

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DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
FTHLS	FOUR	FTHLS4.FTHLS	THREE	6/25/2015	21 JUL 2016

TYPE: RNAV SID

DP ROUTE DESCRIPTION:

CHANDLER MUNI

TAKEOFF RWY 4L: CLIMB HEADING 037.62 OR AS ASSIGNED BY ATC. THENCE. . .
 TAKEOFF RWY 4R: CLIMB HEADING 037.63 OR AS ASSIGNED BY ATC. THENCE. . .
 TAKEOFF RWY 22R: CLIMB HEADING 217.63 OR AS ASSIGNED BY ATC. THENCE. . .
 TAKEOFF RWY 22L: CLIMB HEADING 217.64 OR AS ASSIGNED BY ATC. THENCE. . .
 . . . EXPECT RADAR VECTORS TO BROAK, THEN ON TRACK 059.42 TO FTHLS. THEN ON (TRANSITION), EXPECT FILED ALTITUDE 3 MINUTES AFTER DEPARTURE.

PHOENIX DEER VALLEY

TAKEOFF RWY 25L: CLIMBING RIGHT TURN HEADING 320.00 OR AS ASSIGNED BY ATC, THENCE...
 TAKEOFF RWY 25R: CLIMBING RIGHT TURN HEADING 320.00 OR AS ASSIGNED BY ATC, THENCE...
 . . . EXPECT RADAR VECTORS TO BROAK, THEN ON TRACK 059.42 TO FTHLS. THEN ON (TRANSITION), EXPECT FILED ALTITUDE 3 MINUTES AFTER DEPARTURE.

GLENDALE MUNI

TAKEOFF RWY 1: CLIMB HEADING 013.71 OR AS ASSIGNED BY ATC, THENCE...
 TAKEOFF RWY 19: CLIMB HEADING 200.00 OR AS ASSIGNED BY ATC, THENCE...
 . . . EXPECT RADAR VECTORS TO BROAK, THEN ON TRACK 059.42 TO FTHLS. THEN ON (TRANSITION), EXPECT FILED ALTITUDE 3 MINUTES AFTER DEPARTURE.

PHOENIX GOODYEAR

TAKEOFF RWY 3: CLIMB HEADING 028.09 OR AS ASSIGNED BY ATC, THENCE...
 TAKEOFF RWY 21: CLIMB HEADING 228.00 OR AS ASSIGNED BY ATC, THENCE...
 . . . EXPECT RADAR VECTORS TO BROAK, THEN ON TRACK 059.42 TO FTHLS. THEN ON (TRANSITION), EXPECT FILED ALTITUDE 3 MINUTES AFTER DEPARTURE.

PHOENIX-MESA GATEWAY

TAKEOFF RWY12C: CLIMB HEADING 123.57 OR AS ASSIGNED BY ATC. THENCE. . .
 TAKEOFF RWY12L: CLIMB HEADING 123.57 OR AS ASSIGNED BY ATC. THENCE. . .
 TAKEOFF RWY 12R: CLIMB HEADING 123.56 OR AS ASSIGNED BY ATC. THENCE. . .
 TAKEOFF RWY 30C: CLIMB HEADING 303.58 OR AS ASSIGNED BY ATC. THENCE. . .
 TAKEOFF RWY 30L: CLIMB HEADING 303.57 OR AS ASSIGNED BY ATC. THENCE. . .
 TAKEOFF RWY 30R: CLIMB HEADING 303.58 OR AS ASSIGNED BY ATC. THENCE. . .
 . . . EXPECT RADAR VECTORS TO BROAK, THEN ON TRACK 059.42 TO FTHLS. THEN ON (TRANSITION), EXPECT FILED ALTITUDE 3 MINUTES AFTER DEPARTURE.

