

<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.	
<b>US DEPARTMENT OF TRANSPORTATION</b> <b>FEDERAL AVIATION ADMINISTRATION</b>			
<b>TERMINAL ROUTES</b>			
FROM	TO	COURSE AND DISTANCE	ALTITUDE
TVF VOR/DME	HARVI LOM/TVF 5.25 DME	127.78 / 5.25	2700
UGACU/TVF 12.00 DME CCW (IAF)	WEMUP/TVF 12.00 DME (NOPT)	12.00 DME ARC (TVF LR-137)	2700
ZALSO/TVF 12.00 DME CW (IAF)	WEMUP/TVF 12.00 DME (NOPT)	12.00 DME ARC (TVF LR-117)	2700
WEMUP/TVF 12.00 DME (IF)	HARVI LOM/TVF 5.25 DME	312.78 / 6.75 (I-HYZ)	2700

**ILS: DA**  
**LOC: 4.45 MILES AFTER HARVI LOM OR AT TVF 0.81 DME FIX**  
  
**CLIMB TO 2700 THEN LEFT TURN DIRECT TVF VOR/DME AND HOLD, OR AS DIRECTED BY ATC.**  
  
**ALTERNATE MA: CLIMB TO 1600 THEN CLIMBING LEFT TURN TO 2700 DIRECT HARVI LOM AND HOLD (ADF REQUIRED).**  
  
**ADDITIONAL FLIGHT DATA:**  
 HOLD NW, RT, 117.00 INBOUND.  
 CHART IN PLANVIEW: ALTERNATE MA HOLDING, HOLD SE HARVI LOM/TVF 5.25 DME, RT, 312.78 INBOUND.  
 CHART FAS OBST: 1206 TREE 480205N/0960826W  
 CHART TVF R-253 AT UGACU.  
 CHART TVF R-114 AT ZALSO.  
 \*\*DME FROM TVF VOR/DME.  
 CHART CIRCLING ICON.

1. PT <u>      </u> SIDE OF COURSE <u>      </u> OUTBOUND <u>      </u> FT WITHIN <u>      </u> MILES OF <u>      </u> (IAF)	
2. HOLD SE HARVI LOM/TVF 5.25 DME, RT, 312.78 INBOUND, 2700 FT. IN LIEU OF PT (IAF)	
3. FAC: <u>312.78</u> FAF: HARVI LOM/TVF 5.25 DME DIST FAF TO MAP: <u>4.45</u> THLD: <u>4.45</u>	
4. MIN. ALT: HARVI LOM/TVF 5.25 DME 2700, VERST/TVF 2.81 DME 1580*	
5. DIST TO THLD FROM OM: <u>4.45</u> MM: <u>-</u> IM: <u>-</u> 150 HAT: <u>-</u> 100 HAT: <u>-</u> GS ANT: <u>1048</u>	
6. MIN GS INCPT: <u>2700</u> GS ALT AT:- <u>      </u> OM: <u>2605</u> MM: <u>-</u> IM: <u>-</u>	
7. GS ANGLE: <u>3.00</u> TCH: <u>55.2</u>	
8. MSA FROM: HARVI LOM 2700	

**MAG VAR: 2E**      **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 31	1314	1/2	200	1314	1/2	200	1314	1/2	200	1314	1/2	200			
S-LOC 31	1580	1/2	466	1580	1/2	466	1580	1	466	1580	1	466			
CIRCLING	1580	1	461	1580	1	461	1820	2	701	1980	2 3/4	861			
VERST FIX MINIMUMS**															
S-LOC 31	1460	1/2	346	1460	1/2	346	1460	5/8	346	1460	5/8	346			
CIRCLING	1540	1	421	1580	1	461	1820	2	701	1980	2 3/4	861			

**NOTES:**  
 CHART PLANVIEW NOTE: ADF OR DME REQUIRED.  
 \*LOC ONLY  
 \*1680 WHEN USING CROOKSON ALTIMETER SETTING.  
 CHART NOTE: WHEN LOCAL ALTIMETER SETTING NOT RECEIVED, USE CROOKSON ALTIMETER SETTING AND INCREASE (SEE FORM 8260-10)

