Flight Procedure Tracking Form	Action: FLIGHT CHECK	Task Type: IAP	Date Open: 08/05/2011	Task #: 2011022826502102009	Request #: 20110228265021
Procedure: VOR OR TACAN RWY 16 R AMDT 23		Airport ID: KMAF	Airport: MIDLAND INTL		Reimbursable #:
City: MIDLAND	ST: TX	GPS #:		Estimated Chart Date: 09/20/2012	FICO #:
Fac ID: MAF	Fac. Type: VORTAC	Specialist: JILL OLSON(Contractor)			

Procedure Review

	Rec'd	Rel'd	Full Name	Comments
Lead:	01/20/2012	05/18/2012	CASIMIR TABAKA	
QA:	05/18/2012	05/18/2012	STEVEN SZUKALA	
Liaison:	05/18/2012		Alfonso	

Procedure Comments:

Remark Type: INFORMATION

pkg 7 of 15

MIDLAND, TX MIDLAND INTL (KMAF) VOR OR TACAN RWY 16R, AMDT 23 ENROUTE-NO FC: 8.7.12 PUB: 9.20.12

ATTACHED FORMS: 8260-5; 8260-10; 8260-9; 8260-2(S): DERIC-INT, REV 6; LOPEY-INT, ORIG; MIPEE-INT, ORIG; NUGSE-INT, ORIG; TARZN-INT, REV 3; (INFO ONLY) MIDLAND (MAF) VTAC, REV 8.

CONTACT: JILL OLSON, AJV-353 LEAD, 405.954.9568:

VOR or TACAN RWY 16R

MIDLAND INTL (MAF)

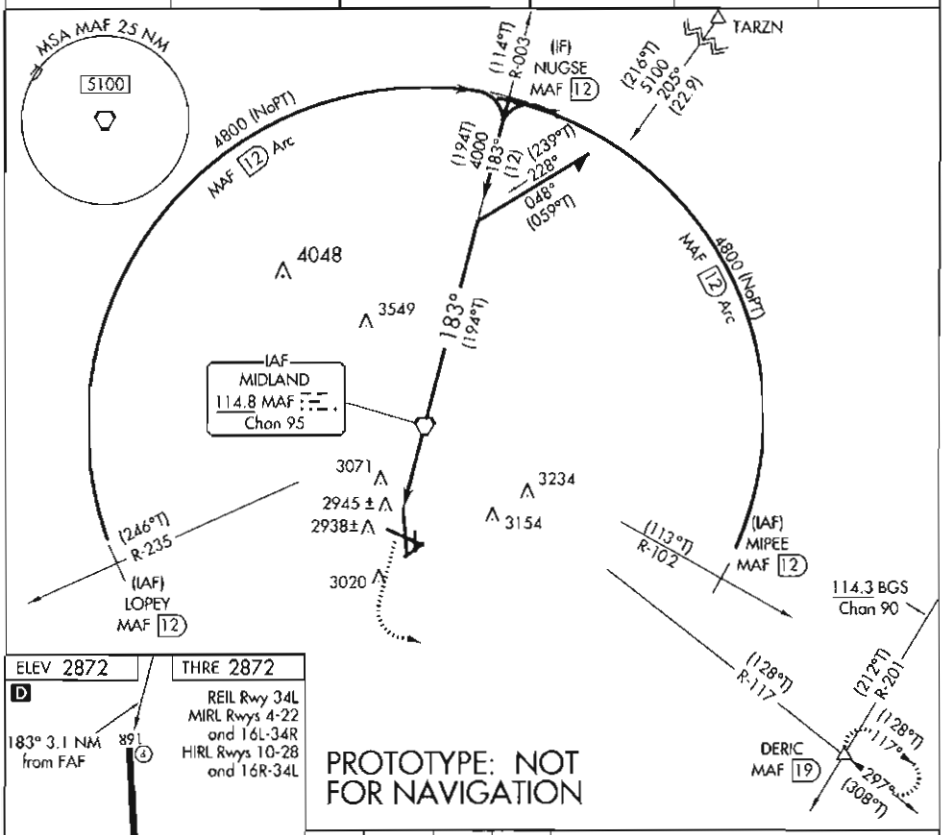
VORTAC MAF	APP CRS	Rwy ldg	9501
114.8	183°	THRE	2872
Chan 95		Apt Elev	2872

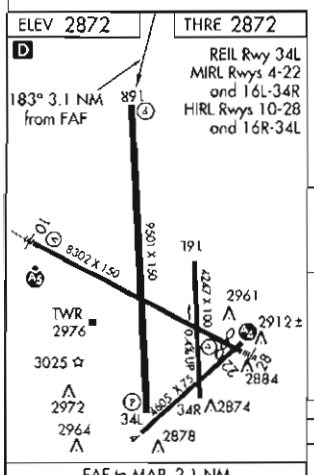
ASR

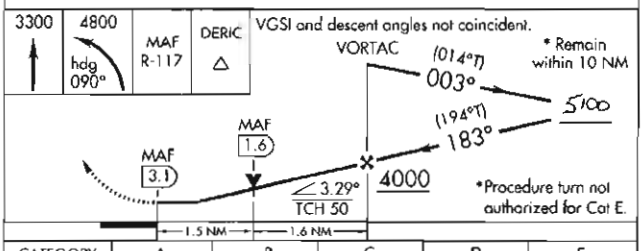
Visibility reduction by helicopters NA.
Circling to Rwy 16L NA at night.

