

**U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION
GRAPHIC DEPARTURE PROCEDURE (DP)**

Bearings, headings, courses, tracks, and radials are magnetic. Elevation 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. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
AMRST	FIVE	AMRST5.AMRST	FOUR	1/8/2015	30 APR 2015

TYPE: SID

DP ROUTE DESCRIPTION:

DEPARTING CLEVELAND-HOPKINS INTL: TAKE-OFF RWY 6L, 6R, 10, 24R, 24L, 28: CLIMB ON ASSIGNED HEADING TO 5000 THENCE ...

DEPARTING WILLOUGHBY LOST NATION MUNI: TAKE-OFF RWY 5: CLIMB ON ASSIGNED HEADING TO 3000 THENCE ... **TAKE-OFF RWY 10:** CLIMB HEADING 098.51 TO 1600 THEN ON ASSIGNED HEADING TO 3000 THENCE ... **TAKE-OFF RWY 23:** CLIMB HEADING 232.60 TO 1400 THEN ON ASSIGNED HEADING TO 3000 THENCE ... **TAKE-OFF RWY 28:** CLIMB HEADING 278.52 TO 1400 THEN ON ASSIGNED HEADING TO 3000 THENCE ...

DEPARTING ALL OTHER AIRPORTS: CLIMB ON ASSIGNED HEADING TO 3000 THENCE...

...OR ASSIGNED ALTITUDE FOR VECTORS TO INTERCEPT DJB VOR/DME R-265, TO AMRST INT THEN ON (TRANSITION). EXPECT FILED ALTITUDE/FLIGHT LEVEL TEN (10) MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	Crossing Altitudes/Fixes
WATERVILLE	AMRST5.VWV	AMRST INT	VWV VOR/DME	294.64 (VWV R-115)	31.87	3000	2200	
CARLETON	AMRST5.CRL	AMRST INT	CRL VORTAC	339.20 (CRL R-159)	52.57	7000		

PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

PROCEDURAL DATA NOTES:

NOTE: RADAR REQUIRED.

TAKEOFF MINIMUMS:

CLEVELAND-HOPKINS INTL: RWY 6R, 6L, 10, 24R, 24L, 28 STANDARD.

CUYAHOGA COUNTY: RWY 6, 24 STANDARD.

ELYRIA: RWY 9, 27 STANDARD.

LORAIN COUNTY RGNL: RWY 7, 25 STANDARD.

GEAUGA COUNTY: RWY 11, 29 STANDARD.

MEDINA MUNI: RWY 1, 9, 19, 27 STANDARD.

CONCORD AIRPARK: RWY 2 STANDARD. **RWY 20** 400-2 3/4 OR STANDARD WITH MINIMUM CLIMB OF 400 FEET PER NM TO 1500.

WILLOUGHBY LOST NATION MUNI: RWY 5, 10, 23, 28 STANDARD.



U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION
GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation 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. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
AMRST	FIVE	AMRST5.AMRST	FOUR	1/8/2015	30 APR 2015

TAKEOFF OBSTACLES NOTES:

CLEVELAND-HOPKINS INTL: NOTE: RWY 6R, ANTENNA 1056 FT FROM DER, 82 FT LEFT OF CENTERLINE, 45 FT AGL/820 FT MSL. **NOTE: RWY 10**, TREES, POLE AND TOWER BEGINNING 1159 FT FROM DER, 656 FT RIGHT OF CENTERLINE, UP TO 137 FT AGL/922 FT MSL. SIGNS BEGINNING 1236 FT FROM DER, 717 FT LEFT OF CENTERLINE, UP TO 86 FT AGL/857 FT MSL. **NOTE: RWY24R**, TREES BEGINNING 3652 FT FROM DER. 856 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/870 FT MSL. TOWER 2564 FT FROM DER, 1027 FT RIGHT OF CENTERLINE, 191 FT AGL/870 FT MSL. **NOTE: RWY 24L**, TREES AND POLES BEGINNING 1903 FT FROM DER, 5 FT LEFT OF CENTERLINE, UP TO 89 FT AGL/849 FT MSL. **NOTE: RWY 28**, TREES, ANTENNA AND ROAD BEGINNING 3 FT FROM DER, 304 FT LEFT OF CENTERLINE, UP TO 94 FT AGL/820 FT MSL. TREE 712 FT FROM DER, 117 FT RIGHT OF CENTERLINE, 135 FT AGL/811 FT MSL.

CUYAHOGA COUNTY: NOTE: RWY 6, TREES BEGINNING 2127 FT FROM DER, 33 FT RIGHT OF CENTERLINE, UP TO 109 FT AGL/982 FT MSL. TREE 2595 FT FROM DER, 739 FT LEFT OF CENTERLINE, 93 FT AGL/947 FT MSL. **NOTE: RWY 24**, TERRAIN 35 FT FROM DER, 447 FT LEFT OF CENTERLINE, 874 FT MSL. TREES BEGINNING 755 FT FROM DER, 46 FT RIGHT OF CENTERLINE, UP TO 82 FT AGL/975 FT MSL. BUILDING 1179 FT FROM DER, 676 FT LEFT OF CENTERLINE, 34 FT AGL/917 FT MSL. TREES BEGINNING 1784 FT FROM DER, 35 FT LEFT OF CENTERLINE, UP TO 92 FT AGL/985 FT MSL.