**CITY AND STATE**  
 THIEF RIVER FALLS, MN

**ELEVATION: 1119**      **TDZE: 1114**  
**AIRPORT NAME:**  
 THIEF RIVER FALLS RGNL

**FACILITY IDENTIFIER:**  
 I-HYZ

**PROCEDURE NO./AMDT NO./EFFECTIVE DATE:**  
 ILS OR LOC RWY 31, AMDT 4  
 13 NOVEMBER 2014

**SUP:**  
**AMDT:** 3  
**DATED** 03/12/2009

US DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION  
ILS - STANDARD  
INSTRUMENT APPROACH PROCEDURE - TITLE 14 CFR PART 97.29

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NOTES, (CONT.):

ALL DA 82 FEET AND ALL MDA 100 FEET. INCREASE S-LOC 31 CAT C/D VISIBILITY 1/4 MILE, CIRCLING CAT C/D VISIBILITY 1/4 MILE; INCREASE VERST FIX MINIMUMS S-LOC 31 CAT C/D VISIBILITY 1/4 MILE AND CIRCLING CAT C/D VISIBILITY 1/4 MILE.  
CHART NOTE: FOR INOPERATIVE MALSR, INCREASE S-LOC 31 CAT C/D VISIBILITY TO 1 3/8 MILE. INCREASE VERST FIX MINIMUMS S-LOC 31 ALL CATS VISIBILITY TO 1 MILE.  
CHART NOTE: FOR INOPERATIVE MALSR, WHEN USING CROOKSON ALTIMETER SETTING, INCREASE S-ILS 31 ALL CATS VISIBILITY TO 7/8 MILE. INCREASE S-LOC 31 CAT C/D VISIBILITY TO 1 5/8 MILE.

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ARINC PACKET - 424-18 - ILS

[illegible][illegible][illegible]

TRM	WP	1	2	3	4	5	6	7	8	9	0	1	2	3
		SUSAP	KTVFK3	CHARVI	K30	R	N48002218W	096054591		E0024	NAR		HARVI	LOM
		SUSAP	KTVFK3	CWEMUP	K30	R	N47553641W	095583911		E0023	NAR		WEMUP	
		SUSAP	KTVFK3	CZALSO	K30	C	N47574926W	095560079		E0023	NAR		ZALSO	

SEGMENT	1	2	3	4	5	6	7	8	9	0	1	2	3
SUSAP KTVFK3FI31	ATVF	010TVF	K3D	OV	IF					18000		0	NS
SUSAP KTVFK3FI31	ATVF	020HARVIK3PC0EY			TF				+	02700		0	NS
SUSAP KTVFK3FI31	ATVF	030HARVIK3PC0EE	AR		HF	IHYZK3	132800573128T010PI		+	02700		0	NS
SUSAP KTVFK3FI31	AUGACU	010UGACUK3EA0E	A		IF	TVF K3	25270120	D		18000		0	NS
SUSAP KTVFK3FI31	AUGACU	020WEMUPK3PC0EE	BL		AF	TVF K3	127401202527	D	+	02700		0	NS
SUSAP KTVFK3FI31	AZALSO	010ZALSOK3PC0E	A		IF	TVF K3	11380120	D		18000		0	NS
SUSAP KTVFK3FI31	AZALSO	020WEMUPK3PC0EE	BR		AF	TVF K3	127401201138	D	+	02700		0	NS
SUSAP KTVFK3FI31	I	010WEMUPK3PC0E	I		IF	IHYZK3	13280124	PI	J	027000270018000		0	NS
SUSAP KTVFK3FI31	I	020HARVIK3PC0E	F		CF	IHYZK3	1328005731300068PI	H	0270002605		-300HY	K3PN0	NS
SUSAP KTVFK3FI31	I	030RW31	K3PG0GY	M	CF	IHYZK3	1328001231300045PI		01168		-300		NS
SUSAP KTVFK3FI31	I	040		0	M	CA	3128		+	02700		0	NS
SUSAP KTVFK3FI31	I	050TVF	K3D	OVY	L	DF			+	02700		0	NS
SUSAP KTVFK3FI31	I	060TVF	K3D	OVE	R	HM	1170T010		+	02700		0	NS

	1	2	3	4	5	6	7	8	9	0	1	2	3
RUNWAY	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890
SUSAP KTVFK3GRW31	0065043128	N48033023W	096102816+0000	+0312101113	000055150I	IHZY1							