PHOENIX SKY HARBOR INTL

TAKEOFF RWY 7L: CLIMB HEADING 078.04 TO 1640, THEN DIRECT TO SPRKY, THEN DIRECT TO BROAK. THENCE. . .
 TAKEOFF RWY 7R: CLIMB HEADING 078.03 TO 1640, THEN DIRECT TO SPRKY, THEN DIRECT TO BROAK. THENCE. . .
 TAKEOFF RWY 8: CLIMB HEADING 078.06 TO 1640, THEN DIRECT TO SPRKY, THEN DIRECT TO BROAK. THENCE. . .
 TAKEOFF RWY 25L: CLIMB HEADING 258.05 TO 1640, THEN TURN LEFT DIRECT TO DAVZZ, THEN ON TRACK 173.30 TO CROSS VANZZ AT OR BELOW 8000, THEN LEFT TURN DIRECT TO BUNEE, THEN ON TRACK 056.99 TO BROAK. THENCE. . .
 TAKEOFF RWY 25R: CLIMB HEADING 258.06 TO 1640, THEN TURN LEFT DIRECT TO DAVZZ, THEN ON TRACK 173.30 TO CROSS VANZZ AT OR BELOW 8000, THEN LEFT TURN DIRECT TO BUNEE, THEN ON TRACK 056.99 TO BROAK. THENCE. . .
 TAKEOFF RWY 26: CLIMB HEADING 258.08 TO 1640, THEN TURN LEFT DIRECT TO DAVZZ, THEN ON TRACK 173.30 TO CROSS VANZZ AT OR BELOW 8000, THEN LEFT TURN DIRECT TO BUNEE, THEN ON TRACK 056.99 TO BROAK. THENCE. . .
 . . . ON TRACK 059.42 TO FTHLS, THEN ON (TRANSITION). MAINTAIN 8000, EXPECT HIGHER ALTITUDE 3 MINUTES AFTER DEPARTURE.

QUALITY
3
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
FTHLS	FOUR	FTHLS4.FTHLS	THREE	6/25/2015	21 JUL 2016

SCOTTSDALE

TAKEOFF RWY 3: CLIMBING LEFT TURN HEADING 335 OR AS ASSIGNED BY ATC. THENCE...

TAKEOFF RWY 21: CLIMBING RIGHT TURN HEADING 335 OR AS ASSIGNED BY ATC. THENCE...

... EXPECT RADAR VECTORS TO BROAK, THEN ON TRACK 059.42 TO FTHLS. THEN ON (TRANSITION), EXPECT FILED ALTITUDE 3 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
ALBUQUERQUE	FTHLS4.ABQ	FTHLS	JNIPR	TRACK 059.87	54.60	FL180	13600	
		JNIPR	JSSUA	TRACK 060.44	68.27	FL180	11800	
		JSSUA	ABQ VORTAC	TRACK 043.92	71.12	FL180	11500	
JNIPR	FTHLS4.JNIPR	FTHLS	JNIPR	TRACK 059.87	54.60	FL180	13600	
MAXXO	FTHLS4.MAXXO	FTHLS	JNIPR	TRACK 059.87	54.60	FL180	13600	
		JNIPR	JSSUA	TRACK 060.44	68.27	FL180	11800	
		JSSUA	MAXXO	TRACK 077.12	65.32	FL180	11700	

PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

NOTE: RNAV 1

NOTE: TURBOJETS AND TURBOPROPS ONLY

NOTE: RADAR REQUIRED

KPHX NOTE: DME/DME/IRU OR GPS REQUIRED

KCHD, KDVT, KGEU, KGYR, KSDL, KIWA NOTE: GPS REQUIRED.

NOTE: ABQ TRANSITION ATC ASSIGNED ONLY

NOTE: AIRCRAFT FILING OVER ACH, LBL, ONM, CNX, PNH, MMB, TCC, IRW AND TXO FILE FTHLS DEPARTURE.

NOTE: AIRCRAFT FILING OVER ABQ, CIM, FTI AND GCK FILE LALUZ DEPARTURE.

NOTE: AIRCRAFT FILING OVER DEN, RSK, ALS AND POINTS NORTH OF ALS FILE YOTES DEPARTURE.

NOTE: FOR NON-GPS EQUIPPED AIRCRAFT, PXR AND TFD DME'S MUST BE OPERATIONAL.

NOTE: AIRCRAFT DEPARTING KGEU AND KGYR ATC ASSIGNED ONLY

TAKEOFF MINIMUMS:

CHANDLER:

RWY 4L/R, 22L/R: STANDARD.

PHOENIX DEER VALLEY:

RWY 7L/R: NA – OBSTACLES.

RWY 25L/R: STANDARD WITH MINIMUM CLIMB OF 370 FT/NM TO 4600.