MISSED APPROACH: Climbing left turn to 4800 on heading 090° and on MAF VORTAC R-117 to DERIC / MAF 19 DME Int and hold.

ATIS	MIDLAND APP CON*	MIDLAND TOWER *	GND CON	CLNC DEL	UNICOM
126.8 235.975	124.6 290.4	118.7 (CTAF) 273.45	121.9 348.6	118.05 317.65	122.95





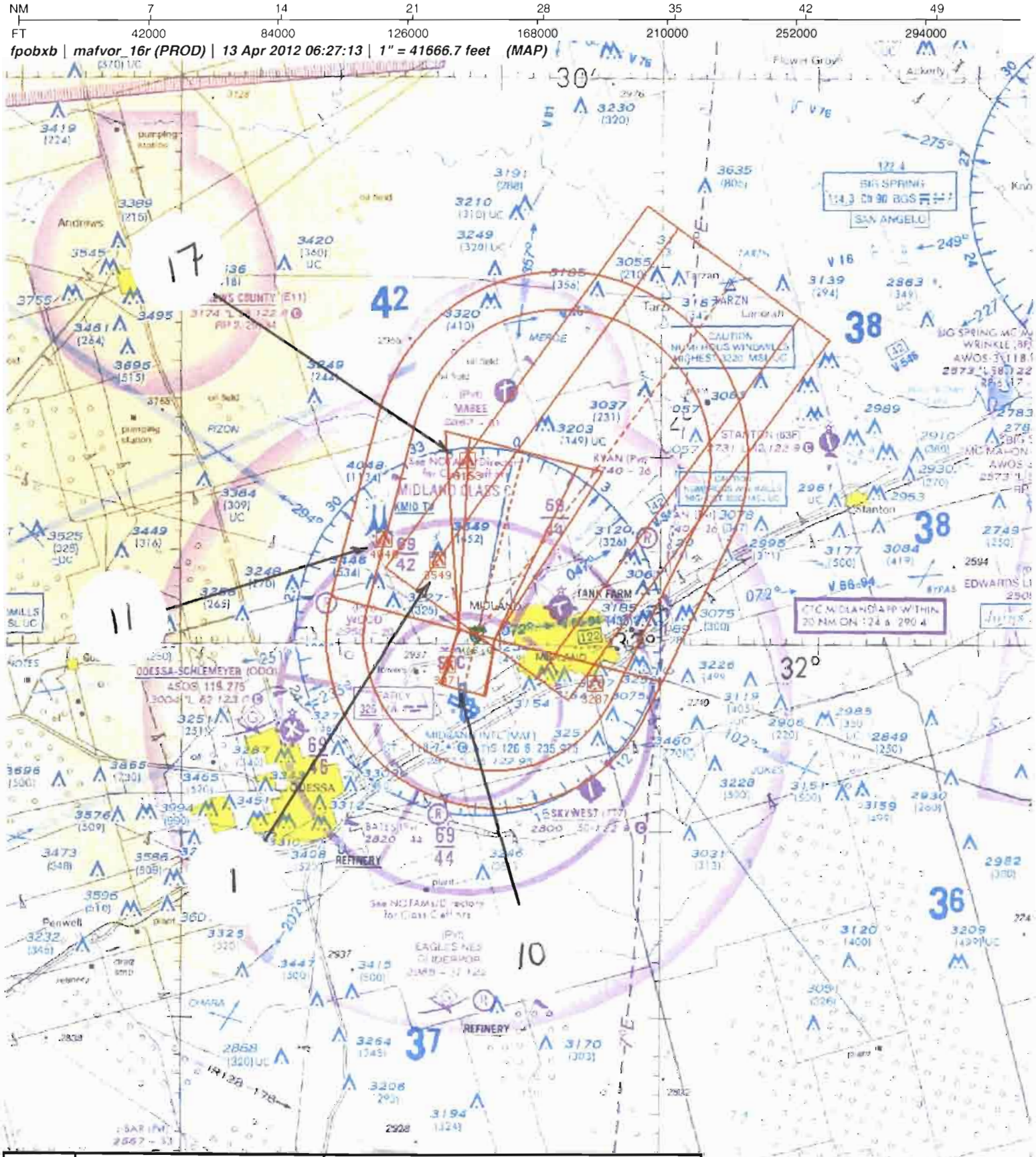


