U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

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
STARR INT	DTL VOR/DME	353.38 / 19.33	3100
ROLAG INT	DTL VOR/DME	079.89 / 14.37	3100

MISSED APPROACH

MAP: DTL VOR/DME

CLIMB TO 2400 THEN CLIMBING RIGHT TURN TO 3100 DIRECT DTL VOR/DME AND HOLD.

ADDITIONAL FLIGHT DATA:

HOLD NW, RT, 141.33 INBOUND.
CHART FAS OBST: 1570 TREE 465013N/0955527W
DUVJU TO RW13: 3.01/45.
FAC CROSSES RWY C/L EXTENDED 3004 FROM THLD.

1. PT L SIDE OF COURSE 321.33 OUTBOUND 3100 FT WITHIN 10 MILES OF DTL VOR/DME (IAF)
2.
3. FAC 141.33 FAF DIST FAF TO MAP THLD
4. MIN. ALT DUVJU/DTL 2.06 DME 2020*
8. MSA FROM: DTL VOR/DME 180-270 3600, 270-180 3200

MAG VAR: 5E EPOCH YEAR:1995

MINIMUMS

TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT

ALTERNATE: N A X

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-13	2020	1	623	2020	1	623	2020	1 3/4	623	2020	1 3/4	623			
CIRCLING	2020	1	623	2020	1	623	2020	1 3/4	623	2080	2 1/4	683			
DUVJU FIX MINIMUMS															
S-13	1820	1	423	1820	1	423	1820	1 1/4	423	1820	1 1/4	423			
CIRCLING	1880	1	483	1940	1	543	1940	1 1/2	543	2080	2 1/4	683			

NOTES:

CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE PARK RAPIDS ALTIMETER SETTING AND INCREASE ALL MDA 100 FEET, INCREASE S-13 AND CIRCLING CATS C/D VISIBILITY 1/4 MILE. INCREASE DUVJU FIX MINIMUMS S-13 AND CIRCLING CATS C/D VISIBILITY 1/4 MILE.
CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA.
(SEE FORM 8260-10)

QUALITY CHECKED

CITY AND STATE	ELEVATION: 1397 THRE: 1397	FACILITY IDENTIFIER:	PROCEDURE NO./AMDT NO./EFFECTIVE DATE:	SUP
DETROIT LAKES, MN	AIRPORT NAME: DETROIT LAKES-WETHING FIELD	DTL	VOR RWY 13, AMDT 1	AMDT ORIG
				DATE 05/12/2005

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

COORDINATED WITH:

ATA	AAT	ALPA	APA	AOPA	NBAA	OTHER (specify)
[X]	[ ]	[X]	[ ]	[X]	[X]	[X] **ZMP ARTCC, AMGR**

FLIGHT CHECKED BY		
NAME:	FIFO	DATE:

DEVELOPED BY		
NAME: **TERENCE D. SHARP (ELIZABETH WHEATLEY)**	FIFO **AJV-351**	DATE: **12/05/2011**

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

CHANGES:

1. CHANGED CHART FROM TDZE TO THRE.
2. INCREASED MIN ALTITUDE AT DUVJU STEPDOWN FROM 1900FT TO 2020FT.
3. MOVED DUVJU STEPTOWN FIX.
4. CHANGED HOLDING INBOUND FROM 141.61 TO 141.33.
5. CHANGED FAC FROM 141.61 TO 141.33.
6. INCREASED S-31 CAT C/D AND CIRCLING CAT C VIS FROM 1 1/2 TO 1 3/4.
7. INCREASE S-31 HAT FROM 504FT TO 623FT ALL CATS.
8. INCREASE CIRCLING HAA FROM 504FT TO 623FT CATS A/B/C.
9. CHANGED DUVJU FIX MINIMUMS S-31 HAT FROM 424FT TO 423FT.
10. CHANGED DUVJU FIX MINIMUMS CIRCLING HAA FROM 424/544/684 TO 483/543/683.
11. INCREASED CLIMB TO ALTITUDE FROM 2300FT TO 2400FT.
12. ADDED NEW NOTE "PROCEDURE NA AT NIGHT".
13. ADDED NEW BACK-UP ALTIMETER NOTE.
14. ADDED NEW NOTE "VISIBILITY REDUCTION BY HELICOPTERS NA".

REASONS:

1. TERPS 8260.3 VOLUME 1 CHAPTER 3.
2. NEW CONTROLLING OBSTACLE.
3. IAW WITH CURRENT CRITERIA.
4. NEW SURVEY ON DTL VOR/DME.
5. NEW SURVEY ON DTL VOR/DME.
6. TERPS 8260.3 VOLUME 1 CHAPTER 3.
7. TERPS 8260.3 VOLUME 1 CHAPTER 3.
8. TERPS 8260.3 VOLUME 1 CHAPTER 3.
9. TERPS 8260.3 VOLUME 1 CHAPTER 3.
10. TERPS 8260.3 VOLUME 1 CHAPTER 3.
11. IAW WITH CURRENT CRITERIA.
12. 20:1 PENETRATIONS.
13. MATCH OTHER PROCEDURES AT THIS AIRPORT.
14. 20:1 PENETRATION.

