

<b>ILS - STANDARD</b> <b>INSTRUMENT APPROACH PROCEDURE</b> <b>TITLE 14 CFR PART 97.29</b>				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		ILS: DA LOC: 6.69 MILES AFTER NARCO INT/I-MSP 6.88 DME OR AT I-MSP 0.20 DME FIX  CLIMB TO 1300 THEN CLIMB TO 3000 ON HEADING 301 AND MSP VOR/DME R-298 TO WOXEB INT/GEP VORTAC 11.83 DME AND HOLD.  <u>ALTERNATE MA (DO NOT CHART):</u> CLIMB TO 1300 THEN CLIMBING LEFT TURN TO 3000 ON HEADING 275 AND FCM VOR/DME R-330 TO WOBEX/15.60 DME AND HOLD. (DME REQUIRED).  <b>ADDITIONAL FLIGHT DATA:</b> HOLD SW, RT, 056.12 INBOUND. CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE WOXEB INT/GEP VORTAC 11.83 DME, RT, 330.28 INBOUND. CHART FAS OBST: 1000 TREE 445116N/0931001W CHART VDP AT 1.40 DME* DISTANCE VDP TO THLD 1.21 MILES. *LOC ONLY. CHART CIRCLING ICON.							
HASTI INT/I-MSP 19.43 DME (IAF)		PINKE INT/I-MSP 16.30 DME		301.36 / 3.14 (I-MSP)		6000									
PINKE INT/I-MSP 16.30 DME		PIGZI INT/I-MSP 13.16 DME		301.36 / 3.14 (I-MSP)		5000									
PIGZI INT/I-MSP 13.16 DME (IF)		AABEZ INT/I-MSP 10.02 DME		301.36 / 3.14 (I-MSP)		4000									
AABEZ INT/I-MSP 10.02 DME		NARCO INT/I-MSP 6.88 DME		301.36 / 3.14 (I-MSP)		3000									
1. PT <u>      </u> SIDE OF COURSE <u>      </u> OUTBOUND <u>      </u> FT WITHIN <u>      </u> MILES OF <u>      </u> (IAF) 2. PROFILE STARTS AT HASTI 3. FAC: <u>301.36</u> FAF: NARCO INT/I-MSP 6.88 DME DIST FAF TO MAP: <u>6.69</u> THLD: <u>6.69</u> 4. MIN. ALT: HASTI 7000, PINKE 6000, PIGZI 5000, AABEZ 4000, NARCO 3000, EAGAN/2.29 DME/RADAR 1520* 5. DIST TO THLD FROM OM: <u>      </u> - <u>      </u> MM: <u>      </u> - <u>      </u> IM: <u>1019</u> 150 HAT: <u>      </u> - <u>      </u> 100 HAT: <u>1033</u> GS ANT: <u>1102</u> 6. MIN GS INCPT: <u>3000</u> GS ALT AT: NARCO 3000 OM: <u>      </u> - <u>      </u> MM: <u>      </u> - <u>      </u> IM: <u>922</u> 7. GS ANGLE: <u>3.00</u> TCH: 54.6 8. MSA FROM: MSP VOR/DME 090-270 2800, 270-090 3500								MAG VAR: 0E EPOCH YEAR: 2015							
MINIMUMS															
TAKEOFF: SEE FAA FORM 8260-15A FOR THIS AIRPORT								ALTERNATE: N A		ILS: #		LOC: 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
S-ILS 30L	1023	1800	200	1023	1800	200	1023	1800	200	1023	1800	200	1023	1800	200
S-LOC 30L	1520	2400	697	1520	2400	697	1520	1 1/2	697	1520	1 1/2	697	1520	1 1/2	697
CIRCLING	1520	1	678	1520	1	678	1520	2	678	1660	2 3/4	818	1800	3	958
EAGAN FIX MINIMUMS (DME OR RADAR REQUIRED)															
S-LOC 30L	1280	2400	457	1280	2400	457	1280	4500	457	1280	4500	457	1280	4500	457
CIRCLING	1360	1	518	1360	1	518	1460	1 3/4	618	1660	2 3/4	818	1800	3	958
<b>NOTES:</b> CATEGORY II ILS SPECIAL AIRCREW AND AIRCRAFT CERTIFICATION REQUIRED S-ILS 30L: CAT A, B, C, D, RA NA, RVR 1200, HAT 100, DA 923 MSL. CHART NOTE: SIMULTANEOUS APPROACH AUTHORIZED. CHART PLANVIEW NOTE: RADAR REQUIRED. (SEE FORM 8260-10)															
CITY AND STATE		ELEVATION: 842 TDZE: 823		FACILITY IDENTIFIER:		PROCEDURE NO./AMDT NO./EFFECTIVE DATE:				SUP:					
MINNEAPOLIS, MN		AIRPORT NAME:		I-MSP		ILS Z OR LOC RWY 30L, AMDT 46A ILS Z RWY 30L (CAT II) 15 OCTOBER 2015				AMDT: 46					
		MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN								DATED 03/05/2015					



ILS - STANDARD  
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

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## NOTES, (CONT.):

CHART NOTE: FOR INOPERATIVE ALSF-2, INCREASE S-ILS 30L CAT E VISIBILITY TO RVR 4000, AND INCREASE S-LOC 30L CAT E VISIBILITY TO 2 MILES.

CHART NOTE: EAGAN FIX MINIMUMS: FOR INOPERATIVE ALSF-2, INCREASE S-LOC 30L CAT E VISIBILITY TO 1 3/8 MILE.