GLENDALE MUNI:

RWY 1, 19: 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
FTHLS	FOUR	FTHLS4.FTHLS	THREE	6/25/2015	21 JUL 2016

PHOENIX GOODYEAR:
 RWY 3, 21: STANDARD.

PHOENIX-MESA GATEWAY:
 RWY 12L/C/R: STANDARD WITH A MINIMUM CLIMB OF 250 FT/NM TO 3100
 RWY 30L/C/R: STANDARD.

PHOENIX SKY HARBOR INTL
 RWYS 7 L/R, 8, 25 L/R, 26: STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 1640.

SCOTTSDALE:
 RWY 3: STANDARD WITH MINIMUM CLIMB OF 445 FT/NM TO 4600.
 RWY 21: STANDARD WITH MINIMUM CLIMB OF 300 FT/NM TO 4600.

TAKEOFF OBSTACLES NOTES:

CHANDLER:

NOTE: RWY 4L, ANTENNA ON BUILDING 69 FT FROM DER, 515 FT LEFT OF CENTERLINE, 25 FT AGL/1281 FT MSL. TOWER 981 FT FROM DER. 615 FT LEFT OF CENTERLINE, 80 FT AGL/1319 FT MSL. TREES AND POLES BEGINNING 1100 FT FROM DER. 458 FT LEFT OF CENTERLINE, UP TO 30 FT AGL/1272 FT MSL.
 NOTE: RWY 4R, POLES BEGINNING 1298 FT FROM DER. 56 FT LEFT OF CENTERLINE, UP TO 36 FT AGL/1283 FT MSL.
 NOTE: RWY 22L, TREE 336 FT FROM DER, 511 FT RIGHT OF CENTERLINE, 15 FT AGL/1250 FT MSL. TREE 988 FT FROM DER, 756 FT LEFT OF CENTERLINE, 30 FT AGL/1266 FT MSL.
 NOTE: RWY 22R, BUILDING 30 FT FROM DER, 441 FT RIGHT OF CENTERLINE, 24 FT AGL/1254 FT MSL. VEHICLES BEGINNING 199 FT FROM DER, 271 FT RIGHT OF CENTERLINE, UP TO 15 FT AGL/1246 FT MSL. POLES AND TREES BEGINNING 471 FT FROM DER, 45 FT LEFT OF CENTERLINE, UP TO 36 FT AGL/1290 FT MSL. TREES AND POLES BEGINNING 1088 FT FROM DER. 50 FT RIGHT OF CENTERLINE, UP TO 36 FT AGL/1274 FT MSL.

PHOENIX DEER VALLEY:

NOTE: RWY 25L, POLE 1127 FT FROM DER, 498 FT RIGHT OF CENTERLINE, 36 FT AGL/1475 FT MSL. POLE 1184 FT FROM DER, 495 FT LEFT OF CENTERLINE, 32 FT AGL/1471 FT MSL.
 NOTE: RWY 25R, MULTIPLE ANTENNAS BEGINNING 1.4 NM FROM DER, 1847 FT RIGHT OF CENTERLINE, UP TO 96 FT AGL/1806 FT MSL.

GLENDALE MUNI:

NOTE: RWY 1, LIGHT ON BLAST FENCE 4 FT FROM DER, 130 FT LEFT OF CENTERLINE, UP TO 10 FT AGL/1088 FT MSL. TREES BEGINNING 124 FT FROM DER, LEFT AND RIGHT OF CENTERLINE, UP TO 30 FT AGL/1104 FT MSL. VEHICLES BEGINNING 299 FT FROM DER, 80 FT RIGHT OF CENTERLINE, UP TO 15 FT AGL/1091 FT MSL. POLES AND TREES BEGINNING 400 FT FROM DER, 197 FT RIGHT OF CENTERLINE, UP TO 75 FT AGL/1144 FT MSL.
 NOTE: RWY 19, TREES BEGINNING 281 FT FROM DER, 331 FT LEFT OF CENTERLINE, UP TO 33 FT AGL/1060 FT MSL.