QUALITY CHECKED

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NOTES, (CONT.):
CHART NOTE: PROCEDURE NA AT NIGHT.
*2120 WHEN USING PARK RAPIDS ALTIMETER SETTING.

QUALITY CHECKED

CITY AND STATE	ELEVATION: 1397 THRE: 1397	FACILITY IDENTIFIER:	PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:	SUP:
DETROIT LAKES, MN	AIRPORT NAME: DETROIT LAKES-WETHING FIELD	DTL	VOR RWY 13, AMDT 1	AMDT: ORIG
				DATED: 05/12/2005

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:

REASONS:

QUALITY CHECKED

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	STARR INT	DTL VOR/DME	1. TOWER (27-001450)	464042.00N/0955718.00W	1902 (5D)	1000		3000
			2. TERRAIN	464424.00N/0954742.00W	1605 (1600)		AS1500	3100
FEEDER	ROLAG INT	DTL VOR/DME	3. TOWER (27-001451)	465219.00N/0960522.00W	1772 (5D)	1000	AT328	3100
			4. TERRAIN	464554.00N/0960042.00W	1548 (1500)		AS1500	3000
FINAL: PT	10 NM	DUVJU/DTL 2.06 DME	5. AAO	465418.00N/0955521.00W	1706 (2C)	300		2020
FINAL: STEPDOWN	DUVJU/DTL 2.06 DME	DTL VOR/DME	6. TREE	465013.03N/0955527.06W	1570 (2C)	250		1820
2. PROCEDURE TURN	DTL VOR/DME	10 NM	7. TOWER (27-001182)	464824.00N/0954624.00W	2060 (5D)	1000		3100
			8. TERRAIN	465336.00N/0954654.00W	1598 (1600)		AS1500	3100
3. MISSED APPROACH MAP:	DTL VOR/DME	DTL VOR/DME				ASC		3100
			9. TOWER (27-020804)	464318.80N/0955038.40W	1869 (5D)	1000	AC50	3000
ELEV:	1570		10. TERRAIN	464339.00N/0954930.00W	1562 (1600)		AS1500	3100

4. CIRCLING AREA	DISTANCE	HT. ABV. ARPT. REQUIRED	HT. ABV. ARPT. ACTUAL							
CATEGORY A	1.3 NM	350	623 / 483	11. TREE	464912.61N/0955503.70W	1569 (2C)	300	SI	2020 / 1880
CATEGORY B	1.5 NM	450	623 / 543	12. WATER TOWER	464904.00N/0955039.00W	1572 (4D)	300	SI / AC50	2020 / 1940
CATEGORY C	1.7 NM	450	623 / 543	12. WATER TOWER	464904.00N/0955039.00W	1572 (4D)	300	SI / AC50	2020 / 1940
CATEGORY D	2.3 NM	550	683 / 683	13. TOWER (27-000153)	465014.00N/0955018.00W	1711 (1D)	300	AC50 / AC50	2080 / 2080
CATEGORY E	4.5 NM	550							

5. MINIMUM SAFE ALTITUDES — PRIMARY NAVAID: **DTL VOR/DME**

SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A	SECTOR	OBSTRUCTION	BRG/DIST	ELEVATION (MSL)	M S A
180-270	TWR (27-001050)	232/ 16.7	2555 (5D)	3600					
270-180	200' AAO	027/ 29.0	2146 (4E)	3200					

CITY AND STATE	ELEVATION: 1397 AIRPORT NAME:	FACILITY	PROCEDURE AND AMENDMENT NO:	REGION
DETROIT LAKES, MN	DETROIT LAKES-WETHING FIELD	DTL	VOR RWY 13, AMDT 1	AGL

QUALITY CHECKED

PART B - SUPPLEMENTAL DATA

1. COMMUNICATIONS WITH:	2. WEATHER SERVICE	3. ALTIMETER SETTING
PNM FSS	N W S / F A A / A / C — OTHER: AWOS-3	SOURCE: KDTL
		DISTANCE:
		HOURS REMOTE OPERATION: 24 / BACKUP
SATISFACTORY ON: X VHF X UHF HF	LOCATION: KDTL	ADJUSTMENT: 0