FAF to MAP 3.1 NM					
Knots	60	90	120	150	180
Min:Sec	3:06	2:04	1:33	1:14	1:02

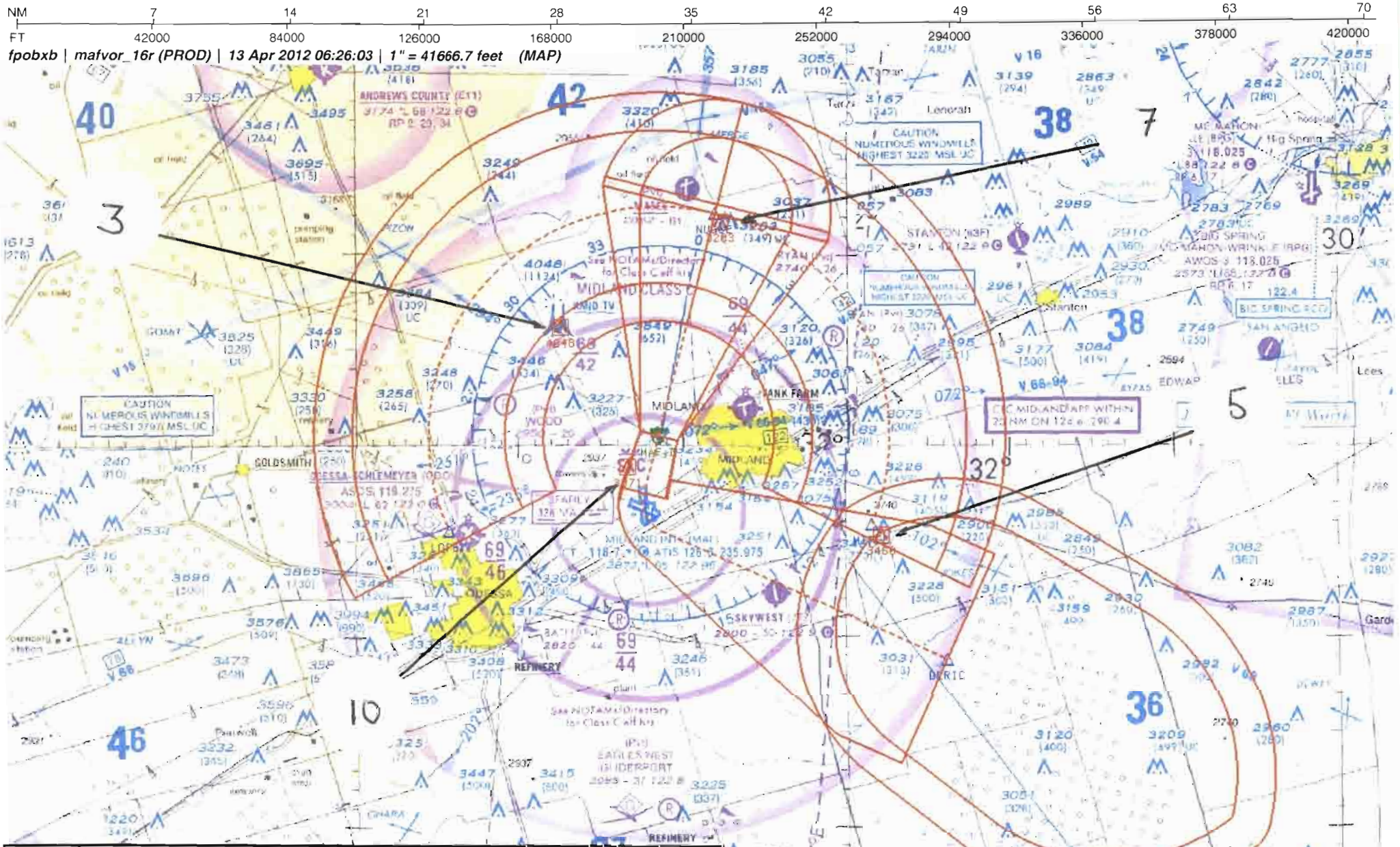
CATEGORY	A	B	C	D	E
S-16R	3400-1 528 (600-1)		3400-1½ 528 (600-1½)		
CIRCLING	3440-1 568 (600-1)		3440-1½ 568 (600-1½)	3520-2 648 (700-2)	3600-2½ 728 (800-2½)

