

**FEDERAL AVIATION ADMINISTRATION  
FLIGHT STANDARDS SERVICE  
GRAPHIC DEPARTURE PROCEDURES (DP)**

Bearings, headings, courses, tracks and radials are magnetic. Elevations and altitudes are in feet, MSL. Altitudes are minimum altitudes unless otherwise indicated  
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<u>DP NAME</u>	<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>
FTHLS	SIX	FTHLS6.FTHLS	FIVE	11/10/2016	<b>24MAY2018</b>

<u>TYPE:</u>	<u>OBSTACLE</u>	<u>COPTER</u>	<u>SID</u>	<u>SPECIAL</u>	<u>RNAV</u>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**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). MAINTAIN ATC ASSIGNED ALTITUDE, 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). MAINTAIN ATC ASSIGNED ALTITUDE, 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). MAINTAIN ATC ASSIGNED ALTITUDE, 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). MAINTAIN ATC ASSIGNED ALTITUDE, 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). MAINTAIN ATC ASSIGNED ALTITUDE, EXPECT FILED ALTITUDE 3 MINUTES AFTER DEPARTURE.

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). MAINTAIN ATC ASSIGNED ALTITUDE, EXPECT FILED ALTITUDE 3 MINUTES AFTER DEPARTURE.

**TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):**

<u>TRANSITION NAME</u>	<u>TRANSITION COMPUTER CODE</u>	<u>FROM FIX/NAVAID</u>	<u>TO FIX/NAVAID</u>	<u>COURSE</u>	<u>DISTANCE</u>	<u>MEA</u>	<u>MOCA</u>	<u>CROSSING ALTITUDE/FIXES</u>
ALBUQUERQUE	FTHLS6.ABQ	FTHLS	JNIPR	TRACK 059.87	54.60	FL180	13600	QUALITY 3 CHECKED
		JNIPR	JSSUA	TRACK 060.44	68.27	FL180	11800	

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FTHLS	SIX	FTHLS6.FTHLS	FIVE	11/10/2016	<b>24MAY2018</b>
	JSSUA	ABQ VORTAC	TRACK 043.92	71.12 FL180	11500
JNIPR	FTHLS6.JNIPR	FTHLS	JNIPR	TRACK 059.87	54.60 FL180 13600
MAXXO	FTHLS6.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:**

- NOTE: RNAV 1.
- NOTE: TURBOJETS AND TURBOPROPS ONLY.
- NOTE: RADAR REQUIRED.
- 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: AIRCRAFT DEPARTING KGEU AND KGYR ATC ASSIGNED ONLY.
- KSDL NOTE: RWY 21: DO NOT EXCEED 210K UNTIL ESTABLISHED ON ASSIGNED HEADING.

**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.

GLENDAL MUNI:  
RWY 1, 19: STANDARD.

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.

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:**

SEE FORM 8260-15A, TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP).

**CONTROLLING OBSTACLES:**

SCOTTSDALE:



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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)

PHOENIX-MESA GATEWAY:  
RWY 12L/C/R: 2649 FT MSL AAO 331107.95N/1113745.04W.

**LOST COMMUNICATIONS PROCEDURES:**

**ADDITIONAL FLIGHT DATA:**

REFERENCE MAG VAR: KSDL 12E EPOCH YR: 1990.  
DME DME ASSESSMENT: SAT (RNP 2.0)  
PHOENIX-MESA GATEWAY- CHART: TOP ALTITUDE: ASSIGNED BY ATC.  
CHANDLER MUNI- CHART: TOP ALTITUDE: ASSIGNED BY ATC.  
PHOENIX GOODYEAR- CHART: TOP ALTITUDE: ASSIGNED BY ATC.  
SCOTTSDALE- CHART: TOP ALTITUDE: ASSIGNED BY ATC.  
GLENDALE MUNI- CHART: TOP ALTITUDE: ASSIGNED BY ATC.  
PHOENIX DEER VALLEY- CHART: TOP ALTITUDE: ASSIGNED BY ATC.  
CHART: MEA/MOCA FROM BROAK TO FTHLS MEA FL180/8900.