4. MONITOR STATUS	PRIMARY NAVAID: DTL VOR/DME	
	MONITOR POINT:	
	HRS OPTN: CAT 1	
	HRS OPTN: CAT 3	24
5. APPROACH & RUNWAY LIGHTING		ALS
		(S) SALS
		MALS
		HIRL
	X	MIRL 31 (PCL), 13 (PCL)
	X	REIL 31 (PCL), 13 (PCL)
		TDZ
		C/LINE
	X	OTHER (SPECIFY) VASI-4L 31 (PCL), 13 (PCL)
6. RUNWAY MARKINGS	BASIC	
	ALL WEATHER	
	INSTRUMENT	NPI-G 31, 13
7. RUNWAY VISUAL RANGE	APPROACH	
	MIDFIELD	
	ROLL OUT	
8. GLIDE PATH	GP ANGLE:	ELEV RWY THRESHOLD:
	DISTANCE FROM RWY:	ELEV GP ANTENNA:
		THRESHOLD CROSSING HEIGHT:
9. FINAL APPROACH COURSE AIMING		RUNWAY THRESHOLD 3004 FT. FROM THRESHOLD
	X	ON CENTERLINE FT. FROM CENTERLINE

10. WAIVERS: NONE

PART D - PREPARED BY: TERENCE D. SHARP (ELIZABETH WHEATLEY)	DATE: 12/05/2011
TITLE: AERONAUTICAL INFORMATION SPECIALIST	OFFICE: AJV-351

PART C - REMARKS:

VDP NOT ESTABLISHED - OBSTACLES PENETRATE THE 20:1.

PARA 251, 20:1 PENETRATION.

PARA 251, 34:1 PENETRATION.

PRECIPITOUS TERRAIN EVALUATION COMPLETED.

BLOCK 3: ALTIMETER SETTING
SOURCE: KDTL/KPKD
DISTANCE: 33.75
RWY 17/35 UNMARKED TURF RWY
AWOS-3/ASOS IS ON SERVICE-A
VGSI DATA: 3.00/45
WHEN USING PARK RAPIDS MUNI-KONSHOK FIELD (PDK)
ALTIMETER: MINIMUM ALTITUDE AT DUVJU 2120.

VEGETATION HEIGHT 100F FT.

NO ADDITIONAL AIRSPACE REQUIRED.
RASS PRESSURE PATTERNS SAME
KDTL 1397, KPKD 1443
RA = 84.30.

VDP NOT PUBLISHED LESS THAN 0.5 NM AFTER STEPDOWN

OBST. 5: VERIFIED TERRAIN BY DOING MAP STUDY.
OBST. 6, 12: RETAINED FROM OLD PROCEDURE.

TERPS, VOLUME 1, "VISUAL PORTION OF FINAL"
PARA 251, 34:1 PENETRATIONS:
1405 ROADWAY 464950.37N-0955320.80W 7.47
1414 POLE 464949.48N-0955332.36W 3.28

PARA 251, 20:1 PENETRATIONS:
1405 ROADWAY 464950.37N-0955320.80W 7.11

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: DETROIT LAKES VOR/DME **STATE:** MN **COUNTRY:** US

LATITUDE/LONGITUDE: 464931.96N/0955314.41W **TYPE:**

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	DETROIT LAKES	DTL	VOR/DME	T						1700	13300

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	NW	DTL	VOR/DME	321.33	141.33	R	1		3100	12000	4	9

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
1	200	TOWER (27-002167)	465321.00N/0955214.00W	1743	5D

HOLDING RESTRICTIONS:
HOLDING LIMITED TO ESTABLISHED PATTERNS.

REMARKS:
PRECIPITOUS TERRAIN EVALUATION COMPLETED.

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	VOR RWY 13	1	1	KDTL	DETROIT LAKES	MN (US)
IAP	VOR RWY 31	1	1	KDTL	DETROIT LAKES	MN (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 4 **DATE OF REVISION:** 07/26/2012

REASON FOR REVISION:
NEW SURVEY ON VOR/DME CHANGED HOLDING INBOUND FROM 141.61 TO 141.33.
UPDATED OBSTACLE TOWER NUMBER.
UPDATED FIX USE.
UPDATED MAA TO 13300 FROM 12000.

DEVELOPED BY: **DATE:** 11/10/2011 **OFFICE:** AJV-351 **NAME:** TERENCE SHARP (ELIZABETH WHEATLEY)

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

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CEN
ARTCC: ZMP
ATC FACILITY:
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: DUVJU **STATE:** MN **COUNTRY:** US

LATITUDE/LONGITUDE: 465114.90N/0955454.38W **TYPE:** 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	FEET	MRA	MAA
1	DETROIT LAKES	DTL	VOR/DME	T	321.33	326.33	2.06	2.06		1920	13300

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

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
IAP	VOR RWY 13	1		KDTL	DETROIT LAKES	MN (US)

REQUIRED CHARTING: IAP

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 2 **DATE OF REVISION:** 07/26/2012

REASON FOR REVISION:
MOVED FIX AND UPDATED LAT/LONG.
UPDATED FIX USE FORMAT.
MOVED FIX .13 NM.
TRUE BRG CHANGED FROM 326.61 TO 326.33.
DME DISTANCE CHANGED FROM 1.08 NM TO 2.06 NM.
UPDATED MAA TO 13300 FROM 12000.