31°57'N-102°12'W

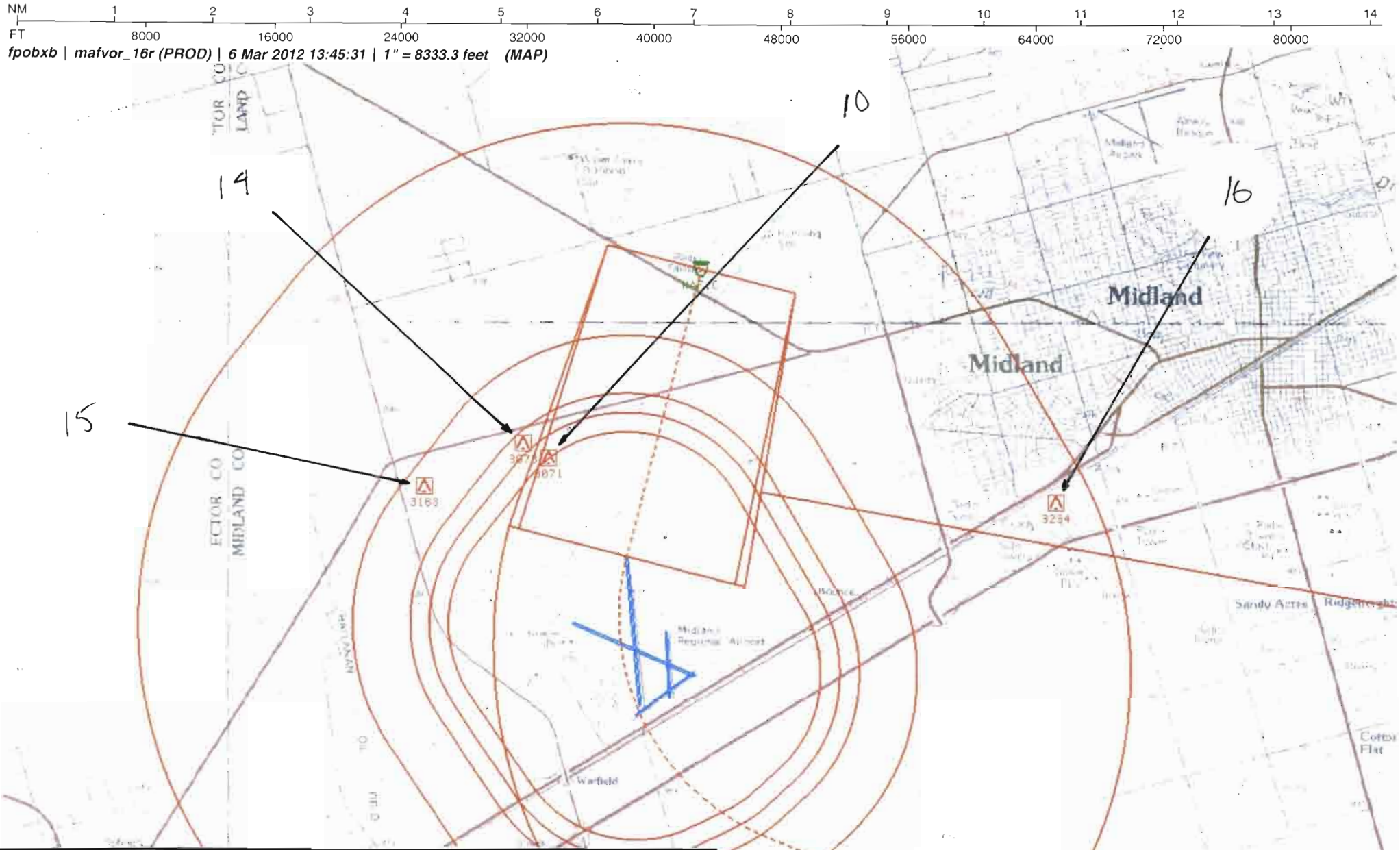
MIDLAND INTL (MAF)
VOR or TACAN RWY 16R



Airport ID:	KMAF	FM 9			
Apt Name:	MIDLAND INTL	No	SEGMENT	OBSTRUCTION	ELEV
City:	MIDLAND	1	FEEDER	TOWER	3549
State:	TEXAS	11	INITIAL: PT	TOWER	4046
Proc ID:	VOR OR TACAN	17	INTERMEDIATE: PT	AAO	3153
Amdt #:	AMDT 23	10	FINAL	RIG	3071
Rwy:	RWY 16R				
Scale:	1:500,000				



Airport ID:	KMAF				
Apt Name:	MIDLAND INTL	No	SEGMENT	OBSTRUCTION	ELEV
City:	MIDLAND	3	INITIAL: ARC	TOWER	4048
State:	TEXAS	5	INITIAL: ARC	TOWER	3460
Proc ID:	VOR OR TACAN	7	INTERMEDIATE	TOWER	3203
Amdt #:	AMDT 23	10	FINAL	RIG	3071
Rwy:	RWY 16R	5	MISSED	TOWER	3460
Scale:	1:500,000	5	HOLDING	TOWER	3460



Airport ID:	KMAF				
Apt Name:	MIDLAND INTL	No	SEGMENT	OBSTRUCTION	ELEV
City:	MIDLAND	10	FINAL	RIG	3071
State:	TEXAS	10	CAT A/B CIRCLE	RIG	3071
Proc ID:	VOR OR TACAN	14	CAT C CIRCLE	RIG	3078
Amdt #:	AMDT 23	15	CAT D CIRCLE	RIG	3163
Rwy:	RWY 16R	16	CAT E CIRCLE	TOWER	3234
Scale:	1:100,000				

U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

TACAN OR VOR STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICE - TITLE 14 CFR PART 97.23

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

TERMINAL ROUTES

FROM	TO	COURSE AND DISTANCE	ALTITUDE
TARZN INT	MAF VORTAC	205.00 / 22.94	5100
LOPEY/MAF 12.00 DME CW (IAF)	NUGSE/MAF 12.00 DME (NOPT)	12.00 DME ARC	4800
MIPEE/MAF 12.00 DME CCW (IAF)	NUGSE/MAF 12.00 DME (NOPT)	12.00 DME ARC	4800
NUGSE/MAF 12.00 DME (IF)	MAF VORTAC	183.48 / 12.00	4000

MISSED APPROACH

MAP: 3.09 MILES AFTER MAF VORTAC OR AT MAF 3.09 DME FIX

CLIMBING LEFT TURN TO 4800 ON HEADING 090 AND ON MAF VORTAC R-117 TO DERIC INT/MAF 19.00 DME AND HOLD.

ADDITIONAL FLIGHT DATA:

HOLD SE, RT, 297.02 INBOUND.
CHART FAS OBST: 3071 DRILLING RIG 315830N/1021316W
CHART: ASR
CHART VDP AT 1.59 DME;
DISTANCE VDP TO THLD 1.50 MILES.
CHART MAF R-235 AT LOPEY.
CHART MAF R-102 AT MIPEE.
MAF VORTAC TO RW16R: 3.29/50.

