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 statue miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
MIDLAND	FIVE	MAF5.MAF	FOUR	10 OCT 96	20 SEP 2012

TYPE: SID

DP ROUTE DESCRIPTION:

TAKE-OFF RWY 04: CLIMB HEADING 044.66, MAINTAIN 13000 (OR LOWER FILED ALTITUDE). THENCE...
TAKE-OFF RWY 10: CLIMB HEADING 104.58, MAINTAIN 13000 (OR LOWER FILED ALTITUDE). THENCE...
TAKE-OFF RWY 16L: CLIMB HEADING 168.16, MAINTAIN 13000 (OR LOWER FILED ALTITUDE). THENCE...
TAKE-OFF RWY 16R: CLIMB HEADING 166.04, MAINTAIN 13000 (OR LOWER FILED ALTITUDE). THENCE...
TAKE-OFF RWY 22: CLIMB HEADING 224.66, MAINTAIN 13000 (OR LOWER FILED ALTITUDE). THENCE...
TAKE-OFF RWY 28: CLIMB HEADING 284.59, MAINTAIN 13000 (OR LOWER FILED ALTITUDE). THENCE...
TAKE-OFF RWY 34L: CLIMB HEADING 346.04, MAINTAIN 13000 (OR LOWER FILED ALTITUDE). THENCE...
TAKE-OFF RWY 34R: CLIMB HEADING 348.16, MAINTAIN 13000 (OR LOWER FILED ALTITUDE). THENCE...

...EXPECT VECTORS TO ASSIGNED ROUTE/FIX. EXPECT CLEARANCE TO 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

PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

TAKEOFF MINIMUMS: RWY 04, 10, 16L, 16R, 22, 28, STANDARD.

RWY 34L, 300-1 ½ OR STANDARD WITH MINIMUM CLIMB OF 400 FEET PER NM TO 3200.

RWY 34R, 300-1 ¼ OR STANDARD WITH MINIMUM CLIMB OF 320 FEET PER NM TO 3200.

TAKEOFF OBSTACLES NOTES:

NOTE: RWY 04, TREES BEGINNING 24 FT FROM DER, 34 FT RIGHT OF CENTERLINE, UP TO 40 FT AGL/2903 FT MSL. RODS, TOWERS, AND DOMES BEGINNING 1231 FT FROM DER, 442 FT LEFT OF CENTERLINE, UP TO 108 FT AGL/2963 FT MSL. **NOTE: RWY 10,** RODS, ANTENNAS, AND LIGHTS BEGINNING 72 FT FROM DER, 40 FT RIGHT OF CENTERLINE, UP TO 20 FT AGL/2874 FT MSL. TREES, POLES, AND SIGNS BEGINNING 1296 FT FROM DER, 457 FT LEFT OF CENTERLINE, UP TO 40 FT AGL/2913 FT MSL. **NOTE: RWY 16L,** SIGNS AND POLES BEGINNING 94 FT FROM DER, 20 FT LEFT OF CENTERLINE, UP TO 30 FT AGL/ 2877 FT MSL. RAILROAD BEGINNING 530 FT FROM DER, 17 FT LEFT OF CENTERLINE, 23 FT AGL/2869 FT MSL. VEHICLES ON ROAD BEGINNING 301 FT FROM DER, 268 FT LEFT OF CENTERLINE, 17 FT AGL/2862 FT MSL. **NOTE: RWY 16R,** POLE 1794 FT FROM DER, 975 FT RIGHT OF CENTERLINE, 55 FT AGL/2906 FT MSL. **NOTE: RWY 22**, TOWER, POLES, LIGHTS, AND ANTENNA BEGINNING 111 FT FROM DER, 66 FT RIGHT OF CENTERLINE, UP TO 102 FT AGL/2986 FT MSL. HANGARS 1112 FT FROM DER, 600 FT RIGHT OF CENTERLINE, 55 FT AGL/2906 FT MSL. TOWER, POLES, AND SIGN BEGINNING 83 FT FROM DER, 62 FT LEFT OF CENTERLINE, UP TO 120 FT AGL/2971 FT MSL. **NOTE: RWY 34L,** DRILLING RIGS BEGINNING 201 FT FROM DER, 178 FT RIGHT OF CENTERLINE, UP TO 165 FT AGL/3037 FT MSL. DRILLING RIGS BEGINNINING 3228 FT FROM DER, 769 FT LEFT OF CENTERLINE, 165 FT AGL/3056 FT MSL. **NOTE: RWY 34R**, VEHICLES ON ROAD BEGINNING 256 FT FROM DER, 10 FT RIGHT OF CENTERLINE, UP TO 17 FT AGL/2881 FT MSL.TREES AND BUSHES BEGINNING 171 FT FROM DER, 80 FT RIGHT OF CENTERLINE, UP TO 40 FT AGL/2878 FT MSL. POLES AND FENCE BEGINNING 28 FEET FROM DER, 109 FT RIGHT OF CENTERLINE, UP TO 38 FT AGL/2903 FT MSL.