05/25/12: THIS IS AN UPDATED COPY OF THE FORM DEVELOPED ON 11/16/2011.
CHANGED FAC 1 MRA FROM 1800 TO 1920.

DEVELOPED BY: **DATE:** 11/16/2011 **OFFICE:** AJV-351 **NAME:** TERENCE SHARP (ELIZABETH WHEATLEY)

APPROVED BY: **DATE:** **OFFICE:** AJV-354 **NAME:** LARRY STROUT

SIGNATURE:

DISTRIBUTION: **NFDC**
FPO: CEN
ARTCC: ZMP
ATC FACILITY:
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: ROLAG **STATE:** MN **COUNTRY:** US

LATITUDE/LONGITUDE: 464813.36N/0961404.53W **TYPE:** WP, INT, DME

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

INFO ONLY

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	ALEXANDRIA	AXN	VOR/DME	L	314.00	321.00	65.62			6000	17500
2	FARGO	FAR	VORTAC	H	074.00	083.00				6000	17500

HOLDING: **HOLDING TYPE OF ACTION:** CANCEL

REMARKS:
ESV: AXN R-314/66 NM, 6000

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V171			KAXN	ALEXANDRIA	MN (US)
IAP	RNAV (GPS) RWY 13			KDTL	DETROIT LAKES	MN (US)
IAP	VOR RWY 13	1, 2		KDTL	DETROIT LAKES	MN (US)
IAP	VOR RWY 31	1, 2		KDTL	DETROIT LAKES	MN (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 5 **DATE OF REVISION:** 05/12/2005

REASON FOR REVISION:
FACILITY 3 DELETED; MOORHEAD, MN GPS RWY 30 CANCELLED

HOLDING DELETED

DEVELOPED BY: **DATE:** 09/14/2004 **OFFICE:** AVN-130 **NAME:** TONY TURKE (LORETTA ZUEST)

APPROVED BY: **DATE:** **OFFICE:** AVN-130 **NAME:** DANNY HAMILTON

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CHI
ARTCC: ZMP
ATC FACILITY:
OTHER:

QUALITY CHECKED

RADIO FIX AND HOLDING DATA RECORD

NAME: STARR **STATE:** MN **COUNTRY:** US

LATITUDE/LONGITUDE: 463012.96N/0955226.81W **TYPE:** INT, DME

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

INFO ONLY

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	FARGO	FAR	VORTAC	H	101.00	110.00	43.10			3500	17500
2	PARK RAPIDS	PKD	VOR/DME	L	230.77	234.77				3500	17500
3	ALEXANDRIA	AXN	VOR/DME	L	314.00	321.00	42.25			3500	17500

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

CONTROLLING OBSTRUCTIONS:

PAT	AIRSPEED	OBSTRUCTION	COORDINATES	ELEVATION	ACCURACY CODE
UPN	200	TOWER (24-1703)	462848.00N/0960146.00W	2035	4D

REMARKS:
UNPLANNED HOLDING AUTHORIZED AT OR ABOVE 4000

FIX USE:

USE TYPE	USE TITLE	FAC	PAT	AIRPORT IDENT	CITY	STATE
EN ROUTE	V171					(US)
EN ROUTE	V510					(US)
IAP	RNAV (GPS) RWY 31			KDTL	DETROIT LAKES	MN (US)
IAP	VOR RWY 13			KDTL	DETROIT LAKES	MN (US)
IAP	VOR RWY 31			KDTL	DETROIT LAKES	MN (US)
IAP	RNAV (GPS) RWY 34			K04Y	HAWLEY	MN (US)

REQUIRED CHARTING: IAP, CONTROLLER, EN ROUTE LOW

COMPULSORY REPORTING POINT: NO

RECORD REVISION NUMBER: 8 **DATE OF REVISION:** 03/15/2007

REASON FOR REVISION:
UPDATE FIX USE

DEVELOPED BY: **DATE:** 07/26/2006 **OFFICE:** AVN-120 **NAME:** GEORGE DAVIS (RICK VAUGHN)

APPROVED BY: **DATE:** **OFFICE:** AVN-120 **NAME:** JOHN BICKERSTAFF

SIGNATURE:

DISTRIBUTION:
NFDC
FPO: CHI
ARTCC: ZMP
ATC FACILITY: FAR APP CON
OTHER:

QUALITY CHECKED