CHART PROFILE NOTE: VGSI AND ILS GLIDEPATH NOT COINCIDENT (VGSI ANGLE {ANGLE}/TCH {FEET}).

CAT II RVR 1000 CHART NOTE: RVR 1000 AUTHORIZED WITH SPECIFIC OPSPEC, MSPEC, OR LOA APPROVAL AND USE OF AUTOLAND OR HUD TO TOUCHDOWN.



CITY AND STATE

MINNEAPOLIS, MN

ELEVATION: 842

TDZE: 823

AIRPORT NAME:

MINNEAPOLIS-ST PAUL INTL/WOLD-  
CHAMBERLAINFACILITY  
IDENTIFIER:  
I-MSP

PROCEDURE NO./ AMDT NO./EFFECTIVE DATE:

ILS Z OR LOC RWY 30L, AMDT 46A  
ILS Z RWY 30L (CAT II)

15 OCTOBER 2015

SUP:

AMDT: 46

DATED: 03/05/2015

## U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

## ILS STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - TITLE 14 CFR PART 97.29

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## ARINC SUMMARY - KMSP

## ROUTES

TRANSITION	WPT SEQ	WPT NAME	LEG TYPE	FB/FO	RNP	MAG CRS	REC NAV	ANGLE	TURN DIR	CENTER FIX	TURN RADIUS	ALTITUDE DESCRIPTION & VALUE	SPEED LIMIT DESCRIPTION & VALUE	WPT DESCRIPTION CODE
HASTI	010	HASTI	IF	FB								AA 07000		E A
HASTI	020	PINKE	TF	FB								AA 06000		E
HASTI	030	PIGZI	TF	FB								AA 05000		E B
HASTI	040	AABEZ	CF	FB		301.4	IMSP					AA 04000		EE
	010	AABEZ	IF	FB			IMSP					AA 04000 GI 03000		E I
	020	NARCO	CF	FB		301.0	IMSP	3.00		MSP		GI 03000 GS 03000		E F
	030	RW30L	CF	FO		301.0	IMSP	3.00				AT 00869		GY M
	040		CA	FB		301.4						AA 01300		M
	050		VI	FB		301.0								
	060	WOXEB	CF	FO		298.1	MSP					AA 03000		EY
	070	WOXEB	HM	FO		056.1			R			AA 03000		EE

## POINTS

POINT NAME	LATITUDE	LONGITUDE
MSP	N445347.40	W0931411.51
IMSP (DME)	N445226.92	W0931220.55
WOXEB	N450311.70	W0933708.36
AABEZ	N444717.10	W0930016.96
HASTI	N444221.30	W0924901.33
NARCO	N444855.46	W0930402.61
PIGZI	N444538.62	W0925631.53
PINKE	N444400.02	W0925246.32
IMSP (LOC)	N445322.46	W0931417.69

## RUNWAYS

RUNWAY	THRESHOLD LATITUDE	THRESHOLD LONGITUDE	THRESHOLD ELEVATION	PROCEDURE TCH
RW30L	N445224.68	W0931204.27	00814	54.6

QUALITY  
15  
CHECKED

CITY AND STATE  MINNEAPOLIS, MN	ELEVATION: 842	TDZE: 823	FACILITY IDENTIFIER:  I-MSP	PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE: ILS Z OR LOC RWY 30L, AMDT 46A ILS Z RWY 30L (CAT II) 15 OCTOBER 2015	SUP:
	AIRPORT NAME: MINNEAPOLIS-ST PAUL INTL/WOLD- CHAMBERLAIN			AMDT: 46	
				DATED: 03/05/2015	

## U.S. DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION

## LOC STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - TITLE 14 CFR PART 97.25

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## ROUTES

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HASTI	010	HASTI	IF	FB								AA 07000		E A
HASTI	020	PINKE	TF	FB								AA 06000		E
HASTI	030	PIGZI	TF	FB								AA 05000		E B
HASTI	040	AABEZ	CF	FB		301.4	IMSP					AA 04000		EE
	010	AABEZ	IF	FB			IMSP					AA 04000		E I
	020	NARCO	CF	FB		301.0	IMSP			MSP		AA 03000		E F
	021	EAGAN	CF	FB		301.0	IMSP	3.01				AA 01520		E S
	030	RW30L	CF	FO		301.0	IMSP	3.01				AT 00869		GY M
	040		CA	FB		301.4						AA 01300		M
	050		VI	FB		301.0								
	060	WOXEB	CF	FO		298.1	MSP					AA 03000		EY
	070	WOXEB	HM	FO		056.1			R			AA 03000		EE

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AABEZ	N444717.10	W0930016.96
EAGAN	N445119.08	W0930933.00
HASTI	N444221.30	W0924901.33
NARCO	N444855.46	W0930402.61
PIGZI	N444538.62	W0925631.53
PINKE	N444400.02	W0925246.32
IMSP (LOC)	N445322.46	W0931417.69

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QUALITY  
15  
CHECKED

CITY AND STATE  
MINNEAPOLIS, MN

ELEVATION: 842 TDZE: 823  
AIRPORT NAME:  
MINNEAPOLIS-ST PAUL INTL/WOLD-  
CHAMBERLAIN

FACILITY  
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ILS Z OR LOC RWY 30L, AMDT 46A  
ILS Z RWY 30L (CAT II)  
15 OCTOBER 2015

SUP:  
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