE STANDARD:

Deviation from standard criteria: Order 8260.46K Appendix E, Section 1, para 2m(4). "Document the minimum crossing altitude at the IF on RNAV Radar departure procedures as follows: CHART: MINIMUM CROSSING ALTITUDE AT (RNAV IF)-(Altitude)."

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

Including unnecessary altitude restrictions at the Initial Fix (IF) increases pilot and controller workload, depending on the climb clearance issued. Complex traffic requires ATC to issue different alt at the IF etc...

4. EQUIVALENT LEVEL OF SAFETY PROVIDED:

a) Positive Radar Control: KBKL Tower & DTW TRACON maintains radar contact and provides specific vectors and climb clearances to ensure all aircraft remain at or above the Minimum Vectoring Altitude (MVA) until joining the procedure.

b) Altitude: In facility LOA, it states on IFR departure clearances from BKL, ATC will issue an altitude of 2000' MSL and to expect requested altitude ten minutes after departure. This is to ensure the aircraft remain below the inbound CLE traffic.

c) Vertical Separation Requirements: ATC instructions ensure that departing aircraft cross the Initial Fix (AYYLE) at or above 3,000 ft MSL, effectively maintaining the required 1,000 ft Required Obstacle Clearance (ROC).

d) DIVERSE ASSESSMENT: 300°-050° 25 NM – DER TO DRP DISTANCE

(1) RWY 6L/24R: 25 NM - 0.50 NM = 24.50 NM

(2) RWY 6R/24L: 25 NM - 0.50 NM = 24.50 NM

e) DIVERSE ASSESSMENT: 20 NM radius around IF, AYYLE

(1) Ran the evaluation with a 2000 FT airspace floor and the 3000 clears all aircraft

(2) See excel sheet

f) DIVERSE ASSESMENT ALTITUDE: (DIVERSE DISTANCE * CG FT/NM) + DER ELEVATION

(1) RWY 6L: $(24.50 \times 200) + 581.1 \text{ MSL} = 5481 (5500)$

(2) RWY 6R: $(24.50 \times 200) + 582.4 \text{ MSL} = 5482 (5500)$

(3) RWY 24L: $(24.50 \times 200) + 583.5 \text{ MSL} = 5483 (5500)$

(4) RWY 24R: $(24.50 \times 200) + 582.4 \text{ MSL} = 5482 (5500)$

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 ensuring required separation from obstacles

h) Workload Optimization: By eliminating redundant altitude restrictions at the IF, pilot and controller focus is redirected toward primary navigation and traffic separation, reducing the potential for human error

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

Altitude restriction at AYYLE is redundant; aircraft depart runways 06L/R or 24L/R with an initial assigned altitude and receive radar vectors to join the fix.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

ZOB Approach Control, COSG, AFS-420, NATCA

7. SUBMITTED BY:

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

SIGNATURE

Digitally signed by

APRIL T SARMENTO

Jul 10, 2026

8. AFS ACTIONS:

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

COMMENTS:

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

1. FLIGHT PROCEDURE IDENTIFICATION:

CLEVELAND, OH
BKL
AYYLE 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.

4. EQUIVALENT LEVEL OF SAFETY PROVIDE

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: ATC ASSIGNED ALTITUDE

b. PER KBKL/CLEVELAND ATCT/TRACON LOA the lowest assigned altitude will be: • RWY 6R/24L & 6L/24R: 300° clockwise 050° – 2000 ft

c. DIVERSE ASSESSMENT: 300°-050° 25 NM – DER TO DRP DISTANCE

(1) RWY 6L/24R: 25 NM - 0.50 NM = 24.50 NM

(2) RWY 6R/24L: 25 NM - 0.50 NM = 24.50 NM

DIVERSE ASSESMENT ALTITUDE: (DIVERSE DISTANCE * CG FT/NM) + DER ELEVATION

(1) RWY 6L: $(24.50 \times 200) + 581.1 \text{ MSL} = 5481 (5500)$

(2) RWY 6R: $(24.50 \times 200) + 582.4 \text{ MSL} = 5482 (5500)$

(3) RWY 24L: $(24.50 \times 200) + 583.5 \text{ MSL} = 5483 (5500)$

(4) RWY 24R: $(24.50 \times 200) + 582.4 \text{ MSL} = 5482 (5500)$

ICA turn altitude for each runway is 400 FT above Departure end Runway (DER) with the LOA stating Standard Heading 350° for all departures.

The MVA over KBKL is 2600 due to downtown buildings. With the northbound turn ATC will be vectoring below the MVA for 4.3 to 4.8 NM then the MVA goes down to 2000 over the lake.

Level surface eval was done for the diverse area and none of the obstacles that do not provide 1000 ft roc clearance is in the aircraft flight path turning northbound away from downtown. See excel sheet for obstacles location in relation to the airport.

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).

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.

d. Climb gradient for obstacle assessment up to 2000 ft

- (1) RWY 6L CG 220 to 1100/ ICA turn alt at 400 ft above DER elevation is 1000; clears 39-000801 aka tower by -.10 FT
- (2) RWY 6R CG 290 to 1100/ ICA turn alt at 400 ft above DER elevation is 1000 clears 39-000647 aka tower by -6 FT
- (3) RWY 24L CG 517 to 1000/ ICA turn alt at 400 ft above DER elevation is 1000 clears 39-001164 aka stadium by .33 FT
- (4) RWY 24R standard//ICA turn alt at 400 ft above DER elevation is 1000 FT

e. Radar is required for the SID

f. Affected CLEVELAND ATC Facilities will make sure all controllers are aware of this waiver for compliance and it will also be found in their facility ATC LOA.

5. ALTERNATIVE ACTIONS DEEMED NOT FEASIBLE:

Routed departure was considered, but due to recent increases in pilot deviations with KCLE arriving traffic allowing the KBKL Tower controllers to actively vector and climb the aircraft seemed safer. The KBKL Tower controllers will normally depart aircraft between headings 300-050. This will give them flexibility during slower periods of traffic to expedite operations.

6. COORDINATION WITH USER ORGANIZATIONS (SPECIFY):

ZOB Approach Control, COSG, AFS-420, NATCA

7. SUBMITTED BY:

DATE OFFICE IDENTIFICATION TITLE

SIGNATURE

Digitally signed by

APRIL T SARMENTO

Aug 24, 2026

8. AFS ACTIONS:

☐ APPROVED ☐ DISAPPROVED ☐ NOT REQUIRED

COMMENTS:

DATE ROUTING SYMBOL SIGNATURE



Federal Aviation Administration

Memorandum

Date: 12/24/2026

To: Wade Terrell, Manager, Flight Technologies and Procedures Division THRU:
Wayne Radicke, Manager, Flight Procedures and Airspace Group

From: Lonnie Everhart, Manager, Instrument Flight Procedure Group AJV-A4

Subject: Approval Request: CLEVELAND, OH (BKL), AYYLE DEPARTURE (RNAV)

Climb gradient exceeds 500 feet per NM, 8260.46K, para 2-1-5 b.

A 763 MSL stadium (39-001164) AC 1A 413025.30N/0814156.85W located 2821 FT from the Rwy 24L departure end of runway in the ICA and it requires a climb of 517 FT per NM to 1000. There are numerous other obstacles which also cause require climb gradients/climb-to altitudes and because of the location of these obstacles, a departure route to avoid them can't be constructed.

Rwy 24L ODP will be updated to reflect the new CG based off the new ICA criteria.

Rwy 6R/24L is 5197 feet long by 100 feet wide. The airport is Part 139 certified and has scheduled air carrier and air taxi operations. FAA Form 5010 lists 18 single-engine, 3 multi-engine, and 5 jets based at the airport with approximately 49,749 total operations per year.

Request to publish the following minimums: ... or standard with minimum climb of 517 FT per NM to 1000.

If disapproved, we will annotate Rwy 24L takeoff minimums as NA-obstacles.