SUP:	
AMDT:	3
DATED:	03/12/2009

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

## ILS STANDARD INSTRUMENT APPROACH PROCEDURE

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	1	2	3	4	5	6	7	8	9	0	1	2	3
ILS	1234567890123456789012345678901234567890123456789012345678901234567890123456789012												
-----													
SUSAP KTVFK3IIHYZ1 011050RW31 N48042246W0961146703128N48033472W0961043261012 10480533300E00205501111													
-----													
MSA	1234567890123456789012345678901234567890123456789012345678901234567890123456789012												
-----													
SUSAP KTVFK3SHY K3PN 0 18018002725 M													
-----													
NAVAID	1234567890123456789012345678901234567890123456789012345678901234567890123456789012												
-----													
SUSAPNKTVFK3 HY K3002600HOLW N48002361W096054379 E0020 NARHARVI													

CITY AND STATE  
THIEF RIVER FALLS, MN

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ARINC SUMMARY - 424-18 - ILS

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	TVF	TVF	010		IF		FB					
	TVF	HARVI	020		TF		FO				AA 02700	
	TVF	HARVI	030	IAF	HF	R	FO		312.8()	T01.0	AA 02700	
	UGACU	UGACU	010	IAF	IF		FB					
	UGACU	WEMUP	020		AF	L	FB		252.7()		AA 02700	
	ZALSO	ZALSO	010	IAF	IF		FB					
	ZALSO	WEMUP	020		AF	R	FB		113.8()		AA 02700	
		WEMUP	010	FACF	IF		FB				AA 02700 GI 02700	
		HARVI	020	FAF	CF		FB		313.0()	006.8	GI 02700 GS 02605	
		RW31	030	MAP	CF		FO		313.0()	004.5	AT 01168	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		312.8()		AA 02700	
	TVF	050		DF	L	FO				AA 02700	
	TVF	060		HM	R	FO		117.0()	T01.0	AA 02700	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	TVF	N480409.53	W0961111.31	N4804.159	W09611.189
	UGACU	N480211.66	W0962849.94	N4802.194	W09628.832
	HARVI	N480022.18	W0960545.91	N4800.370	W09605.765
	WEMUP	N475536.41	W0955839.11	N4755.607	W09558.652
	ZALSO	N475749.26	W0955600.79	N4757.821	W09556.013
	RW31	N480330.23	W0961028.16	N4803.504	W09610.469
	IHYZ (LOC)	N480422.46	W0961146.70	N4804.374	W09611.778
	HY	N480023.61	W0960543.79	N4800.394	W09605.730

RUNWAY DATA	RWY	THRESHOLD ELEVATION	TCH
	RW31	01113	55

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## FLIGHT STANDARDS SERVICES - FAR PART 97.25

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ARINC PACKET - 424-18 - LOC

[illegible][illegible][illegible][illegible]

SEGMENT	1	2	3	4	5	6	7	8	9	0	1	2	3
SUSAP KTVFK3FL31	ATVF	010TVF	K3D	OV	IF					18000		0	NS
SUSAP KTVFK3FL31	ATVF	020HARVIK3PC0EY	TF					+	02700			0	NS
SUSAP KTVFK3FL31	ATVF	030HARVIK3PC0EE	AR	HF	IHYZK3	132800573128T010PI		+	02700			0	NS
SUSAP KTVFK3FL31	AUGACU	010UGACUK3EA0E	A	IF	TVF K3	25270120	D			18000		0	NS
SUSAP KTVFK3FL31	AUGACU	020WEMUPK3PC0EE	BL	AF	TVF K3	127401202527	D	+	02700			0	NS
SUSAP KTVFK3FL31	AZALSO	010ZALSOK3PC0E	A	IF	TVF K3	11380120	D			18000		0	NS
SUSAP KTVFK3FL31	AZALSO	020WEMUPK3PC0EE	BR	AF	TVF K3	127401201138	D	+	02700			0	NS
SUSAP KTVFK3FL31	L	010WEMUPK3PC0E	I	IF	IHYZK3	13280124	PI	+	02700	18000		0	NS
SUSAP KTVFK3FL31	L	020HARVIK3PC0E	F	CF	IHYZK3	1328005731300068PI		+	02700		HY	K3PN0	NS
SUSAP KTVFK3FL31	L	021VERSTK3PC0E	S	CF	IHYZK3	1328003231300025PI		+	01580		-325		NS
SUSAP KTVFK3FL31	L	030RW31 K3PGOGY	M	CF	IHYZK3	1328001231300020PI			01168		-325		NS
SUSAP KTVFK3FL31	L	040	0	M	CA	3128		+	02700			0	NS
SUSAP KTVFK3FL31	L	050TVF	K3D	OVY	L	DF		+	02700			0	NS
SUSAP KTVFK3FL31	L	060TVF	K3D	OVE	R	HM	1170T010	+	02700			0	NS

[illegible]

CITY AND STATE  
THIEF RIVER FALLS, MN

ELEVATION: 1119 TDZE: 1114  
AIRPORT NAME:  
THIEF RIVER FALLS RGNL

FACILITY  
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I-HYZ

PROCEDURE NO. / AMDT NO. / EFFECTIVE DATE:  
**ILS OR LOC RWY 31, AMDT 4**  
 13 NOVEMBER 2014

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AMDT:	3
DATED:	03/12/2009

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

## LOC STANDARD INSTRUMENT APPROACH PROCEDURE

FLIGHT STANDARDS SERVICES - FAR PART 97.25

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SUSAP KTVFK3GRW31 0065043128 N48033023W096102816+0000 +0312101113000055150IIHYZ1

	1	2	3	4	5	6	7	8	9	0	1	2	3
ILS	1234567890123456789012345678901234567890123456789012345678901234567890123456789012												
-----													
SUSAP KTVFK3IIHYZ1	011050RW31	N48042246W0961146703128N48033472W0961043261012	10480533300E00205501111										

	1	2	3	4	5	6	7	8	9	0	1	2	3
MSA	1234567890123456789012345678901234567890123456789012345678901234567890123456789012												
-----													
SUSAP KTVFK3SHY	K3PN	0	18018002725									M	

	1	2	3	4	5	6	7	8	9	0	1	2	3
NAVAID	1234567890123456789012345678901234567890123456789012345678901234567890123456789012												
-----													
SUSAPNKTVPK3 HY	K3002600HOLW	N48002361W096054379						E0020		NARHARVI			

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ARINC SUMMARY - 424-18 - LOC

ROUTES	TRANSITION	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
	TVF	TVF	010		IF		FB					
	TVF	HARVI	020		TF		FO				AA 02700	
	TVF	HARVI	030	IAF	HF	R	FO		312.8()	T01.0	AA 02700	
	UGACU	UGACU	010	IAF	IF		FB					
	UGACU	WEMUP	020		AF	L	FB		252.7()		AA 02700	
	ZALSO	ZALSO	010	IAF	IF		FB					
	ZALSO	WEMUP	020		AF	R	FB		113.8()		AA 02700	
		WEMUP	010	FACF	IF		FB				AA 02700	
		HARVI	020	FAF	CF		FB		313.0()	006.8	AA 02700	
		VERST	021	SDF	CF		FB		313.0()	002.5	AA 01580	
		RW31	030	MAP	CF		FO		313.0()	002.0	AT 01168	

MISSED APPROACH	FIX	SEQ	USE	PATH	TURN	FO/FB	RNP	MAG(TRUE)	DISTANCE	ALTITUDE	SPEED
		040		CA		FB		312.8()		AA 02700	
	TVF	050		DF	L	FO				AA 02700	
	TVF	060		HM	R	FO		117.0()	T01.0	AA 02700	

POINT DATA	WAYPOINT	LAT IN SECS	LONG IN SECS	LAT IN MINS	LONG IN MINS
	TVF	N480409.53	W0961111.31	N4804.159	W09611.189
	UGACU	N480211.66	W0962849.94	N4802.194	W09628.832
	HARVI	N480022.18	W0960545.91	N4800.370	W09605.765
	VERST	N480205.74	W0960821.24	N4802.096	W09608.354
	WEMUP	N475536.41	W0955839.11	N4755.607	W09558.652
	ZALSO	N475749.26	W0955600.79	N4757.821	W09556.013
	RW31	N480330.23	W0961028.16	N4803.504	W09610.469
	IHYZ (LOC)	N480422.46	W0961146.70	N4804.374	W09611.778
	HY	N480023.61	W0960543.79	N4800.394	W09605.730

RUNWAY DATA	THRESHOLD	
RWY	ELEVATION	TCH
RW31	01113	55

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