**AIRPORTS SERVED:**

<u>AIRPORT NAME</u>	<u>CITY</u>	<u>STATE</u>
PHOENIX-MESA GATEWAY (KIWA)	PHOENIX	AZ
CHANDLER MUNI (KCHD)	CHANDLER	AZ
PHOENIX GOODYEAR (KGYR)	GOODYEAR	AZ
SCOTTSDALE (KSDL)	SCOTTSDALE	AZ
PHOENIX DEER VALLEY (KDVY)	PHOENIX	AZ
GLENDALE MUNI (KGEU)	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  
SCOTTSDALE: ATIS, CLNC DEL, GND CON, SDL ATCT, PHOENIX DEP CON

**FIXES AND/OR NAVAIDS:**



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**REMARKS:**

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 11/13/2014.  
 KDVT: ATC WILL ASSIGN HEADING 320 OR AS ASSIGNED IN ACCORDANCE WITH DVA DATED 6/30/2014.  
 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.  
 MOCAS WITH MEA OF FL180 AND ABOVE PUBLISHED PER ATC REQUEST.

**FLIGHT INSPECTED BY:**

FLIGHT INSPECTION REVIEW NOT REQUIRED – PROCESSED IAW AIRCRAFT OPERATIONS GROUP (AJW-333) MEMO, DEC 22, 2017

**OFFICE SYMBOL:**

AJW-333

**DATE:**

05/06/2016

*Digitally signed by*  
**ROBERT G HAMILTON**  
Mar 26, 2018

**DEVELOPED BY:**

DUSTIN DAVIDSON

*Digitally signed by*  
**DUSTIN DAVIDSON**  
Mar 01, 2018

**OFFICE SYMBOL:**

AJV-5422

**DATE:**

02/21/2018

**APPROVED BY:**

JULIE MORGAN

*Digitally signed by*  
**ROBERT G HAMILTON**  
Mar 26, 2018

**OFFICE SYMBOL:**

AJV-5420

**DATE:**

**REQUIRED EFFECTIVE DATE:**

ROUTINE

**COORDINATED WITH:**

<b>A4A</b>	<b>ALPA</b>	<b>AOPA</b>	<b>APA</b>	<b>HAI</b>	<b>NBAA</b>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**OTHER:**

ZAB, PHOENIX APP CON, KPHX ATCT, WFPT.

**CHANGES - REASONS:**

1. REMOVED ALL REFERENCES TO KPHX FROM SID - REPLACED BY BROAK SID FOR KPHX.
2. ADDED "MAINTAIN ATC ASSIGNED ALTITUDE" TO DP ROUTE DESCRIPTION FOR KCHD, KDVT, KGEU, KGYR, KIWA, KSDL - TOP ALTITUDE ASSIGNED BY ATC.
3. ADDED KSDL AS REFERENCE MAGVAR IN ADDITIONAL FLIGHT DATA - ATC REQUEST DUE TO KPHX REMOVAL FROM SID.
4. ADDED "KSDL NOTE: RWY 21: DO NOT EXCEED 210K UNTIL ESTABLISHED ON ASSIGNED HEADING" TO PROCEDURAL DATA NOTES - IAW DVA FOR KSDL.
5. REMOVED TAKEOFF DATA NOTES AND REPLACED WITH "SEE FORM 8260-15A, TAKEOFF MINIMUMS AND OBSTACLE DEPARTURE PROCEDURES (ODP)" - CURRENT CRITERIA MEMO #259.
6. REMOVED PILOT NAVIGATION AREA - COVERED BY DVA.



FEDERAL AVIATION ADMINISTRATION  
 FLIGHT STANDARDS SERVICE  
 DEPARTURE (DATA RECORD)

<u>DP NAME</u>		<u>NUMBER</u>	<u>DP COMPUTER CODE</u>	<u>SUPERSEDED NUMBER</u>	<u>DATED</u>	<u>EFFECTIVE DATE</u>			
FTHLS		SIX	FTHLS6.FTHLS	FIVE	11/10/2016	24MAY2018			
<u>FIX/NAVAID</u>	<u>LAT/LONG</u>	<u>C</u>	<u>FO/FB</u>	<u>LEG TYPE</u>	<u>TC</u>	<u>DIST (NM)</u>	<u>ALTIITUDE</u>	<u>SPEED</u>	<u>REMARKS</u>
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	-	-			FTHLS6.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	-	-			FTHLS6.JINPR
JNIPR	340250.46N/1091922.25W	Y	FB	TF	071.87	54.60			
FTHLS	334605.05N/1102148.84W	Y	-	IF	-	-			FTHLS6.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			