1. PT R SIDE OF COURSE 003.48 OUTBOUND 5100 FT WITHIN 10 MILES OF MAF VORTAC (IAF)
2.
3. FAC 183.48 FAF MAF VORTAC DIST FAF TO MAP 3.09 THLD 3.09
4. MIN. ALT MAF VORTAC 4000
8. MSA FROM: MAF VORTAC 5100

MAG VAR: 11E EPOCH YEAR:1965

MINIMUMS

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT ALTERNATE: N A STANDARD @

CATEGORY =====>	A			B			C			D			E		
	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA	MDA	VIS	HAT/HAA
S-16R	3400	1	528	3400	1	528	3400	1 1/2	528	3400	1 1/2	528	3400	1 1/2	528
CIRCLING	3440	1	568	3440	1	568	3440	1 1/2	568	3520	2	648	3600	2 1/2	728

NOTES:

CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA.
CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT.
CHART NOTE: CIRCLING TO RWY 16L NA AT NIGHT.
CHART PROFILE NOTE: PROCEDURE TURN NOT AUTHORIZED FOR CAT E.

@ CAT E 800-2 1/2

QUALITY 4 CHECKED

CITY AND STATE	ELEVATION: 2872 THRE: 2872	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP
MIDLAND, TX	AIRPORT NAME: MIDLAND INTL	MAF	VOR OR TACAN RWY 16R, AMDT 23	AMDT 22B
				DATE 09/28/2006

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
[X] YES [ ] NO		**ROUTINE**

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
[X]	[ ]	[X]	[X]	[X]	[X]	[X] **ZFW, MAF APP CON, CEN FPT, AMGR**

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:

DEVELOPED BY		
NAME: **JILL OLSON (BRIAN BERUBEE)**	FIFO **AJV-353**	DATE: **03/19/2012**

APPROVED BY		
NAME: **LARRY H STROUT** **MANAGER**	FIFO **AJV-353**	DATE:

CHANGES:

1. CHANGED FINAL COURSE FROM 183.00 TO 183.48
2. CHANGED DIST FAF TO MAP FROM 3.10 TO 3.09
3. RAISED FAF ALTITUDE FROM 3900 TO 4000
4. CHANGED PT OUTBOUND COURSE FROM 003.00 TO 003.48
5. RAISED PT COMPLETION ALTITUDE FROM 4800 TO 5100
6. NAMED ARC INITIALS, REPOSITIONED TO AIRWAY RADIALS AND NAMED INTERMEDIATE FIX
7. CHANGED MISSED APPROACH INSTRUCTIONS TO INCLUDE A "HEADING TO INTERCEPT"
8. RAISED S-16R MDA FROM 3260 TO 3400 AND VIS FROM 1 1/4 TO 1 1/2
9. RAISED CMDA CAT A-C FROM 3340 TO 3440 AND CAT D FROM 3440 TO 3250
10. CHANGED DESCENT ANGLE AND TCH FROM 2.98/52 TO 3.29/50
11. CHARTED VDP
12. CHANGED TARZN FEEDER DIST FROM 22.90 TO 22.94
13. CHANGED TDZE TO THRE
14. ADDED "VISIBILITY REDUCTION BY HELICOPTERS NA" NOTE
SEE 8260-10

REASONS:

1. OPTIMIZATION
2/4. CONSISTENT WITH COURSE CHANGE
3. AIRSPACE
5/8/9. OBSTACLE STUDY
6/7. CRITERIA
10/12. RECALCULATION/VGSI
11. QUALIFIES FOR VDP
13. SURVEY
14. 34:1 SURFACE PENETRATED
15. DESCENT ANGLE EXCEEDS COINCIDENCE CRITERIA
16. 20:1 VISUAL SURFACE PENETRATED

QUALITY A CHECKED

Bearings, headings, courses, and radials are magnetic. Elevations and altitudes are in feet, MSL, except HAT, HAA, TCH, and RA. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above aiport elevation. Distances are in nautical miles unless otherwise indicated, except visibilities which are in statute miles or in feet RVR.

QUALITY CHECK

CITY AND STATE	ELEVATION: 2872 THRE: 2872	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
MIDLAND, TX	AIRPORT NAME: MIDLAND INTL	MAF	VOR OR TACAN RWY 16R, AMDT 23	AMDT: 22B
				DATED: 09/28/2006

ALL AFFECTED PROCEDURES REVIEWED?	COORDINATES OF FACILITIES	REQUIRED EFFECTIVE DATE
☐ YES ☐ NO		

COORDINATED WITH:

ATA ☐ AAT ☐ ALPA ☐ APA ☐ AOPA ☐ NBAA ☐ OTHER (specify) ☐ _____

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:
DEVELOPED BY		
NAME:	FIFO	DATE:
APPROVED BY		
NAME:	FIFO	DATE:

CHANGES:

CHANGES CONT.
15. ADDED NOTE "VGSI AND DESCENT ANGLES NOT COINCIDENT"
16. ADDED NOTE "CIRCLING TO RWY 16L NA AT NIGHT"

REASONS:

QUALITY CHECKED 3

STANDARD INSTRUMENT APPROACH PROCEDURE DATA RECORD

PART - A OBSTRUCTION DATA

1. APP SEGMENT	FROM	TO	OBSTRUCTION	COORDINATES	ELEV. MSL	ROC	ALT. ADJUSTMENTS	MIN. ALT.
FEEDER	TARZN INT	MAF VORTAC	1. TOWER (48-008997)	320405.00N/1021353.00W	3549 (2C)	1000	PT551	5100
			2. TERRAIN	320912.00N/1020951.00W	2920 (2900)		AS1500	4400
INITIAL: ARC	LOPEY/MAF 12.00	NUGSE/MAF 12.00	3. TOWER (48-005355)	320551.00N/1021723.00W	4048 (1A)	1000	SA-248	4800
	DME CW	DME	4. TERRAIN	321027.00N/1022615.00W	3078 (3100)		AS1500	4600
INITIAL: ARC	MIPEE/MAF 12.00	NUGSE/MAF 12.00	5. TOWER (48-005854)	315453.00N/1015750.00W	3460 (5D)	1000	AT340	4800
	DME CCW	DME	6. TERRAIN	321403.00N/1021142.00W	2927 (2900)		AS1500	4400
INTERMEDIATE	NUGSE/MAF 12.00	MAF VORTAC	7. TOWER (48-012721)	321120.00N/1020734.00W	3203 (4D)	500		3800
	DME		8. TERRAIN	320848.00N/1021227.00W	2966 (3000)		AS1000	4000
INTERMEDIATE: PT	10 NM	MAF VORTAC	17. AAO	320924.00N/1021200.00W	3153 (4E)	500	AC98	3800
			9. TERRAIN	320924.00N/1021200.00W	2953 (3000)		AS1000	4000
FINAL	MAF VORTAC	3.09 MILES AFTER	10. DRILLING RIG	315830.43N/1021316.38W	3071 (4D)	250	AC50 XP29	3400
		MAF VORTAC OR						
		AT MAF 3.09 DME						
		FIX						
2. PROCEDURE TURN	MAF VORTAC	10 NM	11. TOWER (48-000844)	320511.00N/1021712.00W	4046 (2C)	1000		5100
			12. TERRAIN	321824.00N/1021303.00W	2980 (3000)		AS1500	4500
3. MISSED APPROACH — MAP:	3.09 MILES AFTER	DERIC INT/MAF				ASC		4800
	MAF VORTAC OR	19.00 DME	5. TOWER (48-005854)	315453.00N/1015750.00W	3460 (5D)	1000		4500
ELEV:	3150		13. TERRAIN	315751.00N/1021345.00W	2901 (2900)		AS1500	4400

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL							
CATEGORY A	1.3 NM	350	568	10. DRILLING RIG	315830.43N/1021316.38W	3071 (4D)	300	AC50	3440
CATEGORY B	1.5 NM	450	568	10. DRILLING RIG	315830.43N/1021316.38W	3071 (4D)	300	AC50	3440
CATEGORY C	1.7 NM	450	568	14. DRILLING RIG	315839.59N/1021335.15W	3078 (4D)	300	AC50	3440
CATEGORY D	2.3 NM	550	648	15. DRILLING RIG	315812.53N/1021447.92W	3163 (4D)	300	AC50	3520
CATEGORY E	4.5 NM	550	728	16. TOWER (48-002518)	315803.00N/1020707.00W	3234 (5D)	300	AC50	3600

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: MAF VORTAC

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
360-360	TWR (48-005355)	305/ 07.3	4048 (1A)	5100					

CITY AND STATE	ELEVATION: 2872 / AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
MIDLAND, TX	MIDLAND INTL	MAF VORTAC	VOR OR TACAN RWY 16R, AMDT 23	ASW

QUALITY CHECKED 3

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE			3. ALTIMETER SETTING
ZFW ARTCC MAF TOWER MAF APP CON		N W S	OTHER: ASOS	SOURCE: KMAF
		F A A		DISTANCE: 0
SATISFACTORY ON:		A / C		HOURS REMOTE OPERATION:
X V H F X U H F H F	LOCATION: KMAF			ADJUSTMENT: 0

4. MONITOR STATUS	PRIMARY NAVAID: MAF VORTAC	
	MONITOR POINT: MOCC	
	HRS OPTN: CAT 1	24
	CAT 3	

5. APPROACH & RUNWAY LIGHTING	
	ALS
	(S) SALS
X	MALS 28 (PCL) MALSR 10 (PCL)
X	HIRL 10, 28, 34L, 16R
X	MIRL 16L, 22, 04, 34R
X	REIL 34L
	TDZ
	C/LINE
X	OTHER (SPECIFY) PAPI-4L 34L, 16R VASI-4L 10, 28

6. RUNWAY MARKINGS	BASIC	BSC-G 16L, 34R
	ALL WEATHER	PIR-G 10, 28, 34L, 16R
	INSTRUMENT	NPI-G 22, 04
7. RUNWAY VISUAL RANGE	APPROACH	10
	MIDFIELD	
	ROLL OUT	

8. GLIDE PATH	GP ANGLE:	ELEV RWY THRESHOLD:
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT: 49.8

9. FINAL APPROACH COURSE AIMING	X	RUNWAY THRESHOLD	FT. FROM THRESHOLD
	X	ON CENTERLINE	FT. FROM CENTERLINE

10. WAIVERS: NONE

QUALITY 3 CHECK

PART D - PREPARED BY: JILL OLSON (BRIAN BERUBEE)	DATE: 03/19/2012
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-353

PART C - REMARKS:

PARA 251, 34:1 PENETRATION.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

NO ADDITIONAL AIRSPACE REQUIRED.