PHOENIX GOODYEAR:

NOTE: RWY 3, POLES BEGINNING 159 FT FROM DER, 267 FT RIGHT OF CENTERLINE, UP TO 47 FT AGL/1015 FT MSL. BLDG 1512 FT FROM DER, 828 FT RIGHT OF CENTERLINE, 48 FT AGL/1014 FT MSL. TREE 1957 FT FROM DER, 551 FT RIGHT OF CENTERLINE, UP TO 49 FT AGL/1019 FT MSL.
 NOTE: RWY 21, TRANSMISSION TOWER 2610 FT FROM DER, 1078 FT LEFT OF CENTERLINE, 125 FT AGL/1047 FT MSL. TRANSMISSION TOWER 3190 FT FROM DER, 311 FT LEFT OF CENTERLINE, 112 FT AGL/1031 FT MSL. POLE 3193 FT FROM DER, 308 FT LEFT OF CENTERLINE, 112 AGL/1030 MSL.

PHOENIX-MESA GATEWAY:

NOTE: RWY 30L/C/R, TREES BEGINNING 351 FT FROM DER, 351 FT LEFT OF CENTERLINE, UP TO 20 FT AGL/1359 FT MSL. TREES BEGINNING 689 FT FROM DER, 398 FT RIGHT OF CENTERLINE, UP TO 20 FT AGL/1359 FT MSL.

QUALITY
3
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
FTHLS	FOUR	FTHLS4.FTHLS	THREE	6/25/2015	21 JUL 2016

PHOENIX SKY HARBOR INTL:

NOTE: RWY 7R, TRANSMISSION TOWERS AND POWER LINES, 3201 FT FROM DER, 1122 FT RIGHT OF CENTERLINE, UP TO 131 FT AGL/1260 FT MSL. NOTE: RWY 8, MULTIPLE LT POLES, BEGINNING 2539 FT FROM DER, 900 FT LEFT OF CENTERLINE, UP TO 82 FT AGL/1234 FT MSL. LT POLE, 1639 FT FROM DER, 793 FT RIGHT OF CENTERLINE, 46 FT AGL/1177 FT MSL. NOTE: RWY 25L, MULTIPLE LT POLES, BEGINNING 681 FT FROM DER, 521 FT LEFT OF CENTERLINE, UP TO 63 FT AGL/1166 FT MSL. SIGN, 902 FT FROM DER, 711 FT LEFT OF CENTERLINE, 64 FT AGL/1170 FT MSL. MULTIPLE LT POLES, BEGINNING 1519 FT FROM DER, 535 FT LEFT OF CENTERLINE, UP TO 99 FT AGL/1201 FT MSL. MULTIPLE LT POLES, BEGINNING 1919 FT FROM DER, 598 FT LEFT OF CENTERLINE, UP TO 90 FT AGL/1192 FT MSL. NOTE: RWY 26, POLE, 42 FT FROM DER, 440 FT LEFT OF CENTERLINE, 26 FT AGL/1135 FT MSL. FENCE, 176 FT FROM DER, 547 FT LEFT OF CENTERLINE, 11 FT AGL/1120 FT MSL. POLE, 315 FT FROM DER, 499 FT LEFT OF CENTERLINE, 11 FT AGL/1120 FT MSL. TREE, 763 FT FROM DER, 642 FT LEFT OF CENTERLINE, 24 FT AGL/1135 FT MSL. POLE, 1959 FT FROM DER, 923 FT LEFT OF CENTERLINE, 59 FT AGL/1163 FT MSL. POLE, 2312 FT FROM DER, 318 FT LEFT OF CENTERLINE, 66 FT AGL/1169 FT MSL. POLE, 2336 FT FROM DER, 578 FT LEFT OF CENTERLINE, 67 FT AGL/1170 FT MSL. POLE, 78 FT FROM DER, 456 FT RIGHT OF CENTERLINE, 32 FT AGL/1142 FT MSL. POLE, 82 FT FROM DER, 64 FT RIGHT OF CENTERLINE, 18 FT AGL/1127 FT MSL. TREE, 118 FT FROM DER, 294 FT RIGHT OF CENTERLINE, 22 FT AGL/1133 FT MSL. TREE, 239 FT FROM DER, 214 FT RIGHT OF CENTERLINE, 22 FT AGL/1133 FT MSL. TREE, 414 FT FROM DER, 522 FT RIGHT OF CENTERLINE, 24 FT AGL/1135 FT MSL. SIGN, 520 FT FROM DER, 567 FT RIGHT OF CENTERLINE, 16 FT AGL/1125 FT MSL. POLE, 2301 FT FROM DER, 193 FT RIGHT OF CENTERLINE, 69 FT AGL/1171 FT MSL. POLE, 2302 FT FROM DER, 661 FT RIGHT OF CENTERLINE, 68 FT AGL/1171 FT MSL.