ELYRIA: NOTE: RWY 9, ROAD 1198 FT FROM DER, 275 FT LEFT OF CENTERLINE, 15 FT AGL/774 FT MSL. TREE 2077 FT FROM DER, 778 FT RIGHT OF CENTERLINE, 100 FT AGL/859 FT MSL. **NOTE: RWY 27**, TREE 68 FT FROM DER, 237 FT LEFT OF CENTERLINE, 100 FT AGL/859 FT MSL. TREE 527 FT FROM DER, 454 FT RIGHT OF CENTERLINE, 100 FT AGL/854 FT MSL.

LORAIN COUNTY RGNL: NOTE: RWY 7, MULTIPLE TREES BEGINNING 973 FT FROM DER, 293 FT RIGHT OF CENTERLINE, UP TO 75 FT AGL/865 FT MSL. MULTIPLE TREES BEGINNING 839 FT FROM DER, 636 FT LEFT OF CENTERLINE, UP TO 47 FT AGL/836 FT MSL. **NOTE: RWY 25**, BUSH 583 FT FROM DER, 468 FT RIGHT OF CENTERLINE, 10 FT AGL/809 FT MSL. TREE 1587 FT FROM DER, 698 FT LEFT OF CENTERLINE, 44 FT AGL/838 FT MSL TREE 2277 FT FROM DER, 435 FT RIGHT OF CENTERLINE, 58 FT AGL/854 FT MSL.

GEAUGA COUNTY: NOTE: RWY 11, RAILROAD 331 FT FROM DER, 315 FT LEFT OF CENTERLINE, 23 FT AGL/1182 FT MSL. TREES 3144 FT FROM DER, 671 FT LEFT OF CENTERLINE, 100 FT AGL/1249 FT MSL. **NOTE: RWY 29**, RAILROAD 349 FT FROM DER, 521 FT LEFT OF CENTERLINE, 23 FT AGL/1212 FT MSL. MULTIPLE BUILDINGS 993 FT FROM DER, 294 FT RIGHT OF CENTERLINE, 40 FT AGL/1239 FT MSL. TREES 1875 FT FROM DER, 791 FT RIGHT OF CENTERLINE, 100 FT AGL/1319 FT MSL. TANK 2251 FT FROM DER, 578 FT RIGHT OF CENTERLINE, 125 FT AGL/1315 FT MSL.

MEDINA MUNI: NOTE: RWY 1, VEHICLE ON ROAD 534 FT FROM DER, ON CENTERLINE, 15 FT AGL/1214 FT MSL. TREES BEGINNING 562 FT FROM DER, 588 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/1279 FT MSL. TREES BEGINNING 1925 FT FROM DER, ON CENTERLINE, UP TO 100 FT AGL/1319 FT MSL. **NOTE: RWY 9**, TREES BEGINNING 305 FT FROM DER, 396 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/1249 FT MSL. TOWER 3626 FT FROM DER, 533 FT LEFT OF CENTERLINE, 189 FT AGL/1321 FT MSL. **NOTE: RWY 19**, TREES BEGINNING AT DER, 112 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/1289 FT MSL. TREES BEGINNING 1490 FT FROM DER, 150 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/1289 FT MSL. **NOTE: RWY 27**, TREES BEGINNING AT DER, 345 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/1319 FT MSL. TREES BEGINNING AT DER, 366 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/1279 FT MSL. VEHICLE ON ROAD 501 FT FROM DER, ON CENTERLINE, 15 FT AGL/1184 FT MSL.

CONCORD AIRPARK: NOTE: RWY 2, TREES BEGINNING 336 FT FROM DER, 42 FT LEFT OF CENTERLINE, UP TO 100 FT AGL/1039 FT MSL. TREES BEGINNING 1064 FT FROM DER, 217 FT RIGHT OF CENTERLINE, UP TO 100 FT AGL/1039 FT MSL. **NOTE: RWY 20**, TREES BEGINNING 131 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 100 FT AGL/1220 FT MSL. TOWER 1.2 NM FROM DER, 2020 FT RIGHT OF CENTERLINE, 114 FT AGL/1223 FT MSL.