QUALITY CHECKED

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

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FENCE BEGINNING 83 FT FROM DER, 271 FT LEFT OF CENTERLINE, 8 FT AGL/2872 FT MSL. WINDMILL, POLES AND TREES BEGINNING 1239 FT FROM DER, 116 FT LEFT OF CENTERLINE, UP TO 66 FT AGL/2913 FT MSL. DRILLING RIG 5540 FT FROM DER, 267 FT LEFT OF CENTERLINE, 165 FT AGL/3025 FT MSL.

CONTROLLING OBSTACLES:

RWY 34L, 3056 FT MSL DRILLING RIG 315837.68N/1021246.27W

RWY 34R, 3025 FT MSL DRILLING RIG 315741.08N/1021157.15W

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

AIRPORTS SERVED:

MIDLAND INTL MIDLAND, TX

COMMUNICATIONS:

ATIS, MAF CLNC DEL, MAF GND CNTL, MAF DEP CON, MAF TOWER

FIXES AND/OR NAVAIDS:

PEQ VOR/DME, TQA VOR/DME, ABI VORTAC, BGS VORTAC, CNM VORTAC, CME VORTAC, FST VORTAC, HOB VORTAC, INK VORTAC, JCT VORTAC, JEN VORTAC, LBB VORTAC, MAF VORTAC, SJT VORTAC, SPS VORTAC..

REMARKS:

U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION

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CHANGES:

1. UPDATED LOW CLOSE IN OBSTACLES
2. ADDED DEPARTURE HEADINGS
3. ADDED CLIMB GRADIENT AND VISIBILITY TO RUNWAY 34L
4. ADDED CLIMB GRADIENT AND VISIBILITY TO RUNWAY 34R.

REASONS:

½. CRITERIA
¾. MITIGATES SURFACE PENETRATIONS

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
MIDLAND	FIVE	MAF5.MAF	FOUR	10 OCT 96	20 SEP 2012

ARINC PACKET - 424-18 - SID

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                 1         2         3         4         5         6         7         8         9         0         1         2         3
NAVAID  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAD        ABI   K4011370VTHW N32285278W099514845    N32285278W099514845E0100018102     NARABILENE
        SUSAD        BGS   K4011430VTLW N32230812W101290126    N32230812W101290126E0110026701     NARBIG SPRING
        SUSAD        CME   K2011610VTHA N33201492W104371648    N33201492W104371648E0120037722     NARCHISUM
        SUSAD        CNM   K2011630VTLW N32152381W104133374    N32152381W104133374E0120032571     NARCARLSBAD
        SUSAD        FST   K4011690VTHA N30570759W102583256    N30570759W102583256E0110028932     NARFORT STOCKTON
        SUSAD        HOB   K2011100VTLW N32381766W103160948    N32381766W103160948E0110036641     NARHOBBS
        SUSAD        INK   K4011210VTHW N31522915W103143760    N31522915W103143760E0110028602     NARWINK
        SUSAD        JCT   K4011600VTHA N30355288W099490293    N30355288W099490293E0080022822     NARJUNCTION
        SUSAD        JEN   K4011500VTLW N32093452W097523965    N32093452W097523965E0060013001     NARGLEN ROSE
        SUSAD        LBB   K4010920VTLA N33421782W101545044    N33421782W101545044E0110033101     NARLUBBOCK
        SUSAD        MAF   K4011480VTLW N32003364W102112540    N32003364W102112540E0110028601     NARMIDLAND
        SUSAD        PEQ   K4011180VDL  N31280953W103342912    N31280953W103342912E0110026501     NARPECOS
        SUSAD        SJT   K4011510VTHW N31222983W100271755    N31222983W100271755E0100018902     NARSAN ANGELO
        SUSAD        SPS   K4011270VTHW N33591423W098353650    N33591423W098353650E0100011332     NARWICHITA FALLS
        SUSAD        TQA   K4011160VDLW N32140868W099490042    N32140868W099490042E0100020581     NARTUSCOLA

                 1         2         3         4         5         6         7         8         9         0         1         2         3
AIRPORT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMAFK4AMAF     0     095YHN31563310W102120690E009002872         1800018000C    MNAR    MIDLAND INTL