40' VEGETATION APPLIED PER FPT

KMAF ASOS ON SVC A
REDUNDANT WEATHER REPORTING SOURCES ON APT

VGSI DATA: 3.00/49.8

OBST #7 REQUIRES F/C VERIFICATION FOR 4D ACCURACY

APPLIED 248' OF ROC REDUCTION FOR OBST #3 ALTHOUGH 670' WAS AVAILABLE

TERPS VOL 1, VISUAL PORTION OF FINAL PENETRATIONS
34:1
3020 RIG 315805.03N/1021232.00W (58.86)
3037 RIG 315819.65N/1021207.73W (37.91)
RW16L
20:1
2875 TREE (KMAF0047) 315649.00N/1021150.07W (7.70)
2880 ROAD (KMAF0035) 325650.86N/1021151.00W (3.12)
FPT NOTIFIED OF PENETRATIONS

XP29-FPT PROVIDED VALUE, COORDINATED WITH ATC AND TXDOT

RADIO FIX AND HOLDING DATA RECORD

NAME: DERIC **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 314848.81N/1015351.42W **TYPE:** INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	MIDLAND	MAF	VORTAC	L	117.02	128.02	19.00	19.00		4000	14000
2	BIG SPRING	BGS	VORTAC	L	200.74	211.74		40.23		4000	14000

EXPANDED SERVICE VOLUME (ESV):

FAC IDENT	FAC TYPE	RADIAL/BEARING	DISTANCE	MIN ALTITUDE	MAX ALTITUDE
BGS	VORTAC	R-201	41	4000	17500

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	SE	MAF	VORTAC	117.02	297.02	R	1		4600	14000	9	12

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	230	TOWER (48-005854)	315453.00N/1015750.00W	3460	5D

HOLDING RESTRICTIONS:
PAT 1 CHART 230K ICON
HOLDING LIMITED TO ESTABLISHED PATTERN

REMARKS:
MIDLAND (FAC 1) AND BIG SPRING (FAC 2) USED TO ESTABLISH FIX COORDINATES
PRECIPITOUS TERRAIN EVALUATION COMPLETE

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	HI-VOR/DME OR TACAN RWY 16R	1, 2	1	KMAF	MIDLAND	TX (US)
IAP	ILS OR LOC RWY 10	1, 2	1	KMAF	MIDLAND	TX (US)
IAP	LOC BC RWY 28	1, 2		KMAF	MIDLAND	TX (US)
IAP	VOR OR TACAN RWY 16R	1, 2	1	KMAF	MIDLAND	TX (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 6 **DATE OF REVISION:** 08/23/2012

REASON FOR REVISION:
DELETED WP FROM FIX TYPE
ADDED DIST FROM FAC 1/2
CHANGED HOLDING INBOUND COURSE FROM 297.00 TO 297.02
CHANGED HOLDING PAT OBSTACLE FROM 3449 TWR TO 3460 TWR
CHANGED HOLDING PAT TEMPLATES FROM 8/11 TO 8/12
DELETED DME LEG LENGTH
ADDED ESV DATA
UPDATED FIX USE

DEVELOPED BY: **DATE:** 02/28/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (BRIAN BERUBEE)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZFW
ATC FACILITY: MAF APP CON/ATCT
OTHER:

QUALITY 3 CHECK

RADIO FIX AND HOLDING DATA RECORD

NAME: LOPEY **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 315537.57N/1022417.25W **TYPE:** DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	MIDLAND	MAF	VORTAC	L	234.83	245.83	12.00	12.00		5000	17500

REMARKS:
MIDLAND (FAC 1) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V68	1				(US)
IAP	VOR OR TACAN RWY 16R	1		KMAF	MIDLAND	TX (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 03/06/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (BRIAN BERUBEE)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZFW
ATC FACILITY: MAF APP CON/ATCT
OTHER:

QUALITY CHECKED 3

RADIO FIX AND HOLDING DATA RECORD

NAME: MIPEE **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 315554.65N/1015824.82W **TYPE:** DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	MIDLAND	MAF	VORTAC	L	101.69	112.69	12.00	12.00		4500	17500

REMARKS:
MIDLAND (FAC 1) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V68	1				(US)
IAP	VOR OR TACAN RWY 16R	1		KMAF	MIDLAND	TX (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 03/06/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (BRIAN BERUBEE)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZFW
ATC FACILITY: MAF APP CON/ATCT
OTHER:

QUALITY CHECK

RADIO FIX AND HOLDING DATA RECORD

NAME: NUGSE **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 321212.17N/1020753.22W **TYPE:** DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** ESTABLISH

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	MIDLAND	MAF	VORTAC	L	003.48	014.48	12.00	12.00		4800	17500

REMARKS:
MIDLAND (FAC 1) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	VOR OR TACAN RWY 16R	1		KMAF	MIDLAND	TX (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: ORIG **DATE OF REVISION:** 07/26/2012

DEVELOPED BY: **DATE:** 03/06/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (BRIAN BERUBEE)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZFW
ATC FACILITY: MAF APP CON/ATCT
OTHER:

RADIO FIX AND HOLDING DATA RECORD

NAME: TARZN **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 321908.41N/1015530.80W **TYPE:** WP, INT, DME

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** MODIFY

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	BIG SPRING	BGS	VORTAC	L	249.04	260.04	22.79	22.79		4400	17500
2	MIDLAND	MAF	VORTAC	L	025.00	036.00		22.94		4400	17500

HOLDING: **HOLDING TYPE OF ACTION:** NO CHANGE

REMARKS:
BIG SPRING (FAC 1) AND MIDLAND (FAC 2) USED TO ESTABLISH FIX COORDINATES

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V16	1, 2				(US)
IAP	VOR/DME RNAV RWY 35 (SPECIAL)			K7TX5	MIDLAND	TX (US)
IAP	LOC BC RWY 28	1, 2		KMAF	MIDLAND	TX (US)
IAP	VOR OR TACAN RWY 16R	1, 2		KMAF	MIDLAND	TX (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 3 **DATE OF REVISION:** 07/26/2012

REASON FOR REVISION:
ADDED DIST FROM FAC 1/2
UPDATED FIX USE

DEVELOPED BY: **DATE:** 02/29/2012 **OFFICE:** AJV-353 **NAME:** JILL OLSON (BRIAN BERUBEE)

APPROVED BY: **DATE:** **OFFICE:** AJV-353 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZFW
ATC FACILITY: MAF APP CON/ATCT
OTHER:

QUALITY CHECK 3

RADIO FIX AND HOLDING DATA RECORD

NAME: MIDLAND VORTAC **STATE:** TX **COUNTRY:** US

LATITUDE/LONGITUDE: 320033.64N/1021125.40W **TYPE:**

INFO ONLY

AIRSPACE DOCKET: **FIX TYPE OF ACTION:** NO CHANGE

FIX MAKE-UP FACILITIES:

FAC	NAME	IDENT	TYPE	CLASS	MAG BRG	TRUE BRG	DME	DIST FROM FAC NM	DIST FROM FAC FEET	MRA	MAA
1	MIDLAND	MAF	VORTAC	L						4000	17500

HOLDING: **HOLDING TYPE OF ACTION:** MODIFY

PATTERNS:

PAT	DIR	IDENT	TYPE	RAD/CRS/BRG	CRS INBOUND	TURN (L OR R)	LEG LENGTH TIME	LEG LENGTH DME	HOLDING ALTITUDES MIN	HOLDING ALTITUDES MAX	TEMPLATES MIN	TEMPLATES MAX
1	NE	MAF	VORTAC	051.14	231.14	L	1		5000	6000	5	5

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	310	TOWER (48-004478)	315755.00N/1024612.00W	4240	3C
1	200	TOWER (48-000685)	315730.00N/1020401.00W	3287	4D

REASON FOR NONSTANDARD HOLDING:
PAT 1 ATC REQUEST

HOLDING RESTRICTIONS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 5300.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
DP	MIDLAND			KMAF	MIDLAND	TX (US)
EN ROUTE	V546					(US)
EN ROUTE	V66					(US)
EN ROUTE	V68					(US)
EN ROUTE	V81					(US)
EN ROUTE	V94					(US)
IAP	HI-VOR/DME OR TACAN RWY 16R			KMAF	MIDLAND	TX (US)
IAP	HI-VOR/DME OR TACAN RWY 34L			KMAF	MIDLAND	TX (US)
IAP	ILS OR LOC RWY 10			KMAF	MIDLAND	TX (US)
IAP	LOC BC RWY 28			KMAF	MIDLAND	TX (US)
IAP	VOR OR TACAN RWY 16R			KMAF	MIDLAND	TX (US)
IAP	VOR/DME OR TACAN RWY 34L			KMAF	MIDLAND	TX (US)
IAP	VOR-A			KMDD	MIDLAND	TX (US)
IAP	VOR/DME RWY 25			KMDD	MIDLAND	TX (US)
IAP	NDB RWY 20			KODO	ODESSA	TX (US)
IAP	VOR-A		1	KODO	ODESSA	TX (US)
IAP	NDB RWY 35			KGNC	SEMINOLE	TX (US)

REQUIRED CHARTING: MILITARY IAP, IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: LOW

RECORD REVISION NUMBER: 8 **DATE OF REVISION:** 07/29/2010

REASON FOR REVISION:
1. ADDED PAT 1.
2. DELETED REMARK, HOLDING EVALUATED FOR GPS HOLDING.
3. DELETED REMARK, UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 5000.
4. ADDED HOLDING RESTRICTION, UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 5300.
5. ADDED REMARK, PRECIPITOUS TERRAIN EVALUATION COMPLETED.
6. DELETED UNPLANNED HOLDING 230K AND 265K CONTROLLING OBSTACLE.
7. CHANGED UNPLANNED HOLDING 310K OBSTACLE DESCRIPTION NUMBER.

DEVELOPED BY: **DATE:** 01/13/2010 **OFFICE:** AVN-120 **NAME:** JOSE ALFONSO (DAVID SAUER)

APPROVED BY: **DATE:** 04/26/2010 **OFFICE:** AVN-120 **NAME:** SUE CRUMB

SIGNATURE:

QUALITY CHECK 3

DISTRIBUTION:

NFDC
FPO: CEN
ARTCC: ZFW
ATC FACILITY: MAF APP CON
OTHER: