

FEDERAL AVIATION ADMINISTRATION  
 FLIGHT STANDARDS SERVICE  
 STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
 Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

| Arrival Name        | Number     | STAR Computer Code  | Superseded Number | Dated             | Effective Date |
|---------------------|------------|---------------------|-------------------|-------------------|----------------|
| <b>HYPER (RNAV)</b> | <b>ONE</b> | <b>LIRCH.HYPER1</b> | <b>NINE</b>       | <b>03/21/2024</b> |                |

TRANSITION ROUTES:

| Transition Name | Transition Computer Codes | From FIX/NAVAID | To FIX/NAVAID | Course | Distance | MEA  | MOCA | MAA | Crossing Altitudes / Fixes |
|-----------------|---------------------------|-----------------|---------------|--------|----------|------|------|-----|----------------------------|
| ALBANY          | ALB.HYPER1                | ALB VORTAC      | ALB VORTAC    |        |          |      |      |     |                            |
|                 |                           |                 | ATWAN         | 190.74 | 60.57    | 5000 | 3900 |     |                            |
|                 |                           |                 | FILGA         | 214.50 | 21.72    | 5000 | 3900 |     |                            |
|                 |                           |                 | KEAVR         | 227.84 | 16.43    | 5000 | 3900 |     |                            |
|                 |                           |                 | BOTLS         | 248.72 | 31.27    | 5000 | 3900 |     |                            |
|                 |                           |                 | JETTZ         | 248.31 | 29.44    | 5000 | 3900 |     |                            |
|                 |                           |                 | SARAA         | 250.58 | 26.77    | 5000 | 3900 |     |                            |
|                 |                           |                 | LRP VOR/DME   | 234.19 | 26.64    | 5000 | 3900 |     |                            |
|                 |                           |                 | JOANE         | 249.07 | 08.85    | 5000 | 3900 |     |                            |
|                 |                           |                 | DELRO         | 248.97 | 09.12    | 5000 | 3900 |     |                            |
|                 |                           |                 | LIRCH         | 248.86 | 16.03    | 5000 | 3600 |     | AT 14000                   |
| BARNES          | BAF.HYPER1                | BAF VORTAC      | BAF VORTAC    |        |          |      |      |     |                            |
|                 |                           |                 | BIGGO         | 241.93 | 20.00    | 5000 | 4000 |     |                            |
|                 |                           |                 | YORKE         | 241.66 | 14.45    | 5000 | 4000 |     |                            |
|                 |                           |                 | GANDE         | 241.55 | 28.43    | 5000 | 4000 |     |                            |
|                 |                           |                 | KEAVR         | 235.47 | 27.21    | 5000 | 3900 |     |                            |
|                 |                           |                 | BOTLS         | 248.72 | 31.27    | 5000 | 3900 |     |                            |
|                 |                           |                 | JETTZ         | 248.31 | 29.44    | 5000 | 3900 |     |                            |
|                 |                           |                 | SARAA         | 250.58 | 26.77    | 5000 | 3900 |     |                            |
|                 |                           |                 | LRP VOR/DME   | 234.19 | 26.64    | 5000 | 3900 |     |                            |
|                 |                           |                 | JOANE         | 249.07 | 08.85    | 5000 | 3900 |     |                            |
|                 |                           |                 | DELRO         | 248.97 | 09.12    | 5000 | 3900 |     |                            |
|                 |                           |                 | LIRCH         | 248.86 | 16.03    | 5000 | 3600 |     | AT 14000                   |
| BANKK           | BANKK.HYPER1              | BANKK           | BANKK         |        |          |      |      |     |                            |
|                 |                           |                 | HIKES         | 292.12 | 33.54    | 5000 | 3900 |     |                            |
|                 |                           |                 | LRP VOR/DME   | 253.37 | 34.81    | 5000 | 3900 |     |                            |
|                 |                           |                 | JOANE         | 249.07 | 08.85    | 5000 | 3900 |     |                            |



FEDERAL AVIATION ADMINISTRATION  
 FLIGHT STANDARDS SERVICE  
 STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
 Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

| Arrival Name    | Number                    |                 |               | STAR Computer Code | Superseded Number |      |      | Dated      | Effective Date             |
|-----------------|---------------------------|-----------------|---------------|--------------------|-------------------|------|------|------------|----------------------------|
| HYPER (RNAV)    | ONE                       |                 |               | LIRCH.HYPER1       | NINE              |      |      | 03/21/2024 |                            |
| Transition Name | Transition Computer Codes | From FIX/NAVAID | To FIX/NAVAID | Course             | Distance          | MEA  | MOCA | MAA        | Crossing Altitudes / Fixes |
|                 |                           |                 | DELRO         | 248.97             | 09.12             | 5000 | 3900 |            |                            |
|                 |                           |                 | LIRCH         | 248.86             | 16.03             | 5000 | 3600 |            | AT 14000                   |
| FILGA           | FILGA.HYPER1              | FILGA           | FILGA         |                    |                   |      |      |            |                            |
|                 |                           |                 | KEAVR         | 227.84             | 16.43             | 5000 | 3900 |            |                            |
|                 |                           |                 | BOTLS         | 248.72             | 31.27             | 5000 | 3900 |            |                            |
|                 |                           |                 | JETTZ         | 248.31             | 29.44             | 5000 | 3900 |            |                            |
|                 |                           |                 | SARAA         | 250.58             | 26.77             | 5000 | 3900 |            |                            |
|                 |                           |                 | LRP VOR/DME   | 234.19             | 26.64             | 5000 | 3900 |            |                            |
|                 |                           |                 | JOANE         | 249.07             | 08.85             | 5000 | 3900 |            |                            |
|                 |                           |                 | DELRO         | 248.97             | 09.12             | 5000 | 3900 |            |                            |
|                 |                           |                 | LIRCH         | 248.86             | 16.03             | 5000 | 3600 |            | AT 14000                   |
| GANDE           | GANDE.HYPER1              | GANDE           | GANDE         |                    |                   |      |      |            |                            |
|                 |                           |                 | KEAVR         | 235.47             | 27.21             | 5000 | 3900 |            |                            |
|                 |                           |                 | BOTLS         | 248.72             | 31.27             | 5000 | 3900 |            |                            |
|                 |                           |                 | JETTZ         | 248.31             | 29.44             | 5000 | 3900 |            |                            |
|                 |                           |                 | SARAA         | 250.58             | 26.77             | 5000 | 3900 |            |                            |
|                 |                           |                 | LRP VOR/DME   | 234.19             | 26.64             | 5000 | 3900 |            |                            |
|                 |                           |                 | JOANE         | 249.07             | 08.85             | 5000 | 3900 |            |                            |
|                 |                           |                 | DELRO         | 248.97             | 09.12             | 5000 | 3900 |            |                            |
|                 |                           |                 | LIRCH         | 248.86             | 16.03             | 5000 | 3600 |            | AT 14000                   |
| LANCASTER       | LRP.HYPER1                | LRP VOR/DME     | LRP VOR/DME   |                    |                   |      |      |            |                            |
|                 |                           |                 | JOANE         | 249.07             | 08.85             | 5000 | 3900 |            |                            |
|                 |                           |                 | DELRO         | 248.97             | 09.12             | 5000 | 3900 |            |                            |
|                 |                           |                 | LIRCH         | 248.86             | 16.03             | 5000 | 3600 |            | AT 14000                   |
| MODENA          | MXE.HYPER1                | MXE VORTAC      | MXE VORTAC    |                    |                   |      |      |            |                            |
|                 |                           |                 | DELRO         | 284.00             | 44.14             | 5000 | 3900 |            |                            |
|                 |                           |                 | LIRCH         | 248.86             | 16.03             | 5000 | 3600 |            | AT 14000                   |
| PARKE           | PARKE.HYPER1              | PARKE           | PARKE         |                    |                   |      |      |            |                            |



FEDERAL AVIATION ADMINISTRATION  
 FLIGHT STANDARDS SERVICE  
 STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
 Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

| Arrival Name    | Number                    |                 | STAR Computer Code | Superseded Number |          |      | Dated      | Effective Date |                            |
|-----------------|---------------------------|-----------------|--------------------|-------------------|----------|------|------------|----------------|----------------------------|
| HYPER (RNAV)    | ONE                       |                 | LIRCH.HYPER1       | NINE              |          |      | 03/21/2024 |                |                            |
| Transition Name | Transition Computer Codes | From FIX/NAVAID | To FIX/NAVAID      | Course            | Distance | MEA  | MOCA       | MAA            | Crossing Altitudes / Fixes |
|                 |                           |                 | JETTZ              | 274.28            | 13.88    | 5000 | 3900       |                |                            |
|                 |                           |                 | SARAA              | 250.58            | 26.77    | 5000 | 3900       |                |                            |
|                 |                           |                 | LRP VOR/DME        | 234.19            | 26.64    | 5000 | 3900       |                |                            |
|                 |                           |                 | JOANE              | 249.07            | 08.85    | 5000 | 3900       |                |                            |
|                 |                           |                 | DELRO              | 248.97            | 09.12    | 5000 | 3900       |                |                            |
|                 |                           |                 | LIRCH              | 248.86            | 16.03    | 5000 | 3600       |                | AT 14000                   |
| ROBBINSVILLE    | RBV.HYPER1                | RBV VORTAC      | RBV VORTAC         |                   |          |      |            |                |                            |
|                 |                           |                 | BANKK              | 291.88            | 19.01    | 5000 | 3900       |                |                            |
|                 |                           |                 | HIKES              | 292.12            | 33.54    | 5000 | 3900       |                |                            |
|                 |                           |                 | LRP VOR/DME        | 253.37            | 34.81    | 5000 | 3900       |                |                            |
|                 |                           |                 | JOANE              | 249.07            | 08.85    | 5000 | 3900       |                |                            |
|                 |                           |                 | DELRO              | 248.97            | 09.12    | 5000 | 3900       |                |                            |
|                 |                           |                 | LIRCH              | 248.86            | 16.03    | 5000 | 3600       |                | AT 14000                   |

**ARRIVAL ROUTE DESCRIPTION:**

IAD: FROM LIRCH ON TRACK 248.68/4.81 TO BINNS, THEN ON TRACK 248.61/11.62 TO CROSS HYPER AT 10000 AND AT 250 KIAS.

LANDING IAD RWY 1C/R: FROM HYPER ON TRACK 211.45/8.81 TO CROSS BRUHH AT 9000, THEN ON TRACK 211.41/8.81 TO CROSS SIGBE AT 7000, THEN ON TRACK 188.92/8.65 TO CROSS MOWAT AT 5000, THEN ON TRACK 188.90/6.10 TO CROSS HUSEL AT 4000, THEN ON TRACK 189.88/15.37 TO CROSS YACKK AT 4000 AND AT 210 KIAS, THEN ON TRACK 191.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING IAD RWY 1L, 30: FROM HYPER ON TRACK 227.52/27.41 TO CROSS CRAIN AT 6000, THEN ON TRACK 187.67/10.39 TO CROSS KUKSE AT 5000, THEN ON TRACK 189.82/12.76 TO ELISN, THEN ON TRACK 189.82. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING IAD RWY 19L/C/R: FROM HYPER ON TRACK 220.00/5.00 TO CROSS PHATT AT 9000, THEN ON TRACK 220.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING CJR/MRB/JYO/FRR/HWY/OKV: FROM LIRCH ON TRACK 248.68/4.81 TO BINNS, THEN ON TRACK 248.61/11.62 TO CROSS HYPER AT 10000 AND AT 250 KIAS, THEN ON TRACK 220.00/5.00 TO CROSS PHATT AT 9000, THEN ON TRACK 240.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

LANDING NYG/EZF/RMN/HEF: FROM LIRCH ON TRACK 248.68/4.81 TO BINNS, THEN ON TRACK 248.61/11.62 TO CROSS HYPER AT 10000 AND AT 250 KIAS, THEN ON TRACK 211.45/8.81 TO CROSS BRUHH AT 9000, THEN ON TRACK 211.41/8.81 TO CROSS SIGBE AT 7000, THEN ON TRACK 188.92/8.65 TO CROSS MOWAT AT 5000, THEN ON TRACK 188.90/6.10 TO CROSS HUSEL AT 4000, THEN ON TRACK 190.39/29.07 TO TICON, THEN ON TRACK 191.00. EXPECT RADAR VECTORS TO FINAL APPROACH COURSE.

**PBN REQUIREMENT NOTES:**

RNAV 1 - DME/DME/IRU OR GPS

**EQUIPMENT REQUIREMENT NOTES:**

RADAR REQUIRED

**PROCEDURAL DATA NOTES:**

NOTE: JET AND TURBOPROP AIRCRAFT ONLY

NOTE: FOR AIRCRAFT CAPABLE OF 180 KIAS OR GREATER.

NOTE: LRP TRANSITION ATC, ASSIGNED ONLY.



FEDERAL AVIATION ADMINISTRATION  
 FLIGHT STANDARDS SERVICE  
 STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
 Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

| Arrival Name        | Number     | STAR Computer Code  | Superseded Number | Dated             | Effective Date |
|---------------------|------------|---------------------|-------------------|-------------------|----------------|
| <b>HYPER (RNAV)</b> | <b>ONE</b> | <b>LIRCH.HYPER1</b> | <b>NINE</b>       | <b>03/21/2024</b> |                |

**FIXES AND/OR HOLDING PATTERNS:**

CHART HOLDING AT BINNS: HOLD E, RT, 248.61 INBOUND, 7 NM LEGS, 265 KIAS.  
 CHART HOLDING AT HYPER: HOLD E, LT, 248.61 INBOUND, 4 NM LEGS, 210 KIAS.

**COMMUNICATIONS:**

**AIRPORTS SERVED:**

| <u>AIRPORT ID</u> | <u>CITY</u>    | <u>STATE</u> |
|-------------------|----------------|--------------|
| IAD               | WASHINGTON     | DC           |
| CJR               | CULPEPER       | VA           |
| MRB               | MARTINSBURG    | WV           |
| FRR               | FRONT ROYAL    | VA           |
| JYO               | LEESBURG       | VA           |
| HEF               | WASHINGTON     | DC           |
| NYG               | QUANTICO       | VA           |
| EZF               | FREDERICKSBURG | VA           |
| RMN               | STAFFORD       | VA           |
| HWY               | WARRENTON      | VA           |
| OKV               | WINCHESTER     | VA           |

**LOST COMMUNICATIONS PREFERENCES:**

**REMARKS:**

THE ENVIRONMENTAL REVIEW UNDER ORDER 1050.1 (LATEST EDITION) AND THE NOISE SCREENING HAVE BEEN ACCOMPLISHED.  
 ATC ELECTS TO ADD FM LEG(S) SO AIRCRAFT FMS DOES NOT AUTOMATICALLY TURN ON TO CONNECTING IAPS.  
 MOCA VALUE AT LIRCH 3600 FT DUE TO 1547 MSL TOWER (42-000370) LOCATED NORTH OF RWY TRANSITIONS.  
 LOWEST ASSIGNED ATC ALTITUDE AT ELISN, 4000 AND AT TICON, 3000.

**ADDITIONAL FLIGHT DATA:**

DME/DME ASSESSMENT: SAT (RNP 2.0)  
 MAG VAR: IAD 10W/2000  
 CHART AT PHATT TERMINUS: IAD LDG RWY 19L/C/R  
 CHART AT ELISN TERMINUS: IAD LDG RWY 1L, 30  
 CHART AT YACKK TERMINUS: IAD LDG RWY 1C/R  
 CHART AT PHATT TERMINUS: LDG CJR/FRR/HWY/JYO/MRB/OKV



FEDERAL AVIATION ADMINISTRATION  
 FLIGHT STANDARDS SERVICE  
 STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
 Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

| Arrival Name                                 | Number     | STAR Computer Code  | Superseded Number | Dated             | Effective Date |
|--|------------|---------------------|-------------------|-------------------|----------------|
| <b>HYPER (RNAV)</b>                          | <b>ONE</b> | <b>LIRCH.HYPER1</b> | <b>NINE</b>       | <b>03/21/2024</b> |                |
| CHART AT TICON TERMINUS: LDG EZF/HEF/NYG/RMN |            |                     |                   |                   |                |
| CHART: P-40, R-4009                          |            |                     |                   |                   |                |
| CHART: P-56A, P-56B                          |            |                     |                   |                   |                |

**FLIGHT INSPECTED BY:**

MICHAEL G CAMPBELL

**ORGANIZATION: DATE:**

AJF 04/01/2026

Flight Inspected Signature:

*Digitally signed by*

**TARA N MARTINELLI**

*Digitally signed by* Apr 17, 2026

**PARNELL R PRASSADA**

Mar 03, 2026

**DEVELOPED BY:**

PARNELL PRASSADA

AJV-A432 01/12/2026

Developed By Signature:

**APPROVED BY:**

CASIMIR TABAKA

AJV-A432

Approved By Signature:

*Digitally signed by*

**TARA N MARTINELLI**

Apr 17, 2026

**CHANGES:**

- ENROUTE TRANSITION: LOWERED ALL MEAS TO 5000.
- ENROUTE TRANSITION: ADDED "AT 14000" ALTITUDE RESTRICTION AT COMMON ROUTE WAYPOINT LIRCH.
- ENROUTE TRANSITION: ADDED LRP TRANSITION TO THE ARRIVAL PROCEDURE.
- ARRIVAL ROUTE DESCRIPTION: LANDING IAD 1C/R: ADDED BRUHH; ADDED CROSS YACKK AT 4000/210 KIAS.
- ARRIVAL ROUTE DESCRIPTION: LANDING RWY 1L,30: ADDED CROSS KUSKE AT 5000; FM LEG CHANGED TO 189.82 10.
- ARRIVAL ROUTE DESCRIPTION: LANDING 19L/C/R: RELOCATED PHATT 4.2 NM NE; FM CHANGED FROM 230 TO 220.
- ARRIVAL ROUTE DESCRIPTION: DELETED "LANDING ALL SATELLITE AIRPORTS" AND ADDED "LANDING CJR/MRB/JYO/FRR/HWY/OKV" AND "LANDING NYG/EZF/RMN/HEF."
- ARRIVAL ROUTE DESCRIPTION: UPDATED CJR/MRB/JYO/FRR/HWY/OKV TO PHATT TRACK/DISTANCE INFORMATION FROM 232.92/8.92 TO 220.00/5.00.
- ARRIVAL ROUTE DESCRIPTION: UPDATED COMMON ROUTE FM LEG TRACK FOR CJR/MRB/JYO/FRR/HWY/OKV FROM 230.00 TRACK TO 240.00 TRACK.
- ARRIVAL ROUTE DESCRIPTION: ADDED NEW COMMON ROUTE FOR NYG/EZF/RMN/HEF ARPTS AFTER HYPER (BRUHH, SIGBE, MOWAT, HUSEL, TICON).
- PROCEDURAL DATA NOTES: ADDED "LRP TRANSITION ATC, ASSIGNED ONLY."
- COMMUNICATION/LOST COMMUNICATIONS: DELETED "CHART: POTOMAC APP CON."
- REMOVED "K" FROM AIRPORT IDENTIFIERS ON 17.1 FORM.
- REMARKS: ADDED "MOCA VALUE AT LIRCH 3600 FT DUE TO 1547 MSL TOWER (42-000370) LOCATED NORTH OF RWY TRANSITIONS."
- REMARKS: ADDED "LOWEST ASSIGNED ATC ALTITUDE AT ELISN, 4000 AND AT TICON, 3000."
- ADDITIONAL FLIGHT DATA: UPDATED TERMINUS DATA.

**REASONS:**

- DUE TO INCREASED DME/DME/IRU COVERAGE.
- 2-6, 9-11. PER ATC REQUEST.
- DUE TO AIRPORTS DISTINCTLY ASSIGNED TO PHATT AND NEWLY ADDED TICON TERMINUS.
- PHATT MOVED 4.2 NM NE TO PROVIDE PROCEDURAL SEPARATION.
- IAW 8260.19K, 4-5-12 (F).
- IAW 8260.19K DOCUMENTATION STANDARDS.



FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

| Arrival Name        | Number     | STAR Computer Code  | Superseded Number | Dated             | Effective Date |
|---------------------|------------|---------------------|-------------------|-------------------|----------------|
| <b>HYPER (RNAV)</b> | <b>ONE</b> | <b>LIRCH.HYPER1</b> | <b>NINE</b>       | <b>03/21/2024</b> |                |

14. IAW 8260.19K, 4-5-12 (I).

15. IAW "WAIVER TO FAA ORDER 8260.3, UNITED STATES STANDARD FOR TERMINAL INSTRUMENT PROCEDURES (TERPS), STAR TERMINATION ALTITUDE" MEMO.

16. IAW 8260.19K, 4-5-2 (H) (2).

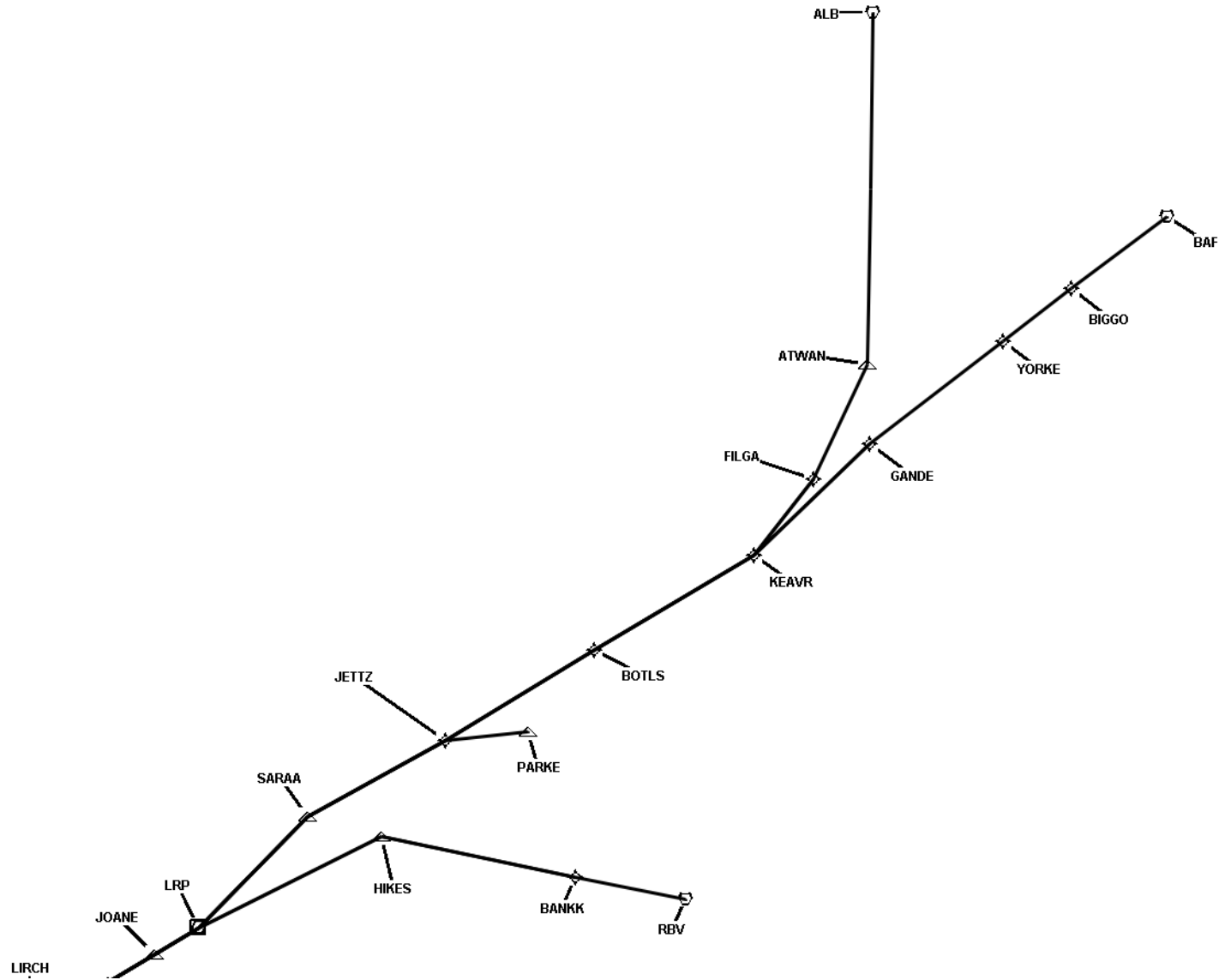


FEDERAL AVIATION ADMINISTRATION  
 FLIGHT STANDARDS SERVICE  
 STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
 Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

| Arrival Name | Number | STAR Computer Code | Superseded Number | Dated      | Effective Date |
|--------------|--------|--------------------|-------------------|------------|----------------|
| HYPER (RNAV) | ONE    | LIRCH.HYPER1       | NINE              | 03/21/2024 |                |

Graphic Depiction 1

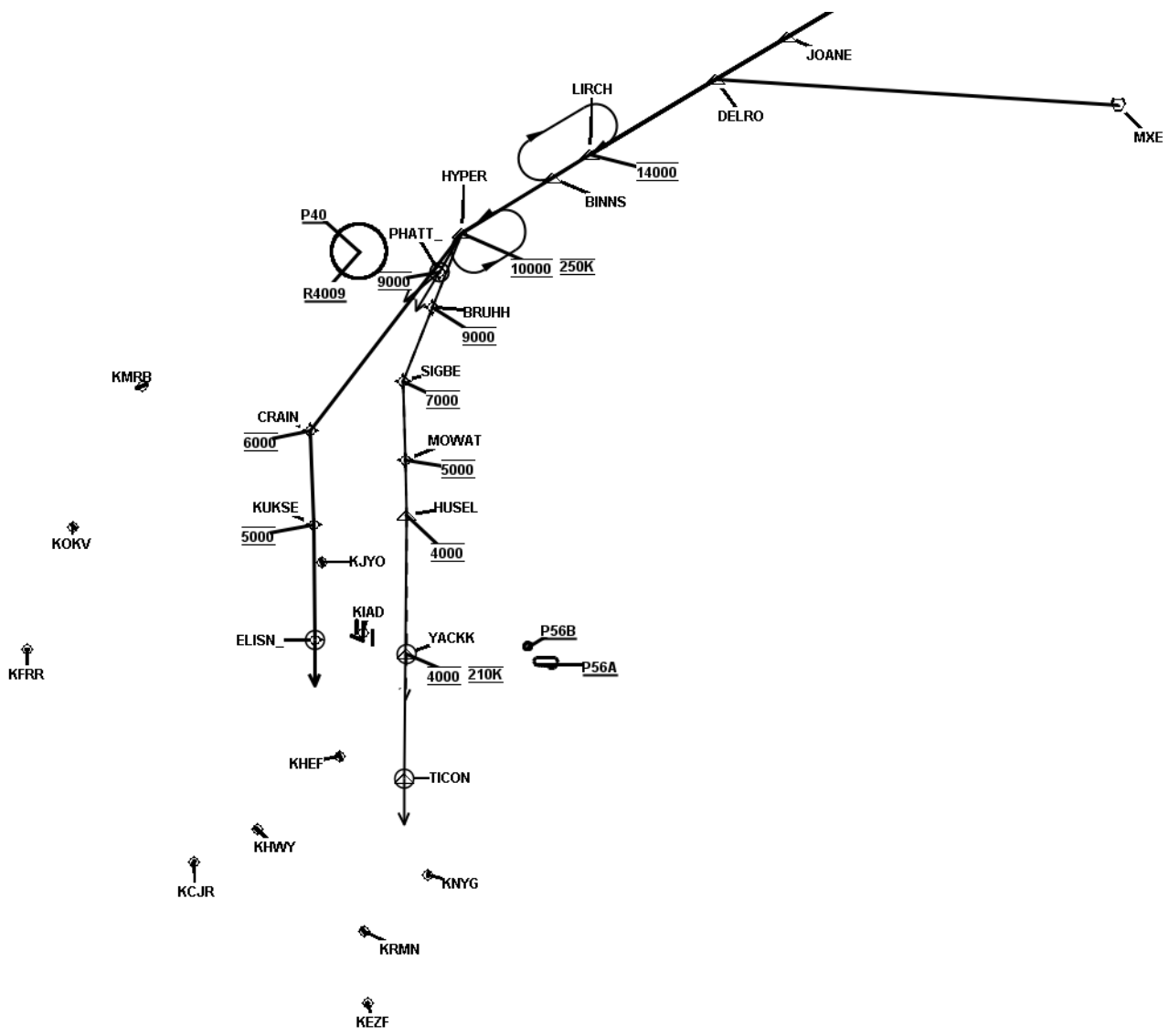


FEDERAL AVIATION ADMINISTRATION  
 FLIGHT STANDARDS SERVICE  
 STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
 Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

| Arrival Name        | Number     | STAR Computer Code  | Superseded Number | Dated             | Effective Date |
|---------------------|------------|---------------------|-------------------|-------------------|----------------|
| <b>HYPER (RNAV)</b> | <b>ONE</b> | <b>LIRCH.HYPER1</b> | <b>NINE</b>       | <b>03/21/2024</b> |                |

Graphic Depiction 2

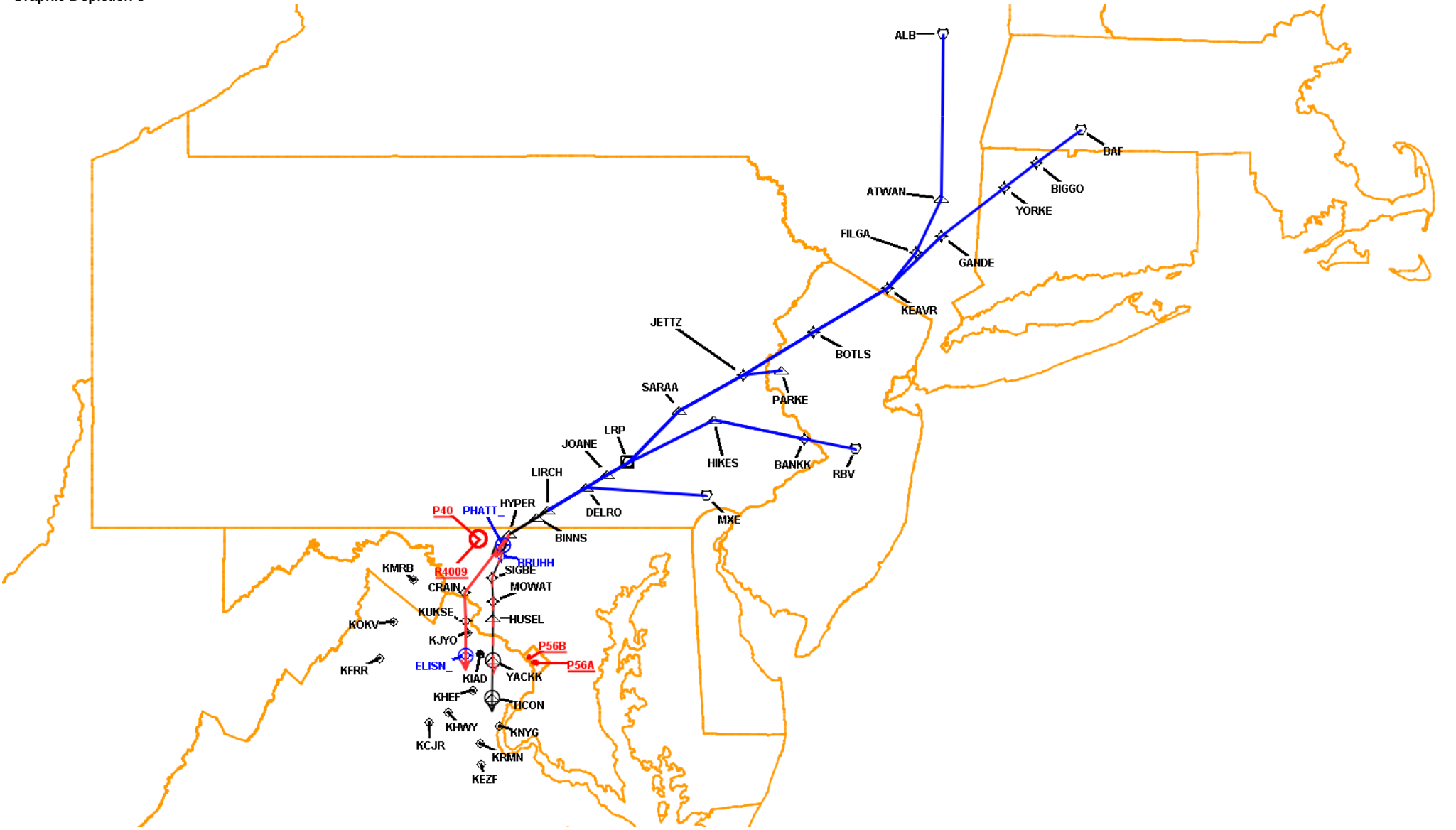


FEDERAL AVIATION ADMINISTRATION  
 FLIGHT STANDARDS SERVICE  
 STANDARD TERMINAL ARRIVAL (STAR)

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated.  
 Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated.

| Arrival Name | Number | STAR Computer Code | Superseded Number | Dated      | Effective Date |
|--------------|--------|--------------------|-------------------|------------|----------------|
| HYPER (RNAV) | ONE    | LIRCH.HYPER1       | NINE              | 03/21/2024 |                |

Graphic Depiction 3



FEDERAL AVIATION ADMINISTRATION  
 FLIGHT STANDARDS SERVICE  
 STAR (DATA RECORD)

| Arrival Name<br>HYPER (RNAV) | Number<br>ONE            | STAR Computer Code<br>LIRCH.HYPER1 |              | Superseded Number<br>NINE | Dated<br>03/21/2024 | Effective Date       |                 |              |                |
|------------------------------|--------------------------|------------------------------------|--------------|---------------------------|---------------------|----------------------|-----------------|--------------|----------------|
| <u>FIX/NAVAID</u>            | <u>LAT/LONG</u>          | <u>C</u>                           | <u>FO/FB</u> | <u>LEG<br/>TYPE</u>       | <u>TC</u>           | <u>DIST<br/>(NM)</u> | <u>ALTITUDE</u> | <u>SPEED</u> | <u>REMARKS</u> |
| En Route Transition          |                          |                                    |              |                           |                     |                      |                 |              |                |
| ALB VORTAC                   | 424450.21N / 0734811.46W | Y                                  |              | IF                        |                     |                      |                 |              | ALB.HYPER1     |
| ATWAN                        | 414415.03N / 0734914.27W | Y                                  | FB           | TF                        | 180.74              | 60.57                |                 |              |                |
| FILGA                        | 412428.13N / 0740112.37W | Y                                  | FB           | TF                        | 204.50              | 21.72                |                 |              |                |
| KEAVR                        | 411128.24N / 0741433.66W | Y                                  | FB           | TF                        | 217.84              | 16.43                |                 |              |                |
| BOTLS                        | 405508.24N / 0744948.79W | Y                                  | FB           | TF                        | 238.72              | 31.27                |                 |              |                |
| JETTZ                        | 403935.00N / 0752244.00W | Y                                  | FB           | TF                        | 238.31              | 29.44                |                 |              |                |
| SARAA                        | 402621.57N / 0755316.30W | Y                                  | FB           | TF                        | 240.58              | 26.77                |                 |              |                |
| LRP VOR/DME                  | 400711.91N / 0761728.66W | Y                                  | FB           | TF                        | 224.19              | 26.64                |                 |              |                |
| JOANE                        | 400238.48N / 0762721.40W | Y                                  | FB           | TF                        | 239.07              | 08.85                |                 |              |                |
| DELRO                        | 395755.71N / 0763731.24W | Y                                  | FB           | TF                        | 238.97              | 09.12                |                 |              |                |
| LIRCH                        | 394936.36N / 0765520.03W | Y                                  | FB           | TF                        | 238.86              | 16.03                | AT 14000        |              |                |
| En Route Transition          |                          |                                    |              |                           |                     |                      |                 |              |                |
| BAF VORTAC                   | 420943.05N / 0724258.32W | Y                                  |              | IF                        |                     |                      |                 |              | BAF.HYPER1     |
| BIGGO                        | 415720.91N / 0730404.59W | Y                                  | FB           | TF                        | 231.93              | 20.00                |                 |              |                |
| YORKE                        | 414821.75N / 0731914.12W | Y                                  | FB           | TF                        | 231.66              | 14.45                |                 |              |                |
| GANDE                        | 413036.66N / 0734852.03W | Y                                  | FB           | TF                        | 231.55              | 28.43                |                 |              |                |
| KEAVR                        | 411128.24N / 0741433.66W | Y                                  | FB           | TF                        | 225.47              | 27.21                |                 |              |                |
| BOTLS                        | 405508.24N / 0744948.79W | Y                                  | FB           | TF                        | 238.72              | 31.27                |                 |              |                |
| JETTZ                        | 403935.00N / 0752244.00W | Y                                  | FB           | TF                        | 238.31              | 29.44                |                 |              |                |
| SARAA                        | 402621.57N / 0755316.30W | Y                                  | FB           | TF                        | 240.58              | 26.77                |                 |              |                |
| LRP VOR/DME                  | 400711.91N / 0761728.66W | Y                                  | FB           | TF                        | 224.19              | 26.64                |                 |              |                |
| JOANE                        | 400238.48N / 0762721.40W | Y                                  | FB           | TF                        | 239.07              | 08.85                |                 |              |                |
| DELRO                        | 395755.71N / 0763731.24W | Y                                  | FB           | TF                        | 238.97              | 09.12                |                 |              |                |
| LIRCH                        | 394936.36N / 0765520.03W | Y                                  | FB           | TF                        | 238.86              | 16.03                | AT 14000        |              |                |
| En Route Transition          |                          |                                    |              |                           |                     |                      |                 |              |                |
| BANKK                        | 401600.95N / 0745400.03W | Y                                  |              | IF                        |                     |                      |                 |              | BANKK.HYPER1   |
| HIKES                        | 402255.93N / 0753654.90W | Y                                  | FB           | TF                        | 282.12              | 33.54                |                 |              |                |

QUALITY  
14  
CHECKED

FEDERAL AVIATION ADMINISTRATION  
 FLIGHT STANDARDS SERVICE  
 STAR (DATA RECORD)

| Arrival Name<br>HYPER (RNAV) | Number<br>ONE            | STAR Computer Code<br>LIRCH.HYPER1 |       | Superseded Number<br>NINE |        | Dated<br>03/21/2024 | Effective Date |       |              |
|------------------------------|--------------------------|------------------------------------|-------|---------------------------|--------|---------------------|----------------|-------|--------------|
| FIX/NAVAID                   | LAT/LONG                 | C                                  | FO/FB | LEG<br>TYPE               | TC     | DIST<br>(NM)        | ALTITUDE       | SPEED | REMARKS      |
| LRP VOR/DME                  | 400711.91N / 0761728.66W | Y                                  | FB    | TF                        | 243.37 | 34.81               |                |       |              |
| JOANE                        | 400238.48N / 0762721.40W | Y                                  | FB    | TF                        | 239.07 | 08.85               |                |       |              |
| DELRO                        | 395755.71N / 0763731.24W | Y                                  | FB    | TF                        | 238.97 | 09.12               |                |       |              |
| LIRCH                        | 394936.36N / 0765520.03W | Y                                  | FB    | TF                        | 238.86 | 16.03               | AT 14000       |       |              |
| En Route Transition          |                          |                                    |       |                           |        |                     |                |       |              |
| FILGA                        | 412428.13N / 0740112.37W | Y                                  |       | IF                        |        |                     |                |       | FILGA.HYPER1 |
| KEAVR                        | 411128.24N / 0741433.66W | Y                                  | FB    | TF                        | 217.84 | 16.43               |                |       |              |
| BOTLS                        | 405508.24N / 0744948.79W | Y                                  | FB    | TF                        | 238.72 | 31.27               |                |       |              |
| JETTZ                        | 403935.00N / 0752244.00W | Y                                  | FB    | TF                        | 238.31 | 29.44               |                |       |              |
| SARAA                        | 402621.57N / 0755316.30W | Y                                  | FB    | TF                        | 240.58 | 26.77               |                |       |              |
| LRP VOR/DME                  | 400711.91N / 0761728.66W | Y                                  | FB    | TF                        | 224.19 | 26.64               |                |       |              |
| JOANE                        | 400238.48N / 0762721.40W | Y                                  | FB    | TF                        | 239.07 | 08.85               |                |       |              |
| DELRO                        | 395755.71N / 0763731.24W | Y                                  | FB    | TF                        | 238.97 | 09.12               |                |       |              |
| LIRCH                        | 394936.36N / 0765520.03W | Y                                  | FB    | TF                        | 238.86 | 16.03               | AT 14000       |       |              |
| En Route Transition          |                          |                                    |       |                           |        |                     |                |       |              |
| GANDE                        | 413036.66N / 0734852.03W | Y                                  |       | IF                        |        |                     |                |       | GANDE.HYPER1 |
| KEAVR                        | 411128.24N / 0741433.66W | Y                                  | FB    | TF                        | 225.47 | 27.21               |                |       |              |
| BOTLS                        | 405508.24N / 0744948.79W | Y                                  | FB    | TF                        | 238.72 | 31.27               |                |       |              |
| JETTZ                        | 403935.00N / 0752244.00W | Y                                  | FB    | TF                        | 238.31 | 29.44               |                |       |              |
| SARAA                        | 402621.57N / 0755316.30W | Y                                  | FB    | TF                        | 240.58 | 26.77               |                |       |              |
| LRP VOR/DME                  | 400711.91N / 0761728.66W | Y                                  | FB    | TF                        | 224.19 | 26.64               |                |       |              |
| JOANE                        | 400238.48N / 0762721.40W | Y                                  | FB    | TF                        | 239.07 | 08.85               |                |       |              |
| DELRO                        | 395755.71N / 0763731.24W | Y                                  | FB    | TF                        | 238.97 | 09.12               |                |       |              |
| LIRCH                        | 394936.36N / 0765520.03W | Y                                  | FB    | TF                        | 238.86 | 16.03               | AT 14000       |       |              |
| En Route Transition          |                          |                                    |       |                           |        |                     |                |       |              |
| LRP VOR/DME                  | 400711.91N / 0761728.66W | Y                                  |       | IF                        |        |                     |                |       | LRP.HYPER1   |
| JOANE                        | 400238.48N / 0762721.40W | Y                                  | FB    | TF                        | 239.07 | 08.85               |                |       |              |



FEDERAL AVIATION ADMINISTRATION  
 FLIGHT STANDARDS SERVICE  
 STAR (DATA RECORD)

| Arrival Name<br>HYPER (RNAV) | Number<br>ONE            | STAR Computer Code<br>LIRCH.HYPER1 |              | Superseded Number<br>NINE |           | Dated<br>03/21/2024  | Effective Date  |              |                |
|------------------------------|--------------------------|------------------------------------|--------------|---------------------------|-----------|----------------------|-----------------|--------------|----------------|
| <u>FIX/NAVAID</u>            | <u>LAT/LONG</u>          | <u>C</u>                           | <u>FO/FB</u> | <u>LEG<br/>TYPE</u>       | <u>TC</u> | <u>DIST<br/>(NM)</u> | <u>ALTITUDE</u> | <u>SPEED</u> | <u>REMARKS</u> |
| DELRO                        | 395755.71N / 0763731.24W | Y                                  | FB           | TF                        | 238.97    | 09.12                |                 |              |                |
| LIRCH                        | 394936.36N / 0765520.03W | Y                                  | FB           | TF                        | 238.86    | 16.03                | AT 14000        |              |                |
| En Route Transition          |                          |                                    |              |                           |           |                      |                 |              |                |
| MXE VORTAC                   | 395504.98N / 0754014.96W | Y                                  |              | IF                        |           |                      |                 |              | MXE.HYPER1     |
| DELRO                        | 395755.71N / 0763731.24W | Y                                  | FB           | TF                        | 274.00    | 44.14                |                 |              |                |
| LIRCH                        | 394936.36N / 0765520.03W | Y                                  | FB           | TF                        | 238.86    | 16.03                | AT 14000        |              |                |
| En Route Transition          |                          |                                    |              |                           |           |                      |                 |              |                |
| PARKE                        | 404059.46N / 0750435.32W | Y                                  |              | IF                        |           |                      |                 |              | PARKE.HYPER1   |
| JETTZ                        | 403935.00N / 0752244.00W | Y                                  | FB           | TF                        | 264.28    | 13.88                |                 |              |                |
| SARAA                        | 402621.57N / 0755316.30W | Y                                  | FB           | TF                        | 240.58    | 26.77                |                 |              |                |
| LRP VOR/DME                  | 400711.91N / 0761728.66W | Y                                  | FB           | TF                        | 224.19    | 26.64                |                 |              |                |
| JOANE                        | 400238.48N / 0762721.40W | Y                                  | FB           | TF                        | 239.07    | 08.85                |                 |              |                |
| DELRO                        | 395755.71N / 0763731.24W | Y                                  | FB           | TF                        | 238.97    | 09.12                |                 |              |                |
| LIRCH                        | 394936.36N / 0765520.03W | Y                                  | FB           | TF                        | 238.86    | 16.03                | AT 14000        |              |                |
| En Route Transition          |                          |                                    |              |                           |           |                      |                 |              |                |
| RBV VORTAC                   | 401208.65N / 0742942.09W | Y                                  |              | IF                        |           |                      |                 |              | RBV.HYPER1     |
| BANKK                        | 401600.95N / 0745400.03W | Y                                  | FB           | TF                        | 281.88    | 19.01                |                 |              |                |
| HIKES                        | 402255.93N / 0753654.90W | Y                                  | FB           | TF                        | 282.12    | 33.54                |                 |              |                |
| LRP VOR/DME                  | 400711.91N / 0761728.66W | Y                                  | FB           | TF                        | 243.37    | 34.81                |                 |              |                |
| JOANE                        | 400238.48N / 0762721.40W | Y                                  | FB           | TF                        | 239.07    | 08.85                |                 |              |                |
| DELRO                        | 395755.71N / 0763731.24W | Y                                  | FB           | TF                        | 238.97    | 09.12                |                 |              |                |
| LIRCH                        | 394936.36N / 0765520.03W | Y                                  | FB           | TF                        | 238.86    | 16.03                | AT 14000        |              |                |



FEDERAL AVIATION ADMINISTRATION  
 FLIGHT STANDARDS SERVICE  
 STAR (DATA RECORD)

| Arrival Name<br>HYPER (RNAV)      | Number<br>ONE            | STAR Computer Code<br>LIRCH.HYPER1 |              | Superseded Number<br>NINE |           | Dated<br>03/21/2024  | Effective Date  |              |                |
|-----------------------------------|--------------------------|------------------------------------|--------------|---------------------------|-----------|----------------------|-----------------|--------------|----------------|
| <u>FIX/NAVAID</u>                 | <u>LAT/LONG</u>          | <u>C</u>                           | <u>FO/FB</u> | <u>LEG<br/>TYPE</u>       | <u>TC</u> | <u>DIST<br/>(NM)</u> | <u>ALTITUDE</u> | <u>SPEED</u> | <u>REMARKS</u> |
| Common Route                      |                          |                                    |              |                           |           |                      |                 |              |                |
| LIRCH                             | 394936.36N / 0765520.03W | Y                                  |              | IF                        |           |                      | AT 14000        |              | LIRCH.HYPER1   |
| BINNS                             | 394706.22N / 0770039.58W | Y                                  | FB           | TF                        | 238.68    | 04.81                |                 |              |                |
| HYPER                             | 394102.16N / 0771330.34W | Y                                  | FB           | TF                        | 238.61    | 11.62                | AT 10000        | AT 250K      |                |
| Common Route                      |                          |                                    |              |                           |           |                      |                 |              |                |
| LIRCH                             | 394936.36N / 0765520.03W | Y                                  |              | IF                        |           |                      | AT 14000        |              | LIRCH.HYPER1   |
| BINNS                             | 394706.22N / 0770039.58W | Y                                  | FB           | TF                        | 238.68    | 04.81                |                 |              |                |
| HYPER                             | 394102.16N / 0771330.34W | Y                                  | FB           | TF                        | 238.61    | 11.62                | AT 10000        | AT 250K      |                |
| PHATT                             | 393642.09N / 0771644.43W | Y                                  | FO           | TF                        | 210.00    | 05.00                | AT 9000         |              |                |
| KCJR,KFRR,KHWY,<br>KJYO,KMRB,KOKV |                          |                                    |              | FM                        | 230.00    |                      |                 |              |                |
| Common Route                      |                          |                                    |              |                           |           |                      |                 |              |                |
| LIRCH                             | 394936.36N / 0765520.03W | Y                                  |              | IF                        |           |                      | AT 14000        |              | LIRCH.HYPER1   |
| BINNS                             | 394706.22N / 0770039.58W | Y                                  | FB           | TF                        | 238.68    | 04.81                |                 |              |                |
| HYPER                             | 394102.16N / 0771330.34W | Y                                  | FB           | TF                        | 238.61    | 11.62                | AT 10000        | AT 250K      |                |
| BRUHH                             | 393249.70N / 0771740.29W | Y                                  | FB           | TF                        | 201.45    | 08.81                | AT 9000         |              |                |
| SIGBE                             | 392437.20N / 0772149.20W | Y                                  | FB           | TF                        | 201.41    | 08.81                | AT 7000         |              |                |
| MOWAT                             | 391557.60N / 0772136.60W | Y                                  | FB           | TF                        | 178.92    | 08.65                | AT 5000         |              |                |
| HUSEL                             | 390951.60N / 0772127.60W | Y                                  | FB           | TF                        | 178.90    | 06.10                | AT 4000         |              |                |
| TICON                             | 384045.60N / 0772142.60W | Y                                  | FO           | TF                        | 180.39    | 29.07                |                 |              |                |
| KEZF,KHEF,KNYG,<br>KRMN           |                          |                                    |              | FM                        | 181.00    |                      |                 |              |                |
| Runway Transition                 |                          |                                    |              |                           |           |                      |                 |              |                |
| HYPER                             | 394102.16N / 0771330.34W | Y                                  |              | IF                        |           |                      | AT 10000        | AT 250K      |                |
| PHATT                             | 393642.09N / 0771644.43W | Y                                  | FO           | TF                        | 210.00    | 05.00                | AT 9000         |              |                |
| KIAD:RWY 19C,RWY<br>19L,RWY 19R   |                          |                                    |              | FM                        | 210.00    |                      |                 |              |                |



FEDERAL AVIATION ADMINISTRATION  
 FLIGHT STANDARDS SERVICE  
 STAR (DATA RECORD)

| Arrival Name<br>HYPER (RNAV) | Number<br>ONE            | STAR Computer Code<br>LIRCH.HYPER1 |              | Superseded Number<br>NINE | Dated<br>03/21/2024 | Effective Date       |                 |              |                |
|------------------------------|--------------------------|------------------------------------|--------------|---------------------------|---------------------|----------------------|-----------------|--------------|----------------|
| <u>FIX/NAVAID</u>            | <u>LAT/LONG</u>          | <u>C</u>                           | <u>FO/FB</u> | <u>LEG<br/>TYPE</u>       | <u>TC</u>           | <u>DIST<br/>(NM)</u> | <u>ALTITUDE</u> | <u>SPEED</u> | <u>REMARKS</u> |
| Runway Transition            |                          |                                    |              |                           |                     |                      |                 |              |                |
| HYPER                        | 394102.16N / 0771330.34W | Y                                  |              | IF                        |                     |                      | AT 10000        | AT 250K      |                |
| BRUHH                        | 393249.70N / 0771740.29W | Y                                  | FB           | TF                        | 201.45              | 08.81                | AT 9000         |              |                |
| SIGBE                        | 392437.20N / 0772149.20W | Y                                  | FB           | TF                        | 201.41              | 08.81                | AT 7000         |              |                |
| MOWAT                        | 391557.60N / 0772136.60W | Y                                  | FB           | TF                        | 178.92              | 08.65                | AT 5000         |              |                |
| HUSEL                        | 390951.60N / 0772127.60W | Y                                  | FB           | TF                        | 178.90              | 06.10                | AT 4000         |              |                |
| YACKK                        | 385428.80N / 0772125.20W | Y                                  | FO           | TF                        | 179.88              | 15.37                | AT 4000         | AT 210K      |                |
| KIAD:RWY 1C,RWY 1R           |                          |                                    |              | FM                        | 181.00              |                      |                 |              |                |
| Runway Transition            |                          |                                    |              |                           |                     |                      |                 |              |                |
| HYPER                        | 394102.16N / 0771330.34W | Y                                  |              | IF                        |                     |                      | AT 10000        | AT 250K      |                |
| CRAIN                        | 391914.47N / 0773501.25W | Y                                  | FB           | TF                        | 217.52              | 27.41                | AT 6000         |              |                |
| KUKSE                        | 390850.86N / 0773428.65W | Y                                  | FB           | TF                        | 177.67              | 10.39                | AT 5000         |              |                |
| ELISN                        | 385604.53N / 0773425.56W | Y                                  | FO           | TF                        | 179.82              | 12.76                |                 |              |                |
| KIAD:RWY 1L,RWY 30           |                          |                                    |              | FM                        | 179.82              |                      |                 |              |                |