                 1         2         3         4         5         6         7         8         9         0         1         2         3
SEGMENT 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMAFK4DMAF5  TRW04  010         0 E      VM                    0447                    18000
        SUSAP KMAFK4DMAF5  TRW10  010         0 E      VM                    1046                    18000
        SUSAP KMAFK4DMAF5  TRW16L 010         0 E      VM                    1682                    18000
        SUSAP KMAFK4DMAF5  TRW16R 010         0 E      VM                    1660                    18000
        SUSAP KMAFK4DMAF5  TRW22  010         0 E      VM                    2247                    18000
        SUSAP KMAFK4DMAF5  TRW28  010         0 E      VM                    2846                    18000
        SUSAP KMAFK4DMAF5  TRW34L 010         0 E      VM                    3460                    18000
        SUSAP KMAFK4DMAF5  TRW34R 010         0 E      VM                    3482                    18000
        SUSAP KMAFK4DMAF5  VABI   010KMAF K4PA0A       IF                                            18000
        SUSAP KMAFK4DMAF5  VABI   020ABI  K4D 0VE      DF
        SUSAP KMAFK4DMAF5  VBGS   010KMAF K4PA0A       IF                                            18000
        SUSAP KMAFK4DMAF5  VBGS   020BGS  K4D 0VE      DF
        SUSAP KMAFK4DMAF5  VCME   010KMAF K4PA0A       IF                                            18000
        SUSAP KMAFK4DMAF5  VCME   020CME  K2D 0VE      DF
        SUSAP KMAFK4DMAF5  VCNM   010KMAF K4PA0A       IF                                            18000
        SUSAP KMAFK4DMAF5  VCNM   020CNM  K2D 0VE      DF
        SUSAP KMAFK4DMAF5  VFST   010KMAF K4PA0A       IF                                            18000
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QUALITY CHECKED

DEPARTURE (DATA RECORD)

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
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SUSAP KMAFK4DMAF5  VFST   020FST  K4D 0VE      DF
SUSAP KMAFK4DMAF5  VHOB   010KMAF K4PA0A       IF                                    18000
SUSAP KMAFK4DMAF5  VHOB   020HOB  K2D 0VE      DF
SUSAP KMAFK4DMAF5  VINK   010KMAF K4PA0A       IF                                    18000
SUSAP KMAFK4DMAF5  VINK   020INK  K4D 0VE      DF
SUSAP KMAFK4DMAF5  VJCT   010KMAF K4PA0A       IF                                    18000
SUSAP KMAFK4DMAF5  VJCT   020JCT  K4D 0VE      DF
SUSAP KMAFK4DMAF5  VJEN   010KMAF K4PA0A       IF                                    18000
SUSAP KMAFK4DMAF5  VJEN   020JEN  K4D 0VE      DF
SUSAP KMAFK4DMAF5  VLBB   010KMAF K4PA0A       IF                                    18000
SUSAP KMAFK4DMAF5  VLBB   020LBB  K4D 0VE      DF
SUSAP KMAFK4DMAF5  VMAF   010KMAF K4PA0A       IF                                    18000
SUSAP KMAFK4DMAF5  VMAF   020MAF  K4D 0VE      DF
SUSAP KMAFK4DMAF5  VPEQ   010KMAF K4PA0A       IF                                    18000
SUSAP KMAFK4DMAF5  VPEQ   020PEQ  K4D 0VE      DF
SUSAP KMAFK4DMAF5  VSJT   010KMAF K4PA0A       IF                                    18000
SUSAP KMAFK4DMAF5  VSJT   020SJT  K4D 0VE      DF
SUSAP KMAFK4DMAF5  VSPS   010KMAF K4PA0A       IF                                    18000
SUSAP KMAFK4DMAF5  VSPS   020SPS  K4D 0VE      DF
SUSAP KMAFK4DMAF5  VTQA   010KMAF K4PA0A       IF                                    18000
SUSAP KMAFK4DMAF5  VTQA   020TQA  K4D 0VE      DF
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                1         2         3         4         5         6         7         8         9         0         1         2         3
RUNWAY  123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012
        ------------------------------------------------------------------------------------------------------------------------------------
        SUSAP KMAFK4GRW04     0046050447 N31555413W102121350+0100    +0844702851000045075R
        SUSAP KMAFK4GRW10     0083021046 N31565152W102125886-0200    +0850202869000054150IIMAF1
        SUSAP KMAFK4GRW16L    0042471682 N31564645W102115086-0400    +0848802865000050100D
        SUSAP KMAFK4GRW16R    0095011660 N31573386W102121986-0200    +0851002872000050150R
        SUSAP KMAFK4GRW22     0046052247 N31562113W102113046-0100    +0845802855000050075R
        SUSAP KMAFK4GRW28     0083022846 N31562139W102113793+0200    +0845802855069153150R
        SUSAP KMAFK4GRW34L    0095013460 N31560020W102121033+0200    +0844702851000050150R
        SUSAP KMAFK4GRW34R    0042473482 N31560449W102114842+0400    +0843702848000050100D
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QUALITY CHECKED