SCOTTSDALE:

NOTE: RWY 3, MULTIPLE LIGHT STANDARDS BEGINNING 63 FT FROM DER, 445 FT LEFT OF CENTERLINE, UP TO 44 FT AGL/1554 FT MSL. HOIST ON DIKE 878 FT FROM DER, 735 FT LEFT OF CENTERLINE, 51 FT AGL/1561 FT MSL. DIKE BEGINNING 1066 FT FROM DER, 316 FT LEFT OF CENTERLINE, 38 FT AGL/1548 FT MSL. DAY MARKER ON DIKE 1230 FT FROM DER, 5 FT LEFT OF CENTERLINE, 39 FT AGL/1549 FT MSL. TREE 765 FT FROM DER, 115 FT LEFT OF CENTERLINE, 22 FT AGL/1532 FT MSL. ROAD BEGINNING 647 FT FROM DER, 296 FT LEFT OF CENTERLINE, 19 FT AGL/1529 FT MSL. FENCE BEGINNING 5 FT FROM DER, 338 FT RIGHT OF CENTERLINE, 6 FT AGL/1511 FT MSL. LIGHT STANDARD 1013 FT FROM DER, 430 FT RIGHT OF CENTERLINE, 44 FT AGL/1552 FT MSL.
 NOTE: RWY 21, TREES 1072 FT FROM DER, 426 FT RIGHT OF CENTERLINE, 53 FT AGL/1497 FT MSL. BUILDING 316 FT FROM DER, 537 FT RIGHT OF CENTERLINE, 23 FT AGL/1467 FT MSL. TREE 2087 FT FROM DER, 418 FT LEFT OF CENTERLINE, 61 FT AGL/1505 FT MSL. TREE 1432 FT FROM DER, 438 FT RIGHT OF CENTERLINE, 38 FT AGL/1482 FT MSL. TREE 2234 FT FROM DER, 559 FT LEFT OF CENTERLINE, 58 FT AGL/1502 FT MSL.

CONTROLLING OBSTACLES:

PHOENIX SKY HARBOR INTL:

RWY 25L/R, 26: 4554 FT MSL AAO 331103.96N/1121150.53W
 RWY 26: 1599 FT MSL BLDG 332650.76N/1120424.48W

SCOTTSDALE:

RWY 3: 3039 FT MSL AAO 334147.51 N/1115119.13W (CG) AND 3639 FT MSL AAO 334854.37N/1115628.61W (CTA)

PHOENIX DEER VALLEY:

RWY 25L/R: 2479 FT MSL AAO 334504.94N/1120513.74W (CG) AND 4159 FT MSL AAO 334109.72N/1114920.69W (CTA)

LOST COMMUNICATIONS PROCEDURES:



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
FTHLS	FOUR	FTHLS4.FTHLS	THREE	6/25/2015	21 JUL 2016

ADDITIONAL FLIGHT DATA:

REFERENCE MAG VAR: KPHX 12E EPOCH YR: 2000.
DME DME ASSESSMENT: SAT (RNP 2.0)
All Airports - CHART: TOP ALTITUDE: 8000

PILOT NAVIGATION AREA:
10 NM ARC CENTERED ON BROAK (IDF) CW
FROM: POINT A (BEARING 014.42 DEGREES TO BROAK)
TO: POINT B (BEARING 104.42 DEGREES TO BROAK)
MINIMUM ALTITUDE 16000

CHART: MEA/MOCA FROM BROAK TO FTHLS MEA 18000/8900.

AIRPORTS SERVED:

PHOENIX SKY HARBOR INTL, PHOENIX, AZ
PHOENIX-MESA GATEWAY, MESA, AZ
CHANDLER MUNI, CHANDLER, AZ
PHOENIX GOODYEAR, GOODYEAR, AZ

SCOTTSDALE, SCOTTSDALE, AZ

PHOENIX DEER VALLEY, PHOENIX, AZ
GLENDALE MUNI, GLENDALE, AZ

COMMUNICATIONS:

CHANDLER MUNI: ATIS, GND CON, CHD ATCT, PHOENIX DEP CON
PHOENIX DEER VALLEY: ATIS, CLNC DEL, GND CON, DVT ATCT, PHOENIX DEP CON
GLENDALE MUNI: ATIS, GND CON, GEU ATCT, PHOENIX DEP CON, LUKE DEP CON
PHOENIX GOODYEAR: ATIS, GND CON, GYR ATCT, PHOENIX DEP CON, LUKE DEP CON
PHOENIX-MESA GATEWAY: ATIS, CLNC DEL, GND CON, IWA ATCT, PHOENIX DEP CON
PHOENIX SKY HARBOR INTL: ATIS, CLNC DEL, GND CON, PHX ATCT, PHOENIX DEP CON
SCOTTSDALE: ATIS, CLNC DEL, GND CON, SDL ATCT, PHOENIX DEP CON

FIXES AND/OR NAVAIDS:

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
FTHLS	FOUR	FTHLS4.FTHLS	THREE	6/25/2015	21 JUL 2016

REMARKS:

KPHX CLIMB GRADIENTS AND CLIMB TO ALTITUDES DETERMINED BY DME/DME COVERAGE FOR NON-GPS EQUIPPED AIRCRAFT.

KDVT RWY 25L/R AND KSDL RWY 21 CLIMB GRADIENTS AND CLIMB TO ALTITUDE DETERMINED BY LOCATION OF 4600 MVA AND PROXIMITY TO HIGHER MVAS.

KSDL: ATC WILL ASSIGN HEADING 335 OR AS ASSIGNED IN ACCORDANCE WITH DVA DATED 6/23/2014.

KDVT: ATC WILL ASSIGN HEADING 320 OR AS ASSIGNED IN ACCORDANCE WITH DVA DATED 6/30/2014.

SATELLITE AIRPORTS WERE MADE GPS REQUIRED DUE TO A HIGH PNA GRID ANALYSIS ALTITUDE ON SOME OF THE PNA SIDS. ELIMINATING THE PNA DME/DME/IRU GRID ANALYSIS REDUCED THE PNA ALTITUDE TO A MANAGABLE VECTORING ALTITUDE. KPHX RETAINED DME/DME/IRU OPERATIONS DUE TO HAVING A DEFINED ROUTE TO THE IDF AND DUE TO APPROXIMATELY 20 PERCENT OF THE DEPARTURES UTILIZING DME/DME/IRU NAVIGATION.

KGEU RWY 19 AND KGYR RWY 21 UTILIZE A HEADING FOR DEPARTURES WITHIN THE DVA RANGE FOR EACH RUNWAY WHICH IS CLOSEST TO THE RUNWAY ALIGNMENT SINCE THE RUNWAY ALIGNMENT IS NOT WITHIN THE USABLE DVA RANGE FOR VECTORING AIRCRAFT.

COORDINATED WITH: Apr 13, 2016

ALPA, AOPA, ATA, NBAA, ZAB, PHOENIX APP CON, KPHX ATCT, WFPT.

CHANGES:

1. PHOENIX GOODYEAR (KGYR) RWY 3/21 INITIAL CLIMB HEADINGS CHANGED FROM 026 AND 225 TO 028 AND 228.
2. PHOENIX-MESA GATEWAY PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS RWY 12L/C/R CHANGED FROM STANDARD TO STANDARD WITH A MINIMUM CLIMB OF 250 FT/NM TO 3100.
3. PHOENIX GOODYEAR (KGYR) TAKEOFF OBSTACLE NOTES UPDATED.
4. CHANDLER (KCHD) TAKEOFF OBSTACLE NOTES UPDATED.

REASONS:

1. AIRPORT (KGYR) MAGNETIC VARIATION ROTATION FROM E13 TO E10.
2. TO MATCH PUBLISHED DVA.
3. RWY CONSTRUCTION MOVED RWY 300 FT SOUTH.
4. TO MATCH CURRENT PUBLISHED NOTES.



DEPARTURE (DATA RECORD)

DP Name		Number		DP Computer Code			Superseded Number		Dated	Effective Date
FTHLS RNAV		FOUR		FTHLS4.FTHLS			THREE		6/25/2015	21 JUL 2016
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS	
RW07L (AER)	332551.81N/1120137.56W	N	-	-	-	-				
1640MSL	-	-	-	VA	090.04	-			CG 500 FT/NM TO 1640	
SPRKY	332609.01N/1115327.82W	Y	FO	DF	-	-				
BROAK	333149.83N/1111312.53W	Y	FB	DF	-	34.14				
RW07R (AER)	332543.89N/1120137.57W	N	-	-	-	-				
1640 MSL	-	-	-	VA	090.03	-			CG 500 FT/NM TO 1640	
SPRKY	332609.01N/1115327.82W	Y	FO	DF	-	-				
BROAK	333149.83N/1111312.53W	Y	FB	DF	-	34.14				
RW08 (AER)*	332627.09N/1120136.66W*	N	-	-	-	-			*DISPL THLD (898 FT)	
1640 MSL	-	-	-	VA	090.06	-			CG 500 FT/NM TO 1640	
SPRKY	332609.01N/1115327.82W	Y	FO	DF	-	-				
BROAK	333149.83N/1111312.53W	Y	FB	DF	-	34.14				
RW25L (AER)	332543.84N/1120005.54W	N	-	-	-	-				
1640 MSL	-	-	-	VA	270.05	-				
DAVZZ	332247.37N/1120827.00W	Y	FB	DF	-	-			CG 500 FT/NM TO 1640, LEFT TURN	
VANZZ	331935.44N/1120848.22W	Y	FO	TF	185.30	3.21	AT/BELOW 8000			
BUNEE	331456.42N/1120617.82W	Y	FB	DF	-	5.09			LEFT TURN	
BROAK	333149.83N/1111312.53W	Y	FB	TF	068.99	47.54				
RW25R (AER)	332551.73N/1115936.05W	N	-	-	-	-				
1640 MSL	-	-	-	VA	270.06	-				
DAVZZ	332247.37N/1120827.00W	Y	FB	DF	-	-			CG 500 FT/NM TO 1640, LEFT TURN	
VANZZ	331935.44N/1120848.22W	Y	FO	TF	185.30	3.21	AT/BELOW 8000			
BUNEE	331456.42N/1120617.82W	Y	FB	DF	-	5.09			LEFT TURN	
BROAK	333149.83N/1111312.53W	Y	FB	TF	068.99	47.54				
RW26 (AER)	332626.96N/1115931.69W	N	-	-	-	-				
1640 MSL	-	-	-	VA	270.08	-				
DAVZZ	332247.37N/1120827.00W	Y	FB	DF	-	-			CG 500 FT/NM TO 1640, LEFT TURN	

QUALITY
3
CHECKED

QUALITY
3
CHECKED

DEPARTURE (DATA RECORD)

DP Name		Number		DP Computer Code			Superseded Number		Dated	Effective Date
FTHLS RNAV		FOUR		FTHLS4.FTHLS			THREE		6/25/2015	21 JUL 2016
FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS	
VANZZ	331935.44N/1120848.22W	Y	FO	TF	185.30	3.21	AT/BELOW 8000			
BUNEE	331456.42N/1120617.82W	Y	FB	DF	-	5.09			LEFT TURN	
BROAK	333149.83N/1111312.53W	Y	FB	TF	068.99	47.54				
BROAK	333149.83N/1111312.53W	Y	-	IF	-	-				
FTHLS	334605.05N/1102148.84W	Y	FB	TF	071.42	45.20				
FTHLS	334605.05N/1102148.84W	Y	-	IF	-	45.20			FTHLS4.ABQ	
JNIPR	340250.46N/1091922.25W	Y	FB	TF	071.87	54.60				
JSSUA	342303.42N/1080043.42W	Y	FB	TF	072.44	68.27				
ABQ VORTAC	350237.66N/1064858.72W	Y	FB	TF	055.92	71.12				
FTHLS	334605.05N/1102148.84W	Y	-	IF	-	-			FTHLS4.JNIPR	
JNIPR	340250.46N/1091922.25W	Y	FB	TF	071.87	54.60				
FTHLS	334605.05N/1102148.84W	Y	-	IF	-	-			FTHLS4.MAXXO	
JNIPR	340250.46N/1091922.25W	Y	FB	TF	071.87	54.60				
JSSUA	342303.42N/1080043.42W	Y	FB	TF	072.44	68.27				
MAXXO	342338.32N/1064147.78W	Y	FB	TF	089.12	65.32				

QUALITY
3
CHECKED