

US DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

**RNAV (GPS) - STANDARD
INSTRUMENT APPROACH PROCEDURE
FAR PART 97.33**

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				MISSED APPROACH
FROM	TO	COURSE AND DISTANCE	ALTITUDE	
PIKAW (IAF)	OYNOP (NOPT) (FB)	049.25 / 7.39	3000	LNAV: RW14L CLIMBING LEFT TURN TO 2700 DIRECT GEP VORTAC AND HOLD. ADDITIONAL FLIGHT DATA: HOLD N, LT, 166.00 INBOUND. CHART FAS OBST: 1064 TOWER 450616N/0932355W ZUNBE TO RW14L: 3.04/40
ZAPIN (IAF)	OYNOP (NOPT) (FB)	181.85 / 10.76	3000	
OYNOP (IF/IAF)	ZUNBE (FB)	139.29 / 6.10	2500	

- PT SIDE OF COURSE OUTBOUND FT WITHIN MILES OF (IAF)
- HOLD NW OYNOP, RT, 139.29 INBOUND, 3000 FT. IN LIEU OF PT (IAF)
- FAC: 139.36 FAF: ZUNBE DIST FAF TO MAP: 4.93 THLD: 4.93
- MIN. ALT: OYNOP 3000, ZUNBE 2500
- DIST TO THLD FROM OM: MM: IM: 150 HAT: 100 HAT: GS ANT:
- MIN GS INCPT: GS ALT AT: OM: MM: IM:
- GS ANGLE: TCH: 34:1 IS NOT CLEAR
- MSA FROM: RW14L 3500

MAG VAR: 2E

EPOCH YEAR: 2000

MINIMUMS

TAKEOFF:		STANDARD	X	SEE FAA FORM 8260-15A	FOR THIS AIRPORT			ALTERNATE: N A			STANDARD @					
CATEGORY =====>		A			B			C			D			E		
	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	DH/MDA	VIS	HAT/HAA	
LNAV MDA	1380	1	512	1380	1	512	1380	1 1/2	512	1380	1 3/4	512				
CIRCLING	1380	1	511	1380	1	511	1380	1 1/2	511	1460	2	591				

NOTES:
 CHART NOTE: DME/DME RNP-0.3 NA.
 CHART NOTE: VISIBILITY REDUCTION BY HELICOPTERS NA.
 CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE ANOKA COUNTY-BLAINE ARPT (JANES FIELD)
 ALTIMETER SETTING AND INCREASE ALL MDA 80 FEET, INCREASE CIRCLING CAT D VISIBILITY 1/4 MILE.
 SEE 8260-10

@ NA WHEN LOCAL WEATHER NOT AVAILABLE.

CITY AND STATE	ELEVATION: 869 TDZE: 868	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 14L, ORIG 15 JAN 2009	SUP:
MINNEAPOLIS, MN	AIRPORT NAME: CRYSTAL			AMDT: NONE
				DATED

QUALITY
CHECKED

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NOTES CONT.**CHART PROFILE NOTE: VGSI AND DESCENT ANGLES NOT COINCIDENT.****CHART PLANVIEW NOTE: PROCEDURE NA FOR ARRIVALS AT PIKAW VIA V78 WESTBOUND, AND ARRIVALS AT ZAPIN VIA V82-161 NORTHBOUND.**

CITY AND STATE

MINNEAPOLIS, MN

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AIRPORT NAME:

CRYSTAL

FACILITY
IDENTIFIER:

RNAV

PROCEDURE NO./AMDT NO./EFFECTIVE DATE:

RNAV (GPS) RWY 14L, ORIG

15 JAN 2009

SUP:

AMDT: NONE

DATED:

6
CHECKED

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[illegible]

SUP:	
AMDT:	NONE
DATED:	

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FLIGHT STANDARDS SERVICE - FAR PART 97.33

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MSA 123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890123456789012

SUSAP KMICK3SRW14LK3PG 0 18018003525 M

CITY AND STATE MINNEAPOLIS, MN	ELEVATION: 869 TDZE: 868 AIRPORT NAME: CRYSTAL	FACILITY IDENTIFIER: RNAV	PROCEDURE NO./AMDT NO./EFFECTIVE DATE: RNAV (GPS) RWY 14L, ORIG 15 JAN 2009	SUP:
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ARINC FLIGHT INSPECTION SUMMARY - VERSION 424-18

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE
	OYNOP	OYNOP	010		HF	R	FB		139.3 (141T)	004.0	03000
	OYNOP	ZAPIN	010	IAF	IF		FB				
	OYNOP	OYNOP	020		TF		FB	1.0	181.9 (184T)	010.8	03000
	PIKAW	PIKAW	010	IAF	IF		FB				
	PIKAW	OYNOP	020		TF		FB	1.0	049.3 (051T)	007.4	03000
		OYNOP	010	FACF	IF		FB				03000
		ZUNBE	020	FAF	TF		FB	0.5	139.3 (141T)	006.1	02500
		RW14L	030	MAP	TF		FO	0.3	139.4 (141T)	004.9	00908

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE
	GEP	040		DF	L	FO	1.0			02700
	GEP	050		HM	L	FO	2.0	166.0 (168T)	004.0	02700

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	GEP	N450844.50	W0932223.50	N4508.742	W09322.392
	OYNOP	N451230.78	W0933108.71	N4512.513	W09331.145
	PIKAW	N450753.41	W0933918.10	N4507.890	W09339.302
	ZAPIN	N452314.76	W0933007.35	N4523.246	W09330.123
	ZUNBE	N450745.22	W0932545.60	N4507.754	W09325.760
	RW14L	N450353.98	W0932124.83	N4503.900	W09321.414

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW14L	00868	40

CITY AND STATE
MINNEAPOLIS, MN

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