DEPARTURE (DATA RECORD)

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MIDLAND	FIVE	MAF5.MAF	FOUR	10 OCT 96	20 SEP 2012

ARINC SUMMARY - 424-18 - SID

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	RW04		010		VM		FB		044.7()			
	RW10		010		VM		FB		104.6()			
	RW16L		010		VM		FB		168.2()			
	RW16R		010		VM		FB		166.0()			
	RW22		010		VM		FB		224.7()			
	RW28		010		VM		FB		284.6()			
	RW34L		010		VM		FB		346.0()			
	RW34R		010		VM		FB		348.2()			
	ABI	KMAF	010		IF		FB					
	ABI	ABI	020		DF		FB					
	BGS	KMAF	010		IF		FB					
	BGS	BGS	020		DF		FB					
	CME	KMAF	010		IF		FB					
	CME	CME	020		DF		FB					
	CNM	KMAF	010		IF		FB					
	CNM	CNM	020		DF		FB					
	FST	KMAF	010		IF		FB					
	FST	FST	020		DF		FB					
	HOB	KMAF	010		IF		FB					
	HOB	HOB	020		DF		FB					
	INK	KMAF	010		IF		FB					
	INK	INK	020		DF		FB					
	JCT	KMAF	010		IF		FB					
	JCT	JCT	020		DF		FB					
	JEN	KMAF	010		IF		FB					
	JEN	JEN	020		DF		FB					
	LBB	KMAF	010		IF		FB					
	LBB	LBB	020		DF		FB					
	MAF	KMAF	010		IF		FB					
	MAF	MAF	020		DF		FB					
	PEQ	KMAF	010		IF		FB					
	PEQ	PEQ	020		DF		FB					
	SJT	KMAF	010		IF		FB					
	SJT	SJT	020		DF		FB					
	SPS	KMAF	010		IF		FB					
	SPS	SPS	020		DF		FB					
	TQA	KMAF	010		IF		FB					
	TQA	TQA	020		DF		FB					

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	ABI	N322852.78	W0995148.45	N3228.880	W09951.808

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BGS	N322308.12	W1012901.26	N3223.135	W10129.021
CME	N332014.92	W1043716.48	N3320.249	W10437.275
CNM	N321523.81	W1041333.74	N3215.397	W10413.562
FST	N305707.59	W1025832.56	N3057.127	W10258.543
HOB	N323817.66	W1031609.48	N3238.294	W10316.158
INK	N315229.15	W1031437.60	N3152.486	W10314.627
JCT	N303552.88	W0994902.93	N3035.881	W09949.049
JEN	N320934.52	W0975239.65	N3209.575	W09752.661
LBB	N334217.82	W1015450.44	N3342.297	W10154.841
MAF	N320033.64	W1021125.40	N3200.561	W10211.423
PEQ	N312809.53	W1033429.12	N3128.159	W10334.485
SJT	N312229.83	W1002717.55	N3122.497	W10027.293
SPS	N335914.23	W0983536.50	N3359.237	W09835.608
TQA	N321408.68	W0994900.42	N3214.145	W09949.007
RW04	N315554.13	W1021213.50	N3155.902	W10212.225
RW10	N315651.52	W1021258.86	N3156.859	W10212.981
RW16L	N315646.45	W1021150.86	N3156.774	W10211.848
RW16R	N315733.86	W1021219.86	N3157.564	W10212.331
RW22	N315621.13	W1021130.46	N3156.352	W10211.508
RW28	N315621.39	W1021137.93	N3156.357	W10211.632
RW34L	N315600.20	W1021210.33	N3156.003	W10212.172
RW34R	N315604.49	W1021148.42	N3156.075	W10211.807

RUNWAY DATA

RWY	THRESHOLD ELEVATION	TCH
RW04	02851	45
RW10	02869	54
RW16L	02865	50
RW16R	02872	50
RW22	02855	50
RW28	02855	53
RW34L	02851	50
RW34R	02848	50

QUALITY CHECKED