WILLOUGHBY LOST NATION MUNI: NOTE: RWY 5, TREES BEGINNING 47 FT FROM DER, 93 FT RIGHT OF CENTERLINE, UP TO 109 FT AGL/726 MSL. FENCE 530 FT FROM DER, 244 FT RIGHT OF CENTERLINE, 16 FT AGL/633 FT MSL. TREES BEGINNING 1079 FT FROM DER, 150 FT LEFT OF CENTERLINE, UP TO 120 FT AGL/737 FT MSL. POLE 2129 FT FROM DER, 428 FT RIGHT OF CENTERLINE, 56 FT AGL/677 FT MSL. **NOTE: RWY 10**, TREES AND POLES BEGINNING 602 FT FROM DER, 63 FT RIGHT OF CENTERLINE, UP TO 109 FT AGL/730 FT MSL. TREES AND POLES BEGINNING 608 FT FROM DER, 67 FT LEFT OF CENTERLINE, UP TO 117 FT AGL/731 FT MSL. **NOTE: RWY 23**, LIGHT ON HANGAR 201 FT FROM DER, 534 FT RIGHT OF CENTERLINE, 32 FT AGL/672 FT MSL. TREES, POLES AND BUILDINGS BEGINNING 294 FT FROM DER, 87 FT RIGHT OF CENTERLINE, UP TO 85 FT AGL/722 FT MSL. TREES BEGINNING 1660 FT FROM DER, 164 FT LEFT OF CENTERLINE, UP TO 77 FT AGL/714 FT MSL. **NOTE: RWY 28**, LIGHT ON HANGAR 877 FT FROM DER, 539 FT LEFT OF CENTERLINE, 32 FT AGL/672 FT MSL. BUILDING 881 FT FROM DER, 665 FT LEFT OF CENTERLINE, 32 FT AGL/672 FT MSL. POLE 988 FT FROM DER, 533 FT RIGHT OF CENTERLINE, 31 FT AGL/661 FT MSL. BUILDING 1101 FT FROM DER, 337 FT RIGHT OF CENTERLINE, 35 FT AGL/661 FT MSL. TREES BEGINNING 1177 FT FROM DER, 395 FT RIGHT

QUALITY
CHECKED

**U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION
GRAPHIC DEPARTURE PROCEDURE (DP)**

Bearings, headings, courses, tracks, and radials are magnetic. Elevation 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. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
AMRST	FIVE	AMRST5.AMRST	FOUR	1/8/2015	30 APR 2015

OF CENTERLINE, UP TO 75 FT AGL/705 FT MSL. TREES BEGINNING 1179 FT FROM DER, 200 FT LEFT OF CENTERLINE, UP TO 80 FT AGL/717 FT MSL.

CONTROLLING OBSTACLES:

CLEVELAND-HOPKINS INTL: RWY 6R: 1999 FT MSL TOWER 412245.00N/0814311.00W. **RWY 6L:** 1999 FT MSL TOWER 412245.00N/0814311.00W. **RWY 10:** 1999 FT MSL TOWER 412245.00N/0814311.00W.

CONCORD AIRPARK: RWY 20: 1169 FT MSL TREE 413920.80N/0811220.27W. 1349 FT MSL AAO 413825.88N/0811305.38W. 1339 FT MSL AAO 413748.73N/0811314.71W. 1309 FT MSL AAO 413836.19N/0811321.23W.

WILLOUGHBY LOST NATION MUNI: RWY 10: 1487 FT MSL AAO 413830.00N/0811624.00W. **RWY 23:** 1207 FT MSL STACK 414014.23N/0812633.55W. **RWY 28:** 1207 FT MSL STACK 414014.23N/0812633.55W.

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

- CLEVELAND-HOPKINS INTL CHART: TOP ALTITUDE: 5000
- CUYAHOGA COUNTY CHART: TOP ALTITUDE: 3000
- ELYRIA CHART: TOP ALTITUDE: 3000
- LORAIN COUNTY RGNL CHART: TOP ALTITUDE: 3000
- GAUGA COUNTY CHART: TOP ALTITUDE: 3000
- MEDINA MUNI CHART: TOP ALTITUDE: 3000
- CONCORD AIRPARK CHART: TOP ALTITUDE: 3000
- WILLOUGHBY LOST NATION MUNI CHART: TOP ALTITUDE: 3000

AIRPORTS SERVED:

- | | |
|-----------------------------|-------------------|
| CLEVELAND-HOPKINS INTL | CLEVELAND, OH |
| CUYAHOGA COUNTY | CLEVELAND, OH |
| ELYRIA | ELYRIA, OH |
| LORAIN COUNTY RGNL | LORAIN/ELYRIA, OH |
| GAUGA COUNTY | MIDDLEFIELD, OH |
| MEDINA MUNI | MEDINA, OH |
| CONCORD AIRPARK | PAINESVILLE, OH |
| WILLOUGHBY LOST NATION MUNI | WILLOUGHBY, OH |

COMMUNICATIONS:

CLEVELAND -HOPKINS INTL: 128.25/346.32. CUYAHOGA COUNTY, GAUGA COUNTY, CONCORD AIRPARK, WILLOUGHBY LOST NATION MUNI:125.35/346.32. ELYRIA, LORAIN COUNTY REGIONAL 126.35/346.32. CLEVELAND-HOPKINS INTL ATIS.

FIXES AND/OR NAVAIDS:

HUDDZ INT/DJB 15.97 DME.

REMARKS:



U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION
GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation 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. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
AMRST	FIVE	AMRST5.AMRST	FOUR	1/8/2015	30 APR 2015

CHANGES:

1. CHANGED KCLE TOP ALTITUDE FROM 3000 TO 5000

REASONS:

1. CORRECTED TOP ALTITUDE.

